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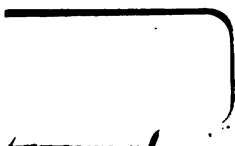
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REPORT
ON THE
LAND REVENUE SETTLEMENT
OF THE
BANNU DISTRICT,
1872-78.



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REPORT
ON THE
BEST REGULAR LAND REVENUE SETTLEMENT
OF THE
BANNU DISTRICT
IN THE
DERAJAT DIVISION
OF THE
PUNJAB,

EFFECTED BY
MR. S. S. THORBURN, C. S.



LAHORE:
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1879.

J. Mahon, Manager.



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of the Indus, where all cultivation depends upon flood or percolation from the river, and where, broadly speaking, the floods prevent the growth of any kharif or autumn harvest. In paragraph 183 there is a descriptive list of soils, which will illustrate their great variety.

The 13th paragraph contains a striking account of the continual shifting of the Indus. In the upper part of the Bannu kachi, the change anticipated by Mr. Thorburn has already taken place, for the main stream may now be said to be midway. In that part of the kachi which is below the junction of the Kurram, the river has within the last year or two changed right over from the left to the right bank. The result of all these rapid changes is that the kachi, as a whole was never in a worse condition: barren wastes of sand extend for miles in the place of broad expanses of wheat cultivation.

3. The Financial Commissioner does not think it necessary to review in any detail the next four chapters which give an account of the history, administration, population and agriculture of the district. He thinks chapter II. contains a good and true sketch of the history; its most peculiar feature is the series of clan or tribal immigrations resembling that of the ten tribes into the Promised Land. These are well described by Mr. Thorburn. There are no doubt abundant traces of such tribal migrations and conquests having occurred in other parts of the Punjab and among other races, but here, on this frontier the thing is very recent and distinct. The 35th paragraph contains a summary of progress since 1861, when Bannu became a separate district, which deserves attention. The only unsatisfactory point in it is the increase in litigation, and this, in the Financial Commissioner's opinion, is mostly due to the keen jealous spirit of the people, and to the rise in the value of land. It was hoped that the excessive litigation regarding land, for which this district, and tahsíl Miánwali, in particular, have been distinguished, would be brought to an end by the settlement, but from inquiries made during a recent tour in the District, the Financial Commissioner finds that this war in the Courts is still carried on. With regard to the Settlement Officer's estimate of the administrative staff required for the District, given in paragraph 39 of chapter III., it may be remarked that the staff has been increased

Remarks on the history, population and administration of the district.

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fully and yet not in excess of its actual power of payment. Major Coxe rarely altered Major Nicholson's assessments, except taking small enhancements when this seemed possible. One-fourth produce was not a high standard for the richer lands of the Bannu tahsil which can be rented to tenants for two-thirds produce and upwards, but it was high for the poorer lands and for tahsils Marwat and Isa Khel. Generally speaking, it may be said that the Summary Settlement assessments were high when they were made except in the better parts of the Bannu tahsil. They soon got lighter from extension of cultivation in Marwat and Isa Khel, but remained high in many villages of Marwat. In the Mianwali tahsil cash assessments had been roughly made by Mr. Bowring, Assistant Resident, before annexation. The first Summary Settlement was made by Mr. Simson in 1853-54, and the second by Captains Parsons and Smyly in 1860-61. The Bhakkar ilaqua was summarily settled by the Deputy Commissioner of Jhelum in 1853-54, and by Mr. Cowan in 1863-64; Mr. Simson was an officer of great ability and experience and his assessments were generally full but fair.

14. The first regular settlement operations were commenced in March 1872; measurements were finished by the end of April 1874; the next few months were spent in checking and comparing the field maps and khasrahs; attestation was commenced in the autumn of 1874, and completed in Isa Khel in March 1876, in Bannu in September 1876, and in Marwat and Mianwali in March 1877; and the settlement was completed by the end of 1878; attestation was concluded in the first instance on the spot, and subsequently at selected local centres. The dates of submission and of orders on the Revenue Rate Reports were as follows :—

TAHSIL.	Date of submission to Settlement Commissioner.	Date of submission to Financial to Commissioner.	Date of submission to Government.	Date of orders by Government.
Isa Khel	...	Novr. 1875...	Jany. 1876	March 1876
Marwat	... March 1876	July 1876 ...	August 1876	October 1876
Bannu	... May 1876...	October 1876	July 1877 ...	August 1877
Mianwali	... Sepr. 1876	June 1877...	Decr. 1877...	January 1878

The reports of the detailed village assessments were submitted for Isa Khel in June 1877, for Marwat in October 1877, for Miánwáli in May 1878, and for Bannu in July 1878.

15. The instructions quoted by Mr. Thorburn in paragraph 181 and Appendix I (4) are, Mr. Lyall finds, those prepared by Mr. Melville and submitted to Government with this office No. 207 of 8th March 1873; these however were not accepted, and the Government reply, No. 1615 of 3rd November 1873, prescribed amended instructions, which were duly issued to the Commissioner of Delhi.

A copy of these instructions ought to have been forwarded to the Settlement Commissioner for his opinion with this office No. 7055 of 13th October 1874, but by a mistake made in this office the instructions sent with that letter were those prepared by Mr. Melville and not those which Government had approved; the Officiating Settlement Commissioner, Colonel Munro, expressed his concurrence in the applicability of the instructions forwarded to him in his No. 262 of 8th January 1875. As the mistake was not discovered, it was supposed that this concurrence referred to the Delhi instructions, which were accordingly sanctioned for the districts of Mooltan and Muzaffargarh by Secretary to Government's No. 338 of 6th March 1875, and for those of Dera Ismail Khan and Bannu by Secretary to Government's No. 502 of 15th March 1875. These orders were communicated to the Settlement Commissioner in continuation of former correspondence, but no fresh copy of the instructions was sent, so that the mistake has only now been discovered.

The instructions, which ought to have issued, were as follows :—

1. The general principle of assessment to be followed is that the Government demand for land revenue shall not exceed the estimated value of half the net produce of an estate, or, in other words, one-half the share of the produce of an estate ordinarily receivable by the landlord either in money or kind.
2. In applying this principle in the case of the Bannu District, where produce rents prevail, special attention should be given by the Settlement Officer to produce estimates.



Table of most prominent *Errata* in the Bannu First Regular
Land Revenue Settlement Report.

Page.	Position in page or number of para.	For	Read
1	Heading	Land Revenue Settlement ...	First Regular Land Revenue Settlement.
5	5	There are two ...	There are, too,
"	Near foot	(Quarter—crystals) ...	(Quartz—crystals).
10	Top	Karrum ...	Kurram.
"	"	Sabz—Rah ...	Sabz—Boh.
12	"	Grayss ...	Grassy.
15	Footnote	Niris ...	Miris.
16	"	A hundred years ...	A hundred years ago.
17	19	Kurram (also in other places) ...	Kurram (also in other places).
20	24	1805 ...	1505.
"	25	The Duráni invasions ...	Nádir Shah's invasion
21	26 Margin	The Nawab of D. I. Khan ...	The Nawáb of Mankera.
22	28	Trains—Indus ...	Trans-Indus.
23	Middle	Lientenan ...	Lieutenant.
24	31	Funeh ...	Futeh.
34	Top	Hat khel ...	Háthikhel.
"	Bottom	Kharaba ...	Kharoba.
35	45	Ahmadzi ...	Ahmadzái.
39	Near bottom	Timbor ...	Timber.
41	Top	Bannuchi ...	Bannu.
46	Near top	Properley ...	Properly.
"	Middle	Thraee ...	Three.
51	Near top	Recoveriest ...	Recoveries.
"	"	Nos ...	Not.
53	Foot	Afford a cheap ...	Afford it a.
"	"	Nuncha ...	<i>Nimcha</i> .
58	67	(Neck) ...	(Neck).
"	Foot	Marwat ...	Marwats.
60	Middle	Recents ...	Recent.
61	"	<i>Lashma</i> ...	<i>Lasama</i> .
64	74	Marked place ...	Market-place.
69	Near top	The Sohán ...	This Sohán.
74	Near foot	Had ...	Hus.
79	85	<i>Gauri</i> ...	<i>Gávri</i> .
80	86	Earthly ...	Earthy.
81	Middle	0 ...	88
84	Near top	Four-fifty ...	Fifty-four.
91	Middle	Rs. 94 ...	Rs. 60.
94	"	Pavment ...	Payment.
98	107	The portion ...	The partition.
113	Foot	Khunjarri ...	Khujarri.
116	Two-thirds down	Bund ...	Bunds.
"	Last line	Taken in ...	Taken in it by.
122	Near top	Wahai ...	Wáhi.
124	Near end	<i>Babla tobla and Chumi</i> ...	Bobla Jobla and Chumi.
126	130	Chak ...	Chaks.
127	131	Kachi Kamár ...	Kechi Kamár.
"	"	Núshkin ...	Múshkin.
129	Near end of 133	And so my ...	And as my.

BANNU TAHSIL.

(14)

CIRCLE.	IRRIGATED.						UNIRRIGATED.				REMARKS.			
	1st Class.			2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.	4th Class.					
	Turmeric.	Sugarcane.	Revenue.											
										Rs. A.		Rs. A. P.	Rs. A. P.	
I.—Bannu	15 0	6 0	3 0	0 1	8 0	1 0	0 0	...	...	...	...	Rates sanctioned.		
II.—Trikha	...	...	1 12	0 1	4 0	0 12	0 0	...	...	...	...	Rates ordered to be raised, so as to give an increase of 5 per cent. on the revenue yielded by them.		
III.—Lohra	...	...	1 13	0 1	0 0	0 12	0 0	...	...	...	...	Rates sanctioned.		
IV.—Nar	...	...	1 0	0 11	0 0	0 7	0 0	...	...	...	...	Ditto.		
V.—Lundidak	...	...	0 12	0 10	0 0	0 8	0 0	...	...	...	...	Ditto.		
VI.—Eastern Waziri Thal	...	...	0 12	0 0	4 0	...	...	0 6	0 0	3 0	0 2	0 1	0 0	These rates were nominal only ; but as they gave too high a result even for the nominal demand, the Settlement Officer was directed to frame new rates, but these, if framed, were not reported.
VII.—Western Waziri Thal	...	5 0	1 4	0 0	5 0	0 3	0 0	6 0	0 3	0 2	0 1	0 0	0 0	

MARWAT TAHSIL.

CIRCLE.	IRRIGATED.			CLASS OF SOIL.				UNIRRIGATED.			REMARKS.
	Tandobah or canal-irrigated, including well area jhalari.	Rs. A.	Rs. A.	Tarkha or briny.	Barah or rodkohi, irrigated from hill torrents.	Dagar, receiving drainage from higher lands.	Shiga khatina, or best sandy soil.	Shiga ya'i, or inferior sandy soil.	Shiga or sand.		
I.—Shiga	...	...	...	...	0 10 0	0 6 0	0 10 0	0 6 0	0 5 0	The rates proposed for this tahsil were sanctioned subject to such reductions as might be necessary to allow for certain reductions in the amounts resulting as follows :— Shiga from Rs. 24,988 to Rs. 23,755. Shiga khatina from Rs. 36,201 to Rs. 35,475. Gadwad from Rs. 18,971 to Rs. 18,575. Pakha from Rs. 22,104 to Rs. 21,036.	
II.—Shiga khatina	...	...	...	...	0 12 0	0 9 0	0 12 0	0 9 0	0 7 0		
III.—Gadwad	...	...	...	...	0 11 0	0 7 0	0 10 0	0 6 0	0 3 0		
IV.—Pakha	...	...	...	...	0 12 0	...	0 7 0	0 4 0	0 2 0		
V.—Tandobah	...	0 14	0 9	0 6	0 12 0	0 7 0	0 8 0	0 6 0	0 3 0		
VI.—Nar	...	0 12	0 8	0 5	...	0 7 0	0 8 0	0 6 0	0 3 0		

TAHSIL ISA KHEL.

1	2	3	4	5	6	7	8	9	10	11	12
ASSESSMENT CIRCLE.	Sam and Nahri.	Dag.	Gor and Ghazan.	T H A L.				NAHRI (CANAL-IRRIGATED.)			REMARKS.
				Hill torrent.	Barani Kasladar (Rain and surface drainage).	Fallow.	Chahi.	Ratti.	Ghasar.	Kallari.	
I.—Bhangi Khel ...	Rs. A. Rs. A.	Rs. A. Rs. A.	Rs. A. Rs. A.	Rs. A. Rs. A.	Rs. A. Rs. A.	Rs. A. Rs. A.	Rs. A. Rs. A.	Rs. A. Rs. A.	Rs. A. Rs. A.	Rs. A.	These rates were estimated to yield Rs. 2,326, but the Settlement Officer was ordered not to take more than Rs. 2,200.
II.—Mohar ...	...	...	...	1 0	0 13	0 6	...	...	...	...	Rates sanctioned, but Settlement Officer to assess about Rs. 600 under rates.
III.—Danda ...	...	...	...	1 0	0 13	0 6	4 0	...	...	...	The rates were not altered, but the Settlement Officer was directed to assess about 8 per cent. below them.
IV.—Kachi ...	...	...	...	...	...	...	...	...	...	...	All subject to fluctuating assessment.
V.—Nari ...	...	...	...	0 12	0 8	0 6	...	1 0	0 12	0 6	Settlement Officer was directed to assess about 7 per cent. below his rates.
VI.—Kacha Pakka...	...	...	...	1 0	0 13	0 2	...	...	...	0 8	Settlement Officer was directed to assess about 3 per cent. below his rates.

MIANWALI TAHSIL.

(17)

C I R C L E .	Chahi or Nahri.		Naladar.		Kasladar.		Maira.		Tibba Ret and Pakkar.		R E M A R K S .
	Rs. A.	...	Rs. A.	...	Rs. A.	...	Rs. A.	...	Rs. A.	...	
I.—Kacha ...	...	...	...	...	...	...	...	...	...	...	All subject to fluctuating assessment.
II.—Kacha Pakka,	2 0	0 14	0 12	0 8	...	...	...	...	...	...	
III.—Kacha Thal...	0 14	0 14	...	0 6	0 2	0 2	...	...	...	...	
IV.—Thal ...	0 13*	0 13	0 11	0 4	0 2	...	...	...	...	...	
V.—Mohar ...	1 0	0 14	0 9	0 6	...	...	...	...	...	...	
VI.—Pakkar ...	2 0	...	0 13	0 8	0 6	...	...	...	...	...	Rates yielded Rs. 16,975. Settlement Officer was directed to assess at Rs. 17,404. Settlement Commissioner noted that to make the rates comparatively fair they ought to have been Nahri Re. 1-4-0, Naladar Re. 0-15-0, Kasladar Re. 0-11-0.

* Only applied to a very small area.

19. The general result of the new assessments is given in the table at para. 193 of the Financial result of the Settlement fixed revenue. Report, for all that portion of the District which is under fixed assessment; as compared with the revenue of the year preceding the new assessments, the jama has risen from Rs. 3,33,728, to Rs. 3,58,278, * i. e., by Rs. 24,550, or 7 per cent. In the Bannu tahsíl the increase is 17 per cent., in Miánwáli 13 per cent., and in Isa Khel 9 per cent.; while in Marwat there is a decrease of 9 per cent. The demand on account of cesses has risen from Rs. 61,862 to Rs. 78,260.

20. The Settlement Officer notes that the land revenue and grazing assessment on the Indus sailaba lands amounted to Rs. 89,039 at the second Summary Settlement and to Rs. 89,293 in the year preceding that from which the new assessments came into force. In tahsíl Isa Khel the result of the application of the sanctioned rates to the areas as found at the settlement measurements of 1873-74 would have been a demand of Rs. 27,474, but the actual revenue distributed by the Settlement Officer on the basis of the measurements of 1876-77 amounted to Rs. 25,245 only, the difference being due to river action. In tahsíl Miánwáli, the assessment on the basis of the settlement measurements would have been Rs. 74,784, while the actual jamas distributed by the Settlement Officer amounted to only Rs. 50,671.

* NOTE.—There is a difference of Rs. 53 between the fixed jama of Isa Khel tahsíl as given on page 198 and as given in Appendix II. The difference is said to be due to the lapse of a máfi grant or protective lease.

The following table shows the financial result of the system since its introduction :—

Tahsil.	Harvest from which the new assessments came into force.	ASSESSMENT FOR EACH 12 MONTH SINCE THE NEW SETTLEMENT CAME INTO FORCE.							
		1877-78.		1878-79.		1879-80.		1880-81.	
		June.		June.		June.		June.	
		Khalsa.	Jágir and máfi.	Khalsa.	Jágir and máfi.	Khalsa.	Jágir and máfi.	Khalsa.	Jágir and máfi.
		Rs.	Rt.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Miánwáli ...	Rahi 1878-79 ...	...	...	50,671	...	40,303	430	44,298	453
						40,733		44,751	
Isa Khel ...	Hharif 1876-77	21,857	4,794	16,406	3,983	16,533	3,098	14,103	4,494
		26,651		20,389		19,631		18,597	
TOTAL ...	...	21,857	4,794	67,077	3,983	56,836	3,523	53,401	4,947
		26,651		71,060		66,364		63,348	

The financial result then of the new system during the last three years has been an average assessment of Rs. 64,924, as compared with the former demand of Rs. 89,293, or a decrease of 27 per cent. On this subject Mr. Steedman, who was deputed to report on the working of the fluctuating assessments in the Bannu and Dera Ismail Khan Districts, wrote as follows :—

“ In Isa Khel and Miánwáli change in course of the river is responsible for the loss.

“ The river channel as mapped at settlement is now a bed of sand intersected by a few fordable streams. Hardly any new culturable land has as yet formed. The main

channel of the Indus is now in the Isa Khel tahsil, several miles away to the west of the old bed. In fact, at settlement the river was cutting away under the high bank of the Thal, and now its waters are flowing under the Kirri Khasor and Umr Khel range. I was told that the Kurram too had done a good deal of mischief last year by depositing its clay silt over a large tract of sailab land opposite Isa Khel.

“In Miánwáli I saw very little culturable land indeed that was not under crop, and the change in the course of the river fully accounts for the 40 per cent. and 33 per cent. decrease in the cultivated area that has resulted during the last two years since settlement.”

Mr. Lyall has recently been informed that the returns for 1881-82, which have not yet reached this office, show an increase on the fluctuating revenue of 1860-81 of Rs. 7,494 in Miánwáli and of Rs. 4,265 in Isa Khel; this result is attributed in part to the successful construction in the spring of 1881 of dams across small branches of the river, which throw the flood-water out of the channels on to the surrounding lands. On visiting the tract in January 1881, Mr. Lyall found that large areas in the kachi were lying waste mainly for want of silt to make the sandy soil culturable, and in part for want of water to enable the higher and dryer lands to be ploughed and the seed to germinate. He consulted Pandit Sheo Rám, Extra Assistant Commissioner, then temporarily in charge of Miánwáli, and that officer suggested the remedy, which has already proved to some extent effectual. Mr. Udny, the Deputy Commissioner, put the Pandit in charge of the operations, and he was very successful in inducing the zamíndárs to combine to make the dams in the positions selected. The Financial Commissioner hopes and expects that the increase in area of cultivation and in revenue which has occurred in 1881-82 will prove to be the commencement of a prosperous period, and that the area of cultivation will go on rising till it equals the area given by the Settlement measurements for the years previous to the last great changes in the course of the river.

21. In paragraph 194 Mr. Thorburn details the cesses
 Cesscs, now levied, and I am to ask that these
 may be formally sanctioned in the
 orders passed on the Report.

22. It is of course true, as stated by Mr. Thorburn in paragraph 195 of the Report, that the Waziris have been very lightly assessed at this settlement. This was done purposely for political reasons, but it will be seen nevertheless that the previous demand on the clans whose cultivation has most extended has been largely increased. The Financial Commissioner concurs in what Mr. Thorburn says about the manner in which the new assessment has been received by the Bhitannis and the Bannuchis. The Lohra tract is, the Settlement Officer thinks, more highly assessed than any other part of the Bannu tahsil, and as to the comparative pitch of the assessments he is probably right; but even here Mr. Lyall sees no reason to think that the assessments are not decidedly light. The various reasons for a generally lenient treatment of the Bannu tahsil were detailed in the Revenue Rate Reports and orders thereon. In the Marwat tahsil the Settlement Officer holds that, with one exception, the assessment is no where high, and in the border villages is decidedly light: this exception is that of the very sandy tract, where he thinks that the jamas of the 75 villages to which reductions were given are even now severe. The Financial Commissioner does not think that the jamas of the villages in question can properly be called severe; but he agrees that the proprietors of these estates are so poor and live so much from hand-to-mouth that in case of failure of the rabi crop they will find it difficult to pay the revenue and feed themselves without getting into debt; and no doubt under such circumstances suspensions should be readily granted to them in years of failure of crop.

In the Isa Khel and Miánwali tahsils, the Financial Commissioner considers the fixed assessment of the lands outside the river bed to be, as the Settlement Officer calls it, somewhat light, although not particularly so. Mr. Thorburn's remarks as to the assessments on the Bhangi Khels are concurred in by the Financial Commissioner.

The Settlement Officer remarks that he thinks that his tendency throughout the district has been to assess the less productive estates relatively more heavily than the more productive; the mistake is a common one among Settlement Officers, and one which it is difficult for a supervising Officer to fully correct or check.

23. The rates finally sanctioned by letter from Secretary to Government No. 1319, of 9th October 1878, for the fluctuating assessments of the sailaha lands in tahsils Isa Khel and Miánwahi are stated in paragraph 204 of the Report, and are, Mr. Lyall thinks, fair, neither high nor low. The ordinary rate on cultivation will be Re. 1-4 per acre, but for newly thrown up and newly cultivated lands three-fifth rates will be taken for two years, and three-fifth rates will also be levied on lands damaged by kallar or reh. As pointed out by Mr. Thorburn in paragraph 203, a fluctuating system of assessment on these river lands had been introduced some years before settlement, having been found absolutely necessary by the District Officers: the Settlement Officials merely took up the system and rendered it more equal in its operation.

When Sir Henry Davies, as Lieutenant-Governor, marched through the country in the year in which settlement operations commenced, great complaints were made of the high assessments in many of these villages. The fact was that many of the villages were annually assessed at very high rates owing to the system of using in these assessments the average village rate on cultivation, whatever this chanced to be; and for the same reason other villages were annually assessed at very light rates, although no real permanent difference of soil existed. This source of inequality has now been removed. That it was absolutely necessary to maintain in the Indus kachi of Bannu some such system of fluctuating assessment as that which was at the beginning of settlement found to be already in force, Mr. Lyall has no doubt; if he ever had entertained any doubts on the subject they would have been removed by what he saw on his visit to the tract in the beginning of 1881. The same sudden and violent change in the course of the river which forced the system into existence originally has been occurring again since settlement; and in spite of the relief afforded by the fluctuating system in proportioning the demand to the outturn, Mr. Lyall found that a large number of villages had suffered very considerably owing to the difficulty of gaining from their present reduced areas a sufficient subsistence for this population. In some villages from which, when Mr. Lyall first knew the country, numbers of zamíndárs would turn out mounted on their mares; now

hardly a horse is to be found, and the cry is that the population has diminished by emigration of tenants, and that the number of village watchmen must be reduced : yet in a few years these same villages will probably be as populous as before and the proprietors very well off. For the river, after destroying their lands, has moved away to a distance, leaving wide expanses of barren sand, which the silt deposit of a few lucky floods may turn into culturable soil of the finest quality. The rules for application of the system given on page 212 of the Report are, Mr. Lyall thinks, well devised, and he recommends them for sanction. As far as he could gather on his visit to the country in 1881, they were well understood and no objection to them was made. The annual assessments are sanctioned by the Commissioner, who then forwards to this office an abstract statement of the assessment for record, together with the detailed statements for inspection and return.

The abstract statement is copied into a register kept to show the working of the system, and the Commissioner has been furnished with a key statement in order to facilitate his check of the village statements.

An important misprint in rule (3) on page 212 requires notice. *For* "well land will therefore pay at the full quarter rate" *read* "well land will therefore pay at the full Re. 1-4-0 rate."

24. The remarks offered by the Settlement Officer in paragraph 196 as to the future working of the settlement and the granting of suspensions and remissions are generally concurred in by Mr. Lyall. In the Bannu tahsil the case of abrasion of its bank by the Kurram will be met by reduction of assessment under the ordinary diluvion rules. Putting this case aside, the Settlement Officer anticipates that neither remissions nor suspensions will be required in Bannu proper, except in the case of loss from hail, and, in the Lohra Circle, in the case of the failure of the Tochi. As to loss by hail, Mr. Lyall thinks that certain remissions on this account proposed by the Deputy Commissioner at Mr. Thorburn's suggestion, after the new assessments came into force, show that Mr. Thorburn considered that remissions should be granted almost as a matter of course for damage of this kind. Mr. Lyall does not see why damage by hail should

be treated very differently from damage by blight, droughts or other calamity of season ; the matter is one in which each case should be treated on its merits at the discretion of the Deputy Commissioner with reference to the amount of damage caused. In Bannu the assessments are so light, that remissions should, Mr. Lyall thinks, as a general rule not be granted for damage by hail except in extreme cases ; but proposals for such remissions will require to be submitted to this office, where they will be considered on their merits.

These remarks apply to the Isa Khel and Miánwali tahsils as well as to the Bannu tahsil. As to the Marwat tahsil, Mr. Lyall remarks that Sir Henry Davies, as Lieutenant-Governor, passed orders on the Settlement Officer's proposals in respect to the system on which remissions and suspensions should be granted, and Mr. Lyall does not think that those orders require any revision. Liberal suspensions in bad years, and occasional remissions in case of repeated failure of crops will no doubt be found necessary, but for these no previous rule can be laid down. With reference to the Settlement Officer's suggestions as to the course which should be followed if the present assessment of what he calls the still heavily assessed sandy villages should break down, I am to state that Mr. Lyall does not think that there is a sufficient chance of this occurring to make it worth while to discuss these suggestions at present. The assessment put on the canal irrigated lands in Isa Khel is, in Mr. Lyall's opinion, particularly light. This was done intentionally under the idea that much of the land was exhausted and that the proprietors' arrangements for maintaining the canals were likely to work imperfectly. Mr. Lyall is now disposed to think that these ideas were exaggerated, and that he himself and the Settlement Officer were somewhat misled by the representations of the zamindárs. On these lands no suspension or remission ought to be necessary, unless in case of stoppage—a great irregularity in the irrigation from a canal. In the lands depending upon hill streams in both Isa Khel and Miánwali and in the Kaslahdar lands of the latter tahsil suspensions may sometimes be required.

25. It does not seem necessary to add anything to what Mr. Thorburn writes in paragraph 197 on the subject of the dates of the

Dates of instalments.

instalments, except that the dates of the rabi instalments are now the latest in the Province.

26. Nor do Mr. Thorburn's remarks in paragraph 198 on the assessment of water-mills call for further notice, except an expression of the Financial Commissioner's concurrence in the hope that the Deputy Commissioner will be chary of granting permission for the erection of new mills.

27. In paragraphs 200, 201 and 202 the Settlement Officer states what has been done in the matter of demarcating Government rakhs in the Miánwáli Thal, and in substituting for a grazing tax, levied by enumeration on cattle, a fixed assessment of Rs. 3,675 on grazing waste in Miánwáli and a fluctuating assessment of Rs. 3-2-0 per 100 acres on grazing waste in the villages in the Indus bed, whenever the grazing area equals or exceeds the cultivated area. This assessment on the land on its grazing aspect is not of the nature of tirni or grazing tax, but of land revenue, and is so classed in the accounts. Tirni or grazing tax in the Bannu District is now levied only on camels in Isa Khel and in the Government rakhs in Miánwáli. The question of the terms on which the leases of these rakhs should be sold formed the subject of a correspondence ending with letter from Secretary to Government, No. 805 of 7th April 1879.

In this correspondence the action of the Settlement Officer in forming six blocks of waste, and in leasing them for Rs. 2,720 in 1878-79 was approved, but his proposal to grant to Mian Sultan Ali a long lease of part of the Van Bhachran rakh was negatived. The form of lease proposed by the Settlement Officer, of which the main provisions are noted in Settlement Officer's paragraph 202, was sanctioned, and the district authorities were forbidden, with two exceptions, to alter the conditions of the leases unless with the sanction of the Financial Commissioner; the two exceptions were—

- (1)—the power given in the leases granted by the Settlement Officer to the lessees of the Wichmin, Bala and Harnoli rakhs to exclude Powindahs ;
- (2)—the power given to the lessee to allow cultivation of a single crop.

If the Commissioner at any time finds it inexpedient to exclude the Powindahs from these two rakhs, or finds that the cultivation in the rakhs is injuring the grazing, he will be at liberty to amend the terms of the leases on these points. Since this correspondence took place, Mr. Lyall had occasion, in connection with complaints made by Shahpur zamindars as to the tirni arrangements in that district, to make enquiry as to the rates of tirni fixed in Miánwáli as the maximum rates at which the lessees may collect from graziers; and he was surprised to find how very light these rates are. He thinks, however, that it will be good policy to keep them light, more especially because the blocks or rakhs are generally not large in extent, and so graziers may require to pay fees in more rakhs than one, and also because most of the graziers, who use the rakhs, graze their cattle partly in the rakhs and partly on their own land. But although he holds that the rates should be kept light, he is not sure that some increase will not be advisable, and this it will be open to the Deputy Commissioner and Commissioner to propose under the orders above quoted.

Mr. Thorburn, as he states in the report, sold the lease of the rakhs for 1878-79 for Rs. 2,720; but in 1879-80 and 1880-81 the leases fetched Rs. 4,235 and Rs. 4,825. While holding that these leases ought not to be sold for the utmost they will fetch without regard to the character of the bidder, and that trustworthy men of influence from among the cattle-owning classes should be given the preference for the position of lessee, Mr. Lyall thinks that Mr. Thorburn fixed the prices in 1878-79 too low, and sees no reason to think that the subsequent rise has been excessive. From the correspondence already quoted it appears that Mr. Thorburn received higher bids for the leases, but rejected them as extravagant and due to rivalry.

28. In chapter IX. Mr. Thorburn gives some account of the Code of Tribal Custom. of the Tribal Code and village administration papers. He shows in paragraph 205 how unsettled many of the so-called customs are, and what an effect the altered circumstances of the last 30 years have had upon their development. His remarks as to what would have been the effect of the preparation of a customary code soon after annexation are of interest as pointing to the danger which must always attend the

transition from an unwritten into a written code, lest the free development of the future should be injuriously restricted. But the Financial Commissioner thinks that they also teach a lesson which is somewhat opposed to the view of the Settlement Officer as to the weight which should in future be given by the courts to the recorded opinions of the people and the Settlement Officers as to the shape which customs now unformed should take in order to be equitable. These opinions, it is evident from what Mr. Thorburn writes, are not entirely the spontaneous expression even of the present sentiments of the people, but have been to some extent moulded by the Settlement Officer. They have not undergone the test of actual experience, and it may well be that the rules which they attempt to lay down, even if thoroughly suitable at present, will not be those most suitable to the conditions of the future. In these cases, therefore, the courts, while giving due weight to the record as a statement of the views of disinterested experts, should always remember that it has no binding force, and that, if the surrounding circumstances have since altered, it might be most inequitable to give effect to it.

29. The most noteworthy provisions in the village administration papers are the admission of the authority of the Deputy Commissioner on good cause being shown to order a redistribution of the revenue during the terms of settlement, a power affirmed in Financial Commissioner's Book Circular No. VI. of 1879 ; the restriction on the founding new villages in the frontier tahsils without the sanction of the Deputy Commissioner ; the provisions for the facilitating well sinking in the Miánwáli Thal ; the admission that no proprietor can object to the appropriation of his land on full compensation being paid, if required for the excavation of a canal or water-course sanctioned by the Deputy Commissioner ; the admission of the power of the Deputy Commissioner to direct the clearance of tanks, and the acknowledgment of the power of the Civil Officer to interdict the taking possession of new alluvion until its distribution has been properly arranged. This last provision, if properly worked, will probably have a very beneficial effect, but the Deputy Commissioner should take care that undue delay should not be allowed in the disposal of such cases.

30. The amount of land revenue assigned in the Bannu District is reported in chapter X. Assignments of land revenue. to be Rs. 40,036, the principal grants being those to the Kalabagh Chief, the Khans of Isa Khel, Sardad Khan Ghoriwal, and Mir Abas Khan of Bazar. Orders on the question of the principle of succession to be recognised in the case of the grant to the Isa Khel Khans were contained in letter from Secretary to Government, No. 1310 of 7th October 1880, and affirmed the restriction of the succession to the shares of the land revenue and of the alum proceeds to one selected heir of each of the eight co-sharers. In one case where a share was already shared between two heirs, the arrangement is to continue until the death of one of the two co-sharers, when the survivor is to receive the whole.

31. Mr. Thorburn's statement in paragraph 213 of the terms on which Government sanctioned the grant of petty mafis, aggregating Rs. 325 in favor of 24 institutions, and Rs. 555 in favor of 56 individuals, is in accordance with the orders communicated in Secretary to Government's letter No. 753 of 4th May 1878. Grant of petty mafis.

32. The terms on which the concession of a reduction of one-sixth of that assessment was granted to the Sayads and Uluma of Bannu proper are correctly stated in paragraph 215. The final orders fixing the rate of this allowance at the above amount in all cases were contained in paragraph 4 of letter from Secretary to Government, No. 1637 of 31st August 1877. The amount of remissions then sanctioned was Rs. 3,975, that actually granted was Rs. 2,143; the difference therefore is Rs. 1,832, not Rs. 832 as stated in the Report. Reductions of assessment in favor of Sayads and Uluma.

33. The barát grants referred to in paragraph 216 of the Report should, Mr. Lyall thinks, be considered to have been sanctioned for the term of settlement, except in cases where sanction for a longer term has been definitely given, and to be subject to revision at next settlement. As vacancies occur, the Commissioner should have power to fill them up in accordance with the general scheme prepared at settlement, under which the number of holders will be gradually reduced to fifteen. If he sees reason to depart from this scheme, he should refer the question for the orders of Government. Barát grants.

34. With reference to the 5 per cent. inám grants out of revenue to lambardárs in the Landidak and the two Nar tracts, mentioned in paragraph 217 of the Report, it is sufficient to note that these were sanctioned for the Bannu tahsíl in paragraph 5 of Secretary to Government's No. 1637 of 31st August 1877, and for the Marwat tahsíl in letter No. 330 of 16th February 1877, from the Government of India, Foreign Department, to the Punjab Government.

35. In Bannu, as in the Pathán parts of Dera Ismail Khan, it was not thought advisable to introduce the zaildári and ála lambardári systems, and zamíndári ináms were sanctioned in lieu of them as follows : in the Bannu tahsíl to the value of Rs. 900, sanctioned by paragraph 7 of letter from Secretary to Government, No. 1637 of 31st August 1877 ; in the Isa Khel tahsíl to the value of Rs. 600, sanctioned by letter from Secretary to Government, No. 967 of 3rd June 1876 ; in Marwat tahsíl to the value of Rs. 1,000, (reduced to Rs. 950 by the transfer of a village to tahsíl Dera Ismail Khan), sanctioned by letter from Secretary to Government, No. 2009½ of 5th December 1876 ; and in Miánwáli tahsíl to the value of Rs. 1,000, sanctioned by letter from Secretary to Government, No. 150 of 28th January 1878.

The conditions on which these ináms are sanctioned are correctly stated in the summary at the end of paragraph 219 of the Report.

36. The grant of the Wazíri-lungi ináms, to be held on the same conditions as the zamíndári ináms, was sanctioned in letter from Secretary to Government, No. 2017 of 19th November 1877, and the distribution of the ináms was subsequently reported and sanctioned by letter from Secretary to Government, No. 948 of 22nd June 1878. In the case of these ináms there will be no objection to the Commissioner's changing their amounts, or amalgamating them, provided that the total amount does not exceed that now sanctioned.

37. The approval of His Honor the Lieutenant-Governor to instructions issued by Mr. Lyall that all these small ináms should be collected by the recipients themselves was communicated in letter from Secretary to Government, No. 833 of 20th May 1880.

38. In paragraph 220 Mr. Thorburn gives a clear and concise account of the lambardári arrangements made during the settlement. The arrangement, which exists in 29 per cent. of the villages, by which the fees are distributed by fixed shares among the headmen, while the proprietors pay their revenue through any lambardár they may choose, is at first sight very anomalous; but it has not yet been found necessary or advisable to alter it. If, however, in future the system breaks down, or a distribution of the revenue payers among the headmen is asked for, the ordinary system can, as the Settlement Officer points out, be introduced. Mr. Thorburn, in treating of the question of reduction of lambardárs, remarks that he had to carry out Mr. Lyall's conservative policy. The Financial Commissioner observes that this policy had the concurrence of the Commissioner of the Division, Colonel Munro. Mr. Thorburn was, in Mr. Lyall's opinion, too much influenced in his proposed revisions of the lambardári arrangements by the present apparent fitness and popularity of the men he wished to appoint, or whose lambardárships he wished to aggrandise; and Mr. Lyall had to point out to him that these reasons for change were but temporary, and that the heirs of these men might be as unfit and unpopular as the men he wished to remove, while on the other hand the changes would cause great excitement and a keen sense of injury.

With reference to the Settlement Officer's remarks as to the official recognition in some villages of the status of warhidar, the Financial Commissioner remarks that he was, as Settlement Commissioner, generally opposed to such a recognition, and in some cases modified in this respect on appeal the Settlement Officer's arrangements. As long as the owners prefer to pay their revenue to the lambardár through the warhidar and no embezzlements occur, a necessity for interference will not arise; but the arrangements should be considered to rest on private agreement, and if any difficulty arises, the position of warhidar will probably disappear.

39. Mr. Lyall, as Financial Commissioner, sanctioned the Settlement Officer's proposal to fund the patwáris' cess, and grade the patwáris, in this office No. 905 of 15th February 1879, remarking that the system was already in force in Mián-

The lambardári arrangements.

The patwári arrangements.

wáli, where it had worked well; was very necessary in Isa Khel on account of the fluctuating sailab assessments; was advisable in the Bannu tahsíl as if it were not introduced; the rates of pay in the various circles must differ very widely from each other; and was on the whole advisable in Marwat, both for general reasons, and in order to keep the system uniform throughout the district. Full instructions have been issued in this office Book Circular No. I of 1881 on the question of the papers to be prepared by patwáris in connection with the fluctuating assessments of the kacha. Under these instructions the number of papers to be furnished by the patwáris has been reduced.

40. Mr. Lyall has examined the village statements referred to in paragraph 223 of the Report, and considers that they were well and carefully prepared.

41. Mr. Thorburn in paragraph 227 gives the cost of the settlement up to November 1878. From the settlement business return sent in for the year ending 31st March 1879, it appears that the total expenditure from Imperial and Provincial Services up to that date was Rs. 48,84,775, or some Rs. 5,300 more than that noted by the Settlement Officer. The cost was no doubt somewhat heavy; but on the other hand, it must be remembered that the operations were those of the first regular settlement of a frontier district, and that the holdings were generally small.

42. Mr. Lyall considers that Mr. Thorburn in paragraph 231 gives good reasons for recommending that the settlement should be sanctioned for 30 years. The sanction of Government to the record of rights and to the assessment for the term of 30 years is therefore solicited.

43. In conclusion, Mr. Lyall remarks that Mr. Thorburn took a keen interest in the work, and was anxious to do justice between man and man and between different classes. He was constantly in camp, and knew well all the principal chiefs and village headmen of the district; and being also a quick worker and a good Pashtu and Punjabi linguist, he was well informed of all that was going on, and sufficiently able to control and guide the proceedings of his subordinates.

The Financial Commissioner thinks that Mr. Thorburn deserves the thanks of Government for his work and for the Report, which is a good one.

Mr. Lyall considers that Mr. Thorburn was very fortunate in getting good subordinates. In his notice of officers he describes very accurately the character, qualifications and performances of Munshi Ganga Rám, Extra Assistant Settlement Officer, and of the Superintendents and some of the Deputy Superintendents. Mr. Lyall does not think that he praises them too highly. They were all specially selected with much care for employment in this settlement.

Since Mr. Thorburn wrote, Fakír Abdulla has been most useful to the Deputy Commissioner as Extra Assistant Commissioner of the District.

Mián Ghulám Faríd, after doing excellent work in another settlement, has lately been appointed Extra Assistant Commissioner in Dera Gházi Khan.

Munshi Harbans Lál has left settlement work of his own accord, and is now a 1st Class Tahsildár and an approved candidate for an Extra Assistant Commissionership.

No. 164 C., dated Simla, 24th August 1892.

From—F. C. CHANNING, Esquire, Senior Secretary to Financial Commissioner,
Punjab.

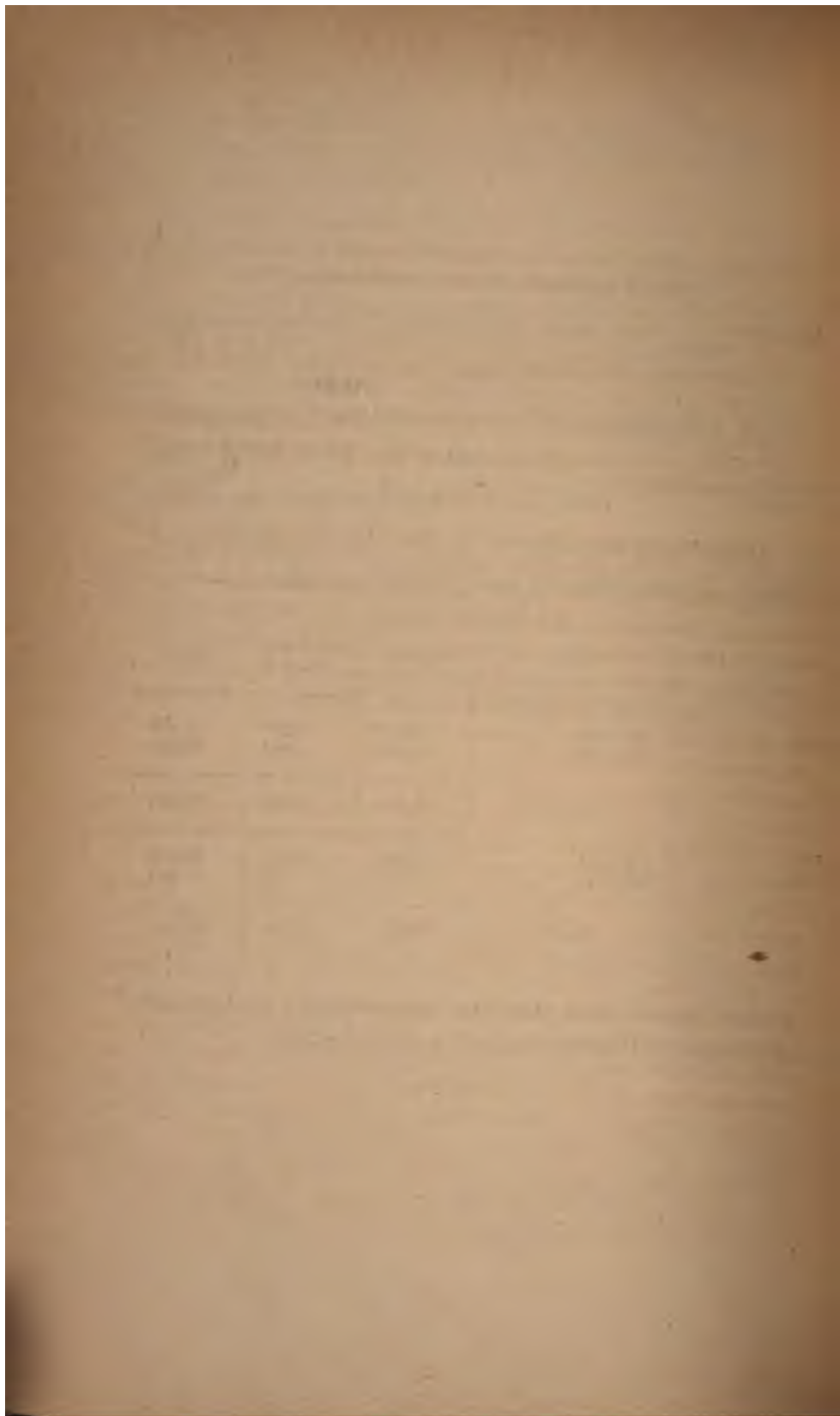
To—The Secretary to Government, Punjab.

WITH reference to the remarks contained in paragraph
20 of this office No. 77 C.S. of 23rd
June, I am directed to report the results
of the fluctuating assessments in the Bannu district for
the financial years 1881-82 and 1882-83, as follows :—

Review of Bannu Settle-
ment Report.

Year.	Tahsil.	Khalsa.	Jágir and Maufi.	Total.
1881-82 	Isa Khel	18,198	5,293	23,491
	Mianwáli... 	47,382	480	47,862
	Total 	65,580	5,773	71,353
1882-83 	Isa Khel	22,345	5,411	27,756
	Mianwáli 	54,876	73	54,949
	Total 	77,221	5,484	82,705

These figures show that the improvement anticipated
by the Financial Commissioner is being obtained.



Proceedings of the Hon'ble the Lieutenant-Governor of the Punjab, in the
Foreign Department, No. 632, dated 28th August 1884.

READ—

The Settlement Report of the Bannu district by Mr. S. S. Thorburn,
C.S., late Settlement Officer, Bannu, dated 20th November
1878.

Letter from the Settlement Secretary to Financial Commissioner
(Mr. J. B. Lyall), No. 77 S. C., dated 23rd June 1882, submitting
the above report.

RESOLUTION.—The Bannu district, which since 1861 has formed the northern boundary of the Derajat Division, is bounded on the north by the jágír territory of the Khatak Nawáb in the Kohát district, the Saghri hills and the Sohan river; on the south by the Dera Ismail Khan district; on the east by the Jhelum and Shahpur districts; and on the west by the hills of the Wazirs and Bhittannis. It contains the three trans-Indus sub-divisions of Bannu, Marwat and Isa Khel, and the cis-Indus tahsíl of Miánwáli, and its total area is 3,931 square miles. The river Indus, which flows through the district, spreads out rapidly on debouching from the hills at Kálábágh, until its various branches enclose an area 13 miles wide near Isa Khel. The low alluvial lands (known by the name of Kacha) through which it flows are subject to great changes from the river, which constantly shifts its course and often causes much damage to good land. It is joined on its right bank by the combined streams of the Kurram and the Tochi or Gambila rivers. The Kurram, which enters the district just above the cantonment of Edwardes-abad, brings down a rich fertilising silt, which adds much to the value of the water taken from it for irrigation. The Isa Khel tahsíl is separated from the other trans-Indus sub-divisions by the Maidani Range, and the Salt Range in the Miánwáli tahsíl divides the country of the Patháns on the west from that of the Awáns on the east.

2. Owing to its secluded position, the early history of Bannu is enveloped in some obscurity. It appears, however, that about 500 years ago the Bannuchis, leaving what are now the Darwesh Khel mountains, displaced the two small tribes of Mangals and Haunis, as well as a settlement of Khataks, and settled on the banks of the Kurram, where they parcelled out the land among themselves. They have since allowed other persons of miscellaneous tribes to settle and intermarry with them, and have now lost nearly all purity of descent. Some two centuries later the Niazais, who are Lodis by descent, come down from the Suleiman Khel hills, and spread from Tank into Marwat. Fifty years afterwards the Marwat Lohanis, who are also Lodis, drove the Niazais from the Marwat plain, and occupied it, and the Niazais spread over Isa Khel; and later crossed the Indus and expelled the Ghakhars from Miánwáli. Finally, the Darwesh Khel Wazirs invaded the north-west of Bannu, but the walled villages of the Bannuchis prevented them from occupying the rich lands near the Kurram. The only other tribe of importance in the district is that of the Awáns, who for at least 600 years have held the portion of Miánwáli lying to the east of the Salt Range. The Bhattanni and Bhangi Khel Afgháns occupy small tracts of country in Marwat and round Kálábágh; and the Jats, who were formerly graziers in the Kacha and the Miánwáli Thal, only adopted a settled life during the Sikh rule. Early in the present century the Nawáb of Mankera took possession of a great part of the district, but was soon after ousted by the Sikhs.

3. The population of the district, which is shown in the Settlement Report as 296,529, amounts, according to the later figures of the census of 1881, to 332,577. The population per square mile of cultivation according to the report is 366 for the whole district, but more than double this in the canal-irrigated tracts of the Bannu tahsíl. As in most parts of the province, self-cultivating peasants form the large majority of the agriculturists. The number of occupancy-tenants in the Bannu and Marwat tahsíls is very small; but in Isa Khel and Miánwáli a considerable number of tenants in the Kacha hold occu-

pancy rights acquired by breaking up land for cultivation. The district contains every variety of soil, from the rich loams of Bannu Proper to the sandy soils of Marwat and the Miánwáli Thal, and from the alluvial lands of the Indus to the stony slopes of the hills. The rainfall averages 10 inches throughout the greater part of the country, but the fall in Bannu Proper and in the Waziri Thal near the high range of hills amounts to as much as 14 inches. The cultivated area is 566,909 acres, of which 113,972 acres, or 20 per cent., are irrigated. The greater part of the irrigated area is in the Bannu tahsíl, and is watered by canals taken out of the Kurram. The Settlement Report contains an interesting account of the irrigation customs on the several canals, which will undoubtedly be of much use to the officers of the district. The Lieutenant-Governor agrees with Mr. Lyall that as long as the people manage their canals in the satisfactory manner described in the report, there would be no advantage in placing them under State control. Provision will, however, be made in the new Canal Act to enable the officers of Government to intervene in the matter of the administration of the canals, should they at any time be in danger of falling into disorganization by reason of disputes among the irrigators. There is very little well-irrigation in the district, and such as there is, is confined to the Isa Khel and Miánwáli tahsíls. The fact that the rainfall amounts to only 10 inches, and that four-fifths of the district are unprotected by irrigation, render the country extremely liable to severe fluctuations of seasons—a circumstance which should never be lost sight of by the local officers.

4. The principal crops of the district are wheat, which occupies half the total cultivated area, and gram, bajra and barley, which occupy nearly two-fifths more. The wheat of the thal and the gram of Marwat are of superior quality. Some sugarcane and turmeric are also grown in the irrigated lands of Bannu. As a rule, only *gur* is made from the former. The Settlement Officer, who has written an interesting chapter on the agriculture of the district, shows how the people follow a system of rotation of crops suitable to each locality. The district as a whole

is more than self-supporting; and a good deal of grain exported, the imports in return consisting principally English and country cloths, tobacco and iron.

5. The condition of the people generally may be described as prosperous. In the small holdings of Bannu and the sandy plains of Marwat there must necessarily be some debt; but a good deal of the debt may be ascribed, as pointed out by the Financial Commissioner, to litigation and to a rise in the value of land, which now fetches a price ranging from 24 to 30 times the land-revenue. Many of the principal families have no doubt become involved by trying to keep up the old traditions of hospitality, while they consider it derogatory to handle the plough. Chapter IV. of the report gives a most useful account of the people and leading families.

6. The tenures of land and water in this district are exceedingly complicated; but Mr. Thorburn's account of them in Chapters VI. and VII. is clear and exhaustive, and will doubtless be of great help in future to the courts before whom disputes regarding these matters are brought. The *vesh* tenure in Marwat is interesting as a survival of a primitive form of property now rarely found in any part of the world. It is in existence still in thirteen villages only, and the Settlement Officer shows the term of years for which each *vesh* will last. It seems unlikely that a custom, based upon the exchange of lands long cultivated by those who surrender them, can be maintained for any great length of time, although Mr. Thorburn is now of opinion that it is not so near extinction as he at first imagined. With a settled Government and a rise in the value of land severalty must doubtless displace this archaic form of common enjoyment, and will probably grow into fixed individual right. It is interesting to notice that the report shows what is, perhaps, the first phase in this transition. According to the present custom in certain Marwat villages where the *vesh* in its original form has died out, ancestral lands are still exchanged within the family, the communal system of a general redistribution amongst all the members of the village brotherhood being disused. In the neighbouring

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beginning.

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roads with numerous bridges; and a people who were restless and suspicious in 1850 are now quiet and law-abiding.

9. The method by which Mr. Thorburn evolved his revenue rates, and which is explained by him in paragraph 191 of his report, has formed the subject of a separate correspondence, ending with Mr. Young's letter No. 325, dated 24th March 1882. This method did not meet with the approval of the Punjab Government, and will not be adopted in other settlements. The points at issue in the discussion which took place on the subject were of a technical nature, and cannot be conveniently examined in the present review, though it should be stated that some misunderstanding occurred in the first instance regarding the contentions of Mr. Thorburn and Mr. Lyall. Sir Charles Aitchison agrees with the Financial Commissioner that any further discussion of the matter is now unnecessary, and it is sufficient to note that though the procedure adopted by Mr. Thorburn in framing his revenue rates was disapproved, no doubt has been felt at any time regarding the suitability of the assessment derived from those rates.

10. The general result of the settlement is that the land-revenue of that portion of the district where fixed assessments have been maintained was raised from Rs. 3,33,728 to Rs. 3,58,278, or by 7 per cent. The detail by tahsils is as follows:—

Tahsil.	Revenue of year before new assessments.	New assessment.	Increase or decrease.	
			Amount.	Percentage.
	Rs.	Rs.	Rs.	
Bannu 	1,13,697	1,37,469	+ 23,772	+ 17
Marwat 	1,20,543	1,13,448	- 7,095	- 6
Isa Khel 	35,257	36,591	+ 1,334	+ 4
Mianwāli 	64,231	70,770	+ 6,539	+ 9

11. The river Indus so constantly shifts its course, thereby making waste large areas of fertile land, and fertilising what was before barren, that it was found impossible to maintain fixed assessments in the Kacha. Accordingly a system of fluctuating assessments, which was introduced into the Miánwáli tahsil in 1862-64, and formed the first instance of such a system in the Punjab, was extended to all the Kacha lands at the present settlement. The method of assessment, which is extremely simple, is explained by the Settlement Officer in paragraph 203 of his report, and need not be discussed here. The result, as will be seen below, has been an immediate sacrifice of some revenue; but it was decided by the Settlement Commissioner and Financial Commissioner, with the concurrence of the Lieutenant-Governor, that this was the only plan which would be fair to both the people and the Government, and there is no reason to regret its introduction. The assessment of this tract in the year before the new system came into force was Rs. 89,293. The revenue collected in 1878-79 and subsequent years has been as follows:—

	Rs.			
1878-79	...	...	...	71,060
1879-80	...	...	...	60,364
1880-81	...	...	...	63,348
1881-82	...	...	...	71,353
1882-83	...	...	...	82,705

During several of these years the Kacha tract has suffered very severely from changes in the Indus bed; and had not the system of fluctuating assessment been in force, it would have been necessary to grant large remissions of the land-revenue. It would appear that the anticipations of the Financial Commissioner, that a more prosperous period is about to return to the Kacha, are likely to prove true, and that, whether from the natural set of the river, or from the construction of dams for draining the water of small branches on to the neighbouring fields—a work which has been successfully prosecuted by the subordinate revenue staff of the district under the direction of Mr. Udny—a good deal of fresh land is now being brought under the plough.

12. The rules to be followed in the alluvion and diluvion enquiries in this tract are given in paragraph 204 of the Settlement Report, and are approved and sanctioned by the Lieutenant-Governor. The rules are simple, and should be easily worked. Only three rates will be applied in assessing the lands placed under the fluctuating system, *viz.*, two for cultivation, and a light rate for land fit for grazing, as shown in the margin.

13. The incidence of the revenue on cultivation according to the last and present settlements is shown below:—

Tahsil.	By last settlement.		By new settlement.	
	Rs. A. P.		Rs. A. P.	
Bannu	1	8 8	1	0 9
Marwat	0	12 0	0	7 10
Isa Khel	0	15 6	0	14 5
Miánwáli	1	2 4	0	14 1
Total district ...	1	0 7	0	12 2

It will be seen from this that, owing to the extension of cultivation, the incidence of the revenue is now nearly 4 annas an acre less than at last settlement. The new assessment appears to Sir Charles Aitchison to be of a fair and moderate character; and he trusts that the district will maintain its flourishing condition under it. It was necessary to tax the border villages and certain privileged classes, such as the Syads and Ulama of Bannu, somewhat lightly; but such concessions are necessary in all frontier tracts, and do not in any way argue a high pitch of

assessment. A reduction of 6 per cent. was given in the tahsil of Marwat, which was considered rather overassessed, but the revenue has been raised in all the other tahsils. It should be noted that the percentages given in the Financial Commissioner's review (paragraph 19) appear to have been wrongly calculated on the assessments of the second summary settlement, instead of on those of the year preceding the regular settlement.

14. The remarks of the Settlement Officer in paragraph 196 of the report will be found useful to the Deputy Commissioner of the district in the working of the new settlement. The revenue being light, there should ordinarily be no difficulty in realizing it. The observations made by Mr. Lyall regarding the principles on which suspensions and remissions should be granted (paragraphs 22 and 24) are in the Lieutenant-Governor's opinion judicious. No doubt in the dry, unirrigated tracts of the district suspensions and perhaps remissions will be sometimes necessary, and cases of damage by hail must be treated on their merits. In dealing with these cases the orders of Sir Henry Davies, which are quoted by the Settlement Officer, and the principles which have been laid down by the Government of India and by the Lieutenant-Governor in the reviews of the Revenue Administration Reports of the last two years, should be borne in mind.

15. The statement attached to paragraph 193 of the report shows that the rate of the cesses has been increased from Rs. 18-9-0 to Rs. 21-13-0 per cent. In the Waziri circles the lambardárs receive an allowance of 10 instead of 5 per cent. on the revenue. The patwáris' cess is levied at varying rates in the different parts of the district, the highest rate being Rs. 5-12-0 per cent., and the lowest Rs. 4-0-0 per cent. The cesses peculiar to the district are those on irrigation and on water-mills. It is not usual to include the malba in the list of cesses, but Mr. Thorburn appears to have done so. The malba rate, however, is very low, being an average of one per cent. in the greater part of the district, and in the Bannu tahsil nothing. These cesses are sanctioned by the Lieutenant-Governor.

16. A change has been made in the dates on which the instalments of land-revenue are to be paid. Those now fixed are detailed in the statement which is given in paragraph 197 of the report. These dates are more favourable to the revenue payers than those formerly in force, and the alteration accords with the orders issued by the Government of India on the recommendations of the Famine Commission. The dates of the rabi instalments are now, except in tahsíl Bannu, the latest in the Punjab.

17. Among other improvements effected in the new settlement are the demarcation of the Government rakhs in the Miánwáli Thal, the substitution, in place of a grazing tax by enumeration of cattle, of a fixed assessment on grazing waste in Miánwáli, and a light fluctuating assessment on grazing waste in the alluvial lands of the Indus. A grazing tax proper (tirni) is now levied only on camels in Isa Khel and in the Government rakhs in Miánwáli. The Lieutenant-Governor concurs generally with the remarks made by the Financial Commissioner on this subject in paragraph 27 of his letter.

The present area of reserved Government land in the Miánwáli Thal is 145 square miles. Besides this there are or were in the Indus bed four blocks of Government forest aggregating 2,772 acres. The proprietary right of Government has also been declared in 1,413 acres of shísham forest land in the Kacha, as well as in other land now submerged by the river; and measures have been taken (as described in paragraph 156 of the report) to prevent the indiscriminate cutting down of the trees on the lands released to the people. .

18. The Settlement Officer has explained fully in Chapter IX. the procedure followed by him in recording the tribal customs. The Lieutenant-Governor entirely agrees in the remarks of the Financial Commissioner regarding the weight to be attached to the record of so-called custom described in paragraph 28 of Mr. Lyall's review. So far, however, as Mr. Thorburn's record includes well-established customs, it will doubtless be of much use to the courts of the district.

19. A necessary and important part of the work of the recent settlement consisted of the investigation and record of all revenue assignments of which the actual extent and value were not altogether satisfactorily known. All doubtful points connected with this subject have now been cleared up, and the total value of assignments in the district is as shown below :—

	Rs.
Jágírs	20,960
Old Máfis	2,091
New Máfis	880
Marwat Barats	5,200
Allowances to Tappa Maliks	6,704
Zamíndári ináms	4,201
Total	40,036

The Barat grants, as noted by Mr. Lyall, will be considered as sanctioned for the term of settlement, except in cases in which a special term has been definitely fixed.

20. The arrangements for the appointment of lambardárs and patwáris have also been placed on a satisfactory footing during the recent settlement. The Lieutenant-Governor agrees with the Financial Commissioner that radical changes in appointments of headmen are to be deprecated, and wholesale reductions or dismissals, even if of temporary advantage, produce mischievous results in the long run. The patwáris of the district have been graded according to fitness, instead of necessarily receiving the pay of their respective circles, and the cess has been funded to allow of their being paid according to the new system. It is hoped that when the kánúngo staff is strengthened under the new provincial scheme, the Bannu patwáris will be thoroughly supervised, and especially that the fluctuating revenue will be assessed from year to year on reliable data.

21. With regard to the special points noticed in Mr. Lyall's letter, the Deputy Commissioner should take into consideration and report on the Settlement Officer's remarks in paragraph 47 regarding the insufficiency of pound dues in Isa Khel and Mianwali, and on the Financial Commissioner's observations regarding the restrictions placed on the use of inflated skins by river-side villagers on the Indus. The Deputy Commissioner's attention should also be drawn to Mr. Thorburn's remarks in paragraph 116 regarding the care required in working the "Nagha" system.

22. The remarks of the Financial Commissioner in paragraph 9 of his letter on the Chichali and Wahai schemes will be brought to the notice of the Public Works Department in connection with the provincial scheme of famine preventive works, when the report regarding such works in the Derajat is submitted by the Commissioner. The Lieutenant-Governor understands that Abdul Rahim Khan has overcome the natural difficulties in the way of his second water-course, and that a fair area has been irrigated by it during the past year.

23. His Honor observes with satisfaction that Mr. Lyall considered that the village statements were well and carefully prepared, and he trusts that the record contained in them is being duly maintained by the Deputy Commissioner. The special attention of Commissioners and District Officers has been repeatedly invited to this subject of late, and the Lieutenant-Governor will be glad to be assured that the orders have not been overlooked in the Bannu district.

24. The settlement operations lasted six and a half years, and were carried out at a cost of Rs. 4,84,775, which will not be recovered from the increased revenue for 20 years. It must be remembered, however, that a first regular settlement is necessarily more costly than a revised settlement; and making allowance for this and for the special circumstances of frontier districts, and the great

difficulty caused by the complexity of tenures in preparing the record of rights, Sir Charles Aitchison sees no reason to think that the expenditure was in any respect excessive.

25. The sanction of the Lieutenant-Governor is herewith accorded to the record of rights, prepared by Mr. Thorburn, and the irrigation maps and records which the Financial Commissioner has proposed shall be considered a part of the settlement record (paragraph 9 of the Financial Commissioner's letter). Mr. Lyall has recommended that the new settlement be sanctioned for 30 years; and in view of the reasons given by Mr. Thorburn in paragraph 231, which appear to him to be sufficient, His Honor is pleased to sanction the settlement for a term of 30 years, with effect from the autumn of 1877, when the new assessment of the whole district came into force.

26. The Lieutenant-Governor fully concurs in the commendation which Mr. Lyall has bestowed on the work of the Settlement Officer. Mr. Thorburn has carried out a difficult settlement with care and judgment, and his report is well written, interesting, and replete with information which will be most useful to the officers of the district. The acknowledgments of the Punjab Government are also due to Munshi Ganga Rám, Fakír Abdulla, Mián Ghulám Faríd, and Munshi Harbans Lál for the efficient discharge of their duties under Mr. Thorburn's control.

27. In conclusion, Sir Charles Aitchison wishes to place on record the obligations of the Punjab Government to Mr. J. B. Lyall (now Resident of Mysore) for his excellent review of this report, and his supervision as Settlement Commissioner of the whole working of the settlement, the successful issue of which is due in a large measure to his able direction and advice, His Honor much regrets that so long an interval should have been allowed to elapse before final orders were passed on the settlement. Measures have, however, been taken to prevent the recurrence of similar delays in future.

It is a pleasure to receive from you the information that the Government of India has decided to send a mission to the United States to study the various aspects of the American system of government and administration. The mission will consist of a number of officials from various departments of the Government of India, and it is hoped that it will be able to gain valuable insights into the American system of government and administration. The mission will be led by a senior official of the Government of India, and it is hoped that it will be able to gain valuable insights into the American system of government and administration.

I am, Sir, very respectfully,
Your most obedient servant,
H. M. DURAND,
Officiating Secretary to the Government of India.

I have the honor to be,

Sir,

Your most obedient Servant

(Sd). H. M. DURAND,

Officiating Secretary to the Government of India

LAND REVENUE SETTLEMENT

OF THE BANNU DISTRICT.

CHAPTER I.—GEOGRAPHICAL AND PHYSICAL.

1. On January 1st 1861 the old Leiah division was broken up, and the Derajat division formed with Bannu for its most northern district. Previously the Trans-Indus portion of the new district comprising the tahsils of Bannu, Marwat, and Isa Khel, had belonged to the Dera Ismail Khan district, with Edwardes-abad, then Dalipnagar, as its head-quarters and the Cis-Indus portion, consisting of the sub-division of Káchhi or Miánwáli, to the old Leiah district. In 1862 Pakhar, a tract lying along the eastern base of the Salt Range, and the Miánwáli Thal villages of Harnoli and Wichwin were added to Bannu, whilst the eighteen villages of the Núrpur iláka were taken from it, and annexed to Shahpur. Since then only one change of importance has been made, viz., in 1875 Mullazai and a strip adjoining up to the water-shed of the Bhitanni Range, until then a part of Marwat, were transferred to the Dera Ismail Khan district but have been settled by me.

2. The boundaries of the district with those adjoining, as well as boundaries of district with independent Waziristán, require to be stated precisely, as disputes may arise concerning them; and on two sides a clear knowledge of what they are, and why they have not been more exactly demarcated, is politically important.

I give the information in the following statement :—

Direction.	District or territory on further side of line.	Specification of line.	REMARKS.
N. N. W. W. and S. W. (Bannu and Marwat tahsils).	Independent Waziristán, and portion of the Bhitanni hills.	Along the base of the hills from near Lattammar to the Kharoba Nala.	No exact line has ever been fixed. In this settlement it was decided on political grounds not to attempt to fix a hard and fast line. The country was mapped in the Bannu tahsil up to the frontier post road, and in Marwat somewhat beyond it, viz., up to the 1865 Thakbast limits. Beyond such lines only cultivated plots were measured.
S. S. W. ...	Portion of Marwat transferred to Dera Ismail Khan in 1875.	The Bain Pass & water-shed of the Bhitanni hills as far east as the Sigi Pass.	See Punjab Government notification No. 1974, dated 8th November 1875. The boundary in the hills for the few miles between the Kharoba Nala and the Bain Pass does not seem to have been fixed. To decide jurisdiction in border cases, I would suggest the watershed, but in many cases it will be advisable perhaps to treat the foot of the range on either side as the boundary.

Direction.	District or territory on further side of line.	Specification of line.	REMARKS.
S. ...	Dera Ismail Khan district.	Southern boundary line of Pezu village; thence road from Pezu to Shekh Budin station, central road of station except a short divergence in order to make the line run through the tanks: thence a straight line to water-shed of the Shekh Budin range: along water-shed to head of Atak Paniála Nala, thence to a point in the Khisor range about two miles north of the upper Káfirkot: thence a line nearly due south through the Kacha to Wina in Miánwáli: thence across the Thal nearly due east to Wichwin Bála.	The greater portion of this line except the Thal portion, was not accurately fixed until this settlement, when Mr. Tucker and I laid down part in concert, and the rest by way of judicial decision between contending villages.
E. ...	Shahpur district as far north as Sakesar; thence the Jhelum district to the Sohán river.	The joint boundary line of the different villages concerned.	As to the higher parts of Sake hill, it should be noted that Ban there only has a triangular part surrounded on all sides by Shahpur district, in which is the whole of the Sakesar rakh.
N. E. ...	Rawalpindi district.	Sohán river ...	Rawalpindi only adjoins the district for a frontage of about 6 miles.
N. N. E and N.	Sághri hills in Kohát district.	A fixed line of about 28 miles in length up the Múlwál Nala to a peak called Chattrú Sar, thence along crests & ridges and through cultivated lands to the Khatak Algaed or ravine.	I demarcated the line in February 1871. But it was not until the year (Punjab Government let No. 1782, dated 11th October 1871) that it was sanctioned after Capt Hastings, Settlement Officer Kohat and I had jointly made a few small modifications in it. The line now fixed is absolute. A printed copy of my 1871 report and subsequent correspondence is in the district office.
N. W. (Tahsil Isa Khel.)	Iláka Khatak in Kohát district	An irregular line striking southwards across ridges and along water-sheds to foot of hills north of Kálábágh.	This line separates the Nawab of Khatak's jagir territory from Bhangi Khel. There were no disputes about it.

Direction.	District or territory on further side of line.	Specification of line.	REMARKS.
W. Tahsil Isa Khel.	Ilāka Khatak in Kohāt district.	The limit of settlement measurements as far south as the Mithā Khatak Nala is generally the Isa Khel base of the horse-shoe wall of the Maidani hills, which look down on the Isa Khel plain, but the real boundary line, if demarcated, would be the crest of that wall or half way up.	During settlement I made several attempts to fix a line in conjunction with the Khatak Nawāb's agent, but without success. The Nawāb claimed the whole Maidāni Range down to its eastern base, but our Khatak & Bhangi Khel villages seemed to be in possession to the water-shed. Ultimately at Mr. Lyall's suggestion the line was left undemarcated, and an entry was made that, both Mr. Lyall & I considered that should it become necessary to fix a line, one midway between the foot of the range and its water-shed would be the most suitable, and that in any case villagers on both sides of the line would retain their old rights to cut brushwood & grass, &c. As this arrangement seemed to give satisfaction, and to meet the required merits of the case, we thought it inexpedient to do more, especially, as the real object of the Nawāb appeared to be to indirectly revive an extinct claim to Kotki and the alum works there. From base to crest the rise of the range is very abrupt. The intervening space excepting about Kotki is uninhabited. The land about Kotki itself which is in the throat of the Chichāli Pass, together with all the ground up the pass from which the black shale (<i>rol</i>) used in the manufactory of alum is procured, has been entered as Government property.
(Marwat and Bannu.)	Ditto ...	From the Mithā Khatak Nala the line crosses the range to the Abasa hamlet in Marwat, and thence runs in a N. N. W. direction through Thal lands to near Lattam mar.	The greater part of this line was laid down by Deputy Commissioners of Kohāt and Dera Ismail Khan in 1856.

Thus the boundaries are broadly, north the jagir territory of the Khatak chief in the Kohāt district, the Sāghri hills, and the Sohān river, south the Dera Ismail Khan district, east the Jhelum and Shahpur districts, and west the hills of independent Wazirs and Bhitannis.

3. The district, as above defined, covers an area of 3,931 square miles, lies between latitudes 32°15 and 33°06, and longitudes 70°24 and 72°00, has an extreme

Area and tahsils.

length from north to south of 58 miles, and an extreme breadth from east to west of 9½ miles, and is divided into four tahsils as follows:—

Name of Tahsil	AREA IN SQUARE MILES.										
	CULTIVATED AND FALLOW.			UNCULTIVATED.							GRAND TOTAL.
	Canal irrigated.	<i>Bārāni</i> including hill torrent and <i>sailāba</i> .	Total.	<i>Culturable.</i>		<i>Unculturable.</i>				Total.	
				With present rain-fall.	Only if means of irrigation be improved.	Mountainous.	Sandy & sterile.	Marsh or under water.	Other.		
Bannu including Can- tonments.	132	96	228	25	77	...	83	29	3	217	445
Marwat including Mula- zai.	37	347	384	93	266	* 313	239	32	5	948	1,332
Isa Khel ...	21	102	123	38	205	260	15	32	2	552	675
Miánwāli ...	2	261	263	49	674	277	69	145	2	1,216	1,479
Total ...	192	806	998	205	1,222	850	406	238	12	2,933	3,931

4. An off-shoot of the Salt Range, commonly spoken of as the Maidāni spur, bisects the district into two nearly equal valleys, or more correctly hill-encircled plains. To the west of this dividing wedge, which runs from north to south, and is mainly in the Kohāt district, lie the sandy Marwat plain, the green oasis occupied by the Bannuchis, the Waziri settlements, and some Thal country in the jágir of the Khatak chief.

Looking eastwards the eye first rests on the rain-watered clayey up-lands of Isa Khel, furrowed by the sandy beds of two large hill torrents, the Chichāli and the Biroch. Those up-lands slope gently down to the low-lying alluvial tract known as the Kacha. The eye notes its level expanse, its cultivated land, and the dark greenness of its clumps of shisham trees, and beyond them the silver brightness of the mighty Indus, and sees still further east the Miánwāli plain with the Salt Range and the Sakesar Hill (4992 feet) in the back ground. Of the two great valleys into which the district is thus divided, the western is the finer; because, besides containing the highly irrigated and well timbered Bannuchi

* Measured 182 + unmeasured but estimated at 131 = 313.

† Probably the area of the district is about 40 square miles larger, as in the Bannu tahsil I only measured up to the frontier road, and in the Isa Khel tahsil up to the foot of the Maidāni range. What area the revenue survey will give I do not know, as that survey is not yet completed.

country, it is entirely surrounded by mountains, amongst which Pirghal (11,583 feet) and Shiwidhar (10,998 feet), Kafirkot (4004 feet), Gabar (6378 feet), and Shekh Budín (4516 feet) are conspicuous, while far away to the south appears the massive plateau-like crest of the Takht-i-Sulemán (11,292 feet), and to the north the everlasting snows of the Sufaid Koh Range. The eastern valley commands a view of no lofty peaks, and to the south merges into an interminable flat Thal country, but it contains some charming park-like scenery in the alluvial bed of the Indus. Besides these two great valleys two other tracts require passing mention, the net work of hills north of Kálábágh, known as Bhangi Khel, and Pakhar, the tract east of the Salt Range received, as already noticed, from Jhelum in * 1862.

5. The absence of trees, except in parts irrigated from the Kúrram or subject to Indus inundation, the bareness of the hills immediately surrounding the district, and the dazzling glare of the sun, are serious drawbacks to scenic effect. On these grounds Bannu as a district, can hardly be called picturesque. Still about sunrise or sunset or in the spring time when the rains have been seasonable, or on a cloudy day, there are few parts where one or more views would not be described by that comprehensive epithet. And here and there beautiful spots are to be found, and charming views to be obtained. Thus, nothing can be prettier or more idyllic than the scenery in Bannu proper † on a May morning, when every Bannuchi is out harvesting. The yellow corn, the green trees, the murmuring water, the reapers both men and women; the white pet-lambs or sheep with their tinkling bells in every field, and lastly the abrupt grey hills in the back ground, make up as sweet a picture of peace and content as can be seen in any country. There are two delicious spots for spring camping under the shisham trees in the alluvial bed of the Indus. Then if you wish to see nature on a grand scale go into the Bhangi Khel hills, or ascend either Sakesar or Shekh Budin, and from the first your eyes will feast on snowy peaks and wild gloomy glens; from the second they will see views of rare beauty and softness; and from the third looking eastwards they will rest on a strange lifeless picture of weird desolation. Gazing west from Shekh Budin on an August evening after a fall of rain you will see the portals of heaven open and close before your eyes, as the sun sinks behind the Sulemán mountains, and the colours of his dying glory change and fade away into gloom. Amongst fine views I should add too that of the Indus and the eastern valley from a little conical hill at Mári, where the "Kálábágh diamonds" (quarter crystals) are found and which is crowned by an old Hindu ruin, also that of a dust storm seen from Shekh Budín as it sweeps southwards over the Marwat plain. Amongst picturesque spots I may mention Nammal, just beyond the Dhak Pass in Miánwáli, also Kálábágh and Mári on the Indus, and Kotki in the throat of Chichali Pass.

* Men of Miánwáli mostly know the name Pakhar; but residents of the Kacha and Isa Khel generally speak of the tract and parts beyond as *utrad*, i. e., the high country.

† Here and elsewhere the term "Bannu proper" means the canal-irrigated portion of the Bannu tahsil.

6. The general elevation of the plains is between 685 feet (new Miánwáli station), and 1276 feet (Edwardes-abad).

Climate.

hence the temperature would be much the same all over the district, did special local causes not affect it. Thus trees, excessive irrigation, and the close propinquity of the hills all combine to make the climate of Edwardes-abad in the hot weather moist and close, and to nearly equalize the temperature throughout the twenty-four hours. But 32 miles away at Lakki, where there is no irrigation, and the country is open and sandy, the days are comparatively hotter, the nights cooler, and the atmosphere is very dry. So marked is the contrast that a local proverb says: "The day of Bannu, the night of Marwat (is best)." In ordinary years punkahs are required from early in May until the end of September, hence the cool and cold weather may be said to last for seven good months. The hottest time is from the middle of June until the first great fall of rain, which can not be counted on before the end of July. The coldest month is of course January, during the whole of which ice can be collected, when there are no clouds or wind. Frosts continue until late in February. Thus in 1876, the first year in which ice was stored in pits, large collections were made between the 15th and 22nd of February. The most trying, though not the least enjoyable, months are, I think, October and November, in which the variation of temperature in the twenty-four hours is the greatest. I have seen water in a shallow earthen vessel freeze over night in the second week in November, and by 2 P. M. the thermometer in my tent go up to between 80° and 90°. During an eleven years' residence in the district I have only once known snow fall in the plain, viz., in January 1874, when it fell in Marwat. On the whole, the climate of Bannu must be called a trying one, the extremes of heat and cold are so great; and for the Englishman it is particularly so, because he must reside the greater part of the year at Edwardes-abad, the most unhealthy locality in the district.

7. Except in the northern portion of the Bannu tahsil, the annual

Rain-fall.

rain-fall throughout the district is under 10 inches. Bannu proper and the Waziri Thal catch the tail of many a storm, which never reaches farther south, and thus in the course of the year their rain-fall runs up to about 14 inches. The July to September rains are more general than those of any other season. They usually come from the south-east or east after the wind has blown strongly, and steadily from those quarters for a day or more. In the cold weather the rain clouds come mostly from the north or west or from between those points, and are very partial and capricious in discharging themselves. The southern parts of Marwat seem to get less rain than any other portion of the district, except perhaps the Miánwáli Thal. Shekh Budin is too isolated, and the hills connecting it with the Salt Range to the east and the Sulemán Range to the west are too low to offer much attraction to passing storm clouds, which often persistently hang about the Gabar mountain, and lofty peaks or ranges south-west of it, and after vain attempts to strike across Marwat, sweep southwards towards the Takht-i-Sulemán, or disappear to the west. October and November are the most rainless months in the year. In some years not

a shower falls between 20th September and Christmas. The most rainy months are July, August and January. The latter is certainly the cloudiest. In April and May occasional thunder storms break on different parts of the district, and are frequently accompanied with hail. On the whole the rain-fall must be characterized as scant and uncertain, and when sufficient, it is often unseasonable. Thus between two and three inches fell in May 1872, and again in 1877, when none was wanted.

8. I believe Doctors Verchere and Costello are the only amateurs, who have studied the Geology of this district and of the surrounding hills, and that as yet no professional survey has been made. The result of the formers' labour will be found in Part II No. 1, A. S. Journal 1867, Chapters III and IV. It is sufficient here to note that the hills are generally composed of miocene sand stone and conglomerate, with great masses of lime-stone cropping up through them, and that the soil of both the western and eastern valleys consists of a thick bed of lacustrine clay, now in many places eroded or covered over with detritus from the hills. Thus a zone of pebbles and gravel from one to 3 or 4 miles in breadth skirts the bases of most of the hills, and all central and southern Marwat has now a sandy surface soil. Throughout the western valley, and in fact all down the frontier, rounded eminences or mounds covered with broken pottery arrest the eye. Their history is very interesting. I transcribe here what Doctor Verchere wrote me about them in 1869. After telling me that the alluvium of the western valley was still in places upwards of 40 or 50 feet thick, * and that underneath it lay strata of coarse gravel and pebbles he went on to say; "at one or two places this alluvium has escaped the erosion which has worn down most of it, and slight eminences are left standing; such is the eminence on which is the ruin of Akra. The erosion has been further lessened at Akra by the hillock having been covered by buildings from a great antiquity. Two or three similar hillocks exist near the foot of the hills on the west, but they have now worn down to very un conspicuous mounds." I may add that next to Akra the most noticeable mounds are those at the Tochi Pass Post, and at Islāmnagar in Marwat, and that on both antiquities are sometimes found.

9. No archeologist, † professional or amateur, has yet visited the district, owing to which little has been positively ascertained about its antiquities, of which the best known are the Akra mounds lying nine miles south-west of Edwardesabad. There is a picturesque, but rather highly coloured, account of them in Edwardes "*Year on the Frontier*" Volume I, pages 335 to 341. Those mounds now consist of several rounded eminences, each covered with potsherds, stones and rubbish of sorts. The highest rises abruptly about 250 feet above the level of the country immediately surrounding it, and covers an area of 33 acres. No ruins exist on it, and the only

* When the Edwardes Memorial well was being dug in the eutcherry compound, parts of a skeleton, supposed to be that of a man, were exhumed from the gravel stratum underlying the clay at a depth of, I think, 35 or 40 feet below the surface. The bones I am sorry to say got mixed up with the gravel, and were removed and lost.

† In the latter half of December 1878 General Cunningham, visited the ruins on the Māri hill, of the upper Kafir Kot on the Indus and the village and mounds of Rokhri.

traces of masonry to be found are at the northern end, where tunnelling has exposed portions of arches and brick walls. The kiln bricks found are all very large. A shaft sunk to about 40 feet by myself in 1868-69 at the southern extremity of the mound only resulted in the exhumation of a few bones. The stratum pierced was clay. This hillock and its more insignificant neighbours are gradually but very slowly disappearing, theft materials having been in request for generations past as manure. Judging from the quantities of chips of bone found, the chief mound must have been utilized for some long period as a common sepulchre by the inhabitants round about. It is the bone-earth (phosphate of lime) which makes Akra so valuable to the cultivator. Mr. Egerton, the present Lieutenant Governor, when Financial Commissioner, visited the mounds, and at his suggestion they were declared Government property. The villagers are allowed to excavate as formerly, but are expected to bring in antiquities when found. Any taken should be paid for. The popular tradition ascribes the earliest occupations of Akra to Hindus, to whom succeeded Greeks, Indo-Grecians and Indo-Scythians. Subsequently Hindus recolonized the place calling it Sat Rám, and remained in possession until Sultan Mahmúd of Ghazni destroyed it and them. Coins and other antiquities establish the settlement here of Hindus, and of races acquainted with Greek art, also of Muhammadans in later times. Thus four years ago, when in camp at Akra, a villager brought me an inscribed stone he had turned up, when ploughing below the chief mound. It is now in the Lahore museum, but has disintegrated from exposure to the air. All that General Cunningham and the Sanskrit Professor at St. Petersburg could pronounce about it was, that the inscription was in ancient Sanskrit, and had it been better preserved and more perfect, it "would have been invaluable." Again small moulded Budhist (?) images are constantly laid bare here after rain. The coins found are mostly copper and of many sorts. The most valuable antiquities are small cut cornelians and agates, apparently the stones of Greek signet rings. I have seen the following figures beautifully engraved on some of them, a helmeted head, a horse, a bull, two cocks &c. They are clearly of Greek design. A small mound similar to those at Akra exists at Islámnagar, and another at the Tochi outpost. There are a few others, but their size is very insignificant.

Passing now to the Isa Khel parganah we have in the Khisor Range (Rattah Roh) about ten miles due south of Isa Khel town a stupendous Hindu ruin locally termed "Káfirkot," which, together with the greater part of the range, a settlement boundary decision has included within the Dera Ismail Khan district. It would therefore be beyond my province to describe it. I have mentioned it because if the Kurram is fordable, it is easiest visitable from Isa Khel.

Now crossing the Indus into Miánwáli we have at Mári a picturesque Hindu ruin crowning the Gypsum hill there, on which the "Kálabágh diamonds" are found. Its centre building now serves as a Hindu temple. The ruins themselves have once been extensive, but compared to those of the Khisor "Káfirkot" are insignificant. The above together with two centry-box-like buildings, I suppose to be *dolmens*, near Nammal, and several massive looking tombs (?) constructed of large blocks of dressed.

stone, in the Salt Range comprise all the antiquities above ground in the district. There can be no doubt many remain concealed beneath our feet which accident alone will reveal. Thus the encroachments of the Indus, and even of the Kurram near Isa Khel, often expose portions of ancient masonry arches and wells.

At Miánwáli itself and Rokhri, when the old high bank of the river had been undermined and fallen, fragments of masonry have been exposed, amongst which numerous life-sized moulded heads were found.

In 1868, Mr. Priestley, Assistant Commissioner, sent several of these to the Lahore museum, where they now are. The only other antiquity worth mentioning is a monster *bāuli* at Ván Bhachrán said to have been built by order of Sher Shah. It is in very good preservation, and is similar to those in the Shahpur district.

10. When I come to the paragraphs on assessments, which will be treated of in the chapter headed "Fiscal," I shall have something to say about each of the cultivated tracts, and therefore confine myself in this and the next five paras. to describing the mountains, rivers, and other physical and special features of the district most worthy of notice.

I begin with the mountains, and would premise that natives seem to have no one comprehensive name for a range of hills, hence I shall here refer to each by what is its best known or most appropriate designation. It would be aimless to give all the names, they are so many, but where useful, I shall note the most common.

Wazíri Hills.—The wall of mountains collectively termed the Wazíri Hills, which bound the district on the west, is independent Wazíristán. The highest is the Gabar (6378 feet). It is the natural sanitarium of the district, and though its summit is only about 30 miles south-west of Edwardesabad, it was never visited by an Englishman, until Captain St. Barbe Browne, 3rd Punjab Cavalry, ascended it in May last.*

Bhitanni Range.—A little south of the Gabar the Suleman Range throws out towards Shekh Budín a low spur of crumbling sand stone hills, known as the Bhitanni Range. It is held by independent Bhitannis as far south as the Kharoba torrent, whence it is in British territory, the water-shed from the Bain Pass east-wards forming the boundary between the Dera Ismail Khan and Bannu districts. This Bhitanni Range comes to an end at the Pezú Pass. Immediately to its east rises the Shekh Budín mountain, which will be presently described.

* As the Gabar may some day be a sanitarium, and all information about it is useful, I here give some extract from a letter Captain Browne wrote me, describing his adventurous trip.

*** "Yes, I succeeded in getting to the top of the Great Gubbur. The small Gubbur and the Great Gubbur were originally in one range; although they are now divided by an immense impassable chasm fully 3000 feet deep with perfectly straight scarped sides. On the top of the small Gubbur is a *zyarat*, a mere circle of stones, and a rude hut thatched with branches in a very rough way. They take up the only level ground there is on the top; in fact the small Gubbur is simply a knife edge with 3 other knife edges running from it ***. There is no water on the top or anywhere near the top; there are no trees on it; ***. The best road to it runs through Kooie of the Wazírs, and up the Spin Algad; but beyond a nice view there is nothing to be got there. The Great Gubbur is a very different

Shekh Budín Range.—From Shekh Budín, a low spur runs east-north-east as far as the Karrum at the Tang Darra, and except towards its eastern extremity serves to separate this district from that of Dera Ismail Khan. Like the Bhitanni Range this Shekh Budín Range is mostly composed of soft sand stone, and is rapidly disintegrating. No doubt much of the sandy surface soil of southern Marwat has been formed by denudation from this and other neighbouring ranges. Of its several names the best known amongst us is the Shekh Budín or Marwat Range, and among natives Shín Ghar or Sabz Rah.

Maidánt Range.—From Tang Darra northwards runs the spur or range already mentioned in para. 4 as dividing the district into two pretty equal halves. As far as the Mitha Khatak torrent these hills are very low, and entirely in this district, their water-shed separating the Marwat from the Isa Khel tahsíl. North of the Mitha Khatak torrent this spur rises to an average height of over 2000 feet above the level of the plain, and breaks into two chief ridges, the eastern one of which separates Isa Khel from Khatak country, and trending in a north-east direction, curves round to Kálabágh. The whole spur has numerous names, the best known of which are the Khatak or the Maidání Pahár; the latter from the hamlet and valley of Maidán, near its centre and highest point (4256 feet). The eastern face of this range forms a bold and almost impracticable scarpment of cliffs. Thin beds of lignite and black shale (rol), from which latter alum is manufactured, are found throughout the range.

Bhangi Khel.—Above Kálabágh are the Bhangi Khel hills, a wild stony country of parallel ridges and deep gullies, with here and there small culturable glens between.

Salt Range.—From opposite the locally famous Dangkot hill, in Bhangi Khel about six miles up the Indus from Kálabágh, that portion of the Salt Range which extends from the Indus to the Sakesar hill, may be said to commence. It separates the Awáns from the Pathans of Míánwáli, contains some fairly good grazing and *uríál* (mountain sheep) shooting grounds, and in the hollows and glens patches of cultivation are to be met with.

mountain. It is a long ridge some 7 or 8 miles long, very grassy and not by any means steep at the top, with lots of level places on the east side fit for bungalows,—in fact looking as if they had been artificially prepared. There are some olive trees on the top, but down in the dells are plenty of trees. Water is to be found all the year round in a stream which runs out of the side of the mountain. The average height is 6500 feet. It is very easy of access; it is only 30 miles from Bannu to the top, viz.:—

Bannu to Jane Khel	...	...	...	15 miles.
Jane Khel along frontier road to south	...	...	6	"
From frontier road to foot of hills	...	...	3	"
From mouth of Saroba Algad to head of hills...	...	...	3	"
From head of Saroba Algad to top of Gubbur	...	...	3	"

I rode with ease to the head of the Tanda Saroba Algad, and only had to walk 3 miles up the hill. The path up the hill was by no means steep, and could easily be made rideable. I went up to top of the little Gubbur twice, and passed a night on the top of it. I went up to the top of the great Gubbur also twice, and passed three nights in the Tanda Saroba Algad below it. I found the Bathanees very civil * * *. I think it would be a splendid place for a sanitarium, being so very accessible, and is near and having water so high up. There are no villages anywhere on the top, though there are a few in the durrahs on the east side down below. It is perfectly uninhabited, except that the Mahsoods occasionally use it as a road towards Daur when they go for plunder." * * *

11. The two existing sanatoria of the district remain to be described.

Shekh Budín.

Shekh Budín * (4516 feet) or as the natives call it *ghúnd*, i. e., "the hill," rises abruptly from the south-west end of the Shekh Budín Range, and owes the preservation of its original eminence to its being capped with a great mass of imperishable limestone. This mountain is on the extreme south of the district, and its top is 64 miles by road from Edwardes-abad. Its summit, which is now both crowned and crowded with 15 bungalows, besides many other buildings, has been a hot weather retreat for Europeans from Dera Ismail Khan and Edwardes-abad almost since annexation. A first class road runs from Pezú up to the station, and a made pathway, practicable for horses and laden oxen and donkeys, leads directly to and from the village of Khairú Khel Sarga, and is much used by natives and active Englishmen. The hill itself is bare and ugly, and the amount of available space included within the limits of the station is very small. Besides grass, which in good years, notwithstanding the shallowness of the gravelly soil, is abundant, little else grows on the hill. A few stunted wild olives and some *phulá*, acacias and dwarf palms are to be seen amongst the rocks and in sheltered nooks. As a sanitarium Shekh Budín is salubrious, but from the middle of June until the July or August rains come, the heat during the day is very great, the thermometer often ranging between 88° and 93° inside a bungalow. During the summer a steady breeze usually springs up about 10 A. M., and blows from the south nearly all day long. This, in conjunction with the dryness of the atmosphere, makes the heat less perceptible than it otherwise would be. In June and July a punkah is however almost a necessity during the three or four weeks of greatest heat. The chief want of the station is water, there being no springs on the hill at all. Six large masonry tanks now partially obviate this want, but every third or fourth year the stored water is expended before the supply is replenished by rain, and the residents are for several weeks put to great expense in consequence, and the Marwat and Paniála villagers to great inconvenience. Though the tanks catch much of the drainage from the bungalows and other buildings, and their water must therefore be far from pure, no evil consequences have yet resulted. Doctor Verchere published an account of the sanitarium in the supplement to the *Punjab Gazette*, dated 11th February 1865, which may be advantageously consulted. As a summer head-quarters for the Deputy Commissioner of Bannu, Shekh Budín is quite as accessible and convenient as Edwardes-abad for residents of any tahsil except that of Bannu, but whenever water is scarce, the people feel it a hardship going up there.

12. The Cis-Indus sanitarium is Sakesar, (4992 feet) at the extreme

Sakesar Hill.

east of the district. Of the actual summit this district only possesses a small portion, all the rest being within the Shahpur district. Sakesar is a charming hill, and, unlike Shekh Budín, has plenty of space and generally plenty of water derived from springs, tanks and one well near its summit. It is very

* So called from Shekh Bahá-ud-dín, the saint whose shrine dominates the top of the hill.

grayss, and can boast of a number of small trees and shrubs. The climate resembles that of Shekh Budin, but is not so dry, and is perhaps a trifle cooler. Sakesar is the summer head-quarters of the Assistant Commissioner, when there is one in charge of the Miánwáli sub-division. His bungalow owing to late additions is now a handsome roomy building. Unfortunately it is situated about 600 feet below the top of the hill, and about 300 feet below the shoulder on which the Shahpur station is built, hence the position is rather hotter and more isolated than it need have been. The well and several springs are, however, close by. An account of the hill will be found in the Punjab Record for April 1867, pages 23 to 30, Part Miscellaneous.

13. Piercing the Salt Range immediately above Kálábágh through a narrow channel of its own boring, the Indus enters this district, and flows placidly on with a fall of about one foot to the mile in a southerly direction for the next forty miles of its course. Freed from its mountain barriers, it rapidly spreads out in the plain until its bed from bank to bank attains, a few miles above Isa Khel, a maximum width of nearly thirteen miles. Within this bed are a net-work of shifting channels, in one or other of which the main stream rolls on. About 40 years ago the great body of the Indus flowed on the Isa Khel side, but yet sufficiently far from the high bank to leave between a strip of rich alluvial soil, varying from half a mile to two miles in width. By degrees the river encroached on this strip, until shortly after annexation the whole fertile zone had been submerged. About 1856 a change of course commenced, but was so gradual at first as almost to escape notice. Still the main stream was reverting to an old channel on the Miánwáli side, and between 1863 and 1864 the process was completed. Hardly then was the important fact that a great river had capriciously shifted its bed about 8 miles eastwards fully realized by the district officials. In proof of this I may mention that the district record room contains at least one file in which the learned judge gravely laid down that the main channel of the Indus was a *hadd-i-sikandar* or permanent boundary, whilst at the time the said immutable boundary had gone miles away from the contending villages. The cause of the reversion is popularly ascribed to the cutting in 1856 of a short canal below Kálábágh to connect an old and almost dry channel on the Miánwáli side with the Indus. This diverted some water, and on the 26th of August of the following year came down a tremendous flood, which converted this small cut into a broad deep channel. From 1864 to 1873 the Indus kept hugging its left bank closer and closer, engulfing village after village in its bed, and even undermining its old high bank and eroding the old villages which had crowned it for over one hundred years. Thus Pakki, Mochh, Rokhri, Shahbaz Khel, Yarú Khel, Miánwáli (including part of the civil station) Ballú Khel, Kúndi and Piplán have partly or wholly been destroyed. But since 1873 the river has relaxed its pressure on its left bank, and has taken a central set against villages whose lands had been hitherto left untouched, and were consequently the richest and best in its bed. Already about 25,000 acres of cultivated land have suffered diluvion. At the same time some of the channels on the Isa Khel side are again becoming wider, and their volume of water seems year by year to be increasing.

That the Indus is ever shifting its channels from side to side of its capacious bed is a fact; but why it does so, is very puzzling. Should its main stream a few years hence run midway between its banks, as seems not unlikely, the course will be a new one, and one which will destroy the oldest and best cultivated lands and shisham blocks in its bed.

14. The Kurram rises in the southern slopes of the Sufedkoh, and after traversing the countries of the Tori and Bangash tribes, forms for a few miles the western boundary of the Kohát district, then rushes through mountains held by Kabul Khel and Darwesh Khel Wazírs, and finally debouches into British territory about five miles north-west of Edwardes-abad. For the first ten miles of its course through this district its bed is filled with stones and boulders, its stiff clay banks rise abruptly on either side to a height of from 10 to 30 feet, and its width from bank to bank varies from a quarter to three quarters of a mile. Below the point where the stony bed merges into one of clay and sand, the width increases, and the banks are less precipitous and composed of less cohesive materials. In places long stretches of marsh and swampy ground lie between the flowing stream and the uplands on either side. Such ground is not unsuited as pastureland for cattle, especially buffaloes, and in places produces enormous quantities of reeds, which are highly prized for thatching purposes. After traversing the tahsils of Baunu and Marwat in a south-easterly direction, the Kurram breaks through some low sandstone hills at a point called Tang Darra (narrow pass), and empties itself into a branch stream of the Indus by numerous channels a few miles farther eastward. In its diagonal course of about 60 miles through the district the Kurram falls fully 700 feet. Its pace is consequently very rapid. Except in the winter and early spring months its water is always surcharged with a rich fertilizing silt, drawn down from an immense catchment area of hills and valleys. This river is therefore of the highest value as an irrigator, and is extensively used as such both in the hills and in this district. It is subject to sudden and prolonged rises, and, as it is no where yet bridged, crossing it is sometimes impossible for several days at a time. In April last the 4th Punjab Infantry were detained on its left bank within a mile of cantonments for a whole week. The bottom, too, being very treacherous, except where it is stony, renders its passage by camels at Tang Darra and Daddiwála always more or less risky. The unwary beast which wanders a foot or two aside from the beaten track is sure to be embogged. The Tang Darra crossing is that generally used except between June and September, when the only tolerably safe and practicable ford for laden camels is that opposite cantonments. A bridge at this point is the greatest commercial and military want of the district, but as I understand it would cost not less than two lakhs of rupees, I presume there is little prospect of one being made for many years to come.

15. The only other perennial stream in the district containing more than a dribblet of water, is the Tochi. It emerges from the hills about six miles south of the point of entrance of the Kurram, and runs nearly parallel to that

stream for some distance, but finally joins it three miles below Lakk. In the hills and within the limits of the Bannu tahsíl the stream is locally termed Tochi, but once it enters the Marwat country, Gambila. Compared to the Kurram it is a small mountain brook, its flood lasting seldom more than twelve hours after the cessation of rain in the hills, whilst those in the Kurram last for several days. As an irrigator it is of more value to the independent inhabitants of the Dawar valley, than to our fellow subjects in this district. The Bakka Khel Wazirs, and Miri and Bárakzai Bannuchis depend on it for the irrigation of a large portion of their lands. In five years out of six the supply, though never superabundant, is sufficient, but occasionally when no rain falls in the hills in the spring and early summer months, it fails, and the rabi crops are burnt up. Its bed is generally narrow with steep precipitous banks on either side. Two miles east of the village of Hawed it is joined by a hill torrent known as far as the Akra mounds as the Wuch Barn, but thence as the Lohra. At the point where the change of name takes place are numerous springs, owing to which and the discharge of spill from the Kachkot canal into its bed, the Tochi may be called a perennial stream.

CHAPTER II.—HISTORICAL.

16. Within historical times Bannu has never been a theatre for great events, nor have its inhabitants ever played a conspicuous part in Indian history. The secret of its insignificance was this. It lies off all the great caravan routes between Hindustan and Kabul. True, the valley has been occasionally traversed by conquering armies from the west, and Masson, and I believe others, have written of it as being a "highway" between India and Kabul. But in point of fact such armies first debouched upon what is now British territory either by the Khybar or the Kurram route, which latter commences at the head of the Miránzai valley in the Kohát district. Thus Timúr Lang (Tamerlane) when in 1398 he marched *viá* Bannu and Dang Kot on the Indus into the Punjab, most probably came by this Kurram "route," and a century later (1505) when Báber ravaged Bannu, his army had advanced by the Khybar Pass to Kohát and thence to Bannu. It therefore seems to me erroneous to write of Bannu as being a "highway," between India and Kabul. Of the five Trans-Indus districts, it is really the only one from which no great route leads westwards. These routes are the Khybar, the Kurram, the Gumal (Gwalari) and the Bolán, and they respectively appertain to Pesháwar, Kohát, Dera Ismail Khan and Sindh. The Dera Ghazi Khan district, besides being indirectly connected with the Bolán, has two important passes of its own, the Sakhi Sarwar and the Cháchar, one or both of which promise soon to become valuable trade routes. Under

the circumstances I think I am right in attributing the historical unimportance of Bannu to its secludedness. If so, research into its past can have nothing more than a local interest, and it can only be profitable for us to inquire when and how the allocation of the tribes now settled in the district was effected.

17. Before going into details I shall give a general account of the series of Afghán immigrations into this district, quoting in part from the second chapter of my *"Bannu or Our Afghan Frontier."*

The order of descent was as follows:-

(1). The Bannuchis,* who about five hundred years ago displaced two small tribes of Mangals and Haunís, of whom little is known, as well as a settlement of Khataks, from the then marshy but fertile country on either bank of the Kurram

(2). The Niazaís, who some hundred and fifty years later spread from Tánk over the plain now called Marwat, then sparsely inhabited by pastoral Jats.

(3). The Marwats, a younger branch of the same tribe, who within one hundred years of the Niazaí colonization of Marwat, followed in their wake, and drove them farther eastward into the countries now known as Isa Khel and Míanwáli, the former of which the Niázais occupied, after expelling the Awáns, they found there, and reducing the miscellaneous Jat inhabitants to *quasi-serfdom*.

(4). Lastly, the Darwesh Khel Wazírs, whose appearance in the northern parts of the valley as permanent occupants is comparatively recent, dating only from the close of last century, and who had succeeded in wresting large tracts of pasture lands from the Khataks and Bannuchis, and had even cast covetous eyes on the outlying lands of the Marwats, when the advent of British rule put a final stop to their encroachments.

18. The first to settle were thus the Bannudzais or Bannuchis.

The Bannuchis. Their previous home had been in the mountains now held by the Darwesh Khel Wazírs, with head-quarters in Shawál. Sweeping down thence they soon conquered the country lying between the Kurram and Tochi rivers, and once firmly established, devoted themselves to agricultural pursuits. Their subsequent expansion was small, and only extended to their present possessions on the left bank of the Kurram. Weak Khatak communities were already settled there, but were gradually supplanted by the more numerous Bannuchis, whose pressure was irresistible. As soon as their conquests

* The first authentic mention of the Bannuchis occurs in Baber's *"Memoirs."* He includes the whole of the western valley, i. e. the present tahsil of Bannu and Marwat, as "Bannu territory", and says "of the Afghan tribes, the Kerani, the Kivi, the Sur, the Isa Khel and Niazaí cultivate the ground in this country." The three first are Bannuchi clans, viz., the Kerani are the Mira Khels and Ismail Khels, the Sur are the Suranis, and the Kiva are the Niris of to-day. The mention of the Isa Khel, as though they were distinct from the Niazaís, shows at least that then, as now, they were the most distinguished section of their tribe. Baber also establishes the interesting fact that when he came (1505) the Niazaís were settlers in what now is Marwat.

were secured to them, the new colonists seem to have parcelled out the country in a loose way amongst themselves, each group of families receiving once for all the share to which it was entitled by ancestral right. * I give this prominence, otherwise it might be supposed they first held by the Wesh or communal tenure of the Marwats. The sons of their spiritual guide, a Sayad named Shekh Shah Muhammad Ruhání, whose descendants now own the Sádát Tappa, have the credit of having effected the partition, and are said to have been so strictly honest in this work that every one was satisfied. They however reserved the best lands for themselves, as was only natural, considering their superior honesty and sanctity. For the next three hundred years the history of the Bannuchis is a blank. So much is clear, that first the Khataks and subsequently the Marwats, were at chronic feud with them, and that the Marwats were strong enough to check all attempts at expansion eastward of the fens of Ghoríwal; also that the fertility of the valley and the superstitious character of its inhabitants attracted to it persons calling themselves holy Sayads and learned doctors, and that all such were welcomed and given land; also that many of the old inhabitants remained as *hamsáyahs* or dependents of their conquerors, many of whom being indifferent to miscegenation, in the course of generations lost much of their purity of descent from their common progenitors, Shitak and his wife Bannu. Thus the Bannuchis became the hybrid race they now are. Nevertheless each of the numerous clans, into which they still divide themselves, preserves to this day its table of descent from Shitak. Eight pages of the *Hayát-i-Afghání* are taken up with those tables, but I do not suppose that any one, except perhaps the learned author, has ever taken the trouble to study them. Besides the true Bannúdzais, the so-called descendants of Shítak, the *hamsáyah* group and the priestly and learned classes, all of whom are now loosely styled Bannuchis, there are several other dominant families, sprung from later colonists, who are also included in the collective term. In fact "Bannuchi" in its broadest sense now means all Muhammadans, and by a stretch even Hindus long domiciled within the limits of the irrigated tract originally occupied by the Bannúdzais. But locally and strictly the term is only applied to those claiming descent from Shitak. On the decay and disruption of the Moghal empire, bands of adventurers settled themselves on unoccupied land, and taking part with one or other of the factions into which the Bannuchis were split up, gradually obtained a footing. The most notable case of the sort is that of the Moghal Khels of Ghoríwál, an Yusafzai group, who conquered territory for themselves seven generations ago, and still preserve in speech and physiognomy proof of their origin. Later on, during and immediately subsequent to the invasions of Nadir Shah and Ahmad Shah, adventurers from the Durání armies, by inter-marriage with Bannuchis or less honorable means, secured here and there plots of land and even estates for them-

* Pathan tribes, however barbarous, seem generally to divide new acquisitions on some established equitable principle, e. g. ancestral shares or number of families or months in each Khel. The tracts seized by Waziri clans from forty to a hundred years were all so divided, and the Harámtála estate granted the thieving Dhanna and Wurgáro Bhitannies in 1866 has been divided by them amongst themselves according to ancestral shares, (See para. 137).

selves. From the death of Timur Shah (1793) the influx of outsiders, except as *hamisáyahs*, into the Bannú valley may be said to have come to an end. Stormy times followed his decease. The Wazírs had appeared on the scene, and, greedy for land, were annexing many a fair outlying field from the Bannuchis. Then the Sikh visitations commenced (1823-1845) and continued until annexation. In such troublous times the valley had, I should suppose, few attractions for enterprizing foreigners.

19. The Bannuchis must have been settled down for nearly two centuries before the Niázai irruption into Marwat took place. The Niázais. The Niázais are Lodís, and occupied the hills about Shalghar, which are now held by the Suleman Khels, until a feud with the Ghilzais compelled them to migrate elsewhere. Marching south by east, the expelled tribe found a temporary resting place in Tánk. There the Niázais lived for several generations, occupying themselves as traders and carriers, as do their kinsmen the Lohání Pawindahs in the present day. At length towards the close of the fifteenth century, numbers spread north into the plain, now known as Marwat, and squatted there as graziers, and perhaps too as cultivators, on the banks of the Kurrum and Gambála, some fifteen miles below the Bannuchi settlements. There they lived in peace for about fifty years, when the Marwat Lohánís, a younger branch of the Lodi group, swarmed into the country after them, defeated them in battle and drove them across the Kurrum at Tang Darra, in the valley beyond which they found a final home.

At the time of the Niázai irruption Marwat seems to have been almost uninhabited, except by a sprinkling of pastoral Játs, but the banks of the Indus apparently supported a considerable Ját and Awán population. The most important sections of the expelled Niázais were the Isa Khel, Mushánís and a portion of the Sarhangs. The first named took root in the south of their new country and shortly developed into agriculturists: the second settled farther to the north round about Kamar Mushání, and seem for a time to have led a pastoral life; while the majority of the Sarhangs, after drifting about for several generations, permanently established themselves Cis-Indus, on the destruction of the Ghakkar stronghold of Muazam Nagar by one of Ahmad Shah's lieutenants. That event occurred about 1748, and with it terminated the long connection of the Ghakkhars with Miánwáli. They seem to have been dominant in the northern parts of the country even before the emperor Akbar presented it in jágír to two of their chiefs. During the civil commotions of Jehangir's reign the Niázais are said to have driven the Ghakkhars across the Salt Range, and though in the following reign the latter recovered their position, still their hold in the country was precarious, and came to an end about the middle of the last century as stated above. The remains of Muazam Nagar, their local capital, were visible on the left high bank of the Indus about six miles south of new Miánwáli until a few years back, when the site was eroded by the river. The Niázais thus established themselves in Isa Khel about 270 years ago, but their Sarhang branch did not finally obtain its present possessions in Miánwáli until nearly 150 years later. The acquisition of their Cis-Indus lands was necessarily gradual, the country having a settled though weak government, and being inhabited by Awáns and Játs.

20. Closely following on the Niázais came, as already stated, the Marwat immigration. Driven from Shalgarh,

The Marwats.

they too had first settled in Tánk along side of their Niázai brethern. Both clans acknowledge Lodi as their common progenitor, and whilst in Tánk there was amity between them. Time went on, and the Niázais spread into Marwat, then a nameless sandy plain. Several more generations passed before the Marwats, taking advantage of internal dissensions amongst the Niázais, swarmed northward, drove their kinsmen east of Tang Darra, and, erecting their black tents on the banks of the Kurrum and Gambíla, squatted there as graziers. For some time they mainly confined themselves to pastoral pursuits. By degrees as their numbers increased, groups of families went forth from the central settlements to seek new homes for themselves about the plain, but each within the rather vague limits of the allotment of the section to which it belonged. Such groups in turn became centres from which other migrations took place. Thus in process of time the whole plain became occupied, and a large proportion of the Marwats settled down into agriculturists, each community holding and cultivating its land according to the *wesh* tenure. During Moghal times the Marwats, being little interfered with, and being strong and united enough to defy encroachments by surrounding tribes, enjoyed the singular good fortune of being left to themselves, and thus developed and worked out their ancient communal institutions. Meanwhile the Moghal Empire, which had long been declining, received its death-blow, so far at least as its Indus provinces were concerned, from Ahmad Shah Durání in 1756, and soon after the whole of what now is the Bannu district, was incorporated into the newly risen kingdom of Kabul. Marwat was never regularly occupied, but in good years, if the required amount of tribute was not forthcoming, a force was marched into it, and exacted what it could. During such visitations the material loss was not great, as those who led a pastoral nomadic life, retired with their flocks and herds to the hills, and those who tilled the soil either remained and compounded with the royal tax-gatherers, or fled to the hills. Thus, beyond the partial destruction of his crops, no Marwat lost much, as the stay of the Kabul troops was never long, and the burning of his house only gave him the extra trouble of procuring a few ox-loads of reeds from the marsh, and twigs from the jungle, and running up a hut with them.

21. The fourth and last great wave of colonists from the west was

The Wazirs.

that of the Darvesh Khel Wazirs. The tribe is divided into two great sections, the Utmánzais and the Ahmadzais, and have for many centuries occupied the hills between Thal, in Miránzai, and the Gabar mountain. Until about one hundred years ago their camps only descended occasionally into the plain during the cold season, and always clung about the mouths of the passes leading up into their hills. Latterly their visits became annual; and between 1750 and 1775 the Jani Khel and Bakka Khel sections of the Utmánzai branch, seized the Míri grazing lands, lying between the Tochi (Gambíla) and the hills. The Muhammad Khels, and Ahmadzai clan, next took possession of the stony ground at the mouth of the

Kurram Pass, and soon after other Ahmadzais began to occupy the Thal beyond the left bank of the Kurram, driving off the Khatak and Marwat grazing camps they found there. Still the visits of those savage highlanders only lasted during the cold months, and no great alarm was caused. Years went by. The strength of the Duráni hold on the country began to wane, and by about 1818 Bannu had become practically free. A short period of semi-independence followed, and finally the Sikh domination was established. Taking advantage of the general distraction, the united Darvesh Khels commenced systematic encroachments on Marwats, Khataks and Bannuchis alike, and on occasion sold their aid to one or other of the rival parties in the country. On one occasion they crossed the Kurram to attack old Lakki, the head-quarters of the Marwats, but were routed and pursued as far as Latammar. After that they confined their operations to the north bank of the Kurram, and extended their hold north and east to within a few miles of Latammar and Shinwa, both Khatak villages.

Once the Bannuchis became alive to their common danger, their walled villages and united front were sufficient to make good the defence of all but their outlying fields in the Daud Shah, Surani and Jhandu Khel tappas. Both sides too learnt that peace is more profitable than war, and now and again swore a truce, during which friendly intercourse was maintained. Thus in 1826-27, when Masson paid Bannu proper a visit, he found Bannuchis and Wazirs "on a good understanding" together.

22. Two more Afghan tribes require mention, the Bhitannis and the Bhangis. The Bhitannis and Bhangis occupy the eastern and southern slopes of the hills between the Gabar mountain and the Gumal valley, and possess some small hamlets on the Marwat border. They have only appeared as permanent squatters inside British territory within the last sixty or seventy years, and their cultivation consists mostly of patches of stony land, near the mouths of the different passes leading into the hills from Marwat. The latter are a strong united little section of the great Khatak tribe, and seized or spread into the hilly country north of Kálabágh known as Bhangis about four hundred years ago.

23. Of non-Afghan tribes the only important one is that of the Awáns of Pakhar in Miánwáli. They have been almost the sole occupants of that extensive tract for at least six hundred years, and may perhaps have resided there since the Arab invasions of the seventh century, but as to whether they originally came from Arabia or not, I can offer no opinion. Of the many sub-divisions of the Pakhar Awáns, those of the Achhrais and Darals, are most numerous. Previous to the decline and extinction of Ghakkhar authority in Miánwáli, the Awán possessions extended westward of the Salt Range. But the advancing Niázai tide compelled them to retire before it, and for upwards of one hundred years past the mountain barrier, which runs from Sakesar to Kálabágh, has here abruptly marked the limits of Pathan expansion to the east, and Awán contraction to the west. To the south the Miánwáli Thal had no allurements for the invading colonists, and up to the close of the last century, hardly a fixed settlement was to be found in it, or in the alluvial bed of the Indus west of it. Until then the

Thal was but a great prairie, a frequent grazing ground for wandering bands of Jat shepherds. With the advent of Sikh domination came more settled times. Here and there a well was sunk or pond excavated, round which a few huts were erected, and a permanent grazing centre thus created. In the bed of the Indus, groups of Jat families had been drifting about for centuries. They too now began to take root, as organized communities settled in one particular locality. Their numbers were largely augmented by the addition of new immigrants from the west. A Biluch (Pathan) clan became dominant about Piplan, and a Biluch family settled near it at Dab from Shahpur.

24. Having now followed the several tribes from their previous resting places to their present homes, their connection with the outer world has to be noticed. How the Moghals ruled the Trans-Indus portion of the district is not known. No forts, containing foreign soldiery, seem ever to have been established in their time; nor does any governor or revenue collector appear to have ever resided amongst the Bannuchis. This is surprising, as they were a civilized community possessing a highly developed system of canal irrigation and tillage, at least so far back as the reign of Akbar, if not a century earlier, for Bábar in 1805 observed, "the Bangash river (Kurram) runs through the Bannu territory, and by means of it chiefly is the country cultivated." Elsewhere population was sparse, and mainly pastoral, hence forts and governors were not required. The probability is that, as in later times, the people were allowed the luxury of self-government, provided they paid a fixed annual amount of tribute—for Bannuchis grain or cash, and for others so many sheep, goats and camels, and perhaps also horses and men for service. When payment was withheld a force would come and levy what it could. That unfortunate prince Dára Shah, son of Shah Jahán, is said to have once visited the valley when enroute to Kabul, and the largest canal on the left bank of the Kurram Shahjoya or "King's son (?) " is said to have been enlarged and extended under his auspices. Cis-Indus an open country and less warlike races made rule easy. Accordingly we find that Ghakkar feudatories of the great Moghal held sway there until towards the middle of the last century, the Duráni invasions swept away for ever, the last phantom of royal authority in those parts.

25. There still survive in Marwat a few old white-beards, who can tell strange stories of Nádir Shah and his nameless deeds. They remember to have talked in their youth with fellow clansmen who had marched to the sack of Delhi under the banner of that pitiless conqueror. Thus the modern history of Bannu may be said to date from the Duráni invasions of India. In sketching in the history of the valley from that period until annexation I shall make no apology for condensing and quoting from what I have written elsewhere. Nádir Shah's great invasion took place in 1738. In that year a portion of his army entered Bannu by the valley of Dawar, and by its atrocities so cowed the Bannuchis and Marwats as to extract a heavy tribute from them. Ten years later a Duráni army under one of Ahmad Shah's generals entered the valley by the same route, and crossing the Indus at Kálabágh, drove the Ghakkhars, who still ruled in the

Cis-Indus tracts of this district, owing nominal allegiance to the emperor of Delhi, out of the country, and razed Muazamnagar, their stronghold, to the ground. For the next seventy years Ahmad Shah and his successors to the throne of the newly-created kingdom of Kabul maintained a precarious hold on its eastern provinces, amongst which was this district, collecting tribute in the western valley by an army sent periodically to extort it at the sword's point, and in the eastern through local chiefs, to whom a large share was remitted as the price of their good will. But for these latter, too, the presence of royal troops was often required to coerce them and their clansmen into obedience. As the King's authority grew weaker, that of his vassals in his eastern or Indus provinces grew stronger, until one by one each declared himself independent, and commenced to make war on his neighbours, only to fall an easy prey a few years later to the devouring Sikh.

26. In the general scramble for territory which commenced early in this century amongst those quondam vassals, but now independent princes, Nawáb Háfiz Ahmad Khan of Mankera managed to annex Isa Khel and part of the Cis-Indus tract as well; but in 1822* he resigned the latter to the Sikhs, after standing a short siege in his fortress of Mankera, prudently declining further contest with Ranjit Singh, "the Lion of the Punjab." With a keen eye for his own aggrandisement and coming events, this prudent Nawáb had, three or four years before his withdrawal to Trans-Indus, taken advantage of the distracted state of Marwat to assist one of the two factions into which that country was divided.

The "black" or Abezarite party had lately gained a decided superiority over the "white" or Nawazite party, which in its distress was unpatriotic enough to call in foreign aid. The Nawáb despatched his troops, accompanied by a revenue collector named Diwán Mának Rai, and with their assistance the "whites" overthrew the "blacks" in a pitched battle at a place called Lagharwah, between new Lakki and Tang Darra, on which the wily Diwán informed both that his master had ordered him to take possession of the country for himself. From that date Marwat lost its independence; and for the next four years the Nawáb's troops, each spring, when the crops were ripe, ravaged the lands of the "blacks," and extorted a large share of the produce from the "whites." On one occasion the Diwán had the temerity to advance to Akra in the Bannu valley, and requisition the Maliks or village head men for supplies and tribute; but they shut themselves up in their villages, and defied him and his master, on which the disappointed Diwán had the discretion to retire, vowing future vengeance.

27. The Nawáb annexed Isa Khel in 1818, and overran Marwat in the following year, but was not left long to enjoy the fruits of either conquest by the insatiable Ranjit Singh, who had no sooner gained the Indus for a frontier, than he determined to advance it to the Suleman Range itself. In 1823 he crossed the Indus at the head of a large force,

* Mr Tucker, Settlement Officer Dera Ismail Khan, tells me that Mankera capitulated in November or December 1821 not in 1822.

marched through Isa Khel and Marwat without opposition, and pushed on to the outskirts of Bannu. After a stay of a month or two, he retired without attempting to plant a garrison in the country at all. For the next twelve or thirteen years the troops of the Dera Nawáb and of Maharája Ranjit Singh harried the Marwat plain alternatively, until, in 1836, the Nawáb's short-lived semi-independence was finally extinguished, and the Sikhs had it all to themselves. The Marwats never offered any combined resistance to the Sikhs, but on each visitation either fled to the hills, carrying their flocks and herds with them, or remained and paid what they could of the *kalang* or arbitrary money and grain assessment put on each village or tappa. Resistance would have been useless, as their villages were mere collections of huts constructed of twigs, osiers and reeds, either open or encircled with a thorn hedge.

Not so the Bannuchis, who from 1823 to 1845 were every second or third year invaded by a large Sikh army, which never entered their valley without fear and trembling; and although it generally succeeded in squeezing out of them a considerable revenue, never quitted it without having suffered severe loss at the hands of some stout rebel. Thus on one occasion Malik Dilása Khan, head of the Dáud Shah tappa, stood a siege of several days in his mud fort, and repulsed the Sikhs after inflicting upon them a loss of over two hundred men. Now the Bannuchis as a tribe were a nation of cowards compared with the Marwats; but they had nearly four hundred compact villages, each a fort in itself, surrounded by a thick mud wall, strengthened with numerous towers behind which they fought well. Added to this they were adepts at night assassination, and on the entrance of the Sikhs into their little pandemonium, they by common consent suspended their own feuds for the time, called their Waziri foes "brothers," and attacked with one accord the káfir (infidel) enemy, whenever they could with safety to themselves. From first to last no attempt was made to occupy the valley permanently, and in open Marwat even it was not until 1844 that a fort was erected, a Sikh garrison located in it, and the country consigned to the tender mercies of a kárdár or revenue collector, the celebrated Fateh Khan Tewána.

28. It was far otherwise in the eastern valley, where no serious opposition had ever been experienced by the Nature of the Sikhs' hold on Miánwáli and Isa Khel described. Sikhs. Their connection with the Cis-Indut portion of that valley commenced towards the close of the reign of Timúr Shah, the feeble son and successor of Ahmad Shah, the celebrated conqueror of Delhi and destroyer of the Marattahs. Before Timúr Shah's death, which occurred in 1793, the Sikh troops had on several occasions overrun the greater part of Miánwáli, and levied contributions and tribute from its villages; but it was not until after the fall of Mankera (1822) that it was completely annexed and settled. The Trains-Indus portion, that is, Isa Khel, continued subject to the Nawáb of Dera until 1836, when it was formally incorporated into the Sikh kingdom. But for the ten or twelve years preceding that event, the Nawáb's sovereignty was more shadow than substance; for in their expeditions to Marwat and Bannu, the Sikhs used to march through Isa Khel whenever

hey required it as a highway and treated the Nawáb and his government with scant courtesy.

29. Soon after the close of the first Sikh war, the Council of Regency, which had been appointed, under the control of Edwardes sent to Bannu a British Resident, to administer the Punjab proper to realize the "out-standing revenue" for the Sikh Darbár. during the minority of the Maharája Dalíp Singh, drew the attention of their adviser, the late Sir Henry Lawrence, to what they were pleased to term the, "out-standing revenue" of Bannu. After due inquiry into the state of affairs in that quarter, the Resident sanctioned the despatch of a strong Sikh force, accompanied by a British officer to compel payment, if necessary, but if possible "to conciliate the Bunoochees (Bannuchis), to subdue them by a peaceful and just treaty; and reduce the nominal revenue, which was never paid, to a moderate tribute in acknowledgment of sovereignty." The British officer selected to accompany the force was the late Sir Herbert Edwardes, then a subaltern. But as the cold season had well nigh come to an end before his army crossed the Indus, he, after a short stay of six weeks in the valley, retraced his steps to Lahore, arriving at that capital in May 1847. Although but little revenue had been collected, the expedition was by no means barren of important results, as a thorough reconnaissance of the country had been made, discipline and obedience had been forced on an unruly soldiery, and a suspicious people had learnt to place confidence in the authority and good faith of an Englishman.

In the cold weather of the following year (1847-48) Lieutenant Edwardes returned, and crossing the Kurram at Lakki, marched up its left bank into the Wazíri Thal, where he was joined by a column from Pesháwar, under Lieutenant Taylor. The junction being effected, the two officers pitched their camp at Jhandukhel in Bannu proper. By that time all the chief Bannuchi Maliks had come in and tendered their submission, and were with the camp busy watching the course of events and each other. But the Bannuchi priesthood at first remained sullenly aloof, awaiting the action of the Wazíri *jirga* or representative council. After some wavering the Wazíris too submitted, and so the Sayads and Ulama became penitent, and promised allegiance to the young Maharája.

Lieutenant Edwardes' next step was to commence a broad high road right through the heart of the valley to the open Marwat country beyond, and to select a good site for a crown fort, which should command the heads of as many canals as possible. Having chosen his site, he laid out the lines of his fort, and allotted a portion of the work to each of his Sikh regiments.

30. Hitherto the Bannuchi peasantry had been incredulous that the occupation of their valley was seriously intended; but as day by day the walls of the fort rose higher and higher, they became disillusioned, and felt that their days of freedom were numbered. This thought goaded some of the most bigoted to desperation, and plots for a general insurrection, supported by an invasion from Dawar, began to be agitated. The old tactics of way-laying stragglers beyond the camp and shooting sentries

in dark nights, which had the secret approval of the priesthood, were resorted to, and Lieutenant Edwardes himself twice narrowly escaped falling a victim to the assassin's dagger. Meantime a rough revenue survey was going steadily on, and the outer walls of the fort continued to grow higher and higher, until it seemed safe to launch the audacious order that the walls of the four hundred strongholds of the valley should be pulled down by the very hands which had erected, defended and kept them in repair for the last five and twenty years. Forth went the order, "Throw down to the ground the walls of your forts within fifteen days, or I shall punish you," and down went the walls. The Bannuchis thus rivetted their own chains, and proved themselves loyal subjects of the Maharaja, but for their very loyalty all the more contemptible. It was now spring time, and Lieutenant Edwardes had still to visit Marwat and tracts south of it, so he handed over charge to Lieutenant Taylor. At first Bannuchis and Wazirs were constant in their attendance on their new Sahib, anxious to ingratiate themselves with him; and their new Sahib was working day and night, trying to make the yoke of subjection sit as lightly as possible on them. It seemed, indeed, as if the change from wild unrestraint to orderly rule had been accepted by the people more as a boon, for which their forefathers had sighed in vain, than as a sad necessity.

31. The dream of peace was of a sudden rudely broken. The murder of Messrs. Vans Agnew and Anderson at Mooltan was the signal for a general uprising of the Sikh soldiery, to whom the new order of things was particularly galling. Diwán Múlraj raised the standard of rebellion, and the Punjab was ablaze. Acting under instructions from Lieutenant Edwardes, who had, on the outbreak of the storm, boldly marched to attack the Diwán. Lieutenant Taylor placed Funeh Khan Tewána in command at Dalípgarh, and started off to Moolta to assist his chief in his abortive effort to besiege that stronghold with disaffected troops and raw country levies. When the news of the rebellion of the Diwán and of the risings of the Sikh soldiery in different parts of the Punjab, which immediately followed it, reached Dalípgarh, its Sikh garrison laid siege to the inner fort, in which Fateh Khan Tewána and his Muhammadan levies had shut themselves up. After holding out for ten days, Fateh Khan finding that further resistance was impossible, as his supply of water had failed, caused the gates to be opened, and rushed out sword in hand on the enemy, by whom he was immediately cut to pieces. After sacking the fort, the Sikhs marched off with a number of captive local chiefs who had thrown in their lot with ours, to join their brethren in arms on the Jhelum, and add their quota of slain to the number who fell under the well directed fire of our guns at Gujrat. On their departure Muhammad Azim Khan, a son of Dost Muhammad Khan, the Amír of Kabul, came down and occupied the empty fort. His advent only increased the anarchy which prevailed, for he was not strong enough to coerce the people into submission, and the chiefs who had invited him down were in a weak minority, and found that they were generally looked upon with suspicion.

Meanwhile the Lakki fort, built four years before to overawe the Marwats by the unfortunate Fateh Khan, whose death has just been related, was in the hands of a portion of the rebel Sikh garrison, and remained so for some months, until Major Taylor having meantime achieved his majority, was enabled to return from Mooltan. Advancing by Isa Khel, he invested the fort, which capitulated after a siege of a few weeks. He then pushed on for Dalipgarh as the new crown fort was called, from which Muhammad Azim Khan and his Afgháns retired, without risking a fight. Within ten days after the final overthrow of the Sikhs at Gujrat, 21st February 1849, the Bannu valley was quietly re-occupied, and the Bannuchis, after having experienced in the space of a few months the sweets and bitters of freedom, Bárákzai and English rule welcomed Major Taylor back as a deliverer.

32. At the same time the Punjab was formally annexed, 29th March 1849, and the Trans-Indus portions of the present districts of Bannu and Dera Ismail Khan having been formed into one district, under the latter name, with head-quarters at Dalípnagar, now Edwardes-abad. Major Taylor, thus became the first Deputy Commissioner of all this district except Miánwáli, which became a sub-division of the late Leia district

33. Before touching on the history of the district subsequent to annexation, its then social state requires brief notice. Bannu proper was divided into twenty-one tappas or circles, each loosely ruled over by a tappa málik or chief, and each a little semi-independent state in itself. Amongst these twenty-one chiefs were two, *primi inter pares*, who were recognized as the respective heads of the two great factions, to one or other of which every Bannuchi belonged. In each tappa again were from ten to thirty or more separate walled and towered enclosures, within which resided the descendants of the founders, or their supplanters, of what I must call for want of a better term the "village," and their dependents. These latter whether owning land or not were and are known as *hamsáyahs*. The walls and towers had all been lately partially dismantled, but were still sufficiently high for purposes of defence against musketry fire. In every "village" one man was recognized as málik, subordinate to the tappa málik, and all the dues paid to either were as a rule divided by the máliks amongst those of their immediate kinsmen who supported them. The limits of both tappa and "village" were those of the holdings of men resident at the time within them, and were consequently subject to occasional variations. Though might was right, the intense bigotry and superstition* of the people subjected their

* As an instance in the present day I may relate the following circumstances. Nicholson, when Deputy Commissioner, hung a murderer, and had the body buried in a corner of what is now my bungalow compound. The dead man's friends, presumably after Nicholson had left Bannu, built a tomb over the grave and lit *dimahs* over it every Thursday evening; in short made the man a martyr, and the grave a place of pilgrimage. For many years the tomb was left undisturbed though in the line of the servants' houses. At last a late owner of the bungalow himself dismantled the tomb, and built over it. Such was the position when I bought the bungalow. Some time after I happened to go into the hut erected over the grave, and there I found the tomb partially restored, and a number of *dimahs* round it. The servant occupant said he had seen two snakes in the hut, and supposing them to be the guardians of the grave, had renewed its superstructure, and that people were in the habit of coming and saláming at it.

impulses in a great measure to the guidance of their Ulama ; the general law of the land may be said to have been Shara, corrected by assassination. All Bannuchis lived by the plough and spade, save the despised Hindus, who had a monopoly of all trading and banking. Cultivation was fairly skilful and general, except on the confines of two hostile villages, where the peasant could only sow and reap at the risk of being shot from the boundary watch-tower of the adjoining village. Notwithstanding the perpetual feuds of individuals and communities *inter se*, prescription and the necessity of a *modus vivendi* had established a common custom between "villages" and even tappas respecting canal irrigation, and this custom though broken at times by civil commotion or other causes always in the end re-established itself.

To the north and west of Bannu proper were the Darwesh Khel Wazirs, who from contact with the civilized Bannuchis, and from the pressure of their own increasing numbers were already passing from the pastoral nomadic to the settled agricultural state. Still these Wazirs were at best three quarters savages, living in black tents, *Kezhdi*, or slight booths of matting and grass, clothed according to the season in coarse woollen garments or sheepskin, and filthily dirty in their habits. South of the Wazirs and Bannuchis were the Marwats, who though they had suffered severely from the grinding exactions of Sikh domination and their own dissensions, were still a fine united and mainly agricultural race. A considerable minority of those resident near the hills still lived in tents, and led a pastoral life, but with such exceptions the whole tribe was agricultural, living in sectional communities each on its own allotment, and each strictly governed by its own board of elders. Most families resided in wattled booths surrounded by thorn hedges, and it was not until after the mutiny that such frail structures began to be replaced by mud-walled and rafter-roofed huts. Now going on to Isa Khel, we find that at annexation the various communities there, with the exception of some of the Khataks, were well housed, thriving agriculturists, possessing flocks and herds as well, and more land than they could utilize. At the time much of the bed of the Indus was a jungle of shisham trees and tiger grass, in which the sport-loving Niázais of both banks used to have great drives after pig, hog-deer and other game. Here and there the jungle had been cleared and settled on by a small compact group of families, half graziers, half cultivators.

Across the Indus in Miánwáli the social state of its inhabitants was much as in Isa Khel, excepting that in the south cultivation was more backward, population being very sparse, and a roving pastoral life being easier than that of the settled cultivator.

34. The administration of a new frontier district falls under three

District administration heads, *viz.* General Interior, Border and Fiscal. from annexation to end of I shall confine my remarks here to the first 1860. named only.

Until the commencement of 1861, when Bannu was erected into a separate district, the border administration absorbed most of the Deputy Commissioner's time. Still a strong and just rule was enough in itself

to largely promote the expansion of cultivation and the rapid development of natural resources. During the greater part of the incumbency of Major Taylor, the first Deputy Commissioner, the Umarzai Wazírs were in rebellion, yet he found time, amidst the harass of his other duties, to enlarge and extend the Kachkot canal, and commence the reclamation of the Nár tracts, which until then had been debatable jungle land, claimed alike by Marwats and Bannuchis. This jungle was divided into blocks of from 50 to 500 acres each, and given to local chiefs and Pathan officers, who had been useful to him and Major Edwardes in the stormy times of 1847-49.

The next Deputy Commissioner was Major John Nicholson, 1852 to cold weather of 1855, and he during a three and a half year's incumbency chastised the Umarzais, completed his predecessor's Nár reclamation schemes, partially reclaimed another waste tract called Landidák, and made a first summary settlement of the Bannu parganah. His administration though severe was popular, and during all but the first year of it, the border was peaceful, and crime of all sorts was reduced to minimum. The value of his strong rule and "English justice" was seen at the time of the mutiny troubles, for during them with the exception of some petty border disturbances, Bannu remained profoundly tranquil, and the Níazai Pathans and Awáns under their respective chiefs enlisted in numbers and did good service for us, both locally and at Pesháwar, and in the neighbourhood of Delhi. Throughout the whole of that dark time too Captain Coxe, the Deputy Commissioner, was carrying out the second summary settlements of Trans-Indus Bannu, and the country was making great strides in peaceful improvement.

35. With the opening of 1861 Bannu became a separate district, and since then nothing has occurred to seriously retard its general progress towards a fair share of prosperity. It is true that border disturbances have now and again broken out, but their effect has always been very local. It is true, too, that between 1868 and 1871 partial depression and hardship was experienced from a series of bad years, which culminated in 1869-70. But the drought only affected unirrigated uplands, and during it all who cultivated canal irrigated and even alluvial Indus lands were highly prosperous. Thus those drought years brought great gain to a good half of the peasantry of the district, and were by no means an unmixed evil. Now for the last few years preceding 1877-78, the accident of the seasons has reversed the tables. The unirrigated uplands have borne bumper crops: prices have fallen very low, and the incomes of those who gained by the 1868-71 drought, have fallen correspondingly.

To contrast the difference between 1850 and 1877 in a few words, I may say that since the former year cultivation has more than doubled: population has increased 20 per cent. (7,000) seven thousand nomadic and mostly pastoral Wazírs have grown into 14,000 holding 60,000 acres of cultivated land: litigation has increased to such an extent that out of every one hundred heads of families nine indulge once a year in a law suit: criminal statistics show that crime has fallen to the level of an orderly Cis-Indus district like Shahpur: the land revenue

has grown from Rs. 3,80,559 in 1854 to Rs. 4,35,523, although the incidence per cultivated acre has fallen from Rs. 1-6-11 to 0-12-2. Instead of one high road of sixty miles in length and destitute of bridges, there are now 300 miles of high roads with scores of masonry bridges on them: and finally, instead of a restless suspicious population, there is now a quiet law-abiding trustful people, the great mass of which is, I honestly believe, thoroughly loyal.

36. Whatever is interesting in the history of the district since 1st January 1861 is connected with its revenue or border administration, and will be noticed in their proper places. It will therefore suffice here to annex a list of officers who have acted as Deputy Commissioners since that date. Those who held temporary charge for periods of only three months and under are not mentioned.

Name of Deputy Commissioner.	From	To
Captain Munro	1st January 1861	22nd December 1861
Captain Smyly	23rd December 1861	2nd November 1862
Major Urmston	3rd November 1862	15th January 1866
Captain Sandeman... ..	16th January 1866	24th April 1866
Major Minchin	25th April 1866	28th August 1866
Do. Birch	29th August 1866	20th November 1867
Do. Munro	19th January 1868	1st June 1868
Do. C. V. Jenkins	1st August 1868	21st December 1869
Mr. S. S. Thorburn	22nd December 1869	27th May 1870
Captain R. T. Hare	28th May 1870	9th March 1871
Major J. W. H. Johnstone	10th March 1871	19th December 1874
Mr. H. B. Beckett	4th February 1875	14th February 1877
Major J. W. H. Johnstone	15th February 1877	24th March 1878
Mr. R. Udny	25th March 1878	Is still in charge.

37. Similarly, I subjoin a list of officers who have held continuous charge of the Miánwáli sub-division for six months and more since 1863. The special use of this and the preceding list is, that peasants have a habit of referring to dates of old cases by only naming the officer in charge at the time, but whether his incumbency over district or sub-division was ten years or twenty years before, the said peasant can seldom say. "I won the land when Coccus, * (Coxe,) was Dipati," Deputy

* The affix "Sahib" is often omitted owing to ignorance, not disrespect.

Commissioner, is all that the Bannu Hodge can often tell you, so that knowledge of the exact period of each officer's consulship will facilitate his work.

Name of officer in charge.	Year.	REMARKS.
Captain Smyly	1863	
Mr. Cowan	1864 & '65	
Captain Sandeman	1865	
Mr. Moore	1866 & '67	
Mr. Priestley	1868	
Mr. Ogilvie	1869	
Lieutenant Bartholomew	1870 (5 ms.)	
Mr. Thorburn	1870 & '71	
Mr. Tolbort	1872	
Mr. Benton	1873	
Captain Roberts	1874	
Mr. Jenkyns	1875 & '76	
Pundit Suraj Kaul	1877 until present time.	

CHAPTER III.—ADMINISTRATIVE.

38. I propose to make this a very short chapter and to confine my remarks, as far as possible, to points bearing on my work as Settlement Officer, or on which information may be valuable to a district officer new to the district. It seems to me unnecessary to give statistics or other details about civil litigation, crime and criminal justice, the jail, the municipalities and other subjects unconnected with the land and its revenue, on all of which annual reports are submitted by the district officer. The fiscal administration will be described at some length in Chapter VIII.

39. Of late the ordinary judicial and administrative staff of the district has been :—

1. Deputy Commissioner	} Each with full powers of office.
1. Assistant Commissioner	
2. Native Extra Assistant Commissioners—(one of them stationed at Miánwālī)	
4. Tahsildárs	
1. Munsiff *	

* The district has lately been deprived of its Munsiff.

Now that settlement operations are terminating, another English speaking officer with full powers, and perhaps another native Extra Assistant Commissioner* or Munsiff will be I think required.† The revenue work, both executive and judicial, will always be heavy, especially in Isa Khel and Miánwáli, where the assessment of *sailáb* lands is fluctuating, and where the people are very litigious. In this settlement six officers at first heard judicial and revenue cases, but that number was gradually increased to nine, and for the last three years the number of judicial cases annually decided by such courts has averaged 1,858. In future the number will, I should say, not be under 500. Claims relating to mortgages, inheritance, enhancement of rent and new alluvion will always be numerous, as will be applications for partition of holdings now jointly held.

40. The income of the district in 1877-78
Income and expenditure. was as follows:—

	Rs.
Land Revenue and grazing tax	4,03,396
Salt	2,11,712
Stamps	46,430
Fines	13,121
Abkari, opium and drugs... ..	8,770
Local and Provincial Revenue	35,420
Miscellaneous receipts exclusive of supply bills and specie remittances, also Money Orders, Remittance Transfer Receipts and Deposits	52,784
TOTAL	7,71,633

The expenditure was:—

	Rs.
District administration staff	1,91,215
Settlement Department	71,970
Police	73,493
Troops	6,90,000
Miscellaneous exclusive of Remittance Transfer Receipts, Money Orders and Deposits	1,07,700
TOTAL	11,34,378

The total deficit was thus Rs. 3,62,745, which was made good by the issue of supply bills at par on Calcutta or elsewhere, and by specie remittances.

41. The police administration of the district being now nearly assimilated to that of Cis-Indus districts, it will be as well to leave on record a few words on its form prior to the change inaugurated in 1873. In 1862 the old police battalion was disbanded. From that year until 1873 the police force of the district consisted of a company at head-quarters, whose duties were to guard the prisoners in the jail and Government property, and to act as treasure escort when required. There was also a numerous body of rural constabulary called *barkandázes*, scattered throughout the

* One has been given, a very good man.

† It should be remembered that frontier Deputy Commissioners have of late years begun to devote more and more of their time to border political work, so much so that some of them are now rather political than district officers,

district in the different thanahs and chaukis, and seldom transferred from one locality to another, and there was too what was called a *risála* of mounted police. The whole force was under the Deputy Commissioner, who managed it much as he liked. After 1870 the number of men in the *risála* was gradually reduced, and from the savings thus and otherwise effected the force was reorganized.

From the commencement of 1873-74 its constitution has been assimilated to that of the Cis-Indus police. The District Superintendent is however to a great extent subordinate to the Deputy Commissioner, who exercises the powers of Deputy Inspector General, and the Commissioner of the division those of the Inspector General over him.

As thus remodelled the police of this district comprise:—

- 1 District Superintendent.
- 1 Inspector.
- 13 Deputy Inspectors.
- 387 Foot Sergeants and Constables.
- 48 Mounted ditto and ditto.

The above are distributed amongst one kutwáli, the head-quarters lines, eight thanahs, three municipal towns besides Edwardesabad, and twenty-three choukis.

42. As the Wazírs and Bhitannis are settled within our territory about the eastern mouths of the passes, leading into the hills, are masters of those passes and are subject to what is termed "pass" responsibility, in part return for which they have been assessed considerably under half rates; this seems a fitting place to say a few words on our border defence system and on the passes themselves.

To begin with the former: the Bannu frontier towards Afghanistan is protected by a chain of out-posts, which command the mouths of the principal passes, and are garrisoned partly by militia men and partly by detachments of troops from cantonments. The former consist of the nominees of influential chiefs or headmen of the tribes and villages in the immediate vicinity of each post. When a vacancy occurs the chief, who has the privilege of nomination, presents his man to the Deputy Commissioner for entertainment, and if he be accepted, the Officer Commanding the out-posts can only reject him for unfitness or deficiency of local knowledge. The duties of the garrisons in the out-posts are to give intelligence of intended marauding incursions, to prevent and resist raids, to patrol the frontier road and up to the mouths of the passes, and to seize and send to the nearest police station all cattle grazing west of the frontier road without a sufficient *badraga* or grazing guard. As an additional safeguard against raids each section of the Wazíri and Bhitanni tribes holding land within our border has accepted pass responsibility, which means that the responsible section is bound to recover or make good booty carried off through a particular pass, or at least clear itself from remissness of vigilance, and ascertain where the plunder is if beyond its own hill limits. To compensate for such a responsibility the lands of each such section

have been assessed very lightly, and the right of nomination of a certain number of foot and mounted militia men has been given to its headmen. All the militia are under the Commandant of the Cavalry Regiment at Edwardes-abad, who is *ex-officio* the Officer Commanding the out-posts, and as such receives an allowance of Rs. 75 a month. He has under him distributed amongst twelve posts, in three of which only are ordinary troops, forty-two sabres, eighty-three infantry and ninety-three mounted and forty-one foot militia men. The number of troops in the different posts is altered from time to time. At present the number is smaller than in any past year, as the border is quiet. The total monthly cost of maintenance, exclusive of that of the military garrisons, is Rs. 2,308. The following is a list of the posts with their respective garrisons.

Posts mainly garrisoned by troops.

Name.	GARRISON.			Distance in miles by district from- tier roads from cantonnments to out-post.	REMARKS.
	Cavalry.	Infantry.	Militia sowás as guides.		
Latammar ...	10	23	...	18½	Is in the Kohát district, but garrisoned from Edwardes-abad. Could hold a few more infantry.
Kùrm. ...	12	25	2	5	Could hold a few more infantry.
Jáni Khel ...	20	35	4	15½	A large double post with accommodation for as many more men and horses : has quarters for an officer. Some supplies are kept up in the post : has a well which is used when the tank outside the fort is dry. The well water is rather brackish. The four militia men are Jání Khel Wazirs.
Total ...	42	83	6	...	

Posts garrisoned by the militia alone.

Name.	GARRISON.		Distance in miles by district and frontier roads from cantonment to out-post.	REMARKS.
	Horse.	Foot.		
Barganattu ...	21	7	11	Is a strong stone fort: Wazirs have 12 sowars; Marwats and Bannuchis the rest.
Jumatti Tower	...	8	4½	At the mouth of the defile, the entrance to which it commands, is held by Umarzai Wazirs.
Jumatti out-post.	10	3	2½	Bannuchis nominate 6 sowars and 3 foot men, and Wazirs 4 sowars.
Jumatti ...	10	6	6½	Wazirs have 4 sowars; Bannuchis the rest.
Bhi ...	10	7	7½	Ditto ditto.
Bhi ...	6	4	12½	Privilege of nomination distributed nearly equally amongst Wazirs, Bannuchis and Marwats.
Bhi ...	10	2	22	Is in the village, head man of which nominates 5 sowars. The others are Bhitannis, Wazirs and other Marwats.
Bori ...	10	2	32	Is in village; Bhi tannis have 2 sowars only, Marwats the rest.
Marwats Khel...	10	2	39	Ditto There is a rest-house here.
Total ...	87	41	...	
Total Militia	93	41	Costing Rs.	2,119 per month besides extras.

43. From Latammar to Mulazai, following the frontier road which inter-connects the out-posts, is a distance of about sixty-five miles. Within these limits no more than forty-seven routes of sorts lead up into independent Waziristan. Out of this number the Darwesh Khel Wazirs are responsible for twenty-three, and the Bhitannis for the other fourteen. These so-called passes are nothing more than the stony beds of occasional mountain torrents or rivers. Many of them lead into each other a mile or more inside the hills. More than half of them are quite impracticable for any animal but a man or a mule. The following statement gives some information about the eleven largest and most important. The first seven are from within the limits of the Bannu tahsil, and lead directly into Darwesh Khel Waziri territory; the last four from the Marwat tahsil into the Bhitanni country.

Number.	Name of pass.	Name of clan responsible for it.	Distance in miles to mouth of pass from cantonments.	REMARKS.
1	Barganattu	Hat Khel ...	11	Is a mountain torrent bed leading up to Káfirkot and Girang belonging to the Kabi Khels; is practicable for laden camels, and was traversed by our troops in December 1863 in the expedition against the Umarzais. About a mile up the pass the <i>Charmai Khel</i> torrent joins it, and a couple of miles farther up the <i>Charmai Kaldn.</i> Both are easy, generally spoken of as independent passes, and are in charge of the Hathi Khels.
2	Gumatti ...	Umarzai ...	4½	Is broad and easy, has been traversed by troops, leads up to the Gumatti village whence the Kurram can be reached, leads also to Thal in Kohat which by this route is only 4½ miles distant from Edwardesabad. Commissariat stores are now being sent by it to the Field Force assembled at Thal.
3	Kurram ...	Muhammad Khel	6	The pass is the Kurram river's bed, and leads up to Thal in Kohat where the Kurram route to Kabul may be said to commence. About 8 miles up, the Kaipei nala, which leads direct to Khost, joins the Kurram. Both the Kaipei and Kurram are caravan routes.
4	Báran or Barn	Muhammad Khel	7	About a mile up the nala bifurcates, and both beds lead to Dawar by easy routes.
5	Tochi ...	Bakka Khel ...	7	Is the bed of the Tochi river, and leads directly up to the Dawar valley. It was by this pass our troops entered Dawar in 1872.
9	Khisor ...	Ditto ...	20	Is the main route on the Bannu side in to the Masaud hills. It was by this torrent bed the Masaud expeditionary force returned to Bannu in 1860.
7	Shaktu ...	Jani Khel ...	22	Is an important pass much used by Wazirs, leads up to Shawál, has never been traversed by troops nor surveyed.
8	Shamla ...	Baba (Bhitannis)	25	All three are broad and easy, and are in charge of Bhitannis into whose hills and towards the Gabar mountain they lead.
9	Nugram ...	Baba and Babak (Bhitannis) equally.	32	
10	Kharaba...	Babak (Bhitannis)	37	
11	Larzan ...	Warspún, Dhanna and Fattha Bhitannis.	Over 50	A large easy nala leading up to the Gabar mountain from Mulazai, much used by Masands. This district has had nothing to do with it since Mulazai was transferred to Dara Ismail Khan in 1875.

44. There are no metalled roads in the district. The main line, Communications. which connects cantonments with Kohát and Dera Ismail Khan, runs longitudinally for seventy miles from north to south from the Latammarnala to about a mile beyond Pezu. It is under the Public Works Department. It crosses the Kurram and Gambila rivers, both of which are unbridged. Owing to this want, traffic is frequently at a stand-still for days or even weeks, and much property and some lives are annually lost. This hot weather a mail cart has been started which runs between Edwardes-abad and Pezu.

All the other high roads in the district are under the district officer. The chief are, Trans-Indus that which connects Edwardes-abad with Laki, Isa Khel and Kálabágh; and Cis-Indus that which extends from Niki to the Mári salt mart, and thence along the left high bank of the Indus *viâ* Miánwáli to Piplan. There are also other district lines of less importance, *viz.*, Trans-Indus that *via* Hawed to Ahmadzai, and that from Naurang Sarai *via* Daddiwála to Isa Khel, and Cis-Indus that from Miánwáli to Shahpur *via* Van Bhachran, and another from the same centre across the Salt Range to Sakesor and Talagang. All the most traversed lines are fairly well provided with staging bungalows or rest houses and saráis.

As to village roads, they are numerous, and range from ten to twenty feet in width.

Trans-Indus, skirting the hills, is a narrow frontier road, which interconnects the out-posts, and is under the officer commanding them. Cis-Indus, there is a Salt Patrol's road under charge of the Inland Customs Department along the foot of the Salt Range. On the whole, though in the last 25 years much has been done in the way of opening up the district, raising the level of its roads, and bridging canals, water-courses and drainage channels, it cannot be asserted that communications are in a satisfactory state. They will not be so until the Kurram and Gambila rivers are bridged. The great want of the district, both military and commercial, is a bridge over the Kurram on the Kohát road, about a mile from cantonments. Some portion of its cost could be recovered by levying toll from all who use it. Once made the trade route to Isa Khel would follow the left bank of the Kurram, as far as Daddiwála, and thence the existing road.

45. The total monthly cost of the imperial and district post offices and lines throughout the district is at present Postal arrangements. Rs. 1,131-8-0. There are imperial post offices at each tahsíl head-quarters, also at Nowrang Sarái, Mirian, Pezu. Ahmadzi, Kálabágh, Mári, Mochh and Piplan. There are no district post offices at all, but each of the above has attached to it one or more rural messengers. Each runner receives five rupees per mensem. Covers from Mooltan for Miánwáli are sent by rail to Lahore, thence by runners *viâ* Shahpur. The Lahore mail is ordinarily delivered in Edwardes-abad on the third day after despatch. Postal communication between Edwardes-abad and Miánwáli is conducted throughout the hot weather *viâ* Kálabágh, hence covers are not delivered until the third or fourth day after posting. When the Kurram is in flood, we often remain

cut off from the outside world for several days at a time. The bags between Edwardes-abad and Dera Ismail Khan have since September last been carried by hill cart.

The improvements in our communications with parts beyond the confines of the district, which have taken place since 1870, are very great. Since then new offices have been opened, the celerity of delivery has been doubled, packages by parcel post reach their destination within a reasonable time instead of after weeks of detention at Dera Ismail Khan or Kohát, until a donkey or camel load should accumulate, and lastly we now have the telegraph wire.

46. There are four boat ferries on the Indus, *viz.*, those of Kálábágh, Mochh, Rokhri and Miánwáli. The first is open

The Indus ferries.

all the year round, and is safe, rapid and easy.

The other three are practically closed, except for agriculturists, from May to October, and the passage of the Indus by any of them is a long affair, as, owing to the width of the bed and the number of the running channels trans-shipments are required. The Rokhri and Miánwáli ferries are often amalgamated. The exact position of each ferry below that of Kálábágh, which is constant, is changed each season according to the action of the river.* The average number of boats at each during the busy season is four. There are never less than four at Kálábágh, and in the cold weather at the Miánwáli and Rokhri crossing there are often eight employed. The lease of the ferries is auctioned annually, and fetches about Rs. 3,450. The boatmen and lessee share the toll proceeds equally between them.

Owing to the present and late lessees interpreting the rather illiberal terms of the lease regarding "doába zamíndárs" by the letter and not by the spirit, the agriculturists of the Kacha have for several years past had a grievance. Previously, they used to cross and recross on their ordinary avocations free, paying the boatmen for their labour so much grain each spring harvest. But now their transit is regulated by the following clause in the lease:—"Men belonging to the Doába, *i. e.*, whose lands lie on both sides of the river and who cross to and fro for an agricultural purpose are exempt from toll." Thus peasants owning land only in the Kacha, or crossing for other than an agricultural purpose, *e. g.*, to transact business at the tahsíl, are liable to toll. Yet every one knows that to such men crossing the Indus is as ordinary an occurrence as crossing a railway line or high road is for villagers resident near either I think the peasantry of the Kacha and high bank villages fringing the river have a legitimate grievance which should be removed. Were the following substituted for the objectionable clause, the requirements of the case would I consider be met: "Zamíndárs, their tenants and labourers

* The line of the high road between Isa Khel and Miánwáli has to be relaid each season. The distance is 12 or 14 miles. It should be done in October every year as soon as the subsidence of the river enables the tahsildárs to decide on the best line. As no compensation is paid to the zamíndárs for land so temporarily appropriated, early orders should be always given for the making of the road. If not given, the tahsildárs will very likely do nothing until they hear a district sáhib is coming round on tour. Thus some land will be taken up instead of unsown, and traders and travellers will have been put to needless inconvenience.

resident in the Kacha or in villages on the high bank of the Indus when crossing and recrossing in ordinary course are exempt from toll, also their plough cattle when not used for transporting grain." I reported the matter last year, but without result.

Cattle trespass and cattle pounds.

47. There are eighteen pounds in the district as follows :—

Tahsil	Number of pounds.	Average annual fine in- come of each from 1873 to 1877 inclu- sive.			Pound-Keepers.
Banna ...	3	134	0	0	Police Moharirs.
Marwat... ..	3	114	0	0	Dito Ditto
Isa Khel ...	2	197	0	0	Dito Ditto
Miánwáli ...	10	121	0	0	Various lambardárs, School teachers, patwáris and police.
Total or average	18	129	0	0	

The prescribed fine for each horse, mare or pony impounded is only four annas. Being so small, it pays owners to let such animals run loose. The chances of capture are in any case small, and when the crops are ripening or under the sickle, a horse in one night eats more than four annas' worth of corn, and does several rupees worth of damage besides. This is particularly the case in March, April and May in the Kacha, and generally throughout tahsils Isa Khel and Miánwáli. When camping in the Kacha in March and April, I have over and over again seen small herds of practically wild horses there. During the day the animals had a safe retreat in the shisham blocks, whilst at night they fed at pleasure in the wheat fields. I used to amuse myself by hunting them and driving them to a pound, but though I often had half a dozen well-mounted men with me, we found it very difficult work. All that the Deputy Commissioner could do—the Cattle-trespass Act laying down four annas as the fine—was to charge heavy rates for feeding and watering impounded animals, and to have their owners sent to him for verbal admonition. This checked the nuisance for the time. Many of the cultivators of the Kacha and of Miánwáli generally have repeatedly implored me to try to get the fine raised to a rupee or more. Until it is so, the practice of wilfully loosing horses and other animals difficult of capture will continue. I think the fine on horses of all sorts should be raised to one rupee, if not all the year round, at least when the spring and autumn crops are ripening and being cut. Until it is so, the cultivators will not be satisfied, the evil practice just mentioned will not be checked, and animals will be frequently maimed by blows. Much that I have said applies in a measure to asses. Though they cause much loss, and are neither easily caught nor driven, the fine on them is only two annas. I should like to see it doubled.

48. As a brisk trade is one sign of a good administration, I shall close this chapter by a short account of the trade of the district. Boat building is practised at Kálábágh and at Isa Khel, and here and there in villages adjoining the Indus. I reckon the number employed in the carrying trade between this district and Sindh at 130. Besides this number there are from 12 to 15 largish boats plying at the different Government ferries, and as many more smaller boats (*daggah*) at zamíndári ferries over different branches of the river. The capacity of grain-carrying boats ranges from 350 to 2,000 standard maunds, the average being about 800. The rate charged per *path*, a measure of about 25 standard maunds, from either Isa Khel or Miánwáli to Sakhar in Sindh ranges according to the season and the demand from Rs. 10 to Rs. 15, but in extraordinary years it runs up to Rs. 24 per *path*. There is a saying—"The boat arrives by luck," and sure enough the voyage down to Sakhar is a dangerous one, as on an average from 5 to 8 per cent. of the boats annually despatched never reach their destination, but sink with their freight on the way. When such an accident happens, there is small chance of any thing being saved. In most cases the loss is the result of carelessness—of trusting in fact to "luck." The only penalty incurred by the boat owners, independent of the loss of their boat, is the forfeiture of half the transport charges. It takes from ten to twenty days to reach Sakhar in the hot weather, and double that time in the cold. The return journey is always a slow affair. Its period depends on the direction of the wind and the height of the river. It takes from one to two months. The boat is often sold at Sakhar.

For Isa Khel and Miánwáli the cost of conveying grain to the river's bank is small, as the distances are not great. But for the Marwats the case is different. They have to transport their surplus produce distances of from twenty-five to fifty-five miles. When there has been a fair harvest they employ their leisure time in the slack season by acting as carriers between their homes and Dera Ismail Khan or Isa Khel. They use for this purpose about 1,000 donkeys, 3,000 of their plough oxen and 500 camels. Carriage in any of the above ways comes to a little under four annas per standard maund from Pezu to Dera Ismail Khan. But the rates are subject to great fluctuations.

49. The imports and exports of the district can only be approximately stated, as no thorough system of registration exists. I think however the estimate I am about to give is a fair one, as it is the result of long local observation by the most experienced officials and traders checked by the returns of the two foreign trade registrars and the statements of traders and the cctroi registers kept in the four municipal towns of the district, three of which may be said to stand like frontier Customs houses on its very borders, *viz.*, Edwardes-abad, Isakhel and Kálábágh. Through the first passes much of the trade between British and independent territories, through the second much of the grain going south by the Indus, and through the third many of the imports from the northern parts of the Punjab Cis-Indus.

So far as raw produce is concerned, the district is more than self-supporting, as it is a large exporter of grain. But for its manufactured

articles, excepting the coarsest home-spun cotton cloth and iron cooking vessels made at Kālabāgh, it depends entirely on the Punjab Cis-Indus and on England.

The imports in an average year for internal consumption and that of the neighbouring independent tribes are as follows :—

Number.	Article.	Weight in standard maunds.	Average price per maund.			Value in rupees.	Whence imported.	Remarks.
			Rs.	A.	P.			
1	Ghi or clarified butter.	1,975	22	14	0	45,178	Mostly from the independent hills.	
2	Cleaned cotton.	1,545	17	12	0	27,424	Shahpur and elsewhere Cis-Indus.	Mostly used in the district, some is exported south by the Indus.
3	Gur ...	2,325	6	2	0	14,241	Peshāwar and Amritsar..	Consumed by the richer classes.
4	Country cloth	2,476	Various rate.			81,897	Neighbouring Cis-Indus district.	Mostly goes on into the hills. One-fourth perhaps used inside the district.
5	English cloths	4,316	Do.			6,16,060	Amritsar, Mooltan and Delhi.	About one-third is enroute for independent territory.
6	Tobacco ..	12,516	3	12	0	46,935	Mostly from Khōst in Kabul.	Fully half is enroute for Dera Ismail Khan.
7	Indigo ..	342	81	4	0	27,787	Mooltan, Muzaffargarh and Dera Ghazi Khan	Mostly used in the district.
8	Fruits ...	4,371	7	11	0	33,602	Afghanistan ..	Half say is enroute for the Punjab
9	Majith ..	1,768	9	4	0	16,354	Khorsān ..	Most goes on Cis-Indus.
10	Metal Vessels	1,896	60	0	0	1,13,760	Punjab Cis-Indus.	
11	Timber ..	?	?			82,614	Neighbourhood of Indus also Waziri hills.	Mostly used in boat building, also for ordinary buildings.
12	Iron ..	18,866	5	6	0	74,530	Kaniguramin the Waziri hills.	Half manufactured at Kālabāgh and thence exported in the form of cooking vessels.
13	Miscellaneous	?	?			2,02,111	From Kurrachi, Punjab, and England.	Wine stores and other English articles, also drugs, shoes, condiments, live stock, Bahadar Khel Salt &c.
TOTAL,		47,396	0	0	0	13,82,493		

Similarly the exports in an average year may be set down as follows:—

Number.	Article.	Weight in standard maunds.	Average price per maund.	Value in rupees.	Whither exported.	Remarks.
1	Wheat ..	350,000	1 3 0	4,15,625	By Indus towards Sindh via Isakhel or Dera Ismail Khan.	All the tahsils except that of Bannu are exporting countries.
2	Gram ..	102,211	1 0 0	1,02,211	Do. Do.	Is mostly grown in Marwat.
3	Barley, Bajra and maize.	56,525	1 0 0	56,525	Do. Do.	Mostly from Isa Khel and Mianwali except for maize which is from Bannu proper.
4	Gur ...	6,000	5 0 0	30,000	To hills and in all directions especially southwards.	All the produce of Baundehi sugar-cane.
5	Dry Turmeric	7,460	7 0 0	52,220	Do. Do.	All the produce of Bannu proper.
6	Alum ...	19,800	4 0 0	79,200	To Sirsa and Mooltan &c.	
7	Kalabigh salt	70,571	3 0 0	2,11,713	In all directions Cis-Indus	The cheap grey rock salt of Bahadar Khel is alone consumed Trans Indus.
8	Cleaned Cotton	4,335	17 0 0	73,695	Independent hills.	
9	Miscellaneous	?	?	1,74,361	In all directions. ...	Buffaloes and sheep wool skin.
	Total	616,902	0 0 0	11,95,550		

CHAPTER IV.—THE PEOPLE.

50. According to the census taken on the 10th January 1868, the population of the Bannuchi district was, adding 3,224 for cantonments, 290,771. This gives an increase of 51,289 on the returns of the 1854 census. What portion of this is due to growth of population is not ascertainable, as tahsil limits were not the same in 1868 as in 1854. After comparing the figures obtained for each tahsil at either census, and making due allowance for the difference of area under observation, I come to the conclusion that, assuming the 1854 enumeration to have been as correct as that of 1868, there was in the interval a large and real growth in numbers for Wazírs, Khataks and Marwats, and an appreciable growth for all other classes. In this settlement a new enumeration was made of the people settled in tracts occupied by Wazírs and Bhitannis, but elsewhere only in selected villages and localities. A comparison of the figures so obtained with those of the 1868 census leads me to conclude that the latter was, so far as numbers are concerned, very accurate, but that the classification was somewhat faulty. For instance, many persons were I think recorded as non-agriculturists, whose main subsistence was in fact derived directly from the soil. Except for Wazírs and Bhitannis my enumerations, made in 1872-74, showed a decrease in numbers, although there can be no doubt that the population had grown in numbers. The explanation is that in the 1868 census every person in the district was included, whereas in 1872-74 only those domiciled within each observed area were counted. Thus amongst others most travellers and sojourners escaped enumeration. Taking then the 1868 census returns for the whole district, except for the municipal towns and the country occupied by the Wazírs and Bhitannis, for the former of which I use the return of the 1875 census, and for the latter my own, the tahsilwár result is as follows :—

Tahsil Bannu	... 95,807
Do. Marwat *	... 64,719
Do. Isa Khel	... 47,752
Do. Miánwáli	... 88,251
Total	... 2,96,529

* Mulazai and the two small villages transferred with it in 1875 to Dera Ismail Khan are here included. Their total population is 2,826.

Abstract of the population of the district classified under tracts and tribes.

51. The following statement analyses the above figures both territorially and ethnically :—

Taluk	Tract.	AREA IN SQUARE MILES.		APPROX.						Jats.	Hindus.	Miscellaneous.	POPULATION PER SQUARE MILE ON	
		Total.	Cultivated.	Bannuchis.	Marwats.	Misals.	Wadris and Bhitannis.	Khataks.	Sayads.				Total area.	Cultivated area.
Bannu.	Canal Irrigated	169	112	24,427	...	46	774	2,148	6,505	...	4,224	9,726	79,482	790
	Eastern Waziri Thal	166	62	6	...	...	6,362	1,666	...	...	163	69	8,621	139
	Western Waziri Circle...	110	29	31	...	...	7,231	...	...	...	..	15	7,707	266
Marwat.	Total	445	203	24,464	...	46	14,367	3,814	6,505	..	4,387	9,810	86,807	472
	Marwat	1,332	363	...	38,037	1,600	1,649	205	3,526	...	7,123	4,851	64,719	178
	The plains	500	98	...	...	6,591	...	4,371	677	..	13,259	5,186	42,131	480
Isa Khel.	Bhangi Khel hills	175	14	...	...	..	...	4,666	80	...	..	56	5,621	402
	Total	675	112	...	...	6,591	...	9,037	757	..	13,259	5,242	47,752	426
Mianwali.	West and South Salt Range.	1,151	144	...	...	415,428	...	35	1,548	2,445	7,375	17,167	73,267	434
	Fathar	328	66	...	..	395	...	986	278	10,348	558	667	14,964	227
	Total	1,479	210	...	...	4,15,748	...	971	1,536	12,803	29,813	8,043	88,231	369
Grand Total		3,231	888	24,464	85,041	23,987	16,016	14,037	12,614	12,803	84,682	27,945	2,36,529	366

The above shows an increase over the total of the 1868 returns, with 3,224 added for cantonments, of 5,758. This is made up of the difference in the numbers of Wazirs and Bhitannis as recorded in 1868 and as now enumerated, viz., 5,514, and of the net increase in the town population as shown by the 1875 municipal census and of the estate of Wanjari, viz. 244.

Population divided into agriculturists and non-agriculturists.

52. The following abstract gives the above population under the two headings agricultural and non-agricultural:—

TAHSIL.	AGRICULTURISTS.		NON-AGRICULTURISTS.				GRAND TOTAL.
	Muhammads.	Hindus.	Shop-keepers and traders.	Artisans and Craftsmen.	Menials.	Total.	
Bannu	76,006	2,500	2,350	2,489	2,748	9,187	88,693
							Edwardesabad 3,890 Cantonments. 2,224
							96,807
Marwat	57,684	2,579	1,400	1,900	1,156	4,456	64,719
Isa Khel	34,166	948	4,581	2,358	4,699	12,638	47,762
Mianwali... ..	62,888	2,031	2,212	12,016	7,104	22,332	88,231
Total	230,744	10,058	12,143	19,763	16,707	48,613	289,415
			Add	Edwardesabad and Cantonments.			3,890 + 2,224 = 7,114
							2,96,529

For the three Trans-Indus tahsils all persons, irrespective of caste or nominal profession, who depend for their livelihood mainly on the cultivation of the soil, have been classed as agriculturists. Still many of those shown as traders and artisans do also own land or cultivate a plot or two. For the Miánwáli tahsíl the mistake has been made of treating all persons of a low caste or of a professional class as non-agriculturists, instead of following the rule I adopted for the three Trans-Indus tahsils. The population of three municipal towns of Lakki, Isa Khel and Kálabágh is included in the body of the statement, but that of Edwardesabad and of the cantonments is shown separately in last column only.

53. I shall now briefly describe each of the above classes reserving my remarks on the semi-barbarous Waziri and Bhitanni clans to the next paragraph. For the present I shall confine myself as much as possible to points which will not be noticed in the Chapter on Tenures. s

Bannuchis.—By this designation I mean both true Bannuchis and miscellaneous Pathans now amalgamated with them. The former comprise those who belong to any of the khels or sections, the common ancestors of which were admittedly descended from Shítak and his wife Bannu. The most important of those khels are Isakki, Mandan, Suráni, Miri, including Momma Khel, Nurar and Báarakzai, Mamash Khel, Amandi, and Daud Shah. The latter consist of miscellaneous groups and families scattered throughout Bannu proper. Of this class the Moghal

Khels of Ghoriwál are the finest, and still show in speech and appearance their Yusafzai descent. But as a rule all Bannuchi Pathans look, speak and act much alike, and it is not easy for an Englishman to distinguish their different khels and classes. Their general physique is inferior to that of any other Pathan tribe in the district, indeed to that of any community living in an unirrigated tract. Their women are many of them very fair skinned but always sallow. In disposition the Bannuchis are envious, secretive, cowardly and lying. They are very bigoted, but seldom let religious scruples interfere with their desire for worldly gain. On the whole they are an inoffensive people, of little political importance, and however much one may be inclined to despise them as men, we should remember that they are excellent revenue payers, and that to their prolificness and to the climate in which they live are to be ascribed most of their bad qualities, whether physical or mental. I should add that they are great home-stayers, and are seldom met with beyond their own local limits.

Marwats.—Like other Pathans they are divided into numerous khels, the most important of which are Musa Khel, with sections Takhti Khel, Jánuzai and Pasanni; Achu Khel, with sections Begú Khel, Isa Khel, Ahmad Khel &c; Khúda Khel, with sections Sikandar Khel, Mammú Khel &c; Bahrám, with sections Umarchan Khel and Totezai; the latter with sub-sections Tajázai, Dilkhozai, Land and Ghazni Kel; and lastly Tappi. To the above may be added the Abba Khel Sayads, who are affiliated to the Dreplára tappa, also the Michan Khels and other Sarhang Niázais scattered throughout Marwat. Though all such are now to all intents and purposes Marwats, they have been shown under their proper ancestral headings in the statement preceding this paragraph. The tribe thus made up occupies the whole of the Marwat tahsíl, which is territorially divided into three great tappas, *viz*, Dreplára, Musa Khel-cum-Tappi, and Bahrám. The latter is sub-divided into two minor tappas, *viz*, Umarchan Khel and Totazai. For administrative purposes a knowledge of the position and limits of each tappa is not necessary.

Taken as a whole the Marwats are as fine and law-abiding a race as any to be found on our border. They are a simple, slow-witted people, and contrast, in all that is manly, most favourably with the Bannuchis. They are strongly attached to their homes and very averse to travel or to service out of their own country. Many of them have almost ruddy complexions. Their women are pleasing, but rather masculine in appearance. The necessity of doing rough out-door labour, such as fetching water daily from the distant pond or river, has taught them to show their faces as freely as English women do. As the climatic influence due to canal irrigation and marshes has affected the Bannuchis to their detriment, so here, a sandy soil and dry air has had an opposite result on the Marwats, for hard fare and poverty notwithstanding, they are healthy, happy and light hearted.

Niázais.—This tribe consists of many sections which are settled about the Indus, both Kacha and uplands, in the Isa Khel and Miánwáli tahsils. In the former tahsíl are the Isa Khel, Musháni, Sultan Khel, Sarhang, and other sub-sections; in the latter the main divisions are Adris,

comprising Watta Khels, Bailu Khels, Yáru Khels &c., and Tája Khels, Musa Khels, Pái Khels, Burikhels &c. As a tribe the Niázais are indifferent cultivators, and have still a good deal of Pathan-like pride of race about them. They make good soldiers, and are not averse to taking service. Those on the Miánwáli side of the river are better husbandmen, and altogether a more orderly people than their Isa Khel kinsmen. Of all sections of the Niázais the Isa Khels and Tája Khels are the two who retain most of the qualities of a fighting race accustomed to rule over others weaker than themselves.

Khataks.—The Khataks are mostly confined to the Isa Khel tahsil. There are besides a good number settled amongst the Ahmadzai Wazirs, and a sprinkling between Mári and Niki in Miánwáli, and elsewhere throughout the district. Except in Isa Khel they are mostly tenants only. Those in Isa Khel are divided into two classes, viz., the Bhangí Khels, who number 6816, and inhabit the hilly country of that name, and several villages in the plain immediately south of Kalábág; and the Gudi Khels, who are settled in villages all along the skirt of the Maidánu Range. There are also some Kabul Khels. The Khataks are a hardy laborious tribe, and make excellent cultivators. They take service in the army freely. Individually they are poor. They have not a single wealthy man, not even a chair-sitter amongst them. In disposition they are simple, faithful and orderly. Physically they are strongly built, but as a rule shorter in stature than any other of the Pathan peoples in the district, the Bannuchis perhaps alone excepted.

Sayads.—Of the 12,614 in the district, Bannu proper contains over one-half and Marwat about one quarter. Those in Bannu proper are found in every village, but those in Marwat are mostly confined to two viz., Abba Khel and Gorakka. As a rule the Sayads are land-owners not tenants, and bad, lazy, land-owners they make too. In learning, general intelligence, and even in speech and appearance they are hardly distinguishable from the Pathans or Jats amongst whom they live. Here and there certainly honorable exceptions are to be found. The way the lands now held by them were originally acquired was in most cases by gift. Though many of them still exercise considerable influence, their hold as a class on the people at large is much weaker than it was thirty years ago. The struggle for existence caused by the increase of population since annexation has knocked much of the awful reverence the Pathan zamíndár used to feel towards holy men in general out of him. He now views most matters from rather a hard worldly than a superstitious stand-point. Many a family or community would now cancel the ancestral deed of gift under which some Sayad's brood enjoys a fat inheritance. But for the criminal consequences which would ensue from turning them out neck and crop, the spiritual consequences would be risked willingly enough.

Musalman Jats.—There are in round numbers 4000 Musalman Jats in Bannu proper, 7000 in Marwat, and 43,000 in Isa Khel and Miánwáli. Those in the two frontier tashils have assimilated in speech and appearance to the Pathans amongst whom they live. The Marwat Jats are fine

fellows; those in Bannu are much as the Bannuchis are, and with the Awáns they make up the mass of the *hamsáyah* "Hindkais" of the tashil. Those in Isa Khel and Miánwáli resident in parts in which the Niazai element is strong have always been rather kept down by that dominant tribe. The Jats on the whole are an energetic thrifty race. They are split up into numerous sections or *gots*, about some of which further mention will be made in the Chapter on Tenures. They are darker coloured, and not so tall or well made as the Niazáis, but still they are, when properly nurtured, strong men. Those in the Kacha, being more subject to autumnal fever, and leading almost amphibious lives, have a weaker physique than their upland brethern. There is little marked individuality of appearance whereby to distinguish between the different *gots*. Throughout the Kacha and in the neighbouring parts where the Niazais are predominant, the terms "Jat" and *háli* (ploughman) are used indiscriminately. The Bannuchis and Wazirs speak of all Jats and Awans loosely as "Hindkais." In many cases it is impossible to say whether a certain *got* should be classed as Awán or Jat. None of the different Jat *gots* claims descent from one common ancestor; indeed few of them seem to know or care much about their past tribal histories, and many of them speak of themselves simply as *log* (people).

Awáns.—There are in round numbers 13,000 Awans in the district all of whom according to the statement preceding this paragraph are residents of the Miánwáli tahsil, about 2500 west of the Salt Range and the remaining 10,500 east of it in the Pakhar iláka. In the thraee Trans-Indus tahsils I found it impossible to separate Awáns from Jats. I thought it best therefore to class all Awáns resident Trans-Indus as Musalman Jats. Some 3000 or 4000 of them are probably Awána. There is only one Awán village east of the Indus, that of Jalálpur in Isa Khel.

Hindús.—The Hindus are pretty equally scattered throughout all parts of the district except the Waziri tracts and Bhangi Khel, in both of which there are very few. Of the 28,000 in the district, fully two-thirds are engaged in trade, the rest gaining a living as agriculturists. The majority are Aroras (*Kirárs*), the rest being Brahmins and Khatris. They are a cowardly, secretive, acquisitive race, very necessary and useful it may be in their places, but possessed of few manly qualities and both despised and envied by the great Musalman tribes of the district.

Miscellaneous.—No fewer than 72,000 have been entered under this heading. But in this number are included the whole population of the cantonments and the greater part of the non-Hindu residents in the four municipal towns of the district: also of superior classes, Kureshis and Biloches; and of inferior, several *gots* which, should perhaps have been classed as Jats, and all village menials and non-Hindu artizans and craftsmen.

54. Being such a troublesome and important item in the human Settlement census of the Waziri clans, forces making up the population of the district, it will be as well to give some particulars about each clan or khel. This can best be done in the form of a statement

which I here subjoin. The first six khels belong to the Ahmadzai branch of the Darwesh Khel Wazirs, the last two to the Utmánzai branch. The order in which the different clans are entered follows that of their settlements along the border from near Latammar in the north to the skirt of the Gabar mountain to the south:—

Number.	NAME OF VILLAGE.	AREA IN SQUARE MILES.		Number of hamlets.	Number of houses.	DETAIL OF POPULATION.					
		Total.	Cultivated.			Waziri thans.	Khataks.	Hindkai Awan and Jats.	Hindus.	Miscellaneous.	Total.
1	Hathi Khel	81	41	50	980	2,578	1,235	147	60	160	4,170
2	Sirki Khel	6	4	6	99	894	71	...	...	...	465
3	Isparka	39	18	2	319	2,173	312	16	9	93	2,608
4	Bizan Khel	15	2	9	275	852	...	...	...	80	932
5	Umarzai	25	2	1	98	365	48	...	...	38	451
6	Muhammed Khel	7	4	8	211	612	...	...	...	141	653
7	Bakka Khel	37	14	30	681	4,201	...	...	...	142	4,843
8	Jáni Khel	66	11	4	245	2,448	...	...	15	160	2,613
	TOTAL	276	91	105	2,808	13,523	1,666	163	84	794	16,230

The above figures have been obtained from my settlement enumeration. Compared with those of the 1868 census the rise is considerable. There can be no doubt that in the last 10 years the number of Wazirs who have settled in the plain for the spring crop at least has largely increased.

55. I shall now make a few remarks regarding each of the khels named in the above statement. I shall have something more to say about them in the Chapter on Tenures, paragraph 129, and can in consequence be very concise here.

Hatikhel.—This clan is divided into two main branches, Kaimal† and Edel. The former has three chief sections, viz, Ali or Khaídár Khan, Musa and Purba, and the latter four, viz., Bai, Bakkar, Esa and Kaimal.‡

The Kaimal Khels outnumber the Edel Khels by about four to one. With the exception of the Patol Khels, who are a branch of the Ali Khels, and mostly live in the hills, the whole clan is now settled in

* This is 95 under total in the general population statement annexed to paragraph 50. Reason is that Shah Jahán's village is here excluded.

† Here and elsewhere in order to save space I shall where possible omit the affix *khel*.

‡ In the khewat here and there a section of this and one or two of the other clans is shown by different single or compound names, the genealogical tree being followed or the whole *taraf* being called after that section which holds most land or first took to agriculture. I have here used the names in commonest use by the people themselves.

the plain, and is rapidly assimilating to the Marwats. In my enumeration, only from 150 to 250 souls, then in the hills, were not counted. Of the different hamlets Chouki Azim is the largest. Hamlets and separate home-steads are very numerous, because each group of families is settled at pleasure on its own land. About 200 of the houses are mud-built and flat-roofed. All the rest are still temporary thatch structures as are seen in the sandy parts of Marwat. The special hill home of the Hathi Khels is immediately behind their plain possessions, and is surrounded by Umarzais, Kabal Khels and Khataks. The Hathi Khels have always been well behaved, and are now the most loyal, orderly and wealthy Waziri clan settled within British territory in the district. Not more than one-fifth of the clan now retires to the hills in the hot weather. Though I believe they own little or no land in the Shawal direction, those who choose withdraw for the summer to that locality.

Sirkikhel.—This is a poor little clan, and is either a branch of or nearly related to the Hathi Khels. From first to last it has been unfortunate. For some years after annexation it was not amenable to rule, in consequence of which some of its Thal area was given to, and otherwise absorbed by, its two powerful neighbours, the Hathi Khels and Isperka. Then it has never had any strong sensible chief or chiefs to push its interest with the district officer. It has three main sections, Tobla, Bobla and Shuni, all of which hold land in the Thal. I should think nearly half of its numbers were in the hills at my enumeration, and so omitted.

Isperka.—The main divisions are Muhammud Khel, Sudan Khel, and Sada Khel, but the first has long ranked as a distinct clan, and the collective name now applies to the two latter. Of them, the Sudan Khel division, has four main sections of pretty equal strength, *viz*, Bághban, Bokai, Kundi and Bharrat.

The Sada Khel division is small in numbers, and has no sections worth naming. Besides the above there are about thirty families of a people called Dhir affiliated in the clan, who seem originally to have been *hamsáyahs* or dependents derived from some other stock. The Isperkas still largely go to their ancestral hills about Shawál for the summer. About 250 of them neither own nor cultivate land in the plain. The well known Sohan Khan was the chief of this clan at annexation. He belonged to the Bághbán section. His son Mání and grandson Jullundur Shah are the present headmen. The clan is strong, well off, and does not give much trouble. It is the rival of the Hathi Khels, of whose prosperity and independence its leading men are jealous. Some twenty-five families of Badin Khel, who are either a distinct Ahmadzai clan, or are closely related to the Bizan Khels, hold land with the Isperkas.

Bizankhel.—This is on the whole a well conducted clan. Its main divisions are Doulat, Eso and Umar Khan. The fourth called Moghalkhel is still mainly resident in the hills. The other three have long been settled in the plain. In all some 170 souls belonging to the clan find no place in my census. The Páyindah Khels require mention

here. They are a cognate clan, but not apparently descended from Bizan, the common ancestor of the sections named above. These Páyindah Khels maintain themselves more by carrying salt and trading than by agriculture. They hold some land within Iesperka limits.

Umarzai.—Their main divisions are Manzar, Tappai, Boza, all holding lands in our territory, and lastly Sayad, which latter is only now beginning to settle down in the plain in any numbers. The clan owns part of the hilly country between the Kurram and their own plain possessions. They still go largely to the hills in the hot weather. Many of their members hold land in the Suráni and other Bannuchi tappas north of the Kurram, and cultivate such land directly or through Bannuchi tenants. The Umarzais are great wood-carriers, and supply the cantonments with half the wood fuel there consumed, bringing it in by the Gumatti Pass. Collectively the clan is rude, thriftless and kept little in hand by its grey-beards, but amongst its members are a sprinkling of shrewd acquisitive men. During the 1870-71 border disturbances the Umarzais sympathised with their kinsmen, the rebellious Muhammad Khels, and some of their young men fought on the rebel side. I should think the whole clan numbers twice as many as the portion counted by me. I should note that for some years after annexation the Umarzais gave much trouble, and were treated as outlaws until in 1852-53 Major Nicholson punished them, and after a time re-admitted them into our territory.

Muhammad Khel.—As before said this clan is lineally a branch of the Iesperka, but has long ranked as a separate clan. It is divided in my papers into four tarafs, viz., Mahammad Khel Khas, Sur'an Khel, Shuda Kai, and what I may call miscellaneous. The first is the most numerous, and has no fewer than five recognized sections, of which Ro, Kuda and Kouzi are the most important. The Shuda Kai taraf is an affiliated khel from the remnant of some old hill tribe, which cannot trace descent from Iesperka. In my census not more than fifty souls escaped enumeration through absence in the hills. The clan has several strong men in it of a turbulent disposition. In 1870-71 it rebelled, and gave much trouble before it was re-admitted into our territory. I have described the rebellion in chapter IV of *Bannu*, or *Our Afghan Frontier*. As perhaps slightly influencing their conduct, I may note here that I think on the whole that the Muhammad Khels are the least lightly assessed of all our Waziri clans; but that they are rightly so, as, owing to most of their lands being irrigated, a crop of some sort is always assured to them. Their poorer members eke out a subsistence by selling fire-wood and mats in the town and cantonments.

Bakka Khels.—The main divisions are Takhti, Narmi and Sardi. The first are both the most numerous and wealthy. Though very independent in manner, the clan is generally well conducted, and has shrewd, able representatives to support its interests with the district authorities. It is pretty comfortably off. Its hamlets and homesteads are strong and well built. It is the most numerous Waziri clan settled within our border. All its members come down to the plain for the

cold weather. Few families escaped enumeration in the settlement. The Masauds are annually encroaching more and more on the hill territory remaining to the Bakkakhels, and thus compelling them to become plain-dwellers.

Jánikhels.—The case of the Jánikhels closely resembles that of the Bakkakhels, the Masauds gradually supplanting them in the hills, and so, *nolens volens*, the clan is becoming more and more permanent settlers in our territory. It has three chief branches, Edia, the most numerous, Tor and Maliksháhi. The latter are comparatively few and poor. The clan has never given much trouble, though at times if thwarted it threatens to withdraw to the hills. Such a threat has hitherto been for this and for most other clans a *brutum fulmen*, and now that cultivation has so enormously increased, and that the Masauds are year by year absorbing more and more of the hill lands of their Darweshkhel kinsmen, it is unlikely that any clan will ever be so foolish as to seriously go off to the hills in a body. Both Jánikhels and Bakkakhels, I should add, bring quantities of fire-wood into Edwardes-abad in the cold weather.

56. The Bhitannis are a rude people just emerging from barbarism.

The Bhitannis of Marwat. But those who have taken to civilized ways show themselves to be keen-witted, and I think more energetic and desirous of making money than their Marwat neighbours. They used to be great raiders and cattle-lifters, but of late years have been very orderly. I shall write something about them in the Chapter on Tenures (see paragraphs 137-138). They do not take service yet under Government. They occupy the lower hills just beyond the border of Marwat from the southern slopes of the Gabar mountain to the Gumal valley. Since the transfer of Mulazai to Dera Ismail Khan in 1875 the Bain Pass terminates the connection of this district with them. We have now mostly to do with Dhanna and Wurgara Bhitannis. The latter are often termed a "fakír kaum," and are, I understand, the descendants of the clan which held the Bhitanni hills before the conquering influx of the Dhanna Bhitannis. The Dhannas are divided into two clans, Boba and Bobak. Their united number inside and immediately beyond the Bannu border is small, probably under 1,700 souls. The Wurgaras may number 150 souls. About seven-eighths of their whole numbers visit the plains in the cold weather.

57. Malarial fevers and bowel complaints are the most prevalent diseases. In the autumn months the former

The public health. are sometimes very deadly wherever canals exist. In cantonments and amongst the Bannuchis the fever season commences in September, and continues until November or December. I should think quite half the adult population have one or more bouts of fever between those months, if resident during them in an irrigated part of the country. The civil and military station is in the midst of the richest part of the Bannu valley, and is, I believe, quite as unhealthy as Pesháwar. With the exception of the irrigated tracts the district is generally very healthy, the Marwat country particularly so.

Of diseases other than those given above the commonest are small-pox, pneumonia, guinea-worm, and at Kálabágh goitre.

Small-pox is almost entirely confined to children, and is looked upon as a disease every child must face. "Until he gets over the small-pox, parents do not count their child their own," is a local Pashto, saying on the subject. About one case in ten is fatal. Of the recoveriest a good fourth are disfigured for life. As yet vaccination is not sufficiently appreciated: still no classes have any deep rooted objections to it, and belief in its efficacy is steadily spreading. Inoculation has been commonly practised by Kureshis and others for many generations and with good results. The punctures are made either at the base of the thumb of the right hand, or several inches up the right fore-arm.

Guinea-worm is very rife in Marwat and wherever stagnant water is drunk from ponds or tanks. It is most prevalent in the hot weather after July. It is sometimes fatal. I have known a case in which one man had ten worms in him at once. It seems to attack old and young alike, but according to popular opinion the young are more susceptible to it.

Goitre is only endemic at Kálabágh, where the citizens live closely packed, and day and night inhale the noxious smoke and vapour from the large alum work situated in the centre of the town. Perhaps this may explain it. It is certain, that the residents of Kálabágh are, as a community, sallow and more sickly looking than those of any other town in the district.

58. There are five dispensaries in the district under the Civil Surgeon, viz., at Miánwáli, Edwardes-abad, Lakki, Isa Khel and Kálabágh. The first is first class, the second second, and the three latter third class. The two last were opened in 1874. The most popular is that at Edwardes-abad, to which hill men freely resort in the cold weather. The work done by each greatly depends on the personal qualifications of the Assistant Surgeon or Hospital Assistant in charge. If he acquires the confidence of the people the good he can do is only limited by his own powers of endurance. Of important operations the most so are lithotomy cases. About twenty are done each year. Two Kureshi brothers, residents of Khaglanwála near Isa Khel have cut for stone and operated for cataract for many years. Though their instruments are very rude, they have an immense local reputation, which extends beyond the limits of the district. I know many cases in which the younger brother has literally restored the blind to sight.

59. Being on no great trade route, possessing no large towns, and, having a population mainly agricultural, this district is not often visited by serious epidemics and when they come, diffusion seems rapidly to diminish their virulence. The only bad epidemics I recollect are two. Early in October 1867, soon after I came to the district, cholera was imported from Kohát, and for a fortnight appeared in a virulent form in Edwardes-abad and the neighbouring villages. Again in July 1876 it was imported from Shahpur

into Miánwáli, and after being terribly destructive in several villages there, spread Trans-Indus. The case of one village, Sawas, deserves special record. In twenty days 198 persons fell victims to it out of a population of 1,400, and of those who recovered from the disease, several subsequently died from a malignant boil locally termed *malli-barur*. This boil is very fatal in some years in Miánwáli, and seems to resemble that called by Mackenzie Wallace in his "*Russia*" The Siberian Plague. "It is," says he, "a thing like a boil with a dark coloured rim. If this is cut open in time the person recovers, but if not, the person dies." Previous to 1867 cholera is said to have been very fatal all over the district in 1844-45. No other visitation is remembered. Besides cholera typhoid fever sometimes appears in an epidemic form. In the autumn of 1857 after a season of unusually heavy rain it ravaged parts of Marwat and the Indus bed village. The Marwat tell me, whole households were swept away, and that in the villages, which suffered most, hardly a family escaped without the loss of one or more members. The *wzbai-kál* or "epidemic year" has established itself as an era in those parts which were most afflicted.

60. Pashto and what is called Hindi are the two languages spoken in the district. The former is so by Wazirs, Bannuchis, Marwats, and Bhitannis, and in Isa Khel by the Bhangikhels and other Khataks settled there. The Niázai Pathans have to a great extent forgotten their Pashto, and speak it as a foreign tongue. It is still however the domestic language in many a Niázai family in Isa Khel and even in Miánwáli. It would appear that the women, from want of intercourse with the outer world, retain their mother tongue much longer than the men do. It is very difficult to acquire a colloquial knowledge of Pashto in this district, because though all follow the soft pronunciation, yet Wazirs, Bannuchis, Khataks and Marwats each pronounce the vowels somewhat differently, and make use of many words peculiar only to themselves. The dialects spoken by the two latter nearly assimilate, and are to an Englishman easier of comprehension than those of the first mentioned. I remember soon after I came to the district a Yusufzai orderly translating something I had said to a Bannuchi villager. When the man had done, the latter shook his head helplessly, and said "speak Pashto as I don't know Hindi." This case well illustrates the great divergence there can be between two dialects of Pashto. As to the Hindi spoken in the district, it is so by most of the residents of the Isa Khel and Miánwáli tahsils, Khataks alone excepted. It is a sort of Punjabi with a large portion of its vocabulary made up of purely local Persian and Pashto words. It is far easier to understand than to speak.

61. Agriculturists have two regular meals in the day, one in the forenoon, the other in the evening. The Food. women share all food with their male relations. What remains over from either meal is generally preserved, and eaten cold. Thus in the working seasons men will eat four times in the day. The quality and variety of the food depends on what are the

staples of each tract. Marwats who have camels make ghi from the milk, a fact of which they are proud, believing that from camel's milk elsewhere little butter or ghi can be made. As might be expected, the occupants of irrigated lands fare much better than any others. The Bannuchis live best, the Marwat worst in the district. As a rule each household consumes food raised on its own holding. The Bannuchi eats maize, barley and wheat supplemented with butter-milk,* ghi or vegetables. In the cold weather he frequently also eats meat. In the hot weather the Marwats eat cakes of wheat and gram-flour mixed, or of barley. In the cold weather bájra is their principal food. Their cakes are mostly eaten dry. A sort of gruel or porridge called ogra made from bájra and moth boiled together is often eaten hot in the cold months. Little ghi or butter-milk is consumed except in villages adjoining the Kurram or Gambila. Vegetables are only procurable in irrigated tracts. Young gram leaves are largely consumed in the spring and make an excellent pot-herb (*ság*).

The food of the agriculturists of Isa Khel and Mianwáli holds a middle place between that of the Bannuchis and of the Marwats. It consists mostly of wheat in the hot weather, and tájra and moth in the cold, supplemented by ghi or dál and vegetables, especially some kind of pot-herb. Onions too are largely eaten. The Wazirs live much in the same way, but being rich in sheep and goats they fare rather better. Nowhere in the district do the people think vegetable food necessary for health. The Wazirs in particular care little about it. It is generally admitted that the quality and quantity of the food now consumed is better than it was twenty years ago.

As to the non-agricultural labouring classes they eat the cheapest edible grain of the season, and it is mostly eaten dry. The upper classes, those who employ labour, live well, and on much the same articles as men of their class do elsewhere.

The cooking utensils are always few and simple. The Bannuchis have the best, most households possessing besides earthenware vessels, an iron girdle (*tawa* or *táb*), a copper cooking pot (*degchi*), and a shallow drinking bowl, also of copper (*katora*). Elsewhere the number of metal utensils is smaller. The iron girdle is seen everywhere except in Marwat, where a sandstone girdle is still in use.

Intoxicating drugs are little used. Here and there, especially in Mulazai, where hemp is grown, bhang is drunk. It is partly the produce of Bannu proper; but a large amount of that consumed is imported from beyond the border, from Khost and Dawar. Many of those who do not smoke take snuff. That imported from Pesháwar is held in most esteem, being very pungent.

62. Zamíndárs wear much the same clothing all the year round

Clothing. In the cold weather a sheep's wool blanket is added, and by those who can afford a cheap sheep skin pelisse (*postín* or *nuncha*), or camel hair cloak (*chogha* or *chakma*). Amongst the better classes English cotton cloth is largely

* I mean what they call *pakki lassi*. *Kachi lassi* means milk and water.

worn, but the ordinary zamíndár only possesses a turban of it, and perhaps a gala suit as well. As a rule every article of apparel is either home-spun or at least woven in the district. To this rule there is one exception. The Marwats of the sandy tracts growing very little cotton, having few sheep, and their women being employed in fetching water, have to buy most of their clothing in the bazár.

The principal articles of a man's dress are a turban, a long loose tunic (angrakha or kamis), and for the Bannuchis and Wazirs loose trousers (suthan) drawn tight about the ankles. A sheet is also worn as a plaid over the shoulder or as a waist-cloth. Except in the Bannu tahsil, a coarse sheet (manjhla) wrapped round the legs with the ends tucked in about the navel serves instead of drawers. The poorest classes everywhere wear the sheet as a covering to their legs. In Marwat too and elsewhere Trans-Indus a not uncommon dress for labouring men, when afield, is a long coarse woollen blanket (dhusa or simply (kamal) with a slit in it for the head. The rest falls down on either side of the body, to which it is kept close by a waist belt of rope leather or a strip of cloth.

Leather sandals are commonly worn in the two frontier tahsils, and amongst the Gadikhel and Bhangikhel Khataks, elsewhere the ordinary shoe of the Punjab. Grass sandals are still in use amongst the poorest Wazirs, Marwats and Khataks; when travelling zamíndárs generally take off their shoes and walk barefoot.

It is hardly necessary to particularize the dress of the women. It generally consists of a sheet, a bodice with petticoats attached or separate and suthan drawers. Poor women often wear the manjhla sheet instead of drawers. They as a rule go about barefoot. Bannuchi women conceal their faces when outside their own house-yards. Others do not, except when personal modesty or prudery induces them to do so.

When clothing is dyed, the color is either indigo blue or that of brick dust (majith). Marwat turbans in the border tracts are of the latter color, and most of the drawers of the men and bodices of the women of the former. As a rule cotton articles are not dyed until they have been some time in use. Dyeing makes a worn and dirty article of dress look more respectable and cleaner than it really is.

63. Within their means the peasantry are fond of games and sports. But for the expense and the difficulty in obtaining licenses as large a percentage of them would shoot as amongst ourselves. In default of guns dogs are everywhere kept with which jackals and pigs are baited. Some few keep hawks.

Of manly exercises two deserve particular mention; viz., tent pegging (nezabázi or chapli) and a rough sort of cross tig called tond and doda about the Indus, but in Marwat ainda. On every occasion of rejoicing, men who own horses assemble and ride at pegs, shoes or sandals. The Wazirs generally ride at an old grass sandal stuck against a peg, hence the name chapli. Elsewhere an old shoe often serves for a peg.

As to tond or aında, it is essentially a young man's game. Sides are made up, and preliminaries arranged much as in prisoner's base with us. Next a youth goes out some forty yards, and then faces the two homes or bases. He is pursued by a couple from the opposite side, who endeavour to catch and throw him, whilst he aims at escaping between them, butting them in passing on their breasts with his hands, and so getting home uncaught. Heavy falls often occur as pursued, and pursuers are going at full speed. The game is played all over the district, but the men of Isa Khel and Miánwáli are fondest of it. I have seen them in the kacha play, north and south, with upwards of fifty a side, the representatives from villages north or south of some imaginary line challenging those resident on the other side. The players are naked, with the exception of a loin cloth. Amongst them very fine specimens of manhood are to be seen.

The sort of dance and chorus singing called drís is perhaps hardly a game. It consists of singing and dancing to the music of a musician placed in the centre of a group of men or women on some festive occasion, such as a marriage. Lifting weights is a common trial of strength amongst men. Large stones or a part of the trunk of a tree, with a handle excavated therein, are to be seen ready for the purpose at most chouks and baithaks. Wrestling is little practised in the district except here and there amongst boys. Of childrens' games there are many which need not be specified. Altogether the peasantry in their idle moments must be described as a happy people fond of amusement.

64. Excepting the weekly Friday fair, which takes place at Edwardes-abad, and is kept as a holiday, the periodical gatherings held in the district are not largely attended. The Dasehra and Diwáli are celebrated in all towns and large villages. Other festivals in particular localities at which upwards of 400 persons are present are as follows :—

Hindu Festivals.

Name of gathering.	Where held.	Date.	Remarks.
Mághi ...	Khujarri in Bannu proper.	1st Mágh, (11th, 12th or 13th January.)	Over 500 assemble, and spend the day in sports. Muhammadans also attend.
Sheorátri ...	Rámkund, near Kundal in Isa Khel	1st Phágan (11th, 12th or 13th February).	This is an ancient shrine in a palm grove on the eastern face of the Khisor Range. There are three small springs or tanks (kunds) surrounded with some buildings. Over 1000 Hindus from the vicinity assemble, and bathe and present gifts. The shrine is increasing in fame, and is visited on auspicious days all the year round.
Ditto ...	Baba Mansa Nath's Jogiara in Pal Khel in Miánwáli.	1st Do. Do. ...	About 500 persons assemble generally

Name of gathering.	Where held.	Date.	Remarks.
Baisákhi ...	Nánga Arjan, an ancient ruin on the top of a conical hill at Mári.	1st Baisákh (11th, 12 th or 13th April.)	About 500 persons assemble generally.
Ditto. ...	Bazár Ahmad Khan in Bannu proper	... Ditto ...	Over 500 persons attend. Muhammadans also join in the sports.
	<i>Muhammadan</i>	<i>Festivals.</i>	
Eed-ul-fitr and Eed-ul-zuha	Ghoriwal ...	Both Eeds ...	Over 1000 assemble, and spend the day in sports, amongst which tent-pegging is the most popular. Hindús also join. Elsewhere throughout the district each large village has its own gathering. At the earlier Eed, which celebrates the close of Ramzán, every one dresses in his best, and spends the day in feasting and merriment. Lofty swings are then to be seen in every village. It is not a general custom to visit shrines on either Eed.
Khángah Shah Abd-ur-Rahman.	Mitha Khatakin Isa Khel.	Each Thursday in Chetar (March, April.)	The saint buried here died in Afghan times. Villagers and even Hindús from the vicinity present offerings at his shrine which has a great local reputation. The sick become well, childless mothers fruitful, and wishes are fulfilled, so the people believe. The attendance each Thursday is said to be between 400 and 1000.
Khángah Mián Malúk.	Kundal in Isa-Khel.	Ditto. ...	The saint was an Isa Khel, and was buried here over 100 years ago. The grave is in a palm grove on the hill side about 2 miles south of Rám Kund. From 700 to 800 pilgrims attend each Thursday. Hindús also go.
Khángah Háfiz Muhammad Azím.	Nammal in Miánwáli	7th to 9th Muharram	Over 1000 pilgrims collect here.
Khángah Nur Muhammad.	Bakra in Miánwáli	Every Friday in Chetar (March, April.)	The gatherings are small, generally under 500.

65. I do not intend to here describe the social customs of the peasantry, having sketched them in pages 141 to 170 inclusive of my *Bannu, or Our Afghan Frontier*. A few words regarding betrothals, marriages and burials in ordinary zamíndári households are however required. As a rule boys and girls are not betrothed until they attain puberty, and marriage soon

follows betrothal. An exchange arrangement is generally effected, in which case no money is paid to the guardians of the girl. When there is no exchange, a present of from Rs. 30 to Rs. 120 or even more has generally to be given before the girl's guardian consents to the proposed match. Respectable people, however, do not always insist on any money payment being made, and there is always some little mystery as to the amount, and some little shamefacedness experienced, should such a transaction become publicly known. From Rs. 100 to Rs. 150 will cover the average betrothal and marriage expenses incurred by a boy's guardian; thus:—

	From Rs.	To Rs.
Present of food sent to the girl's guardian at the time of the betrothal and fees to go-betweens ...	8	15
Silver ornaments, especially a <i>hasli</i> for the bride ...	40	55
Marriage clothes for the bride and the bridegroom ...	16	25
Cost of entertainments ...	30	45
Fees to Mirásis, Hajáms & ...	6	10
Total, ...	100	150

Few but well-to-do families spend much over Rs. 100 except when they have literally to buy the bride. The provision of the *jahez* is the only expense which falls on the bride's guardians. It consists of cooking and household utensils, also a bed and bedding, and a ring, and some small bangles, the whole cost of which is from Rs. 13 to Rs. 20 only. The ordinary peasant all over the district is the husband of one wife. Many grown-up men, particularly Marwats, are bachelors, not having the means to marry. It is only agriculturists of position, such as village headmen, who can afford the luxury of a second wife. The number of wives a man possesses is a good indication of his circumstances. Marriages are registered by the *patwáris* in *Miánwáli* in their diaries. The practice was in abeyance during settlement operations, but is now being resumed. It affords great help in cases. I have recommended its extension to Isa Khel, and I hope the Deputy Commissioner will induce people of the two frontier *tahsils* to report all marriages in a similar way.

66. The amount to be spent in alms to Mallas is often prescribed by the dying man himself, but I do not suppose his heirs would as a rule obey his injunctions did he name too large a sum. From Rs. 20 to Rs. 25 is the ordinary expenditure on the occurrence of a death; thus, shroud and alms, giving at actual burial Rs. 10 or Rs. 15; cost of food bestowed on the fourth day Rs. 4; again on the ninth day Rs. 2; and lastly on the fortieth day Rs. 4. From Rs. 10 to Rs. 12 will well cover all the expenditure on a day labourer's or poor tenant's burial. The heirs of an agriculturist who leaves a fair property and was not in debt will spend from Rs. 30 to Rs. 100, especially if the deceased was a man of local note. The burial expenses of children and of women are much less than those of an adult male.

67. The large majority of the land owning classes are self-cultivating peasants of small means and frugal habits.

General condition of the cultivating and landlord classes.

With two important exceptions they are all fairly prosperous, and in infinitely easier circumstances than they were thirty years ago. Taking a family to consist of a man, his wife and two young children, the annual cost of living in an average year to an ordinary peasant proprietor ranges from Rs. 70 in Marwat to Rs. 110 in Bannu proper. It is lower amongst the Marwats than elsewhere, because their extreme poverty, and the fewness of home-produced consumable articles enforce great simplicity in diet, and a close economy in every other branch of domestic expenditure, especially in clothing. It is highest amongst the Bannuchis, because every man's holding produces a large variety of consumable articles, and the exhausting nature of the climate requires them to live well. The Bannuchi frequently indulges in flesh, meat and ghi; the Marwat seldom in either, except on great festivals or occasions of rejoicings on the two Eeds, say, and at a marriage. Every peasant has a running account with his *bunniáh*, and borrows money as a matter of course to defray marriage or burial expenses, and at times to pay his revenue. When he has sold or eaten the last of his own reserved store of grain, a frequent occurrence, about a month before the next crop is ripe, he borrows food grain from his *bunniáh*, and returns up to double after harvest. Still, in canal irrigated parts, on *sailába* lands, and elsewhere in fair average years there is no general real indebtedness, and from Rs. 20 to Rs. 50 will represent the average amount of a man's liabilities two or three months after the harvest has been ingathered and the revenue paid. Most peasants live up to their means, and except in the shape of bangles, never have any capital in hand. When a man has a good balance, he either redeems a mortgage, or invests it in land or buries it. Money saved in this latter way is generally referred to as treasure (*khazánah*). Savings are hardly ever invested in cattle.

So far I have spoken of the ordinary peasant, but with two exceptions. They are the Marwats of the poor sandy tracts, the large half of Marwat, and those of the Bannuchis, whose holdings are so minute as to give the owners a bare subsistence. With both the struggle for existence is terrible, when any thing occurs to increase expenditure or reduce income, and numbers drop down every unfavorable year into the position of tenants or of labourers. With the former, once a debt of the class known as *ghára* (neek) is incurred, it is pretty certain that in a few years the debtor must sell his land. This pernicious *ghára* system of securing a loan dates from some twenty years back. Under it the debtor either engages to pay as interest a certain portion of his earnings, and thus makes himself the *quasi* bondsman of his creditor, or a certain measure of grain each harvest crop or no crop. The usual rate is a *topa* of grain, i. e. about five seers per rupee lent, hence this species of debt is known as *topa rupái*. The sum of *ghára* debts in Marwat was in 1875 considerably over half a lakh of rupees, but now it must be less owing to the continuance of good years. The indebtedness of a large proportion of the Marwat is due, I think, chiefly to over-assessment, and the rigidity of our revenue system, but there is

also no doubt that without any assessment at all in bad years or cycles debts would be incurred, and some old peasant proprietors would have to sell or mortgage their holdings. * In this settlement the over-assessed villages have received substantial reductions, but Government still owes them reparation for the great wrong of having for the twenty-two preceding years unwittingly rack-rented them, so to say, and as long as the existing rigid revenue system is maintained, the district officer is I think under an obligation to work the rules sanctioned for suspensions and remissions with a wise liberality, (see paragraph 196). In the other exceptional case, that of the owners of the minutest of the minute Bannuchi holdings, Government neither can nor ought I think to do any thing. The assessment is fair, and a crop being a certainty of our system is elastic enough. The cause of the smallness of the holdings is over-population, and for that the State is not called upon to find a remedy. Besides, the Bannuchis are such a poor hybrid race as to be of little political account. With them there is no fear of a stalwart hereditary peasantry being expropriated as there is in Marwat.

As to the tenant and labouring classes throughout the district they are probably as well off as their fellows in any part of the Punjab. Able-bodied men can always get employment at a fair remuneration, and cultivators are still in demand for the Nar tracts, but the supply is deficient except during drought cycles.

Now to pass on to the landlord class, the *sufuid-poshes*, who do not cultivate with their own hands. As a rule, they are neither so frugal nor prosperous as the better of the peasant proprietary class. Good twenty per cent. of them are deeply involved in debt, and a large minority habitually live beyond their income. A few of course, say ten per cent., are shrewd, careful men, and their holdings and incomes are growing not diminishing in amount. Old families sink into poverty from two causes, both due to a foolish pride. The head of the house thinks he must maintain a reputation for hospitality, the highest of virtues amongst Pathans, and to maintain it he mortgages and borrows freely. Then his sons, they are brought up in idleness, and married early, and no matter how the *res augusta domi* may press, they disdain to work with their own hands.

68. As a rule zamíndárs do not sell or mortgage land unless from

Alienation of land by sale
and mortgage.

necessity. An exceptional case is when a man owns scattered plots in different villages, and desires to concentrate his possessions. Such cases were until lately frequent in Marwat, and account for about one quarter of the transfers which have occurred amongst the Marwats themselves. Of the whole area now found to have been alienated in the last twenty years about 94,000 acres are so to zamíndárs. This robs the figures I am about to subjoin of much of their gravity, but still it must be recollected that of this fraction the transferees of the major portion are moneyed, non-self-cultivating proprietors, and that,

* The Marwats are fast increasing in numbers too. Major Macaulay, Deputy Commissioner, Dera Ismail Khan, tells me they are spreading as tenants over all the northern parts of his district.

but for property devolving in equal shares to all sons, large landed proprietors would be now springing up throughout the country, and the bulk of the old peasant proprietors would sink down into the position of tenants. Without first examining the cause of each sale or mortgage by itself, it is difficult to generalize safely. But I think that there can be no doubt that, in the majority of cases, when a peasant parts with his land, and drops down into the tenant class, the reason is poverty caused by the rigidity of our revenue system, or by the holding being economically too small to support the number of mouths dependent on it. In many villages in the sandy tracts of Marwat the cause has been over-assessment combined with the exaction of revenue throughout a series of bad years. But speaking of the district as a whole, over-assessment by itself has never driven a peasant to alienate his holding. The market price of fully assessed land nowhere throughout the district falls lower than twenty times the amount of the assessment. The general range is from twenty-four to thirty years' purchase of the revenue. The latter is the average market value for the highest assessed villages of Bannu proper. Thus it is clear that for a man of means neither is the assessment heavy, nor is the inelasticity of our revenue system oppressive.

The following statement gives some particulars regarding recent alienations in certain tracts :—

Tahsil.	Tract.	Percentage of assessed land to whole assessed area acquired since 1857-58, by purchase or mortgage and now recorded as held by			REMARKS.
		Zamindars.	Hindus.	Other out-siders.	
Bannu ...	Bannu proper ...	6	4	10	
Marwat ..	Old sandy villages over-assessed in last summary settlements... ..	20	10	3	
	Other villages	19	7	5	
Isa Khel ...	Uplands, i. e., all but Bhangikhel and sailaba lands	17	7	5	
Mianwali ...	Country between Salt Range, Shahpur boundary and bank of Indus ...	9	6	6	

69. In Bannu proper mosques are very numerous, not fewer than one to every 34 houses, elsewhere they are less so. Except amongst the Wazirs and Bhangikhels nowhere in the district does a hamlet exist without one or more

When huts are being run up in a new location, the mosque is one of the first structures erected. It is always the handsomest building in its quarter, and is kept scrupulously clean. The wood work on its front has frequently a good deal of ornamental carving about it, and the roof is studded with the horns of the wild goat (*márhór*) and sheep (*uríal*) of the neighbouring hills and of ravine deer. Every mosque is *wakf*, but the heirs of the original builder have alone the right of management, if they choose to exercise it. The residents of each quarter, and each faction have their special mosque, and few but they and strangers attend, though of course, being the house of God, no man can be excluded. Travellers are allowed to use it as a rest house without distinction as to religion. Except in the cold weather the services are conducted in the court-yard facing the building. When it is cold and wet, they take place inside in the body of the mosque itself. No one can hear the prayers repeated without being struck by the grave reverential demeanour of the congregation. The office of *imám* or priest is not hereditary, but the son generally succeeds his father. The *imám* is dismissible at any time at the will of his employers, and any grant of land assigned him as such, is resumable. In the two Frontier tahsils such assignments fall under the term *kannah*, or service grant. Some such grants were resumed during the settlement, and some being in the possession of ex-*imáms*, who had for many years ceased to officiate as priests, were declared to have become their absolute property. The *imám* performs duties similar to those of a priest with us, and he is very liberally paid. On each domestic occurrence at which he attends, he receives a fee, and if, besides performing the funeral rites, he has himself to wash and lay out the corpse, he receives the dead person's ward-robe and from ten to twenty of the clothes thrown over the bier by friends and relations. He also receives tithes (*lashma*, *ashra*), which are in practice but a small dole out of each grain heap. He also receives *wazifa*, which is a quarter of a cake per house, at each family meal. With this he feeds himself and the "searchers-after-knowledge" whom he may be instructing. It is said that *imáms* frequently sell the greater part of their *wazifa*. As a school master too he makes something. Altogether he is well off. As a rule he is very exacting in collecting his dues, which are most fixed and constant amongst the Bannuchís. There are few mosques in the district so well endowed, or managed by such liberal patrons as to have attached to them any special staff of servants, hence the rule is, that the *imám* does nearly every thing himself except sweeping, which is done by a village sweeper. In Bannú proper "searchers-after-knowledge" who are in the majority of cases lazy vagabonds from a distance, and are both a tax on a village community and a nuisance to the administration, relieve the *imám* of a good deal of menial work, and generally the ablution arrangements are looked after by the wives and daughters of some members of the congregation.

70. Chouks and hujras are institutions peculiar to the two frontier tahsils. The chouk is commonly a mud built platform in some central place and adjoins the mosque. It is always well littered with dirty looking cots, chillams and hukkas. In all cases it belongs to

Chouks, hujras and places of public resort.

a lambardár or a few leading men. To own one gives a man great influence. It is the lounge and place of gossip of every idle man in the village, who belongs to the same party or faction as its owners. As an institution its functions are those of the political club at home, partly social, partly political. Since 1865 the formation of new chouks, without the permission of the Deputy Commissioner, has been prohibited. The fact of the prohibition has been recorded in the administration papers. The hujra is a guest chamber attached to the chouk or mosque. Here travellers and "searchers-after-knowledge" put up, and here too the Pathan boy learns many pernicious and degrading practices. The hujrah is mainly a Bannuchi institution. The service of both chouk and hujra is performed by the kutwál (Bannu proper), dúm and the sweeper. Other expenses are rated on those frequenting such places, or are borne by the owners. In villages where dharat* is levied, the income therefrom goes to the lighting of the hujra, and of the mosque. Where there are *hamsáyahs*, the supply of quilts and food for travellers is obligatory on them: where there are none, the traveller is cared for by the villages in turn or by the lambardár. In Isa Khel and Miánwáli there are no regular chouks, but mere places of resort (baithaks) without any established code of rules. In both tahsils the duties of hospitality fall chiefly on the lambardárs or other leading families. The community at large is neither bound by rule nor expected to assist.

71. The kamian† or village menials, who are paid by fixed dues in kind or cash, may be divided into two classes, agricultural and domestic. In the former class is the blacksmith and the carpenter, in the latter the barber and the sweeper. The leather worker (mochi or cha miár), the mirási or dúm (called in Bannu proper kutwál) render mixed services. The duties of the above joint-stock menials are so obvious, that they need not be here described. Nor need I detail their respective dues, which vary considerably in different tracts, for claims to arrears rarely come into court. As the menial class is numerous,

* A custom called dharat has obtained for generations in twenty-eight villages in Bannu proper, and in fifty-five in Marwat. It is as follows:—The monopoly of weighing all agricultural produce sold wholesale inside the village site belongs to the lambardár. They lease their right to a farmer for so much a year, or they take a fixed share of the weighman's dues, and are supposed to expend what they receive on oil &c. for the village mosques, chouks and hujras. The monopoly holder's right has I believe never been challenged. Were a seller not to employ the authorized weighman, he would I imagine soon repent of his obstinacy as he would suffer social ostracism, that is, be debarred from using the chouk. The custom has been noted, where it exists in the administration paper, but nothing has been said as to its legality or otherwise. It is clear, however, that a seller is under no obligation to employ the lambardár's weighman.

† A special house tax on low-caste non-agriculturists used to be levied by lambardárs in the Kacha and other tracts, but was abolished at the first summary settlement. It now survives only in Pakhar in Miánwáli under the name of *búhá* (door-way or entrance). There it is something of the nature of a customary ground rent charge. Blacksmiths, carpenters, butchers, weavers, washers, barbers and potters, if not agriculturists, pay *búhá*. For Masán and Niki the rate is Rs. 1-4, and for the other three villages of the tract Rs. 1 a year on each house. In Chakralla as the proprietors fought amongst themselves about the partition of the *búhá*, I ordered that its proceeds should be credited to malba. Elsewhere the lambardárs divide the income amongst themselves. The practice now obtaining has been recorded, but nothing said about its legality or other ways.

and all in it are entirely dependent on their masters; did one man sue he would make himself so obnoxious that he would find it difficult to get further employment in his village quarter. Village servants are as a rule entertained in the spring, and are dismissible after the rabi harvest. The rate of grain wage of blacksmith, carpenter, leather worker and barber is about equal, but in some tracts that of the two latter, generally where they make a fair income by extras, is from a quarter to a half lower. The rate ranges from five to eight seers per plough or house on each of the staple crops. Particulars have been entered in the administration paper of each village. For extraordinary services a special money payment is made. Thus in Bannu proper the carpenter is paid Re. 1, when he repairs the sugar-cane press, and Rs. 3 when he makes a new one. Similarly the barber when taking part in a betrothal or marriage, receives a customary fee of from Re. 1 to Rs. 5. On the latter occasion the dím is generally presented with five rupees. Throughout the district the average grain wage paid to village menials for services connected with agriculture may be reckoned at four per cent. of the gross produce.

72. The extra police duties of the village chaukidár of the present day were performed prior to annexation by Village chaukidárs. kutwáls or dúms. The former now only exist as an established village institution in Bannu proper. The latter are found everywhere, but in many villages they are rather the servants of a family or clan than of the whole community. After annexation we introduced chaukidárs, who do the work of a rural constabulary. Their pay was met either by a more or less graduated house cess, or by an octroi. Collections and disbursements were in the hands of the lambardárs, and the consequence was that the chaukidárs did not receive their pay with proper regularity. As a remedy it was arranged that the house cess should be deposited six-monthly in advance in the tahsils, and thence disbursed monthly or quarterly by a munshi styled the Bakhshi chaukidáran. This change was initiated in 1868 in the two frontier tahsils, but later in the others. In Miánwáli octroi was maintained in several large villages until about 1873, but elsewhere all watch and ward charges were met by a house cess. The octroi practice was much preferred by the people at large, because to most it was an indirect tax, fell lightly on the poor, households being taxed according to consumption of dutiable articles, and as the shop-keepers and petty traders seemingly paid manyfold more than others. The system of periodical disbursement from the tahsil continued until July last, since which time lambardárs both collect and disburse. The tax now consists of a house cess at one fixed rate on each collection of houses maintaining a chaukidár. At the periodical distributions each community can exempt those whom it pleases, *e. g.* widows, sayads and imáms. The usual rate of pay is Rs. 4 a month, and its incidence falls at under one anna a house.

73. Our schools are little appreciated except by Hindús, Government officials, and enlightened men here and there. Thus the educational cess drawn from Education. the zamíndárs goes almost entirely to benefit those who do not

contribute towards it. The smattering from the *Korán* imparted by the village mullah, is all the instruction that the *zamíndár* cares to bestow on his son or daughter. There are at present fifteen village and three tahsili Government schools in the district. Of the whole number only those at the tahsil head-quarters of Lakki and Miánwáli rank as middle schools, all the other being preparatory. The daily average attendance is 830, which gives nearly 47 to each school. Rather more than half the boys are Hindus. The average age is said to be nine. Besides the above there is a first-rate Mission School at Edwardes-abad. The average daily attendance is 177, of whom nearly two-thirds are Hindus. Almost all the scholars are town boys. The school is aided by a monthly grant of Rs. 25 from the municipality, and Rs. 100 from Government, and I understand that small fees are also charged averaging in the year Rs. 168. Nineteen boys are learning English at present.

Towns and chief villages. 74. There are only four small towns in the district, and all four are Trans-Indus.

Edwardes-abad.—This was founded in 1848 by Major Edwards. For the purpose he appropriated a few acres of cultivated land just beyond the glacis of the new crown fort he was erecting. In compliment to the boy Maharaja he called his little bazár, for it was no more, Dalípnagar. After annexation and the pacification of the frontier, Hindu traders from the Bannuchi villages and from Shahpur and Dera Ismail Khan settled in numbers in Dalípnagar. It was however, never known by that pretentious name, the people preferring the simpler and more appropriate term bazár. In 1859 its limits were extended, Rs. 160 per acre being paid for the land then taken up. In 1869-70 another extension took place, and this time the land cost Rs. 320 an acre. Sometime after the death of Sir Herbert Edwards, which occurred I believe in 1868, his town was rechristened after him Edwardes-abad. It has been a municipality since 1868. By the 1875 census its population was ascertained to be 3,900, of whom two-thirds were males. Its average annual income for the last five years has been Rs. 11,902, hence the incidence of taxation falls at Rs. 3-0-10 per head. It contains 609 shops, and 736 other buildings mostly houses spread over an area of fifty-two acres. The town owes its existence and prosperity to the adjoining cantonments and head-quarter civil station, which have together a population of nearly 3,500. Few but traders and officials and their families live in Edwardes-abad. The clothmerchants, who are very numerous, do a brisk trade with Bannuchis and Waziris as well as with the independent Dawaris. The central marked place, large square surrounded by two-storied kiln-brick buildings, is very handsome, and presents a noisy and animated scene each Friday day. Edwardes-abad is the only walled town in the district. It has seven gates which are open from day-break until evening gunfire.

Lakki.—In 1844 Fateh Khan Tewána, built and garrisoned a small fort in the heart of Marwat, and induced by threats and promises many of the trading classes to settle near it. He called his town Ihsanpur. It continued to be the capital of Marwat until 1866 when owing to a flood in the Gambála and the never-ending plague

mosquitoes, due to its situation near the marshy apex of the Kurram and Gambila Doáb. Major Urmston, the then district officer, allowed its inhabitants to flit across to the right bank of the Gambila, and settle amongst the sandy cluster of villages named Minakhel, Khoedádkhel and Sayadkhel. The people at once availed themselves of this permission, and old Lakki was soon abandoned. New Lakki, then, comprises the three villages just mentioned, and those who settled in their midst in 1864. It is now a thriving little town with a very fair bazár, and with a number of commodious Government buildings in it, viz, dispensary, school-house, staging-bungalow, tahsil and thánah combined, and a sarái. In 1874 it was erected into a municipality. By the 1875 census it was found to have 4,491 inhabitants, of whom rather more than one-third are Hindus.

Isa Khel.—But for its long narrow dirty bazár Isa Khel * looks more like a village than a town. It covers a large area, 398 acres, and many of its houses have large compounds and patches of cultivation about them. The former head-quarters of the Isa Khel clan having been eroded by the Indus, Ahmad Khan, the tribal chief, selected the present site about 1830. An equal portion of land was taken from the head of each of the four *tals* or sectional allotments of the tribe, and thereon the shareholders in each section housed themselves. Until about 1860 all outsiders settling in Isa Khel, or Tarna as it was generally called, were treated as dependents (*hamsáyahs*), and paid ground-rents, and the sites reverted on their vacation to the proprietary section or khel. But the growth of the place, and the influx of traders have gradually converted Isa Khel into a town, and now it may be said that, as a rule, he who owns the superstructure owns the ground on which it is built as well. In 1874 Isa Khel was raised to municipal dignity. Its average income for the last five years has been Rs. 2,172 a year. There were, by the 1875 census, 6,608 inhabitants mostly engaged in agriculture and in the grain and cloth trades, living in 1,550 houses and shops. Of the population 1,771 are Hindus, 415 are weavers, and the remaining mass are agriculturists.

Kálabágh.—This is the only ancient town in the district. Situated on the hill side, at the point where the Indus enters the plains, and commanding the Kálabágh Salt mines or rather quarries and the easiest and best ferry for fifty miles on either side, the position must always have been an admirable one for a township. The natural fortress of Dankot, about six miles up the river, served the inhabitants as an asylum during invasion, especially during those of Nádir Shah and Ahmad Shah in the last century. In 1841 much of the town was cut away by a cataclysm of the Indus. It was made a municipality in 1874. The average annual income of the last five years was Rs. 4,328. By the 1875 census the population was 6,070 with only 1,345 houses and shops. Of the population 1,300 are weavers,† 355 are

* It is a very unhealthy place to live in. The drinking water is bad, being the brackish stuff brought down in the vials from the Kurram.

† Excepting in Isa Khel khás, Kálabágh and Mári, there are no communities of weavers in the district, though some are to be found of course in every town or large village. In Kálabágh alone is *susi* woven, otherwise everywhere the cloth made in the district is very coarse.

boatmen, 241 are blacksmiths, 1,075 are Hindus, and the rest cellaneous. The town is not a pleasant one to live in. The works in its centre cause an offensive smell to pervade its southerly aspect and the bareness of the hills about and above it terribly hot in summer. It is the only place in the district where leprosy is prevalent. Early in this settlement I laid out a site close to it for a new town, and arranged for the price of each site. Since then Malik Mozaffar Khan, the chief of Kálábágh, himself a roomy residence on the new site, but as yet only a few other houses have been erected there. The Assistant Salt Commissioner, Móri, together with a portion of his establishment are, I believe, to be moved to quarters in Kálábágh. There is a good staging place close to the town. Between June and September Kálábágh can be reached by boat in twelve hours from Attock, a distance of one hundred miles. The scenery is wild and picturesque, but rather confined, and down to Khushalgarh the pace is over 12 miles an hour. There are too several ugly places, rapids, whirlpools, sharp corners at narrows to negotiate which give the voyage excitement. Altogether this Indus route is the quickest and best for officers coming to Bannu, and all who can should try and do so once in the rains. At other seasons it takes nearly two days to reach Kálábágh from Attock.

Chief villages.—Trans-Indus Nurar, sometimes called Nur, is important as being a trading centre between Wazirs and Bannu. It has a population of 2,518.

Cis-Indus, the head-quarters of the Miánwáli sub-division, is of little notice. Until 1868 the villages of Wattakhel, Ballukhel, and Miánwáli were all together, and close by them stood the Commissioner's bungalow, Salt Patrol's house, tahsil, and other Government buildings. But about that year the Indus began to eat away its left high bank, and in 1873 the two first buildings were cut away. As the villagers' houses were engaged owners began running up others for themselves about a mile eastwards of the former sites, and latterly a new civil station has partly erected about two miles inland. The pressure of the Indus on its left bank has now ceased, consequently tahsil and dispensary are the two-thirds or half of the villages which have escaped destruction remain standing on the bank of the river, whilst the rest have been

of character which renders one man worthy of being a chief over his fellows. I propose to give a short account of each of their families.

Lál Báz Khan of Bazár Ahmad Khan.—The founder of the family was Ahmad Khan, an Isakki. He wrested much land from the Sukarris and the Hinjals, and built himself a walled village thereon. His patronage of traders induced Hindus to settle in numbers under his protection, whence his village became known as bazár Ahmad Khan. He died about 1740. Of his immediate successors Sháh Bazurg, a grandson, is best known. By killing his relations and seizing their property he made himself secure in the chiefship. All his descendants are known after him as Shah Bazurgkhels. In Sikh times his grandson Dakkas attained power in the same way, and his name is still respected by both Bannuchis and Marwats. On his death in 1842 Khan Súba, a cousin, killed the late chief's eldest son Mír Alam, and seized the tappa. But the Sikhs espoused the cause of Dakkas Khan's widow. As however his surviving children were then infants, and a man was wanted to rule the tappa, the usual struggle ensued amongst the ambitious members of the family, and finally Lál Báz Khan, a cousin, emerged the victor, after assassinating his most dangerous rival. During the second Sikh war, Lál Báz gave us hearty assistance. Whilst his brother Darab Khan was fighting for us before Mooltan, he himself was taken prisoner by the Sikhs on the capitulation of the Bannu fort in 1848. In reward for his services the tappa malikship was confirmed to him, together with the perpetual cash jágir assignment of one quarter the revenue of his tappa, in which was included the connected tappa of Sádát. On his death in 1854 Faizullah Khan his son succeeded to his allowances, and on Faizullah's death without male issue in December 1874, a younger brother, Mír Abás Khan, succeeded, and now receives Rs. 2,337 as cash jágir, * and Rs. 297 as holding a two-third share of the tappa. The other third is held by Mír Akbar Khan, second son of Dakkas Khan. In 1850 Lal Báz Khan and his brother Darab were given land in Nar, which has been now assessed at Rs. 550. The family has been very handsomely treated by us. The present head is a loyal, well-intentioned man, but of little influence and not much intelligence. Mír Akbar, the prominent man, is plausible but scheming and unreliable. The family is much divided. As its leading members call on the civil officers nearly every Friday, and have frequent law-suits, I append a tree showing their inter-relationship.



* See Appendix No. VII page for particulars about this and other jágirs.

Jáfir Khan of Ghoriwál.—Hasan Khan the progenitor of the Moghalkhels was an adventurer from Yusafzai, who settled in Bannu early in the last century. His son Umar Khan removed to Ghoriwál, and by degrees worked himself into the position of a chief, his followers being mostly Jat and Awán "Hindkais." Fourth in descent from him was Moghal Khan, who has given his name to his small but powerful clan. He was a great man, had six wives and many sons, and extended the limits of his tappa famously. His grandson Jáfir rose to power by first subjecting all his relations to his will, and then the neighbouring tappa of Ismailkhel, over which Allahdád, a distant cousin of his, became chief. On the outbreak of second Sikh war Allahdád and Jáfir took opposite sides, the former against the latter for us. Jáfir Khan raised two hundred men for us for service in Bannu, and sent his eldest son, Sardad at the head of twenty-eight sowárs to assist at the siege of Mooltan. For these and other services Jáfir Khan was rewarded with the perpetual jágir assignment of one-eighth the revenues of both the Ghoriwál and Ismailkhel tappas, and on his paying a balance of revenue due from the latter was made its malik as well. He also received a grant of land in Nár now assessed at Rs. 940. He died about twenty-five years ago, and was succeeded by his eldest son Sardad Khan, who now draws Rs. 2,523 as his jágir grant and Rs. 1,063 as head of the two tappas above named. His brothers Faizullah (Fazal) and Mir Akbar are not very cordial with him, as he does not share his allowances with either of them. Of his nine sons the third, Sarbuland, a fine young fellow, is his favourite.

He was made a Police zaildár in 1863, and deprived of the office owing to incapacity in December 1871. He is a bluff, loyal, stupid sort of man, a good hater, a staunch partizan and rather parsimonious.

Shermast Khan of Jhandukhel.—This man was head of the Jhandukhel tappa in Sikh times. He was succeeded by Zafar Khan his son, and on his death in 1867 by Dost Muhammad Khan, the eldest son and present incumbent. The Duranis and Sikhs used to allow the head of the tappa a large *barát*, and in 1864 Government similarly sanctioned a perpetual grant of one-eighth of the revenue of the tappa. It now amounts to Rs. 452. The tappa confronts the lands of the Ispërka Wazirs, between whom and the men of Jhandukhel is an old standing feud. Dost Muhammad is very poor, as are most members of his family, many of whom are hostile to him. As a tappa malik he is quiet, well meaning, but weak.

Bazid Khan of Bazid.—The history of this man and of his sons is altogether remarkable. He began life without a friend, acquired a name for reckless bravery, and in time carved his own way to the headship of the tappa, since known by his name. He is said to have killed over one hundred men by his own hand, before he attained "great honor." He died in 1864 at the age of 100, after having ruled his tappa for forty years. He had in all eight wives, and twenty sons, besides many daughters. Of those sons ten pre-deceased him, meeting their deaths in various ways. Of those who survived him, one was killed inadvertently by officer, one was murdered, one was hung, and one transported for

life for the murder, and one blew himself up accidentally, and there are five still in Bannu. On Bazid Khan's death his son Khan Suba succeeded him. He blew himself up in 1870, and was succeeded by Asad Khan his half-brother, a man who received the order of merit during the mutiny. He was assassinated by some of his half-brothers in 1875, since which time Khyder Khan his full brother has been tappa malik. Khyder is a shrewd, quiet, useful man.

Sohan or Swahn Khan Isperka Wazir.—The Sohán is the Wazir who was so powerful and useful to Major Edwardes on his first and second visits to Bannu. He is said to have been a man of gigantic size and strength. For his hearty services in early days he was rewarded with a chair and a pension of Rs. 600 per annum. On his death in 1854 his son Najib Khan succeeded him, and received a grant of land in Nar now assessed at Rs. 525. Najib died in 1866 leaving a young son, Jullundur Shah. Since that time Máni Khan, a younger brother of Najib, has acted as head of the family and clan, and in 1872 his father's pension was revived in his favour. Jullundur Shah is now a fine young man, and will probably before long assert himself as rightful head of the family. He and Máni Khan have been recorded as headmen of their clan with equal shares, and each has received a *lungi inám* of Rs. 50. Máni is a sullen, ill-disposed, but far-seeing man. His influence is much inferior to that of his father; still owing to the way he is noticed by Government officers and the blunt shrewdness of his character he has more influence than any other Waziri chief. Of late years his hill campaigns against the Masauds have not been successful, and they have wrested much land from him.

Azim Khán, Háthikhel Wazir.—This man had the sagacity to obtain a *sanad* from Major Taylor in 1850 for land on the Waziri Thal, and to occupy himself in bringing waste land under cultivation, whilst half his tribe remained content with their position as graziers. On his death in 1868 his son Nezám Khan continued in his father's foot-steps, and the consequence is that he is now a most prosperous man and a large land-owner, his holding being 3,568 acres, of which 3,192 are cultivated. He was given a chair in 1876, and has since received a *lungi inám* of Rs. 125. He is Máni Khan's rival, and to some extent enemy. To him and his father belong the credit of heading the tribal movement which has converted the Háthikhels from a collection of half-savage shepherd highlanders to well conducted plain-settled agriculturists.

76. *Khan Mir Khan.*—Chief of the Begukhel section of the Achukhel branch of the Marwat tribe, is a great-grandson of Begu, the founder of the family, and is also the head of the "white" party in Marwat, better known as the *gundi Nawázán*. Begu and a contingent of 120 Marwat horsemen served under Ahmad Shah Durání in the campaign which closed with the destruction of the Maratta army at Pá nipat near Delhi in 1761. After his return he led some attacks against Názais in Isakhel, in the last of which he was killed. Náwaz Khan, his second son, was elected to succeed him. All Marwat was at the time divided into two hostile factions. A murderer had some years before been given an asylum with the Achukhels. This led to other

Families.

Marwat tahsil.

murders of revenge, until at last the blood feud became so ramified that every clan and every family of note in the country became involved in the great quarrel. The leaders of the one party were the Nawáz Khan just mentioned, and another man of the same name, a Midadkhel, the father of Sáhíbdád Khan, whose family will be presently noticed. On the other side the leader was Abezar Khan, a distant cousin of Begu Khan's son, and one who aspired to be chief of the whole Achukhel clan. Thus arose the two great parties which divide Marwat to the present day, and which gave rise to the saying "God is one but the Marwats are two." The one party is known as the "whites" or *gundi Nawazan* and the other as the "blacks" or *gundi Abezar*. Nawáz son of Begu spent his whole life in trying to ward down the Abezar party. Beaten in several fights he was so unpatriotic as to invoke the aid of the Nawáb of Mankera. The Nawáb's army routed Abezar's in 1819, and from that year the Marwats lost their independence. A few years afterwards the Abezarites allied themselves with the Wazirs, who were ready to assist either side when there was a prospect of plunder, and many fights ensued, in one of which the Wazirs suffered heavily and were pursued across the Kurram to the hills. When the rule of the Sikhs superseded that of the Nawáb, the Nawázites sought favour with the new power, and in 1843 assisted Fakh Khan Tewána to build the Lakki fort. Nawáz son of Begu died two years after. His male descendants now alive number 132 souls. To this day the local measure of length in use is that of his arm from elbow to tip of longest finger, and the length of the hand more, and is known after him. It is thirty-one inches long. Abúsamand Khan, a younger son, was elected to succeed him, and held the chiefship until his death in 1864 when Khan Mir Khan became head of the family. He is a plausible, unreliable man, and never loses an opportunity of pushing the interests of his party, and damaging those of the Abezarites. His brother Madad Khan and uncle Purdil Khan are the members of his family whom officials require to know. The former is poor and very dissatisfied with his brother, who allows him nothing, though in receipt of a *barát* of Rs. 1,000 a year. The latter is on better terms with the head of his family, though by no means a contented man.

Arsala Khan.—Is head of the Isakkhel branch of the Achukhels, and grandson of that Abezar whose rivalry with Nawáz son of Begu cost Marwat her independence. Abezar and Nawáz were contemporaries. Both lived to old age, and both died within a year or two of each other on the eve of annexation. Abezar's father Almar may be regarded as the founder of his house. This Almar was a fine, honest character, and had such influence that he united all Marwat to fight the Khataks. On Abezar's death in 1847 his son Sarwar was recognized as head of the clan. He died in 1860, when he was succeeded by his son, the present chief. He is a quiet, simple man, partially blind from cataract, and is greatly respected by the Marwats. He receives a *barát* of Rs. 1,000 a year. He and Khan Mir Khan, as heading the rival parties in the country and being hereditary enemies, have no intercourse together, though their villages adjoin each other. So deep-seated is the mutual feeling of hostility, that when I once asked their sons, both boys at the time, who must have met almost daily, whether they were, to use a boyish

word "chums" together, each explained with grave dignity that acquaintance, much less friendship, was impossible, seeing that their ancestors had been at enmity for generations. Both families sent representatives to assist at the siege of Mooltan, but neither family, nor indeed the Achukhel clan generally was heartily with us until the battle of Gujrat annihilated the Sikh army. Their lukewarmness in our behalf gave Hakim Khan and the Sekandarkhel clan an opportunity of distinguishing themselves in 1848, when Major Taylor besieged the Sikh garrison in the now dismantled Lakki fort.

Sáhibdád Khan.—The Midádkhel family has for many generations supplied chiefs for the Bahrámkhel branch of the Marwats, but the tenure of chiefship was always very uncertain, and the hold of any individual in the clan was never strong. Power depended entirely on personal qualifications, and the clan was from the first split up into two opposing parties. The present chief's father was Nawáz Khan, who with his Begukhel name-sake gave the name *gundi Nawázán* to their party. This Nawáz was a man of great ambition, and ruled by art more than by force. Latterly he attempted to consolidate his hold on his clan by entertaining a band of foreign mercenaries, and began building himself a fort in the hills about a mile and a half up the Kharoba Nála.* Before the work was completed he was assassinated by a youth whose father he had murdered. This was in 1835. On his death Langar Khan a distant clansman rose to power, and held it until he died in 1856, when his son Wali Khan and the late Nawáz Khan's son, Sáhibdád Khan, were jointly made heads of their clan. The former has proved himself a weak, useless man, but the latter is a fine fellow, of great energy and influence. Last year Wali Khan was deprived of his *barát* of Rs. 195. That of Sáhibdád is now Rs. 405, and I hope he may some day be also granted the confiscated share of the worthless Wali Khan.

77. Isa Khan, the common ancestor of the Isakhel clan, left two sons, Zakku and Apu, and two grandsons, Badu

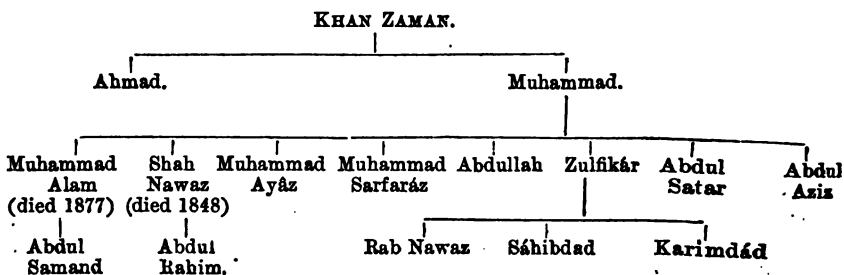
Families. The Isakbel
Khans.

(Badan) and Mammu. Their respective descendants are known by their patronymics. For

many generations the clan was not governed by chiefs, but by its council of elders. In time feuds between the different sections became frequent, the numerically stronger domineering over the numerically weaker. Thus the Zakkukhels and Apukhels were both weak, and the Badanzais and Mammukhels strong. This state of things continued until the time of Khan Zamán Zakkukhel. Procuring help from Ahmad Shah Duraní, he raised himself to the chiefship, and so turned the tables on the two rival sections who had so long oppressed him. In 1761 he led a troop of his clansmen to Pá nipat, and took part in the battle which destroyed Maratta pretensions in Upper India. His son Umar Khan succeeded him, and administered the southern parts of Isa Khel in the interest of the Nawáb of Mankera. It was this Umar Khan who excavated the canal called after him (paragraph 118), and did so much to revive and develop canal irrigation. He was allowed one-quarter of all revenue

* Khairakhel's boundary extends up to the remains of this old fort. There was some correspondence on the subject which ended with Government letter No. 1035 dated 18th May 1877.

collections made by him. Ahmad Khan, his son, succeeded to his position. Under him the fortunes of his house continued to improve until the Sikh conquest of Isa Khel. When that had been effected, Ahmad Khan and his family took refuge in Bannu proper and in Dawar. On his death in exile in 1838 Muhammad Khan his brother made terms with his new masters, and was granted one-eighth of the revenues of Isa Khel, and one-third of the proceeds from the alum pans at Kotki, instead of one-quarter of the former and all the latter, which he and his father before him had enjoyed in the Nawab's time. But the rapacity of Diwán Lakhi Mal, the Sikh kárdar, drove the family once more into exile, and it was not until nearly ten years later that they returned and were re-instated in all their old rights and privileges by Major Edwardes. The restored Khan proved his gratitude a few months afterwards by siding with us throughout the second Sikh war. His third son Shah Nawáz was killed in action near Mooltan in 1848 before the eyes of his benefactor, and his other sons joined Fateh Khan Tewána in withstanding the Sikhs in Bannu proper. Muhammad Khan died in 1855, having first divided his property into eight equal shares, one for each of his seven sons, and one for his grandson Abdul Rahim Khan, son of the Shah Nawáz just mentioned. Government confirmed the jágir in perpetuity in the same shares after reducing the alum proceeds item to a sixth. When the mutiny broke out, the Khans again came forward, and did right good service both in the neighbourhood of Delhi, and in the district, for which they were rewarded with special life jágirs and pensions. As the affairs of the family are constantly before the district officer in some form or other, I think it advisable to give the names of the different members. This can best be done in the form of a genealogical tree. To save space I omit the common surname "Khan."



Of the sons of Muhammad Khan, Nos. 1 to 5 inclusive are by his senior wife, No. 6 by his second wife, and Nos. 7 and 8 by his youngest wife. The children and grandsons by the two latter are all poor and thriftless, whilst those of the senior wife, who are also the eldest, are comparatively rich and thriving. Abdul Samand holds aloof from the rest of the family, fancying that he should be recognized as its head. He has an impracticable disposition. Muhammad Ayáz is a shrewd, rather grasping old gentleman. His son Hak Nawáz has lately been made a naib tahsildár. Abdul Rahim is a man of great acuteness and energy, but very flighty and on bad terms with his uncles. Until he took to canal-digging

he spent his energies and his money on alchemy. He is the only member of his house who is a Mecca Hájí. Muhammad Sarfaráz is the ablest and richest man in the family. His words and actions are always those of a shrewd highborn gentleman. Besides his Isa Khel lands and certain lands in Nár he has a grant in Shahpur, the net profits from which are large. Abdullah is an Extra Assistant Commissioner in Dera Ismail Khan. His son Faizullah manages his father's estate, and is a young man of good education and a high order of intelligence. The jágír and pension emoluments of this family are stated in paragraph 211 and in appendix No. VII.

78. Sher Khan is the sole surviving descendant in the male line of Sher Khan of Isa Khel. Jangi Khan, grandfather of the Khan Zaman named in the last paragraph. His father Hasan Khan was Umar Khan's right hand man. At his death Sher Khan was a child. Grown up he sided with the Sikhs, and did not share in the long exile of the other branch of his house. On their re-instatement Muhammad Khan's sons treated their kinsmen with scant consideration, and in consequence Sher Khan has been their bitter enemy ever since. During the second Sikh war he was shut up in the Bannu fort with Fateh Khan Tewána and taken prisoner on its fall, but released after the battle of Gujrat. In the mutiny he did excellent local service as commandant of mounted police, and was rewarded with a pension of Rs. 600 a year. Altogether he now receives an annual pension of Rs. 1,360. He is still an active old man. His whole life has been one long contention. He will die as he has lived, a struggling disappointed man. He has been hitherto unable to convert his pension into a land jágír, and in this settlement some of the fruits of his former misdeeds have been lost to him. For brazen-faced unscrupulousness and pitiless hardness on those beneath him, Sher Khan has no equal in the district, and yet the old man's seeming blunt candour predisposes all Englishmen in his favour, and even when their eyes are open to his real character, they cannot help liking him and sympathizing with him. He and his works gave much trouble in this settlement. He leaves no male issue. His only daughter is married to the Abdul Rahim mentioned in the last paragraph, in whose favour I believe he has made a will. The succession to his estate, which is large, will be disputed; but as he will leave several young widows, in no case is the dispute likely to arise for many years to come.

79. This is an Awán family which has been rooted at Kálábágh for upwards of two hundred years. The immediate progenitor was one Shekh Adu, who nine generations ago is said to have settled on the barren rock of Dang Kot, a natural fortress on the left bank of the Indus a few miles up-stream from Kálábágh. His grandson Band Ali is supposed in the family to have founded Kálábágh. In any case he made himself strong there, and he and each of his successors derived a good income from the neighbouring salt mines, making alum, levying toll at the ferry, and latterly from judicial fines on the Bhangikhels. At the first approach of the Sikh power to the Indus the then chief declared his allegiance, and benefitted largely in consequence. The countenance of the Sikhs enabled him to strengthen and extend the hold he had lately acquired on the Cis-Indus

lands of what are now the villages of Masán and Niki. In the second Sikh war Malik Allayár Khan the then chief did us useful service in Bannu proper. In the mutiny his son with a number of followers served in Pesháwar for nine months. Allayár Khan died in 1863, when Government consolidated the family jágir, until then held for life, and made it perpetual. The present chief Mozaffar Khan is a hale, hearty, old gentleman. He is a "Khan Bahadur," and exempt from personal attendance in the civil courts. I calculate his annual jágir income to be now worth as follows :—

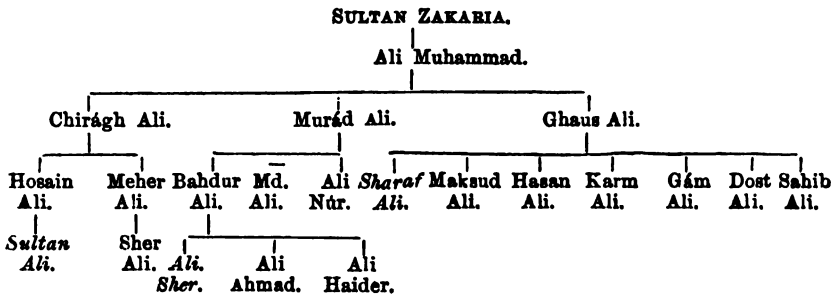
				Rs.
Lands in Isakbel	...	...	...	670
Masán and Bannu in Miánwáli	...	...	...	5,520
Alum proceeds in Kálábágh	...	...	...	4,500
Miscellaneous	...	...	...	310
Total				11,000

In 1865 the above were estimated to be worth Rs. 14,000 a year, but although in this settlement the assigned land revenue has risen from Rs. 4,926 to Rs. 6,190, the net jágir income has I think diminished owing to the smaller profits now derived from the alum manufactory. Mozaffar Khan's eldest son, Yar Muhammad Khan, is a fine man physically, but is quite illiterate, and is a harsh landlord.

For the last three or four generations the eldest son has in each case succeeded to all the property left by his father, so that now primogeniture is the recognized custom of the family, and younger sons are only entitled to a fitting maintenance. The chance of two eldest sons in succession being both able men, and the estate not devolving until they had attained middle age, enabled first the one and then the other in Sikh times to exclude his younger brothers from their share, and warranted us in considering the rule of primogeniture so established. On annexation the cadets of the family sought to obtain in our law courts what they conceived were their rights, but, though the age of law had succeeded that of brute force, none of the claimants succeeded in getting more than a maintenance allowance decreed him. Thus, as may be supposed, they are very hostile to the head of their house, to whom they now stand in the position of humble but sullen dependents. The present chief has only two sons; the younger named Sultan Mahmud is a fine fellow in every sense of the word, and had hitherto lived on good terms with Yar Muhammad his elder brother. Foreseeing what would happen did the father die without securing a proper provision for his younger son, I induced the old gentleman to arrange the matter during the settlement, and Sultan Mahmud is now the recorded owner of 426 acres in Isa Khel, and of 1,992 acres in Miánwáli.

80. Mián Ali, who founded Miánwáli in Ghakkhar times, is said to have been a holy man from Bagdad. He gained ascendancy over the Pathan settlers in the country by encouraging them to throw off the yoke of the Ghakkhars. His promises of success were fulfilled, and the Ghakkhars were driven out of the country about the middle of the last century. His son

Sultan Zakaria was spiritual guide of the peasantry for many years, and is credited with having possessed miraculous gifts. To him succeeded his son Muhammad Ali, a less known man. In 1847 Muhammad Ali's three sons Chiragh Ali, Murad Wand (or Ali) and Ghous Ali were in power, and rendered Lieutenant H. Edwardes valuable assistance in settling a blood feud which had until then cost many lives annually. From that time the family exerted all its influence on our side. After annexation an investigation into its revenue free holdings was made, and continued until, in 1864, revenue to the amount of Rs. 1,200 a year was released in equal shares to the three heads of the house, with the condition attached that each grant was "to be reconsidered on the death of the representative of that branch." By mistake the sanction was translated as being equivalent to a perpetuity grant, and so treated until a few months back. I have lately submitted the case in a special form, and hope that Government will yet make the grant hereditary in favor of the selected representative head of each branch of the family. The genealogical tree is as follows:—



The present heads of the family are the three men whose names appear in italics. They alone are on the provincial darbar list. I have generally however allowed Ali Núr and Muhammad Ali chairs on private occasions. All the members of the family have hitherto shared in the *maafi* as though it were an ancestral estate, but in future I apprehend they will not do so (see appendix No. VII). Sultan, Ali who represents the eldest branch, is a man of sterling character and great influence. He is very fond of sport, and the most successful and fearless pig-sticker in the country. I procured him a Rs. 100 *inám* in this settlement. His ancestor Sultan Zakaria's shrine has also received a small endowment of Rs. 15, and his handsome new mosque one of Rs. 10 a year. He is the only thriving man in the family. Ali Núr is fairly well off, and enhances his income by selling amulets and by breathing on the sick, (*dam darúd*). Most of the other *Miáns*, though desperately poor, are yet so impressed with their own dignity as to be above honest work. This is unfortunate, as the family is prolific, and the physique of its members is good.

CHAPTER V.—AGRICULTURAL.

81. The four great staples of the district are wheat, grown in the year of the settlement measurements on 394,112 acres or 51 % of the whole cultivated area; gram, bájra and barley. Together they occupy 530,079 acres or 88 % of the whole cultivated area. Of the four, wheat is by far the most valuable, being grown everywhere, and not largely consumed by the producers themselves. The Thal grown grain is of a very superior quality, and fetches a higher price than that produced on sailába or canal irrigated land. If the last named were selling at thirty seers a rupee, sailába grown would be at twenty-eight, and Thal grown at twenty-seven. With the exception of sandy soils, which at most require only a preliminary weeding, the ground always undergoes from three to six ploughings preparatory to sowing. Round about Edwardes-abad the stiff clay soil is often first dug up with the iron heart-shaped spade used by Bannuchis. The clods are then broken up, after which the plough is passed over the ground as thus prepared some three or four times. The first turning over of the soil commences in June, immediately after the spring crop is harvested.

Sowing begins about the middle of October or earlier, and continues to the end of December. On the best irrigated lands it may be continued up to the middle of January. As a rule the sooner the seed is in the ground the better the crop, and the more uncertain the supply of moisture the sooner must the sowing be. On báráni lands wheat sown after the end of November seldom produces more than six or eight fold. In despair of rain, Marwats often sow in a perfectly dry soil, in which case the chance of a fair return is very small. In 1862 and again in 1869 an earthquake caused the moisture to rise so high in sandy soils in Marwat as to enable the people to sow and the seed to germinate without a previous fall of rain. Drill-sowing is always practised where the ground permits of it. In the sandiest soils of Marwat the seed is drilled three or four inches into the ground without any preliminary ploughing at all. As to the quantity of seed used, it ranges from thirty to forty-eight seers per acre, the general rule seeming to be that the stiffer the soil the greater the quantity of seed required. Once in the ground the husbandman leaves almost all the rest to God,* and until the grain is actually threshed and garnered, his faith has often a sore trial. In Bhaugikhel fences and scare-crows are here and there put up. Elsewhere fences or mud walls are rarely seen, except close to villages.

Weeding is seldom attempted. When the crop is ripening, a hired watcher (*kasha* also *rákhá*) is engaged, or the cultivator himself keeps a look-out. The former is the practice in Marwat, the latter elsewhere.

* "Furrow" "furrow" in trust on "God," says the Marwat proverb, see page 302 of "*Bannu, or our Afghan frontier.*" A reference to the whole collection of local sayings connected with husbandry, pages 296 to 307 inclusive, will give the district officer a good insight into the state of agricultural lore in the Trans-Indus tahsils.

Reaping begins about the end of April, and the whole crop is generally cut and ingathered by the third week in June, but sometimes, as this year (1878), the threshing floors are not cleared before the end of that month. The date depends on the number of clear, cloudy and rainy days in May and June. In threshing (*ghobal* also *gáh*) the universal practice is to have the grain trodden out by oxen on a prepared floor in the open. The sheaves are spread about on all sides of an upright pole, round and round which the bullocks, and in Marwat cows and donkeys as well, are driven. The grain is next collected and separated from its chaff by throwing it up in a light breeze by means of pitch-forks or shaking it through sieves. Where winnowing is done by hired labour, as in Isa Khel and Míánwáli, the winnower generally receives as pay two *topaks* or about twelve seers a day. In Míánwáli threshing is frequently done by bullocks drawing a weighted branch of some thorny tree over the outspread stalks. As to the storing of wheat and other cereals there are two methods, viz., the grain is kept in the court-yard or inside the house in roomy jar-like receptacles made of mud and called *kalotís*, or it is deposited on round prepared platforms in the open, and each heap is well leaped over, and protected with a shallow trench and often with a thorn hedge as well. The latter is a common way of preserving *bhusa* until required for consumption in the coldest months.

82. Gram is grown on light sandy *báráni* soils throughout the district. That of Marwat, where my measurements show that in 1872-73, 43,102 acres were sown with it, is famous, and is larger and softer than any produced elsewhere in Bannu. A little is grown on the lightest Indus *sailába* soils, but is very inferior. Previous to sowing, the ground requires fewer ploughings than for wheat. Sowings are generally begun and fairly completed in October. The amount of seed runs up from sixteen to twenty-four seers an acre. Though a hardy crop, the out-turn is very uncertain. Rain in March and April, so beneficial for wheat, and indeed abundant rain or prolonged cloudy weather at any time after germination, is injurious for gram, as it causes the plant to sprout too exuberantly, and to flower prematurely. Thus in the spring of 1877 a rainy March and April, though at first it made the gram look beautiful, to the eye, blighted a most promising crop in all parts of the district except on the Waziri Thal; and again the following November and December were wet and cloudy, in consequence of which the plants all died off throughout the district, with again, oddly enough, the partial exception of the Waziri Thal. In Marwat alone nearly 50,000 acres of gram were entirely lost, representing a dead loss in seed grain alone of over Rs. 25,000.

The crop ripens about fifteen days earlier than wheat, and is generally plucked by hand before wheat reaping commences. In Marwat it is rotated with wheat, the people alleging as a reason for the practice that gram leaves catch the dust of the spring dust storms so common in that tract, while the high even surface of wheat hardly intercepts any.

83. **Bájra** is a *báráni* crop grown largely throughout the district on the stiffer Thal soils. In the *naládar* lands of the circles skirting the hills the acreage under it in most years equals, and in some exceeds, that under wheat. Entering largely as it does wherever grown into the dietary of the peasantry, the importance of the crop can hardly be over-estimated. The land is generally ploughed three or four times between March and July preparatory to sowing, but for light soils Wazirs and Marwats think once sufficient. The sowing season is from the middle of March to the end of July, and as usual the earliest sown land affords best hope of the heaviest return. The same field is often sown twice with an interval of a month or two between, and by this means a continuous crop is secured in the autumn months. Very little seed is required, only from two to five seers per acre being used. In some parts of Marwat the soil is lightly run through again with a plough soon after the seed is put in, but in the other parts of the district this after ploughing is not performed until the *bájra* shows itself from six inches to a foot above the ground. The object is to loosen the soil and prevent the plants springing up in clumps. The first sown crops begin to ripen about the middle of August, from which time until early in December the ears are plucked as they successively come to maturity. The stalks are left in the ground for the cattle to graze on, as once cut they dry up, and can only be used as fuel or for roofing purposes. As the ears ripen, watchers are required, about one to every five acres.

84. In the year of measurements 34,000 acres were under barley, of which more than half were in Bannu proper. This crop is mostly grown on inferior irrigated lands, and on the poorer Indus *sailába* tracts. Its cultivation proceeds in very much the same way as wheat, except that less seed grain is required, and that it is sown a few days earlier, and ripens about ten days or a fortnight sooner. Thus its reaping is generally finished before that of wheat is begun. The yield to the acre would be largely in excess of wheat were the two cereals grown on soils of similar quality, but being generally sown on inferior land the excess is not more than a sixth or seventh if so much. Barley is not prized by the agriculturists, being in little demand for exportation out of the district, and not widely used as an article of diet in the district, except in the Kacha, and being held too in small esteem for cattle and horses, though largely given in the hot weather and whenever gram is dear.

85. Of highly remunerative crops two deserve special mention, sugar-cane and turmeric. Their cultivation is almost entirely confined to the richest parts of Bannu proper. The area under sugar-cane is a little over 4,000 acres. Both crops require large quantities of manure and repeated irrigation. The cane used in setting is cut into pieces about nine inches long so as to leave the knot or joint in the centre of each. It is then hand-planted piece by piece horizontally in February or March, sometimes in prepared soil, but generally in the midst of a wheat or barley crop. About twelve rupees' worth of cane to the acre are so used. But fresh planting only occurs once every fourth and sometimes fifth year, as

Three or four crops are cut from the same root. Those of the second and third years are the best. After the crop in which the cane has been set is removed, the soil is loosened and weeded, and, if there were none such before, a low mud wall or hedge is run round each plot. The cane is of two sorts, red and white. The former is the superior, but it is also the more delicate, being very sensitive to frost. Both varieties are very thin in the stem, and grow in clumps very close together. The crop begins to ripen about the end of October, and is cut by degrees between November and the end of March. The clumsy wasteful oil press of the Punjab (*kohlu* local *gauri*) is in general use for extracting the juice, but within the last five years fifty-six English presses have been imported by the Deputy Commissioner, and are immensely popular. As yet only well-to-do men possess them. How their cast iron work is to be repaired when a breakage occurs, I cannot say. With care, however, breakages should seldom occur. The *gur* produced is very inferior and dirty.

From first to last the cultivation of the cane is careless in the extreme. There is no division of labour. Each household has its own press, and works it very leisurely, hence the extended period of cutting the cane. The juice is boiled down in iron pots to about one-quarter its original bulk, by which time its consistency is that of treacle. It is then put to cool in wide mouthed wooden or earthenware vessels, and when cooled, the stuff is made up into round balls of about $2\frac{1}{2}$ seers each. This is *gur*. Little sugar is made, the people not having the skill to manufacture it, or perhaps the juice being in most tappas too poor to crystallize. The yield of *gur* is very uncertain. Of the many causes, which tend to diminish the supply of juice, frost in December and January is the most baneful, and most frequent. The average yield of *gur* per acre is over twelve maunds, and the price current from ten to twelve seers the rupee, hence the average gross profit per acre may be set down at from forty rupees to fifty rupees. But the best lands in the best tappas (Suráni and Mítakhel) produce up to thirty-two maunds an acre, which would give a gross acreage profit of from Rs. 120 to Rs. 165. A little of the large thick cane known as *pounda*, and only used for chewing, is grown about Kálábágh, and yields enormous profits. It has lately been introduced in Bannu proper and in Miánawáli. Its cultivation will extend.

86. This is the most remunerative product of the Bannu valley.

Turmeric.

It is only grown in certain localities, being almost entirely confined to certain villages in the Suráni and Mítakhel tappas and the immediate neighbourhood of Edwardes-abad. It can only be raised by men of means, as it requires a heavy expenditure, much care, and the grower has to wait a whole year for a return to his outlay. Besides this the crop is a delicate one, and the amount of yield is always uncertain. It grows better in a comparatively soft, friable, rather than in a stiff cohesive soil. The ground is prepared between February and April, being first turned over with the spade, then broken up with wooden clubs, and then ploughed several times. The roots are sown in May, about twenty maunds of the moistened tubers being sown to the acre.

During the three following months the ground is watered every fourth day, and thenceforward less frequently. Weeds are removed as they appear. About sixteen rupees worth of manure is used to the acre. Watering ceases about the 10th of March, and the tubers ripen early in April. The withering of the leaves is the one visible sign by which it is known that the crop is ready for removal. The tubers are then dug up by degrees with the spade much as potatoes might be, and being cleared of earthly particles by the hand, are spread out in the sun or in the shade, the latter the better but the slower process, to dry. In drying the roots shrink much, and lose from $\frac{1}{4}$ to $\frac{1}{3}$ of their weight. The process takes about a month. The out-turn is from 80 to 160 maunds (moist) per acre, and the gross profits thereon from Rs. 100 to Rs. 200, sometimes more. Only about one-fifth of the produce is retained for local consumption, the rest being exported. Bannu turmeric is of a rich deep yellow colour, and fetches a lower price than that grown in Hazara or Jummo.

87. I append here below a statement containing information respecting the cultivation of some of the more important minor crops :—

Name.	Quantity in seers of seed sown to the acre.	Time of sowing.	Time of reaping.	Average produce in maunds per acre on different soils.	Remarks.
Cotton	1 to 2½	March, April and May.	Weekly pickings from end of September to end of December.	2½ to 3½ unginced.	Area under cultivation is from 10,000 to 11,000 acres. The plant is left standing 2 or 3 years. Less is grown in Marwat than elsewhere. Supply is not enough for local consumption; still about a quarter of the supply is exported into the hills. Little care is bestowed on the cultivation.
Rice	20	May 15th to June 15th.	October 15th to November 15th.	4½ to 7½	Rice is only grown in Bannu proper on about 1,500 acres. It is sown broadcast and never transplanted, and is in consequence of very inferior quality. Once sown, little care is taken of it, except to flood the plots repeatedly. A little is grown in Marwat.
Maize	12 to 24	July 1st to August 15th.	October and November.	7½ unmanured, 10 manured.	Is only grown on irrigated lands on about 18,000 acres in Bannu proper, and 1,000 acres in the Marwat Nar; is rotated with wheat on <i>dehali</i> lands: is much used as food in the cold months by the Bannuchia. Cultivation is fairly careful, and the grain is good.
Jwār	10 to 24	June, July, and in Marwat into August.	October 15th to December 15th, according to time of sowing.	4 to 6	Is not much cultivated except as fodder for cattle. Whole acreage under it is but little over 8,000.

Name.	Quantity in sers of seed sown to the acre.	Time of sowing.	Time of reaping.	Average produce in maunds per acre on different soils.	Remarks.
Moth	4 to 12	June 13th to end of July.	Ditto ...	4	A little more than 5,000 acres are under moth cultivation. It is mostly grown on the stronger Marwat soils. Its straw is prized for the winter fodder of horses. It is frequently sown with bājra but reaped six or seven weeks after its tall companion. Māsh, and mung are also grown, but over a very small area.
Clover	4	October 15th to November 15th.	March to June	4 cuttings	Is only grown in Bannu proper to the extent of nearly 3,500 acres: is very valuable as fodder: is much grown in the vicinity of cantonments, where the crop is worth from Rs. 12 to Rs. 24 per acre: is generally sown in ground occupied by maize or cotton. It requires repeated waterings: is generally manured and is very hardy. It is often sown in a maize field about the time the maize begins to ripen.

In a district like this where the area under crop and the yield per acre varies largely from year to year, assessment would be haphazard work without an extended acquaintance with the past agricultural aspect of each tract. Believing that information on the subject must be useful, I here append a statement showing in a condensed form the result of my own and others' crop observations for the past eleven years. The three great staples, wheat, bājra and gram are alone entered in the statement, which refers solely to bārāni and sailāba lands, except when otherwise specially mentioned. Loss from hail is not taken into account. It will be seen that the area sown was wonderfully constant even in bad years, and that, subject to local exceptions especially in Marwat, the out-turn from 1868-69 to 1871-72 inclusive, was generally very poor, and at times for bājra and gram almost nothing, but that since 1872-73 the crops, with the exception now and again of the two just named, have been uniformly above average, and occasionally very heavy indeed. Of the three staples wheat appears less liable to total failure than either of the others. Regarding the last column, the "scale of yield," I would observe that in giving the adjectival equivalents of the figured values I have rather followed the nomenclature a zamīndār would use. He, if belonging to the Kacha, would call any thing over tenfold a "good" yield for wheat, and from eight to tenfold an "average" return. If the yield were only enough to replace his seed and pay his revenue or a part of it, and no more, he would certainly call the crop a "failure."

Tahsil.	Year.	Crop.	The cultivation.	The out-turn.	The scale of yield 15 & 16 = bumper 12 to 14 = good 8 to 11 = average 6 & 7 = poor 3 to 5 = famine
Bannu, Marwat, Mianwali.	1868-69	Wheat ...	Largely cultivated: timely rain.	Grains small from want of rain and high winds in March and April. Little came to maturity on barani lands.	6
Isa Khel ...	Ditto	Ditto ...	Little sown on canal lands: Kurram low. Elsewhere average area sown.	Ditto ditto but on sailaba lands yield was good.	8
Marwat ...	Ditto	Gram ...	Very largely sown ...	High winds and other causes blighted the crop in March and April.	3
Whole district.	Ditto	Bajra ...	Average area sown ...	Much dried up: no rain when wanted.	6
Bannu, Isa Khel.	1869-70	Wheat ...	Kurram low: canals low: little rain: sowings small.	Ditto ...	5
Marwat ...	Ditto	Ditto ...	Average area sown ...	Ditto ...	5
Mianwali ...	Ditto	Ditto ...	Indus inundations failed: sailaba area sowings everywhere small.	Ditto ...	6
Marwat ...	Ditto	Gram ...	Little sown ...	Ditto ...	0
Bannu, Isa Khel, Mianwali.	Ditto	Bajra ...	Little rain; small area sown.	Ditto ...	6
Marwat ...	Ditto	Ditto ...	Largely sown: enough rain.	Ditto ...	6
Bannu ...	1870-71	Wheat ...	Average area sown ...	Rain-fall deficient: grain did not fill out: much withered.	6
Marwat ...	Do.	Wheat and gram.	There was moisture enough for a average sowing.	Enough rain fell at intervals on most lands to keep the crop alive.	10
Isa Khel, Mianwali.	Do.	Wheat ...	Average area sown ...	Very poor crop on barani lands: good on sailaba and canal irrigated.	11
Whole district.	Do.	Bajra ...	Ditto ...	Almost all dried up ...	3
Bannu ...	1871-72.	Wheat ...	Ditto ...	Ditto ...	3
Other tahsils.	Do.	Ditto ...	Ditto ...	Much came to maturity, but grains were small and shrivelled: yield good in Kacha.	10
Marwat ...	Do.	Gram ...	Ditto ...	Almost a fair yield ...	8
Whole district.	Do.	Bajra ...	No timely rain: little sown except in Marwat under the hills.	Very poor ...	5
Ditto ...	1872-73	Wheat ...	Largely sown in Mianwali and Bannu: elsewhere an average area.	Generally good, except on light soils in Marwat, and on Isa Khel barani lands, where yield was below average.	12

Tahsil.	Year.	Crop.	The cultivation.	The out-turn.	The scale of yield. 15 & 16—bumper. 12 to 14—good. 6 to 11—average. 6 & 7—poor. 3 to 5—failure.
Marwat ...	1872-73	Gram and Bājra.	Largely sown ...	Rain-fall small : crops poor	6
Other three tahsils.	Do.	Ditto ...	Average area sown ...	A heavy yield for area cultivated.	15
Whole district.	1873-74	Wheat and gram and Bājra.	Large area sown everywhere.	A bumper crop ...	16
Bannu, Isa Khel, Miānwālī.	1874-75	Wheat ...	Average or above ...	Very good except on canal-lands.	15
Marwat ...	Do.	Wheat and gram.	Ditto ...	Rain failed : yield much below average except on light soils.	7
Whole district.	Do.	Bājra. ...	Ditto ...	Good everywhere except on Marwat where it was barely average.	13
Ditto ...	1875-76	Wheat and gram.	Above average sown ...	Everywhere good except on canal lands and in several Marwat villages.	14
Bannu, Marwat.	Do.	Bājra ...	Ditto ...	No rain in August and September : crop much dried up.	6
Isa Khel, Miānwālī.	Do.	Ditto ...	Ditto ...	Rain sufficient : yield good...	12
Whole district.	1876-77	Wheat and gram.	Average area sown ...	Very good on all bārāni : below average on sallāba lands.	15
Ditto ...	Do.	Bājra ...	Largely sown except in Isa Khel where cultivated area was small.	Yield good except in Marwat where it was average.	12
Ditto ...	1877-78	Wheat ...	Largely sown.	Too much rain : also high winds in spring : yield generally below the average, but owing to area sown aggregate yield up to average : that of bunds was good.	11
Marwat and elsewhere.	Do.	Gram ...	Ditto ...	The excessive rain and cloudy weather blighted the crops	3
Whole district.	Do.	Bājra ...	Hardly sown at all : no rain.	<i>Nil.</i>	0
Whole district except Marwat.	1878-79	Wheat ...	Largely sown ...	Would have been very good but for constant rain or cloudy weather in May and June : sallāba yield was poor.	10
Marwat and elsewhere.	Do.	Gram ...	Ditto ...	Rain and clouds in the cold weather killed the crop except on Waziri Thal where there was a poor yield.	2
Whole district.	Do.	Bājra ...	Ditto ...	Heavy yield.	16

89. So highly is manure prized by the Bannuchis that they store it until wanted in their house-yards, and encourage their children, and often their woman

Manure.

too, to attend to calls of nature on the family dung heap. As the average house-yard covers a space of about 40 square yards, and is surrounded by a high mud wall, the atmosphere in the midst of which a family sleeps and eats must at times be very vitiated. Reckoning four souls, three heads of neat cattle and two goats or sheep to a household, the annual out-turn of refuse matter (*sarra*) may be computed at four-fifty to one hundred donkey-loads. This manure is little bought and sold, but is worth from Rs. 4 to Re. 1 per hundred donkey-loads. The latter is the wholesale rate at which the cavalry sell their stable refuse in cantonments, and at which purchasers readily come forward. No other beasts but donkeys and oxen are used for the transport of manure from the house to the field. Reckoning a donkey-load at nearly one and a half maunds, an acre of turmeric receives 300 maunds of manure; an acre of sugar-cane 300 maunds; an acre of tobacco or *do fasli* land 200 maunds. But if we take the average quantity applied to all lands which ever receive a manure dressing, it will not be more than 30 maunds per acre, if so much. Inside the village walls, if the house materials and the building site both belong to one owner, he keeps all his manure for himself, but if to different persons, the owner of the site receives in most *tappas*, as a sort of ground rent, half the manure collections. This is the general custom, but different *tappas* and villages have particular practices of their own. Thus in *tappas* Bazid and Dharmakhel many *hamsáyah* occupants pay a cash rent of one rupee a year, and retain all their house refuse for themselves. In 13 *tappas* the house-sites and superstructures are mostly owned by the same individuals, hence no partition of manure is made. In eight the ownership is distinct, and the *hamsáyahs* pay half their manure to the site-owners. In six *tappas* the *hamsáyah* in all cases retains all his manure. The administration paper of each Bannuchi village contains two sections on this subject.

Excepting in Bannu proper manure is little prized. Manure is hardly ever applied to rain-irrigated or *sailába* land. Where well-cultivation exists, as in some of the Isa Khel and Mianwáli villages, it is used, and it is freely spread over the *bhora* lands immediately surrounding the town of Isa Khel and the other canal irrigated villages of the Isa Khel tahsil. As there is a large area of land watered by cuts from the Kurram in that tahsil, it is to be regretted that manure there is not better utilized. It is not that the people are ignorant of its value, but that they are too lazy to convey it any distance to their fields. The case of *bárání* villages is different, as manure would be too heating for the soil in any but years of super-abundant rainfall. The extra productiveness of land which receives the drainage of the village site is well understood, and here and there the site has been changed purposely, in order to benefit by such refuse-charged drainage.

90. On *bárání* soils, in which *naladar* or hill torrent lands are included, the amount and timeliness or otherwise of the rain-fall generally determine what crop shall be sown or whether an enforced fallow is to be endured. In the sandy parts of Marwat, if there be

Crop rotation on *bárání* and *sailába* lands.

sufficient moisture wheat is grown for two consecutive years, and gram in the third year. Comparatively little barley is produced. In years when moisture is deficient, the areas under wheat and gram are about equal in Marwat, otherwise the proportion is two acres of wheat to one of gram.

On *naladar* lands all over the district the same bund or banked field is generally sown for two or three succeeding years with wheat and then with cotton or *bájra*. The cotton is hardly considered an exhausting crop, as it is sown sparsely, and the leaves falling and rotting on the ground act as manure. *Bájra* is held to be a very "cooling" crop. The area under it varies greatly according to the nature of the season. Barley is not much sown on the Thal except by poor men who have no seed-wheat in hand. It is considered a very "cooling" crop.

On Thal lands which get the drainage from upperlying waste, cropping of the same plot is continued for from three to five years, after which a long fallow ensues, an adjoining plot at the lower end of the field being brought under the plough. The first year's crop on this new land is generally *bájra*, as its roots loosen and soften the soil and enable it to retain moisture. Next year wheat is grown.

On *sailába* lands wheat is raised year after year on the same plot until the increase of weeds and the smallness of the out-turn compel a fallow. A good *sailába* soil well replenished with silt and water will yield wheat for eight or even nine consecutive years before exhaustion takes place. When water remains standing on land in September, the sowing of wheat that year is impossible. In such a case either *bájra* is sown in the following spring for the next *kharif* or the land lies at rest for a year.

91. No regular system of rotation is practised in the district except in Bannu proper. Elsewhere the variety of crops is so small and so much depends on the season, that, beyond the substitution of gram or *bájra* for wheat, any other change is almost impossible. But in Bannu proper with water at command and with manure always obtainable, a constant succession of crops is possible, and indeed imperative for the maintenance of a super-abundant population. Although the Bannuchi farmer knows nothing about agricultural chemistry, experience has taught him what succession is best to get the most out of his land, at the minimum expenditure of labour. He classifies all plants as either "heating" or "cooling" to the soil. When one of the former class has imparted too much heat, he substitutes one of the latter and so renovates the soil. The order of the more important "heating" or exhausting crop is (1) turmeric; (2) tobacco, (3) cotton, and (4) wheat: that of the "cooling" or non-exhausting crops is (1) clover, (2) maize, and (3) barley. Sugar-cane and rice, though both taking much out of the soil, are hardly included in either category, and for the following reasons. The former requires repeated waterings, quantities of manure, and is only grown on good land, which receives plenty of Kurram silt; hence, on the final removal of the cane, after it has been cut for three or even four years

in succession, the soil is nearly as productive as it was before the setting of the cane in it. On removal either cotton or maize is sown; if the latter, wheat very likely follows, and the cane is again set in it whilst it is young. As to rice, it is supposed rather to enrich than to impoverish the soil, because, in the course of the perpetual floodings which go on, an enormous quantity of river silt is deposited. Rice is rather sown on poor and low-lying than on good land, unless the object be to raise the level of a plot or fill up inequalities in the ground, in both of which cases it is freely grown. It is generally followed by wheat or clover.

I shall now run through the four "heating" crops named above and the "cooling" crops by which they are followed:—

- I.—*Turmeric* is sometimes succeeded by itself, but never grown for three consecutive years on the same grounds: is generally followed by maize or clover and then wheat.
- II.—*Tobacco* is little grown except in the Mirián and Shamsikhel tappas, where it seems to thrive best on land slightly impregnated with *reh*, and is almost invariably followed by maize.
- III.—*Cotton* is little grown on the best soils: is supposed to be exhausting, perhaps because its roots strike so deep: is generally followed by clover and sometimes follows sugar-cane, or the soil is left fallow for a year.
- IV.—*Wheat* is generally sown after barley or sugar-cane or even cotton, and on good lands is sometimes continued for three years. On poor lands two crops are seldom raised in succession. It is succeeded by clover or barley or a fallow. The richest *do fasli* land can bear a succession of wheat and maize for three years.

In the canal irrigated part of Isa Khel the rule is no rotation, but a fallow for from one to three years after each fairly good crop. Sometimes the same land will produce wheat or barley for three or four consecutive years before fallowing is allowed. A wheat crop is often followed by cotton.

92. In Bannu proper fallowing is not customary except on lands which get little of the Kurram silt and no manure.

Fallows. Most villages comprising over 200 acres have some remote or high-lying plots which are alternately cropped and fallowed. In Isa Khel the general rule is one, two, or at most three crops in succession, and then a one or two years' rest. Whilst lying idle, the soil is neither turned over nor watered, unless a grass crop is wanted for the cattle, hence much of the gain derivable from fallowing is lost. For unirrigated fields the practice is to continue cropping until soil exhaustion compels a fallow, and when that occurs, the field is left untouched for three or four years. The occasional failure of rain at seed time is not always a loss to the cultivator, as in consequence he saves his seed, and his land gets a rest. In Marwat this spring the wheat crop on the old light sandy soils yielded only two or three-fold. The people ascribed the scant return or rather failure to the excessive rain-fall, but I think it was more due to the over-cropping, as a series

of good years had given a succession of fair or fine crops since 1872. In the case of bunds fed from hill torrents, cultivation can and does continue year after year until a break in the supply of mud and water occurs.

93. Kallar appears to be inherent in the marshy lands of the Ghoriwal, Shamsikhel and Jhandukhel tappas in Bannu proper, and from the point at which the united Júr and Káshu hill torrent empties itself into the Kurram, a little below Jhandukhel, all lands irrigated from the Kurram are largely impregnated by it. The torrent just named is, I believe, perennial, being fed from small springs near its mouth. Though its ordinary cold weather discharge is very small, not enough to turn a water mill, it yet so affects the Kurram as to make the water of that river, even thirty miles lower down, appreciably brackish to the taste. No remedy is practicable. In the three tappas above named the general opinion is that the kallari area is rather less than it was thirty years ago, as cultivation has extended, and the consequent repeated floodings to which the fields are subjected, have largely carried off the pernicious salts. But in Marwat and Isa Khel the affected area has grown larger with the growth of canal irrigation.* To reclaim soil sterilized by kallari rice is frequently sown, as that crop requires constant floodings. The following statement exhibits the kallari area in each tahsil :—

Tahsil.	AREA IN ACRES.			REMARKS.
	Cultivated.	Uncultivated.	Total.	
Bannu	5,829	4,669	10,498	Liberal manuring and application of sweet water enable the lands to produce good crops.
Marwat	3,018	20,914	23,932	No sweet water is available. The crops are never good.
Isa Khel	4,000	17,000	21,000	The whole of the canal irrigated area and the sailába lands at the mouth of the Kurram are included.
Miánwáli	236	...	236	The area is insignificant and the quantity of kallari in the soil is nowhere large.
Total,	13,083	42,583	55,666	

*Excepting where the *rah* evil has affected new lands, I may note here that with eleven years' experience of the district I have nowhere observed any permanent deterioration of soil. When over-cropping has exhausted a particular plot, the exhaustion is invariably cured or curable by a fallow of longer or shorter duration according to the local circumstances. In the light Marwat soil deterioration would no doubt occur did not almost periodic droughts give the over worked land time to recover itself. But in any case all soil deterioration throughout the district is in my opinion of a temporary nature, and is always remediable by a rest,

94. The reaping of grain and barley begins about the middle of April or a few days later ; that of wheat about the end of the month. The date on which the same crops are ready for the sickle depends so much on the soil, and the measure of moisture therein, that Thal wheat throughout the district ripens from ten to twenty days earlier than wheat grown on stiff canal irrigated land or in the bunds fed from the hill-torrents. Thus cultivators have leisure to assist each other in reaping. The villages of the high-lying Sôn ilāka in the Salt Range (Shahpur district) have time to work as reapers in the Miánwāli Thal, and even in the Kacha, before their wheat is ripe. So Trans-Indus, the Marwat and Waziri owners of light sandy soils cut their own crops, and afterwards do the same for their neighbours in the clayey tracts skirting the hills and in Bannu proper. All who are poor, work out as reapers. There is no class prejudice, and the labour is not held to be lowering to any man's personal dignity. Wazirs, Marwats, and Bannuchis, Hindus and low caste or no-caste people may be seen in the fields together. Women and children too of all ages do a good share of the work. The usual rate of payment is every twentieth sheaf (gaddi) or heap (paura). But sometimes the reaper's share runs up to one-fifteenth and even one-tenth, and in any case he seldom fails to make his quantum more than its nominal amount.

After the reapers come, the gleaners, generally women and children, and they manage in a day to collect nearly as much as the share of an indifferent reaper. Of course the number of gleaners is small. Then whilst the reaping is going on, Sayads and Koreshis or their agents go about on horse-back, or with oxen, and collect their dues from their disciples. Fakirs too wander here and there, and receive their dole, for when the peasant's hands are full, he is a charitable fellow. The above is more the practice in Isa Khel and Miánwāli than in the two frontier tahsils. In the ways just described it may be reckoned that between a fifteenth and a twelfth of the harvest, except in small holdings in Bannu proper where it will not exceed one-twentieth, if so much, is appropriated before being placed in the common heaps on the threshing floor.

95. The number of cattle in the district varies largely with the season and the year. In this settlement an enumeration was attempted during measurements and checked at attestation, and is I think a fair though somewhat low approximation of what the number is in a favorable year. Sheep, goats and camels are under-estimated, I should say, by more than ten per cent. As to the quality of the different classes of stock, I think, with the exception of buffaloes generally, of camels in Isa Khel and Miánwāli, and of the dumbah sheep in Bannu proper, it may be

described as poor and small. The average prices of fair stock in ordinary years are as follows:—

Plough bullock	From Rs. 16 in Miánwáli to Rs. 22 in Marwat.
Cow	About the same.
Buffalo bull	From Rs. 14 in Miánwáli to Rs. 20 in Bannu proper.
Buffalo cow	From Rs. 40 in do. to Rs. 50 in do.
Horse	Ra. 80.
Mare	" 110.
Pony	" 30.
Camel	" 40 to 50.
Donkey	" 6 to 10.
Short tailed sheep	" 2.
Fat tailed sheep	" 4.
Milch goat	" 3.

The appended statement shows the results of the settlement enumerations. The cattle of outsiders are not included. For the Bannu tahsíl most of the camels and donkeys and a good half of the sheep and goats are Waziri property. The Wazirs largely under-stated the number of their stock, but it was not easy to say what proportions belonged to the plain settlers, and what to their hill kinsmen, who own no land in the district.

	Bannu.	Marwat.	Isa Khel.	Miánwáli.	Total.
Plough oxen	17,058	25,054	15,164	36,814	94,090
Cows and calves	22,260	21,981	17,093	23,224	84,558
Buffaloes and calves	4,300	300	1,217	5,226	11,043
Horses, mares, ponies and mules	2,115	626	353	1,192	4,286
Camels	1,000	4,308	2,068	1,796	9,172
Donkeys	2,500	9,253	992	3,000	15,745
Sheep and goats	17,286	21,188	13,707	55,968	108,149
Total	66,519	82,710	50,594	127,220	327,043

96. *Capacity.*—The standard grain measures of the district are Measures of capacity and the topah and the ojah. The price current is weight. generally spoken of in them, not in sers. They are both shallow, broad-mouthed wooden bowls turned approximately by the village carpenter, and varying in capacity for different tracts and villages. In measuring the grain is always heaped up high over the lip. The topah is used in Marwat, Isa Khel and the southern villages of Miánwáli, in which latter it only holds about four and half standard sers of dry wheat. Elsewhere it holds from $5\frac{1}{2}$ to $6\frac{1}{2}$ standard sers. The ojah is used in Bannu tahsil, in the greater part of Miánwáli and about Kálábágh. Its capacity varies much from $1\frac{1}{4}$ to 2 sers measured in dry wheat in Bannu proper. It runs up to about $2\frac{1}{2}$ sers in Miánwáli.

The scale of the divisions and multiples of the topah and the ojah are as follows :—

For Marwat, most of Isakhel and southern Miánwáli :—

4 <i>Thulah</i> or 4 <i>páo</i>	...	=	1 <i>paropi</i> .
4 <i>Paropi</i>	...	=	1 <i>topah</i>
4 <i>Topah</i>	...	=	1 <i>pái</i>
10 <i>Pái</i>	...	=	1 <i>chhat</i>

For Bannu tahsil, parts about Kálábágh and all Miánwáli, except the old Piplan iláka :—

4	<i>Kurwah</i> or 3 <i>thriháo</i>	=	1 <i>ojah</i>
100	<i>Ojah</i>	=	1 <i>chhat</i>

Weight.—Before annexation the ser was of various weights, but for many years past the Lahore ser of one hundred tolás has been commonly accepted, Trans-Indus; and the English ser of eighty tolás on the Miánwáli side. Of course by the standard “ser” the latter is meant. Amongst agriculturists and village buniahs almost every thing excepting grain is bought and sold by weight.

97. Although “spontaneous products” are not properly classifiable under the heading “agricultural,” I venture to treat them as such, they being products of the soil, and agriculturists or labourers deriving a livelihood from their manipulation. There are few valuable plants of spontaneous growth in the district. The most profitable and useful is lána, which is used as fuel and as fodder for camels, and is found in all four tahsils. The phisak lána grows in Isa Khel, and soda made from it is used in dyeing and washing. None is exported. The Bhitannis of Haramatala in Marwat, and the Wazirs of the Bannu tahsil make sajji (khár) from the plant growing on their lands, which sells in the bazárs at from Rs. 1-4 to Rs. 2 a maund. A little finds its way to Pesháwar and Rawalpindi, Bhitannis themselves sometimes taking it there.

98. *Salt.*—The most valuable mineral product in the district is the rock salt excavated near Kálábágh, and sold to traders from all parts of the country at the Mári depôt immediately opposite the quarries. The administration of the quarries is under the Inland Customs Department.

the district officials having no more concern in it than to grant *dākki-las* to traders for moneys paid into the treasury wherewith to purchase salt. The mineral crops out at many places in the Salt Range, but the only quarries worked in this district are those near Kálábágh.

Alum.—Next in importance comes alum, which is manufactured at Kotki in the mouth of the Chicháli Pass, and at Kálábágh. The process is described in detail at pages 84 and 85, volume I of Baden Powell's *Punjab Products*. The Kotki works belong to Government as well as the bituminous alum-yielding shale (*rol*) of the neighbourhood. Seven or eight pans are generally in use, the right to work which is annually leased out. Last year (1877-78) the contract sold for Rs. 36,000, which was an advance of several hundreds on the selling prices of the two preceding years. Of the proceeds the descendants of the late Muhammad Khan Rais of Isa Khel receive one-sixth in perpetuity from Government.

The Kálábágh works are in the heart of the town, and the right to extract the *rol* and manufacture the alum belongs to Mozaffar Khan Malik and jágirdár of Kálábágh and Masán. According to the jágirdár's account his net profits from his Kálábágh pans are only about Rs. 3,636 per annum. From three to six pans are worked each year. When the Kálábágh jágir items were estimated in 1865, the average annual profits from the free manufacture of alum were put down at Rs. 9,000. There is no doubt that since then the profits have somewhat diminished, but whether they are so low as Mozaffar Khan now reports them to be, I doubt.

Saltpetre.—Saltpetre is only made in this district upon old village sites on either bank of the Indus, and at several villages in the bed of the Indus. Government now charges Rs. 6 a year on each pan worked. Any person may take out a license. In 1876-77, 69 pans were in work in Miánwáli yielding Government Rs. 414, and 10 pans yielding Rs. 94 in Isa Khel. The number has varied little since 1873-74. Before that year the income used to be about double what it is now.

Jamsao.—Until four or five years ago a very dirty looking salt called *jamsao* used to be made at the saltpetre pans, and used in the process of manufacturing alum. But now it is found cheaper to use Shahpur saltpetre instead, and the manufacture of *jamsao* has consequently ceased.

Lignite.—This mineral crops out in many places in the Salt Range, more particularly in the hills between Kálábágh and Chicháli Pass in Isa Khel. It is not so inflammable as good coal. In burning it gives off an immense quantity of smoke, and it is said to be very deficient in caloric. It was tried as fuel in the Indus Flotilla steamers for several years before they ceased running up to Makhad, but was not appreciated.

Petroleum.—Rock oil or petroleum is found at Jaba in Masán Cis-Indus, near Kundal in the Khisor Range, and in lesser quantities elsewhere in the hills of Isa Khel and Miánwáli. The Jaba reservoir

has been tapped scientifically for several years past, and the oil drawn up sent to Rawalpindi for lighting purposes, but I believe the experiment has not been remunerative. I do not think that oil can be procured in sufficient quantities anywhere in this district to make its extraction really profitable. It is used by the people like tar for itch on camels and sheep. It is also used to light the Kálábágh mines when at work in the tunnels excavating *rol* for the alum manufactory.

CHAPTER VI.—IRRIGATION.

99. I propose to devote this chapter to an examination of rights in water and the irrigation systems past and present of the district. I venture to do so, because the subject is curious and instructive in itself, and because I think its thorough comprehension is necessary to an intelligent administration of the canal irrigated tracts of the Bannu and Isa Khel tahsils. Towards the end of the chapter a short account of the spasmodic action of hill torrents and the way their flood water is or may be utilized will be added, as also a paragraph on irrigation wells.

100. The intricate system of canal irrigation, now in force amongst the Bannuchis, is the out-growth of centuries of Government management of Bannuchi canals to be deprecated. contention, of compromise and of gradual change. That this is no exaggerated assertion I shall endeavour to show in the following paragraphs. There can be no doubt as to the antiquity of some of the now existing canals. Local tradition ascribes the excavation of several to the Hännis and Mangals, whom the Bannuchis displaced over four hundred years ago. The etymology of the names of some of the canals has been lost, *e. g.* those of Kachkot and Chasna. On the Mandán canal a whole turn of four watches (pahars), representing a certain number of shares, is now enjoyed by miscellaneous persons resident in different villages. Each fractional possessor knows his exact share, and how some ancestor of his acquired it by purchase or in mortgage from the Hinjaskhels, the original owners of the turn; but of the Hinjaskhels themselves nothing now remains but the name. This fact alone is remarkable evidence of antiquity, and the faithfulness of a traditional account. Again Báber in his "*Memoirs*," writing in A. D. 1505, says—"The Bangash (Kurram) river runs through the Bannu territory, and by means of it chiefly is the country irrigated." All this is however of no special interest or importance, because cultivation here long preceded Báber's epoch, and without canals there could have been no cultivation. But what is interesting, what is important, is the following fact with its lesson, *viz.*, that under the compulsion of devising a *modus vivendi* for themselves, a rude quarrelsome people should have, without external help, evolved and methodized the

elaborate and smooth working system of water distribution, which it has been a part of my duty to ascertain and record. Under that system 71,822 acres of land are irrigated, Rs. 1,28,292 of land revenue are paid into the Government treasury, exclusive of Rs. 28,046 more raised through extra cesses on the land, and bread is found for 68,454 mouths. Such being the fact, I think the lesson is, the disintegration of sound native institutions being an acknowledged evil, that we should leave well alone.

Hitherto we have done so, for although our rule here is thirty years old, the Bannuchis still manage their own canals. As yet no meddling or muddling on the part of the district officer has constrained Government reluctantly to assume the management, to harass and perplex the people by the introduction of the costly paraphernalia of a Canal Department, with consequent water rates as distinct from land revenue. I am glad to be able to write that I too have interfered little with the *status quo*, though at one time in the settlement I began to make the mistake of attempting to alter it. The Bannuchis owe their past good fortune, I think, as much to the fact that their early Deputy Commissioners were simple men of the sword, most of whose time was taken up by political duties, as to the retired position of their country. Under other conditions their water might have been ere now distributed to greater economic advantage, but such a gain would have been dearly purchased. The incubus of a Canal Department would have burdened the land, and the last vestiges of self-government would have given place to utter self-helplessness.

101. By a close examination and collation of the irrigation records, and of the assertions of the different Bannuchi communities respecting the origin of their own grouping into independent tappas and villages, I am now led to believe that their traditionary accounts approximate much closer to the truth than I used to suppose, and that in past times the principle of the maximum "live and let live" governed their ordinary inter-relationship. There can be no doubt that after the partial expulsion of the Hännis and Mangals, the sectional jirgas of the Bannuchis parcelled out the best lands of the valley amongst themselves in some loose but equitable manner. Those lands immediately adjoined the Kurram, lying along both its banks, and were at the time irrigated by canals, amongst which are the Kachkot, the Shahjoya, and the Chasna. There being room enough and to spare, once a locality for each settlement had been fixed, water rather than land became the first thing definitely appropriated by sub-sections and individuals within the several sectional limits. By degrees the then existing canals were improved and extended, and branch channels and new canals were dug. In each case shares were determined by the amount of labour contributed, and that generally seems to have corresponded with the measure of ancestral right. But the conquering new-comers were not the only settlers in the valley, for with the Bannuchi immigrants came a few dependents, Torkhels and others; and doubtless there remained a large remnant of the old inhabitants.* Both such classes were of course subordinate to the Ban-

* The strong clan of the Fátimakhels, who own two-fifths of the Mandán canal, are said to be Mangala.

nuchi colonists, and were generally allowed no rights in water. Spouting however was probably permitted subject to the payment of a water rate. Time went on. Outsiders flocked to Bannu: if holy or learned men, citizenship, i. e. land and water, was bestowed on them: if of a humbler sort, they were absorbed into the great class of dependents (*humsāyahs*). Thus the possessors of the soil comprised three distinct groups, the dominant Bannuchis, who were both lords of the water and lords of the land, the Sayads and Ulama, who in return for their privileges conferred both spiritual and secular advantages on their benefactors and the dependent or *humsāyah* class who, though originally possessing no rights but many disabilities, yet by degrees, acquired a claim to water in payment for certain services, such as performing canal labour, fighting &c. Meanwhile the Moghal, the Durāni, and last of all, the Sikh, demanded his tribute, and at times made arbitrary exactions, fines, and the like. Such demands were primarily distributed over the tappas, each of which in turn apportioned its quota amongst its villages, the measure of assessment being for communities and individuals alike their respective shares of water. But it was not every village, or every person, who could pay his rated sum, hence, new arrangements became necessary, and as a general practice the plan of redistributing canal shares in accordance with the amount of contribution of each village or individual was adopted. Thus it came about that up to this settlement the payment of *kalang* or Sikh tribute was regarded by the Bannuchis as establishing a proprietary title to land and water, and, to preclude mortgagees from so becoming proprietors, the custom was that under all circumstances the proprietor paid the tribute if he could, and failing him the mortgagee, who thereby converted his title into one of ownership.

102. The cumulative effect of Durāni and Sikh exactions was that

Aspect on the eve of
annexation by the British.

by annexation the Bannuchi tappas *quard* irrigation rights may be placed in one or other of the three following classes, viz :—

- (a). In tappas in which water was superabundant, an amalgamation of interests had practically levelled all classes: ancestral shares had been forgotten: each man paid revenue or tribute and did canal labour in proportion to the extent of his holding. The management of the canals was still vested, as it is now generally throughout Bannu proper, in the hands of members of the original water-owning class, but such managers were rather the executive representatives of a mixed community, each member of which had equal rights, than of a privileged class.
- (b). In tappas in which water was barely sufficient with an economic mode of distribution, the distinction between shareholders and non-shareholders was preserved. But in practice, except at times of abnormally short supply, every land-holder had a right to a share of water from out of the allotment of the village in which he resided, proportionate to the area of his holding

provided he performed canal labour and did not change his domicile. The body of shareholders had still however some special privileges, e. g. a part of their apportionment of canal labour was done for them by non-shareholders, or they gave spare water, when there was any, to whom they chose outside or inside their village limits, or they exacted some special services from the rest, and always, when water was deficient, they exercised a prior right of irrigation.

- (c). In tappas in which the water-supply was at all times deficient for the irrigated area, those descended from the original founders of the village, or rather excavators of its supply canal or channel, and those who had acquired founders' rights by purchase, force or otherwise, still maintained a very strict and tenacious hold on their shares, so much so that few outsiders held shares. Land and water remained distinctly separate properties, being bought, sold and mortgaged independently. In such tappas the acquisition of land alone gave no right to water, however willing the new proprietor of land might be to do canal labour. At most the water-lords regarded themselves as under a sort of moral obligation to give some water to lands whose owners had paid a share of the Sikh *kalang*, as long as those owners did an extra amount of canal labour.

103. Since annexation our policy has been to preserve the *status*

Hitherto we have preserved the *status quo*.

in quo. At the first summary settlement, the measure of assessment for both villages and individual holdings was the mean of the appraised

out-turn of the preceding four years. No inquiry into canal irrigation rights was made. The revenue was imposed on the land alone, just as if land and water were a single property one and indivisible. But as the value of a crop greatly depends on the quantity of silt-charged water supplied to it, and as the basis of assessment was previous crop actuals, the first summary assessment did in point of fact take full cognizance of rights in water, and was calculated to work harmoniously so long as no change in the pre-existing distribution of water should be made. Had water-lords after announcements combined to rent or sell their surplus water to the best advantage for themselves, one of two obnoxious alternatives would have been forced on Government; it would have been necessary to assess land and water separately, or to assume the direct management of the canals. However water-lords did not combine, and as a general rule all revenue paying plots continued to receive water as before. Where in places the supply was stopped, the land-lord either bought or rented water, or quietly sold his land, or the dispute was settled in court by arbitration or otherwise. Those who were deprived of their uncertain supply seldom complained. Why should they have? They had no absolute right to water. They could always procure it on payment, and water-lords had as much claim to the

exemption from taxation of their peculiar source of income as superior land-lords have elsewhere with respect to their special dues. The second summary settlement but emphasized the first. The revenue was slightly raised all round, nothing more. That was all the change, and up to 1872 when this settlement was begun, that remained all the change. Thus between 1849 and 1872 the management of the complicated irrigation system of the Bannuchis continued entirely in the hands of the people, and little was known about it, except that it worked with creditable smoothness. In the rare cases when Government intervention was necessary, the object of that intervention was to enforce the observance of the custom practically obtaining at annexation, or to safeguard the Government revenue. In that period the Kachkot canal and the old Mamashkhel canal were both, it is true, enlarged and extended, but no vested interest suffered thereby. Shares were never arbitrarily taken from one village or one class, and bestowed on another on the ground that the former had too much, and the latter too little water; and yet it is certain that by so doing a more economic distribution of water could have been effected. The most arbitrary series of acts ever done, I believe, was the occasional forcible closure for some twenty-four hours of the upper branch channels and distributaries of the Kachkot in order to save the Nár crops, which were dying from want of water. But that act was if not legal at least justifiable, because the State, as supreme land-lord and first recipient of a large part of the rent of land, has consequently, as an ultimate resource, the right to regulate the water-supply so as to secure its own revenue. Had the Nár crops failed, a remission of revenue might have been required, but that contingency was averted at a hardly appreciable loss to the higher situated Bannuchi villages.

104. In this settlement rights in water and land were at first investigated conjointly and by the same agency. But the result promising to be unsatisfactory, I determined to make the latter a subject for separate inquiry. With the help of a general statement of the tenures and modes of distribution prevalent in each tappa, a series of questions were drawn up, after which selected men were appointed to prepare irrigation maps and records for each village, and subsequently for each one of the more important canals. So much for the collection of facts. I knew they would establish the actual duality of property in land and water in many tappas, and I felt it would be difficult to devise a means for reconciling that duality with unity of assessment. I freely explained my dilemma to the people, who stated they would agree to any equitable arrangement rather than have a large portion of their revenue rated on water. On that I consulted the Settlement Commissioner, and was given a wide discretion by him, provided I could induce the people to assent to the contemplated changes, the objects of which were to give all land a proportionate share of water, to induce water-lords to renounce their exclusive property in water by lightening their canal labour burden, and where such an arrangement was not feasible, Mr. Lyall admitted that it might be necessary to assess water and land separately. Such a prospect so frightened the water-lords, a case of the *ignotum pro terribili*, perhaps,

that they at first readily subscribed to my proposition, and I commenced preparing village irrigation records as if property in water followed that in land. But before long I found I was likely to make a great mistake. A clamour arose amongst the non-water-owning land-holders for a general acreage distribution of water, and the other side began to take alarm. Under the circumstances I announced to both parties that no abrupt changes would be introduced, that no existing practices would be ignored, and that no portion of the revenue would, if possible, be rated on water, provided a satisfactory arrangement could be made for securing the irrigation of all fully assessed plots. After that I thought it advisable to put the completion of the irrigation records under Mián Ghulám Faríd, Superintendent of Isa Khel, and by him the materials already collected were re-attested and the records recast.

105. Collating the data thus obtained, the Bannuchi villages classified under *quond* their irrigation aspect, were found to fall, and may now be classified, under one or other of the following groups :—

- (A). Water and land are practically inseparable: each land-holder has a right to water proportionate to the area of his holding and the amount of canal labour performed by him.
- (B). Theoretically water and land are separable properties, but for many years past the one has not been alienated without the other: water-lords, however, do exist as a distinct class: land-holders possessing no share receive water in return for doing a proportionate amount of canal labour and half as much more for the shareholder who supplied the water.
- (C). Water is a property distinct from land, bought and sold separately: those who possess no share, whether inherited or acquired, receive water from some shareholder or other, either in return for doing a large amount of canal labour, and making in addition some petty customary payment, or after "entreaty" (*khost*) without doing canal labour, but on condition of acknowledging themselves to be dependents, and rendering some small personal services.*

Class A contains all those villages where water is super-abundant, and class B those in which water is only fairly sufficient with economic application. The two together comprise about two-thirds of the old Bannuchi villages. Class C consists of those tappas and villages in which the water supply is deficient, which is the case throughout tappas Nurar, Mammakhel, Shahdeo, Barth and Barákzai, in parts of Ghoríwál, Mandán and Mítakhel, and in one village in Fátmakhel and two in Mamashkhel.

* It is worth noting that except in the Nár and Landidák, nowhere in Bannu proper is a fixed kind of cash *abiyána* taken.

so on until at last each village, and each large body of shareholders, have their exact day and hour fixed. An hour or so suffices to make the whole arrangements for the full circuit. Nothing is written.

But besides settling the sequence of turns, provision has to be made for the contingency of the channel failing before a circuit is completed. In this matter there is a diversity of practice. On the Mandán canal the custom is to decide during each drawing of lots whether that particular circuit shall run until another failure of supply occurs, or until each village has in rotation applied water for one or more fixed number of turns, in which latter case the interval of failure would be *dies non*. The former practice is termed *wucha-tánda*, the latter *tánda-ba-tánda*. On most canals there is a fixed rule to govern breaks in the supply of water, the general, and I think the sounder one, being the *tánda-ba-tánda* custom. On the small Tochi (Gambila) canals, a middle course is followed. The *tánda-bá-tundu* rule only obtains provided a village had not begun its turn when the water ran short; if it had, though only for half a pahar, it loses the rest of its turn in that circuit. Regarding the partition of the unit of turn, be it one pahar, or one day, various practices exist. Every land-owner applies water drawn off by his own little distributary during the whole turn, the water being either not divided at all or divided on the acreage, or the highest lying fields are first irrigated and then the lower-lying in regular sequence, or lots are drawn to determine whether such shall be the order or the converse, or some privileged persons, *e. g.*, descendants of the founders of the village, or the excavators of the channel, apply the water first to their fields, and then all others turn it on to theirs simultaneously, their respective distributaries being opened to their rated width. As connected with the subject discussed in the last paragraph, I should here mention that as a general rule a man has a right to use exterior water-courses within the limits of the area of inter-connected villages for the conveyance of his water. If domicile be a condition of his receiving a share of water, as it is in a majority of villages for both water-lords and others, he must still continue to reside in his original village, though the land on which he applies his water lies elsewhere. If domicile be not a condition, he may reside where he likes so long as he does canal labour with the village from which he draws his water. If the distribution in the exterior water-courses be by "turns," he can only use those channels during the interval between the recurrence of a turn; if by permanently open regulators, he can draw off his measure of water by one of them, or less commonly by a new one of his own. When objection is raised to the latter course, it is often wise to prohibit the tapping of a channel at a new point.

109. In the preceding paragraphs the term "canal-labour" has been repeatedly used, and I have shown that Tinga or canal-labour, on its due performance greatly depends the measure of the irrigation right. This canal-labour is of two sorts, *viz.*, bund-making and silt-clearance. The former is the joint concern of all the shareholding villages of a canal, and for this purpose they act as one corporate body under their tappa maliks, or other representative

shareholders in single villages a difficult task. The shares are generally measured off by sticks notched or otherwise marked at regular intervals, or roughly by hand, or even by pressing into service a maize or bájra stalk, divided for the occasion into the required number of parts. Where the water-supply is abundant, or fairly sufficient, accuracy is never attempted, and the sluices are always open. But when the Kurram is low, an approach to accuracy is necessary, and a common interest guarantees a surprising degree of fairness. When concord fails, the tahsildár arbitrates. But on many canals and water-courses, especially those whose supply is scant for the area to be irrigated, the distribution is effected by each group of shareholders drawing off the whole water-supply in fixed rotation from the channel which feeds theirs. This too is generally the method of interior village partition, when such is necessary, by bodies of landholders on shareholders *inter se*, and is followed in most villages at times of deficiency of supply. The great feature, and one indicating a remarkable power of self-government, is the method by which each turn (wár), or what may be called the periodicity of applying water, is regulated. This method is simply the casting of lots (isk).

108. The whole process can best be understood by an illustration.

An illustration of partition by drawing lots.

Let us take the lower Mandán branch of the Fátimakhel-cum-Mandán canal, that one with its head in the Kurram just behind the old artillery lines. Suppose a freshet in the Kurram has destroyed the head works of the canal, and that each village has supplied its quota of labourers. With much tom-toming and noise the bund is renewed. Water flows once more past the permanently open sluices, where the canal divides into three channels, one for Fátimakhel, one for Mandán, and one for Hinjal. Following down the Mandán channel, we come to a place where it bifurcates, the Badewa drawing off half, and the lower Mandán half. So far the flow has been constant, shares being regulated by the *sitta* contrivance described above. But from this point the Mandán share is apportioned amongst its thirteen shareholding villages by recurring turns. By ancient custom a whole round or circuit of turns (daur) is six days and six nights, two of which is a completed circuit for the Kafshikhel villages, two for those of Sikandarkhel, and two for those of Lodikhel. The lower Mandán channel being again charged with water, the chosen representatives of the shareholding villages assemble. Each selects a pebble, a twig or other substance, and the three lots are together consigned to an ignorant bystander, who draws them one after the other. Whosever lot has been first drawn takes the first two days, and so on. Now each of the three major turns of two days has a certain number of sub-divisions, the unit of time being one pahar or watch, of which there are, as with us, four in the day and four in the night. The unit of time, whether two pahars or one as here, is always and everywhere divided into two parts, the one being by day and the other by night. Such a division is necessary to equalize shares, the length of day and night being variable, and the sun being the only time-piece used by the Banuchis. Well then, priority for the three major turns having been decided by lot, priority for the sub-turns is settled in the same way, and

crop.

110. The main canals and distributaries have neither channels near their heads, nor other excluding unrequired water from the surplus or spill water. frequently there is much waste. When water is not wanted, it goes into the Kurram, Tochi or Lohra (the dry Barán) or on to the lands. The consequence is that much land is either swamp, or subject to the outburst of springs (*chína*), or to general exudations (*now*). The too great saturation of soil seems to produce an outcrop of *reh* (kallar), which is a great sterilizer. Such is most active in the cold weather, when there is a superabundance of water. But complaints are comparatively rare, because the present state of things is that which has existed from time immemorial. Each channel, each petty distributary, each field, has near its prescriptive escape, the position of which is fixed and cannot be changed. Were even the twentieth part of an acre, prevented from the servitude of receiving spill (*chilma*), deterioration of land hitherto benefitted by spill deprived of its source of claims would certainly be made for compensation, and a return to *status quo*. So thoroughly however do land-holders know and understand their rights and obligations in this matter that disputes are not of frequent occurrence. Much spill and spring water has been utilized by catch-water channels, which are now the permanent and only source of irrigation for many villages and scattered plots of land. If obligations appertaining to surplus water are of such importance they are dealt with in a special section in each irrigation statute, which one has been prepared for each main canal or channel for each village, the Nár and Landidák tracts alone excepted,

111. The following statement condenses statistics on the subject dealt with in the last paragraph.

NAME OF TAPPA.	Number of villages affected by spill or springs.	AREA IN ACRES.				Revenue of land in last two columns.
		Uncultivated owing to		Cultivated from.		
		Swamps.	Springs and exudations.	Surplus water.	Springs.	
Kutissadat	1	...	...	...	35	42
Jhandukhel	1	...	...	...	1	1
Fatimakhel	3	...	...	238	...	1,108
Mandán	4	...	...	259	...	356
Mitakhel	1	...	...	37	...	5
Hawed	1	100	139	..	1,073	2,100
Mammakhel	1	...	...	...	135	23
Mirakhel	3	221	100	...	703	967
Mastikhan	3	75	1,195	...	675	805
Ghoriwala	17	1,100	503	1,173	996	1,099
Musakhan	3	300	489	...	312	753
Ismalikhel	4	...	3	...	102	137
Total of Bannu Tahsil	42	1,796	2,429	1,707	4,022	7,090
Marwat Nar and villages near Kurram ...	12	495	..	3,891	36	1,604
Grand Total	54	2,291	2,429	5,098	4,058	8,694

Besides the above the area of small scattered plots irrigated solely by surplus water from different channels is not under 1,000 acres.

112. The Kachkot is the largest and most important canal in the district, having a course of about twenty-five miles, and irrigating, besides the lands of certain Marwat villages beyond the Nárs, 41,723 acres assessed at Rs. 38,808. In giving an account of it, I shall follow the order of subject in which all my irrigation statements have been prepared.

General description.—The origin of the name Kachkot is not known. The upper part was, according to popular tradition, in use by the Harmis and Mangals, prior to the advent of the Bannuchis. The declivity of its bed, and the somewhat tortuous alignment of its upper portion, seem to indicate that a natural channel was first converted into a small canal. It is undoubtedly of considerable antiquity, and has grown to its present dimensions by the labour of successive generations assisted by the great velocity of its current, a characteristic of most Bannuchi canals. That velocity has served to deepen and enlarge its channel, until it has become the broad, swift-flowing stream of to-day. At annexation it was not so large as it is now. At that time the Bárán branch, which diverges from it about four miles from its head, received a good half of the water in it at the point of bifurcation, and the rest flowed on in a narrow channel for

about eight miles, and tailed in Kakki-Barth near the Akra mounds. In 1852-53 its bed was widened, and an extension run into the jungle tracts beyond now known as Nár. From end to end of its course its water is drawn off by numerous distributaries, each of which, the upper thirteen excepted, has a fixed share. At intervals along its course between the head of the Bárán branch and the first masonry sluice of the Nár track are nine overfalls, of which four are of masonry, whilst the rest are constructed of timber, brushwood and stones. Their objects are to assist partition, to raise the level of the water, and to facilitate its flow into the branch channels above them. But they also act as stop-dams—one alone is for a mill race—and by checking the velocity of the water, arrest the degradation of the bed. However, as the soil, where not a stiff clay, is fairly cohesive, and the subsidence of some of the mud held in suspension is always going on, the Bannuchis generally are not apprehensive about the lowering of the bed levels of their canals.

Distribution.—Thirteen distributaries above the Bárán branch draw off water *ad libitum*. To promote the flow a small catch-water bund is run diagonally into the stream. This is a common device at the head of a *viál*, which is the Bannuchi word for a canal or water-course. The size and conditions under which such bunds may be used are all regulated by ancient usage, and have been recorded. The limit of requirements is supposed to regulate the amount of water taken by the thirteen privileged *viáls*, but in practice waste does occur, and will continue until masonry outlet-heads are substituted for those temporary contrivances now in use. At the Bárán divergence the Kachkot divides into two main channels, two-fifths of the water passing off into the Bárán, and three-fifths continuing in the main canal. A masonry sluice or regulator is much required here, and could be easily made. From this point the Bárán can best be regarded as an independent canal, and will be described below. The water separately remaining in the Kachkot is here divided into 252 shares, "fingers," of which the *viál* Mír Akram and fourteen others have amongst them 149, and the remaining 103 are reserved for the Bannu and Marwat Nár tracts, and have been apportioned conditionally amongst the Nár grantees. The Nár portion of the Kachkot will be treated as a separate canal, and so described. We have therefore nothing to do with its 103 shares here. The flow of water in all the *viáls* with heads in the Kachkot is constant. Some of the outlet-heads are of masonry, but most are still temporary and regulated by the *sitta* device mentioned in a preceding paragraph. Amongst the villages *inter se* the prevailing mode of distribution is by "turns."

Proprietary rights in water. *—Amongst the upper-lying villages and those near the heads of some of the lower distributaries, water and land are not alienable separately, and the right to a share depends alone on the performance of canal labour, with or without residence, as the

* The Deputy Commissioner and I did not agree regarding what proprietary rights in the channel of the Kachkot and in the trees of spontaneous growth on its banks should be entered as belonging to Government. At Mr. Lyall's suggestion the channel has been treated down to the Khula Amirán as "belonging to the canal," and the trees as "pertaining to the canal" and to be used for its bands, bridges, &c. Below the Khula Amirán both are Government property.

case may be. But in the tail villages generally, and especially those of the large Sangari branch canal beyond the Lohra, water and land are distinct properties.

Surplus or spill water.—Much of the spill is utilized by other villages. That from the *viads* of Mitakhel villages lying between the Kachkot and the Lohra is wasted in the Lohra. Much escapes down the Baran branch, which in the full season empties itself into the Kurram. That from lands adjoining the Kachkot is as a rule returned into it. A good deal is caught by a catch-water canal dug about eight years ago, which runs nearly parallel with the Lohra, and has a nominal head in some springs near Akra. But most passes on throughout the cold weather into the Nárs, and supplements their rather scant supply, and partially irrigates some Marwat villages as well.

Canal-labour (tinga).—The Kachkot bund is a large structure composed of boulders, timber, shingle matting and brush-wood. On its length and stability depends the volume of water which enters the canal. It ordinarily diverts from a sixth to a quarter of the Kurram water. It is entirely swept away some four or five times in the year, say once in March or April, and three or four times between June and September. The Kurram freshets are seldom high enough in the other months to do more than breach it in places. When it is broken, little or no water can enter the Kachkot, the bed of which sometimes remains dry for from five to ten consecutive days. The bund is repaired and maintained by unpaid statute labour, under the direction of a Government official styled the Nár Darogah. The number of men liable to summons for bund labour is at present 700, viz. :—

List of villages or groups of villages.	No. of villages.	Quota.	REMARKS.
Sukarri ...	4	40	1. These numbers are distributed over the different villages, and over those liable in each village in the ways described in a preceding paragraph.
Mandán ...	3	33	
Mitakhel ...	8	30	2. Four villages, not included in the list, Bangashkhel, Kingar, Lar-mast, Dad Kachkot and Mithakhel Khán Suba contribute no labour, because in 1852-53 when the Kachkot was enlarged, exemption was granted them in lieu of money compensation for land then taken up. But in great emergencies help is sometimes demanded.
Shahdeo ...	1	7	
Mammakhel ...	3	33	3. Amandi tappa, not shown in the list gives 15 logs or branches when necessary instead of manual labour.
Tappa Barth ...	1	40	
Tappa Kakhi ...	1	60	4. The cantonments and Edwardes-abad receive all the water of the Amandi <i>vial</i> by day, but supply no labour.
Ismalkhel cum Tughalkhel ...	2	5	
Nouhasar ...	1	2	5. Shahdeo sends 7 and 8 men alternately.
Lands and villages irrigated from the Baran branch ...	21	150	6. The Marwat Nár complement of 200 men is excessive. I have lately pressed for its reduction to about 100, but the Deputy Commissioner has not yet given his assent to my proposal. I consider the tax of men disproportionate and burdensome as the tract lies at the tail of the canal, and landlords are unable to retain their tenants. In fact the full quota if summoned, which is seldom, never does attend. Of late when the fines had accumulated to several hundred rupees, they had to be remitted. To maintain the over-numerous old levy, gives the Darogha full opportunity to exempt certain favoured villages from supplying men and leads to other abuses.
Bannu Nár ...	22	100	
Marwat Nár ...	55	*200	
Total ...	108	700	

* Today the Deputy Commissioner agreed to reduce the levy experimentally to 150. 26-12-78

The complement of 700 men is only summoned when the bund has been destroyed, and water is urgently wanted. On other occasions a smaller number suffices. Plough oxen are sometimes levied instead of men. Absentees are fined four annas each per diem. The income goes to maintain a small staff of canal watchmen and towards the pay of the Darogha. In July and August gangs of men, taken in rotation are often stationed at the bund to repair breaches as they occur. General canal clearance is performed in the same way, but is very light compared to bund labour. The Darogha has hitherto had no jurisdiction over the branch canals and distributaries from the Kachkot beyond their head outlets or sluices.

113. *General description.*—The Bárán as its name (rain) has always indicated originally served as an escape for the Kachkot, and is said to have been so used by the predecessors of the Bannuchis. At all events it received no fixed share of the Kachkot water until very recently. It seems that Ismailkhel, Khujjarri and other villages then collectively termed "Tappai," had formerly a canal of their own, the old Gambíla with a head in the Kurram. It ran through Mandán, receiving as much as it could carry of the spill of the Kachkot, and then irrigated the Tappai villages. But about 1810 or earlier Bazár Ahmad Khan seized its upper part, and converted it into what is now known as the Kamboh *viál*. Thus the Tappai villages had to depend on the uncertain escape of the Kachkot alone to supply what remained to them of the Gambíla. After a time they appear to have come to terms with the Kachkot villages, and in return for canal labour to have been allotted an ambiguous share, which since 1852-53 has been definitely fixed at two-fifths. As now constituted, the Bárán has an almost clear course of about a mile and a half before it divides into two channels, the new Gambíla and the Bárán proper. Both soon split up into a large number of water-courses, and irrigate an area of 8,692 acres assessed at Rs. 11,850.

Distribution of water.—Of the 180 shares into which the Zambíla and Bárán proper are divided, the former takes 157 and the latter 23. But, as the men of the Ismailkhel tappa hold lands under both channels, they are in the habit of conveying 17 of their 23 shares round by the Gambíla for the rabi crop, thus raising the number of the Gambíla shares in the cold weather to 174. The Zambíla sheds off nine distributaries, each with a fixed share constantly flowing, all of which irrigate the lands of the Ismailkhel tappa. The rest of its water—about one-quarter—goes on in the main channel and is applied to the Ghoríwal tappa, and to five, so called, Khanjarri villages. All five receive a very scant supply, and wish for water directly from the Kachkot—a wish which should not I think be at present granted—or the separation of their share higher up the Bárán. The 23 shares of the Bárán proper are divided amongst three distributaries, and go to irrigate lands in the Ismailkhel tappa. But although all its share of water is thus absorbed, the main channel is seldom or ever dry, as it receives the spill of the Chasna and Mandán canals, also much water from springs.

Proprietary rights in water.—Water and land are still nominally joint properties, and in most villages the water-lords and their shares are still known. But as in practice the right to water everywhere depends on the performance of canal labour, and no water had for many years been separately alienated, the shares have generally not been recorded. Domicile is required from *hamsayáhs* in all the villages, and some from men of the dominant stock as well. Such men have still a few special privileges, *i. e.*, giving water on “entreaty” when there is none to spare.

Spill or surplus water.—The Zambila tails in the cold weather, after receiving the spill from some Bannu Nár water-courses, into Hammakhel, and two other Marwat villages which it irrigates. Two catch-water canals, the Páila and the Pail, *alias* Isakwála, have their heads in the marshes formed from the waste of the Zambila and Kachkot. The Chasna and Mandán canals, after irrigating the large tappas of Mandán, Bazár, Sádát, &c., tail into the Bárán proper, which also receives much of the waste from the Ismailkhel fields. These united sources raise the escape channel of the Bárán proper into a considerable stream. So great is it that four water-courses, one the Ghoriwál viál, large enough to be called a canal, have their heads in it. Two other small viáls draw their supply from springs. Thus from spill collected within the area under the Bárán, but derived through springs, exudation and the tailing of several foreign canals from a very much wider area, no fewer than eight new viáls are formed, which, after irrigating ten or twelve villages partially or wholly, do much to forming the great Ghoriwál swamp. In those eight viáls however the water is clear, and therefore performs only half the work of other water-courses, which are fertilizers as well as irrigators.

Canal labour.—Correctly the number of shares represents the number of men liable for Kachkot bund work. But we have seen that the Bárán complement is 150 not 180. The difference, 30, is due to the lands under the Warana and the Jáfir-welu viáls, contributing no labour, the former because it used to take water *ad libitum*, but since 1852-53 receives a fixed share, the latter because Jáfir Khan achieved its exemption, and up to the present time the doubtful claim to a like privilege by his descendants and fellow clansmen on his viál has never been challenged. With these two exceptions each distributary sends as many labourers as it has shares. As to the Bárán clearance it is done twice a year in the usual way. There are no exemptions.

114. **General description.**—When in 1852-53 the Kachkot was continued into what is known as the Bannu and Marwat Nárs, that whole tract was parcelled out into compact lots varying from forty to one thousand acres, and given away to deserving men with a corresponding amount of water. The measure of both land and water being in kanáls, and a kanál being the eighth of an acre, a grantee of 100 acres came to speak of his share of water as 800 kanáls. The alignment of the Kachkot extension was along the watershed of the Kurram and Gambila (Tochi) doáb. The length of the main channel cannot be precisely given, because, soon

after it enters the Marwat tahsil, it spreads out like an open fan, and each water-course has a special name. From the masonry sluice called Gandi Amirán, immediately above which the old Kachkot may be said to have ended, to one of the tail Marwat Nár villages under it, is a distance of about ten miles. Grants of land with water continued to be made for some years subsequent to 1852, and up till a few years back water alone was occasionally given to thirsty Marwat villages, and in some few cases to importunate persons who owned no land within the area commanded by the canal. Thus the number of shares in water was repeatedly augmented, and the supply is now barely sufficient for the spring crops, and not enough to irrigate one-tenth of the land for an autumn crop. The tail villages in the Marwat Nár receive little water except in the cold weather. Taking the irrigable area as the area irrigated it is as follows :—

					Rs.
Bannu Nár	11,357	acres assessed	at	...	8,350
True Marwat Nár,	11,011	do.	at	...	4,809
Miscellaneous lands in Marwat.	5926	do.	at	...	3,654
Total	28,294	acres paying Rs.	...	...	16,813 land revenue.

Distribution.—As the different blocks were allotted or shortly afterwards outlet heads were made at convenient points on either side of the canal, their positions were sometimes changed. At first the flow was regulated by the *sitta* contrivance, but in 1868 the conversion of such rude regulators into masonry sluices was begun, the cost in each case being defrayed by those interested in proportion to their shares. The settlement stopped the progress of the work. I trust that the Deputy Commissioner will now take it up again. The whole water of the Kachkot, which passes the great masonry sluice called Gandi Amirán, belongs to the lands of the two Nárs, a few old Marwat villages and the Bhitanni settlement of Harámatála, which latter, I should have mentioned, is exempt from canal labour. The people speak of their shares in *kanáls*. But such a unit of measure requires high figures, and is in itself rather unintelligible. I shall therefore prefer to make my unit the inch, only premising that the inch generally represents 2,000 and in places 1000 *kanáls* of water. Well then, the Kachkot at Gandi Amirán is divided into 170 inch shares thus :—

34½ are drawn off by the Khula Amirán distributary, by which nearly half the Bannu Nár villages are irrigated. At about a quarter of a mile or less from its head there is a masonry sluice dividing the water into three unequal shares, which are carried off by three independent water-courses.

71 remain in the main Kachkot channel.

64½ are what is called *afzúd* or kacha shares, that is flow only in the cold weather and onwards until April, and irrigate land for the spring crops alone. Their outlet is shut off from the ingathering of the rabi crop until about the end of November.

As the water is divided at the Gandi Amirán by a sluice contrivance, so it is by similar means at intervals down the main channel. But

the inch unit of width only exists on the upper four sluices, which are masonry, thence below and for most of the villages *inter se* the loose "finger" measure is the unit, and represents "1000 kanáls of water." Again, on the lower masonry sluices an inch of water is of an ever diminishing value, because the number of inches is calculated afresh each. For instance at Gandi Karím, the next below the Gandi Mirán, the width of the "fixed" shares should be 71 inches, but is 82 inches to correspond with the "164,000 kánals" under it. The same is the case with the "finger" measures. This confusion and disproportion amongst shares of equal nominal value seems to arise from the highest sluices having been made first, and water having been given away afterwards at different places below. Miscalculation may also partly account for it. As to the mode of partition on the different distributaries between the share-holding villages, the rule is permanently open outlet-heads, the exception the taking of all the water in rotation. Of the surplus (*afzúd*) or extra spring crop shares only one and three-quarters go to villages in the Bannu Nár. All the rest has been allotted to Marwat Nár and other tail villages. Most of the distributaries have double outlet-heads, one for their "fixed" or perennial share, and the other for their extra cold weather allotment.

Proprietary rights in water.—Water and land were generally granted together on the understanding that they were in future not to be regarded as separate properties. In the course of this settlement it has been distinctly laid down that water can only be applied on the land for which it was granted, but that grantees owning more water than is required for the irrigation of such land can separately alienate that surplus quantity, which would otherwise be of no use to them. Cases of the sale or mortgage of water without land, which occurred before or early in this settlement, have each been dealt with on their respective merits. Where water had been given to landless individuals, a term was allowed them to procure land, a liberal allowance of water was then allowed for that land, and the remainder will, on the death of each grantee, revert to the land of that village with which it has been assessed, the grantee meanwhile paying a specially fixed fraction of the revenue of the village. These arrangements have given perfect satisfaction to the persons interested, and put a pernicious and anomalous state of things in train of extinction.

Spill water.—There is very little. The general rule already explained holds good about it.

Canal labour.—Bannu Nár sends 100, and Marwat Nár at present 200 men for the Kachkot bund work. The levy is one man per 1000 kanáls of water, but in the case of surplus (*afzúd*) water the contribution can only be demanded during the season the *afzúd* outlet-heads are open. In the Bannu Nár canal labour is an obligation in the tenant's tenure. But in the Marwat Nár special canal labourers, who are as often tenants as not besides, called *kaslahs*, are maintained and paid in kind at the rate of one-eleventh of the grain from the common heap.

115. *General description.*—Until 1855 Mamashkhel had a small *viál* of its own called Landai (*landa* = short), but in that year Major Nicholson extended it to a *dák* or waste clayey tract nine miles beyond, and since then both canal and tract have been known as Landidák. The Landidák lands were then divided into lots, and given away much in the same way as those of the two Nárs had been. In both the cases of the Landái and Kachkot all the labour was supplied gratis by the people, reward being given in the shape of a new or extra water allowance, and in a few cases in cash, and all vested interests in water were preserved intact. The Landidák canal as now existing has its head immediately above that of the Kachkot, and though possessing a small Kurram bund of its own, depends indirectly for its water-supply on that of the Kachkot. The extreme length of the Landidák canal is eighteen miles. Its course is almost at right angles to that of the Kurram and Kachkot. After passing through the Mamashkhel tappa, it crosses the Lohra (*wúch* (dry) Baran or Bārán) by means not of an aqueduct but of a temporary bund, traverses the Barázkai and Nurar tappas, in the latter of which it is augmented by the tail of a Tochí *viál* called Aimal bund, and finally at a sluice called the Khula Mazánga enters the tract; its prolongation was specially designed to irrigate. In all thirty-two villages benefit by it, of which twenty-two are the small new Landidák estates founded in 1855. The whole area irrigated is 11,573 acres assessed at Rs. 4,894.

Distribution.—The highest outlet-head is the Sadar Ghosha, a petty *viál* which draws water *ad libitum* for a very small area in Amandi. This water was granted free as compensation for land taken up in 1855. The head should be converted into a masonry one with a fixed share. Below the Sadar Ghosha, Mamashkhel draws off one-third of the Landidák water by means of four outlet-heads, all of temporary structure and uncertain measuring power. Of the two-thirds remaining nearly six-sevenths is the share of the twenty-two Landidák estates; but as they are at the tail of the canal, and few of the outlet-heads on it are yet of masonry, the said twenty-two estates receive much less than their allotment. As on the Kachkot so here the unit of measure is various, namely, “*gánda*” “*guta*” and “a thousand kanáls,” and the precise length of each and their interpretations are not absolute. In each case the unit, whatever its name, must be regarded as nothing more than a fixed fractional part of the major share of a village or group of villages, and that major share is loosely a known fraction of all the water in the canal at a certain point. The main outlet-heads are open all the year round, but share-holding villages and plots *inter se* irrigate in rotation by one or other of the “turns” (*war*) practices.

Proprietary rights in water.—For the old lands formerly under the Landái *viál* the general rule is that all have a right to water when they do canal labour, and that water and land though distinct properties are seldom bartered separately. But between the Lohra and the Khula

* For a condensed abstract statement of the other irrigation canals and channels of the district see Appendix VI, page.

Mazanga the village usage pre-obtaining for their other *vidls* from the Tochi (Gambila) governs rights in water granted in 1855, or subsequently, and the prevailing usage is that water and land are separate properties. For the twenty-two true Landidák estates the rules stated for the analogous cases of the Bannu and Marwat Nárs apply.

Spill or surplus water.—There is none worth writing about.

Canal labour.—Mamashkhel sends 71 men at one man per two *gándás*. Their special charge is the small Kurram bund, and clearance work down to Lohra, into which their old Landái *vidl* tailed. The rest of the canal supplies 138 men for the maintenance of the Lohra bund, which often breaks, and clearing the channel from the Lohra downwards. The true Landidák villages also send hands to repair the Aimal bund, Tochi bund, when so required. Regarding clearance and bund-making generally, the obligation to send their quota ceases with the limit of the interest of the community. Below the Lohra the levy is two men to every "1000 kanáls" of water, but as in the Nárs the holders of a cold weather allowance (*afzud páni* or *kache ubah*) only send men when in receipt of such water. The whole management is under a Government official termed the Landidák Darogha.

116. It has been mentioned that the canal-water, which is supplied

Administration and superintendence of canal irrigation in Bannu proper.	to the Landidák and Nár tracts, was Government property, and has been granted conditionally to the owners of those tracts. All the rest of the water in Bannuchi canals was and is the property of the people themselves. Hitherto the distribution of water amongst the Nár and Landidák estates, and the maintenance of the Kurram training bund of the Kachkot and Landidák have been supervised by two Daroghas appointed by the district officer. To meet the cost of the small irrigation establishment a cess has been levied on all water granted by the State. Fees too have been charged on marriages, and a large income has been derived from nágha fines. The total annual receipts have been of late years about Rs. 1,500, a sum sufficient to cover the pay of the two Daroghas, their two writers and a small staff of canal watchman besides. In this settlement my proposals to raise the patwári cess in Bannu proper to Rs. 5-12 per cent, * and treat a portion of it as an irrigation cess, and to levy for the same purpose a special cess of Rs. 5 per cent. on the revenue of the Nárs and Landidák, were sanctioned. I have thus been enabled to remodel the irrigation establishment, and to place it on a more
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* I have found it sufficient to take only Rs. 5-8 per cent.

recognized footing* According to my arrangements the establishment will in future be :—

	Monthly Salary.	Remarks.
One Superintendent or head Darogha.	100	Should do all the miscellaneous executive and administrative work connected with canal irrigation now done by the Tahsildar, and see to maintenance of existing and construction of new masonry over-falls, regulators, and outlet-heads.
One Darogha for the Nárs ...	30	} Their duties will be much as at present.
One Naib Darogha for the Landidák canal.	25	
Three writers, two at Rs. 15, P.M. each, and one at Rs. 10 per month. }	40	} Perhaps two will suffice, if both Naib Daroghas be educated men.
Seven Chalkrestas or canal watchmen. }	30	
Stationery and miscellaneous ...	5	} A few more should be entertained when the fine proceeds permit.
Total Rs.	230	

Thus the annual charge will be Rs. 2,760. It will be met in the following ways :—

Portion of Patwári cess, viz., Rs. 1-8-0 per cent. on Rs. 1,38,120 which	Rs.
is the revenue of old Bannu proper ...	1,773
Ditto ditto on the new tax on water mills ...	14
Special irrigation cess at Rs. 5 per cent. on Rs 17,052 being the revenue of the two Nárs and the Landidák tract	853
Total Rs.	2,638

The deficit Rs. 122 will be more than covered by fine income. Of late years receipts from this source have been very large, and have fallen with some severity on the poor Landidák and Marwat Nár villages. I trust the district officer will endeavour to keep down the *nágha* fund to the lowest minimum compatible with a wholesome check on absenteeism. As a general rule no *nágha* should be levied by the district officer except for the wilful non-attendance of the summoned quota of labourers from the Nár and Landidák estates, and from other villages only when work has to be done on the Kachkot bund. Elsewhere the people manage their own canals, and levy and recover their own *nágha* fines. Hitherto the Naib Daroghas have themselves imposed and recovered such fines within the limits of their respective jurisdictions, under a loose sort of supervision by the tahsildár. But I think in future the head Darogha alone should have such a power. He should be made to understand that our sole object is the efficient working of the canals under him, and not a large *nágha* fund. Beyond the direct management of the water-supply and distribution for the Nárs and Landidák, and the maintenance of the Kachkot bund, his duties should I think be confined

* Formal sanction to the arrangements has yet to come, but it has been started in anticipation from January 1st 1879.

to keeping the existing masonry works on the Kachkot and Landidák canals in repair,* constructing new works, and assisting the people, when disputes arise, to preserve their old system of distribution. He should I think report directly to the district officer, *i. e.*, be practically independent of the tahsildár, and if invested with judicial powers be required to exercise them very sparingly. I may add that the forms of all necessary registers have been prepared and are in use.

117. Financial pressure, the greater needs of other parts of the Punjab, the extent to which the Kurram is already utilized for irrigation, the obscure position of Bannu, the fact that its existing canals and the fair certainty of a crop in the Indus bed tract largely guarantee the district against absolute famine, and above all the impossibility of carrying out great works without interfering detrimentally with existing interests, will, I am convinced, deter Government from commencing for another generation at least the project of the Irrigation Department for throwing a permanent weir across the Kurram and otherwise improving and extending the irrigation system from that river. Such a weir would probably be constructed above the position of the present Kachkot bund, but even if built two or three miles lower down it would ruin many small canals and water-courses, which have been working for ages, *e. g.*, those of the Jhandukhel tappa. Presuming then that Government will at its own cost undertake no large work, I think that it will be cheapest and safest to leave the improvement and further development of the Bannuchi canal system in the hands of the Deputy Commissioner, and that for this purpose a native Engineer of some practical experience in the construction of petty works might be lent him with advantage. What can be done, and what the people are willing to pay for, is the gradual conversion of temporary regulating contrivances into masonry heads for the chief branches and distributaries of the more important canals. Such works will without lightening canal labour secure and preserve to each channel its proper share of water; and now that elaborate and I hope fairly accurate irrigation records have been prepared, there will be no difficulty in ascertaining what is the exact share of each. One of such works urgently wanted is a regulating sluice for the Bárán branch of the Kachkot, down which I believe much more water ordinarily flows than can be used. Any water saved here would be valuable to augment the supply available for the Nár tracts. The recorded share of the Bárán is two-fifths of the volume in the Kachkot at the point of divergence, but I believe that for the rabi crop at least a smaller share would amply suffice. Whenever the masonry head is to be made, the question of giving the Khunjarri villages a supply direct from the Kachkot should be considered. I referred to this subject a paragraph or two back. I understand that money for building a masonry sluice at the head of the Bárán branch was collected by the Deputy Commissioner some years back, but has been conditionally spent

* Unless the stream is diverted, and the works thoroughly inspected to their foundations each year, say in May or September, much trouble will ensue. Inspection and repairs should be periodically done, and not postponed until forced on the attention by a break down.

Karkhā waterfalls. The Kurram head-works of the different branches I think are left alone for the present. Apart from the heavy machinery for lifting water I would suggest that wherever possible the present heavy manual labour would be altered. Such labour is not confined to the mass of the Bannu hills, but a wholesale army. Were the necessity of hand-making removed, the people would not be boys so prone to fighting and mischief doing, and as it is they are adapted to it. As to attempting a more even water distribution of water, though no doubt regulating heads would be advantageous on some canals I think there are several serious objections against any general curbing of flow or stage in most canals. One, for instance, is that the number of share-holding villages on most canals is large, their crops various, and so it seldom occurs that at any one time some village or a plot of land does not require Kurram water or Kurram silt. For instance, the Marwat Nár and its adjoining villages, lying at the tail of the Karkhā canal at no time in the year be said to have a sufficient supply. Then again any extensive interference in shares would involve an alteration in the assessment which would, unless especially provided for, be illegal during the currency of the settlement. But is the present distribution of water so very uneconomical after all? I think the sight of swamps, marshy ground, springs and water flowing off fields into escapes or into the Lohra or Kurram has caused much misapprehension, even to officers of the Irrigation Department, as to the extent to which water is wasted. They perhaps forget that what is discharged from fields is so after much of its virtue has been extracted from it. The great virtue of the Kurram water is its fertilizing silt (khāra), which being a sort of natural manure is the life of the crop. As to draining the swamps, that is an operation simple enough in itself, but it needs capital and combination; and I am afraid without the Government initiative will never be largely undertaken. A Deputy Commissioner with leisure and inclination might do much by freely levying unpaid statute labour, and in the end the people would bless him for his high-handedness. In 1870 with Colonel Munro's consent I gave Muhammad Ayáz Khan Bahadar of Isa khel 777 acres * of swamp near Ghorīwāl, and he, by running a number of deep surface drains across the land, soon brought nearly half the grant into cultivation, but then he is a man of means.

118. So far I have written of Bannu proper and the Marwat

The Kas Umar Khan in Isakhel up to commencement of regular settlement operations.

Nár. I now pass on to the Isakhel tahsil. The old name for the southern part of that country, and one too still often heard in the mouths of a Marwat or Miánwáli peasant, was

Tarna. It seems that within a generation or two of the settlement of the Isakhel branch of the Niázais in their present home, a net-work of small canals covered the face of the country, and that aqueducts of sorts were freely used, whence the appellation Tarna or aqueduct. In those days the Kurram appears to have flowed in a northerly course for about seven miles after piercing the hills at Tang Darra, in which case its bed must have been much higher than it is now. A good deal of

* Area granted was 967 acres, but in 1875 I gave back 150 acres of it to the Ghorīwāl people. The other difference of acreage is due to original measurement.

the old left bank can still be traced. Besides this the Indus frontage of the upland tract between the villages of Khaglanwála and Trag was a mile and more eastwards of its present line. Thus irrigation was easier, and the irrigable area larger than in our days. Whatever were the physical changes before the beginning of this century, it is certain that there have been none of importance since the old site of Isakhel was eroded about 1830. Below Tang Darra the Kurram seeks the Indus by the same eastern channels as it did when the Kas Umar Khan was dug. That Kas is still the largest canal of the country. It replaced an older one. It was excavated about seventy years ago by Umar Khan, at that time chief of the Isakhel, to water his own village, then as now called after him. But as his village lay from seven to nine miles from the head of his canal, some of the intervening lands were also irrigated from it. Canal labour used to be performed by a special staff of men, and they and the canal owners were remunerated with a share of the irrigated land or crop. In the former case each plot of land was divided into two equal parts, one of which was retained by the land owner (*sajji*), whilst of the other, three-fourths were allotted to the canal labourer (*wakú*) and one-fourth to the canal owner (*máshki*). In the latter case one-sixth of the crop went to the canal owner and labourer, half to each. The practice of dividing the land obtained in Umar Khan's village, and latterly on several of the small distributaries (*surgís*) from the Kas; whilst that of the division of produce was the rule on the upper portion of the Kas. In Umar Khan's village the status of land owner and canal owner was combined. At the first and second summary settlements the cultivator was generally settled with directly, without reference to the terms of his occupancy. Thus all canal labourers were revenue payers, though in fact tenants-at-will. In 1856-57 the superior attraction of new Indus alluvion, and the easier livelihood to be gained thereon, induced most of those who worked on the Kas to abandon their irrigated holdings. But after a time Captain Coxe induced the deserters to return by promising them nearly the whole of the canal owner's share of produce in addition to their own. The canal owners were otherwise recompensed for the loss of their share. The remedy was only effectual for a time, and before long the working of the Kas again became inefficient. Disputes became frequent, and dissatisfaction was general. The three interested classes *máshkis*, *sajjis* and *wakús*, all complained, and recriminated on each other. What was the status of each with reference to his recorded holding? Who was responsible for the revenue of plots abandoned by canal labourers? What was to be the penalty for breach of contract in supplying water? Was there any contract? Such were the questions which arose, and various were the decisions given. However the joint exertions of Government officials and the canal owning class staved off a total collapse until the commencement of this settlement, when it was found that some strong remedy must be applied, as the old system had broken down beyond hope of revival.

119. The first point to determine was the status of the *waku*

The Tinga system introduced in 1875 on the Kas and in operation ever since.

class. They were found to be simple canal labourers, paid in land for produce, and dismissible, like any other servant, for ill performance

of work, if not at the will of his master. At attestation most of the men admitted that they had no occupancy rights, and as it was a fact that their work was not well done, no ground remained for according any of them such rights. For similar reasons on some of the later made distributaries, the canal owner's right to retain their $\frac{1}{3}$ th share of the land was extinguished. They had failed in their contract to supply water to the land owners. The position being thus cleared, I reported in favour of the *tinga* system, which was I considered the only feasible method for working the canal, should Government not assume the direct management. This system is that already described as having obtained for ages in Bannu proper. Under it each land owner has to take a part in silt clearing and bund-making proportionate to his share of water or land, or submit to the penalty of a fine (*nágha*). The burden of providing labour is thus imposed directly on the land owners, and Government is enabled to make the settlement with them. Sanction to introduce the proposed changes was accorded, on the condition of those interested agreeing, and no rights being ignored. Mr. Lyall, Colonel Davies, and myself, at different times explained to the people what the new system was, and why it was necessary, and after some opposition on the part of a factious few, it was introduced in 1875, and has since been in operation. At first difficulty was experienced in inducing Pathan land owners to work with their own hands. Their forefathers had never stooped to a labour only fitted for Játs and other inferior beings, so why should they? Two of their Khans intrigued much to bring about a failure. Abdul Rahím Khan, seeking to be offered the sole management of the canal, and Sher Khan from hostility to most of the other Khans. However the patience and tact of Mián Ghulám Faríd, the Isa Khel Superintendent, by degrees surmounted all obstacles, and the *tinga* system was introduced. Soon after an event happened which for a time discredited it in popular opinion. That event was as follows. Early in 1876 an experimental bund was projected by the Public Works Department from the right bank into the Kurram at a point opposite the highest of the Kas Umar Khan's training bund. This apparently threw the force of the current against the left bank, and the consequence was that the said bunds were breached or swept away as often as they were repaired or remade. The Kas therefore failed, and the small independent canals (*vidls*) in which the supply of water is mainly contingent on the maintenance of the head works of the Kas also failed. The people were disheartened and clamoured for a remission of revenue, which had to be given, inveighing, with reason, against the "experimental bund," and without reason against the *tinga* system, as if it had mysteriously affected the set of the Kurram. Early last year I made a representation on the matter, and the offending bund was removed. The pressure on the right bank was at once relieved, the training bunds were successfully remade, the canals flowed once more, and the 1878 spring crop on Isa Khel irrigated lands have been of unprecedented extent and excellence. The compulsory fallows of the preceding year, and the abundance of the rain-fall assisted in this happy result, but the ultimate cause was the efficient working of the Kas. The land owners are now reconciled to the new system, but its success will long depend on the interest taken in

the tahsildár, and on the energy and good sense of the managing Darogha.

120. I mentioned in the last paragraph but one that the canal owners were "otherwise" recouped for the loss of their one-twelfth share of produce. The way was this. On the death in 1856 of Muhammad Khan, grandson of the Umar Khan mentioned above, the Government of India sanctioned the continuance of the "dues" of the late chief to his seven sons and one grandson. Amongst those dues was put down the item of "abiyána" calculated to amount to Rs. 1,064-8 a year. This "abiyána" was the one-twelfth share of produce which Muhammad Khan received from kind paying lands under his Kas, and it was with this one-twelfth that Captain Coxé had bribed back the Kas wakus. Neither Captain Coxé nor Government seem clearly to have apprehended that the "abiyána" was essentially a proprietary and not a jágir item of income. However after some correspondence Rs. 1,064-8 a year as "abiyána" were granted to the deceased chief's eight successors "for their lives and that of the male issue in the direct line," and that sum has since been annually disbursed to them from the treasury. By the above transaction Government substituted a perpetual cash allowance for the old kind share enjoyed in certain villages by the owner of the Kas Umar Khan, and thereby purchased, so to say, that owner's rights over the whole canal, except that portion of it which irrigates the village Umar Khan itself. I asserted this right early in this settlement, and after some demur Muhammad Khan's heirs admitted the correctness of the claim. The result is that I have recorded about two-thirds of the Kas Umar Khan as Government property, the water of which is apportioned amongst certain villages and plots, the holder having in return to do *tinga* and pay revenue.

121. The discovery that so much of the canal belonged to Government gave me something like a *tabula rasa* to work on. After allotting to four petty distributaries (surgis) about one-seventh of the water, I divided the rest into two shares, about three-fifths for the lands of the township of Isa Khel, and the remaining two-fifths for Umar Khán's village. At the point of partition I had a masonry regulator built, and from it Muhammad Khan's heirs dug a branch to their own village. The sole measure of individual right in water was held to be the irrigated acreage of each holding. In the two main channels, and throughout some of their distributaries the flow is perennial, each outlet head being of a width corresponding to its share. Elsewhere turns have been fixed. The *tinga* levy is 121 men at the rate of two to every 1000 kanáls of land. The annual silt clearance is begun in September, and should be well over by the 10th of October. The work is done in common down to a place called Khu-i-Khap, about three-quarters of a mile from the head of the canal. Thence to the masonry regulator above named each gang has a fixed number of yards to clear: thence below to near the Bhór road the land owners interested are required to clear on the same system, though some endeavour to escape

doing so below the heads of their respective distributaries. Gang leaders have been appointed, and *tinga* superintendence has been declared to be a part of a lambardár's duty. The Kurram bund-work is very heavy indeed, as the bund, which consists of mud and brushwood alone, is repeatedly broken, is entirely swept away five or six times at least in the year; and as in addition to the occasional work of reconstruction it is necessary to keep relays of thirty men on watch at the bund the whole year round. The petty bunds of the lower *viál* cannot be constructed until that for the Kas is completed; hence where extra hands are wanted, assistance may be demanded from the vic owners. For the payment of the Darogha, who gets Rs. 25 per month, and his *chalweshta* who gets Rs. 5 per month, Rs. 360 are annually raised by an acreage cess on the irrigated area. This cess has been distributed on the revenue, and falls at Rs. 5 per cent. on Kas lands and Rs. 2 per cent. on *viál* lands. An extra *Chalweshta* is entertained from the fine fund when possible. When on the making up of the annual accounts, in October there is a credit balance, those gang leaders, who are not also lambardárs, are to have money up to Rs. 50 distributed amongst them in reward for their exertions.

122. Within a space of one mile below the head of the Kas Umar Khan the Kurram is tapped in six different places by as many small independent water-courses or *viáls*. One, that of Sadullah Khan, is of recent date. On it as well as on that of Sher Khan the old practice of dividing the land between *sajji*, *mashki* and *waku* is followed. All the others are old, and on them some form of the system of the *tinga* now obtains. The proprietors or their tenants—where having occupancy rights—manage the work of clearance and bund making themselves, and impose their own fines on absentees. Still the general supervision is under the tahsildár and the darogha. An irrigation cess of Rs. 2 per cent. on the revenue is now levied as a contribution towards the darogha's pay. Each water-course is managed much as the Kas is, but on a small scale. The positions of the heads and now and again of a channel have sometimes to be shifted. The present arrangements—some made since the settlement records were fairied—are the results of amicable agreement, and in two cases of a judicial decision.

123. About ten years ago Abdul Rahim Khan, an Isakhel Rais, conceived the project of tapping the Kurram some miles above the head of the Kas Umar Khan canal, and thence of running a channel eastwards and tunnelling through the spur of the Maidáni Range, which separates Isakhel from Marwat. Could he but bore that spur, and convey sufficient water to the Isakhel side, his canal would command a large area of uncultivated Thal country. He commenced work in the cold weather of 1868-69, and by the following year had bored through a considerable portion of the hill. As might have been expected, his levels were faulty, but, considering his means, they were wonderfully good. A small takávi advance had already been made him, and a much larger one was now proposed by Major Jenkins, Deputy Commissioner, who

wrote in most enthusiastic terms about the Khan's public-spiritedness. Mr. Egerton, too, at that time Financial Commissioner, visited the works, and, struck by their bold design and energetic prosecution, gave Abdul Rahim Khan considerable encouragement. Government demurred to sanction the large advance then applied for, Rs. 14,000, preferring to promise a rent-free lease of all unassessed lands which the canal would irrigate. But meantime the Khan had plunged over head in his undertaking, mortgaging his property and raising money in every way he could. At different times the works were inspected by officers more or less competent to give an opinion on the prospects of a successful issue. So the work went on, and in the end, I believe, Rs. 15,000 were given as takávi advances. Local native opinion was from the first sceptical of any great result. The shrewdest minds of the country held that even could the soft sandstone hill be bored, and water be passed through, the tunnel would be continually falling in, and that in any case no real return to the original outlay could ever be expected. Ultimately the Khán having spent the whole advance, and most of his private means as well, and the canal being still far from completion, was reduced to desperation. At this stage Government generously stepped in, and bought out his interest for Rs. 33,338 less the Rs. 15,000 already received.* Whether Government will make anything of its purchase remains to be seen. My own opinion, and one I have long held, is that the project is an unfortunate one. I only once casually saw some of the papers containing a high professional opinion on the prospects of a return should the canal be completed, and I think that the rate of ábiána therein assumed was far too high. I also think the cost of maintenance will be much higher than that commonly supposed. Should Government ever contemplate finishing the work, and every year's delay is increasing the cost, I trust I may be allowed to see the papers, and record reasons for my opinion. At present I am strongly impressed with a belief that any further expenditure will be a waste of money. The area occupied by, the canal, 10½ acres in Isa Khel and 28 acres in Marwat, has been, recorded as Government property.

124. The Bannu district is as a whole unsuitable for well cultivation because of the great depth of the water level
 Irrigation wells. There are no irrigation wells at all in the Bannu tahsil, and only two in Marwat, besides nine jhalárs on the banks of the Gambála. In Isa Khel and Miánwáli there are at the present time only 281 pakka and 13 kacha irrigation wells and jhalárs in use. The average area irrigated in one year from a well is only about three acres. The finest wells are those in the southern part of the Miánwáli Thal, but their working is expensive, the depth to water being from thirty-five to forty-seven feet. There are also some profitable wells near the high bank of the Indus on the Isa Khel side. Unlike the Indus Kacha

* Abdul Rahim Khan has now for a year past been digging a new and much less ambitious canal below his abortive one. This time he is trying to run the water round the hill instead of through it. He has a fair chance of success; but even if successful, I do not think the work will be remunerative. I have left the Deputy Commissioner a memorandum on the subject.

of the Dera Ismail Khan district, that in Bannu has few wells. The constant shifting of the channels of the river, and the height of the summer inundations, hardly permit of their construction. The few existing only supplement river inundation and percolation, and are more for drinking than irrigation purposes. The cost of a pakka well of a depth, say, of forty feet, would be as follows:—excavation and masonry lining, Rs. 300; gear Rs. 80; two yoke of oxen Rs. 75; total 455. Well cultivation might be advantageously introduced or extended in the following tracts, *viz.*, in and about the Bhitanni settlement of Haramatāh in Marwat, in the southern parts of the Miānwāli Thal, and along and in places under the high banks of the Indus.

125. Being surrounded by hills the plain-portion of the district receives the discharge of numerous hill torrents, most of which are more or less utilized as irrigators. None of these torrents have any perennial flow, but several are to a small extent constant during the cold weather.* The area so irrigated is however very insignificant. The supply of water, then, in the hill torrents of the district only continues whilst rain is falling within their catchment areas, and for at most a few hours after the rain has ceased. Again, as the catchment areas are not large, and as the rain-fall of the district and surrounding hills is very scant, and condensed into heavy discharges now and again, it follows that the absolute amount of water drained off into the plains is not very large, and that much when it does come runs to waste, the humble contrivances of the zamindārs being unequal to the stemming and storing of sudden floods. Then the beds of many of the streams in the plain have in the course of ages become so deepened that they now defy all the irrigation efforts of the peasantry. This is particularly the case in the two frontier tahsils. In them, once the water passes beyond the stony girdle skirting the hills, and enters the soft deep cohesive soil beyond, the bed of the stream sinks suddenly to from 40 to 150 feet and more below the surrounding level of the country, and defies all efforts to arrest and raise it. In such a soil the banks of the channels are abrupt, wall-like and unperceivable until you are on them. "As you ride along," Mr. Lyali has remarked about them, "in an apparently unbroken plain, you are suddenly brought up by finding yourself on the verge of one of these cañons." The hill torrents of the two Indus tahsils have as a rule broader and shallower beds. The reason being I suppose that the gravelly or sandy subsoil found at from ten to fifty feet below the surface tends to arrest degradation.

126. Having thus sketched the salient physical characteristics of the hill torrents of the district, I shall now say a few words about the way they are utilized in each tahsil:—

Bannu.—This tahsil has three great nalas. The largest is the Kashu-cum Jur, which flows from the Khatak country through the

* Water continuously flowing is called *tand* by Pathans in contradistinction to spasmodic flood water (*khare ubah* or *da nuruba*). Hindi speakers call the former *nahada pāni*, the latter *har da pāni*. The terms *kalā pāni* and *sufed* or *chitta pāni* in use in Dera Ismail Khan are not generally known here.

eastern Waziri Thal. Owing to the depth of its bed and brackishness of its water it is almost useless as an irrigator. The other two are the Khisor (Khesra) and the Shaktu from independent Waziristán. Both are utilized by the Bakkakhel and Jánikhel Wazirs. Both are good torrents, and have a small but almost constant flow in the cold weather. When water is plentiful, it is applied on the *saroba-páina* principle, when scarce by shares and turns. No separate maps and statements have been prepared for the above torrents. The customs of partition have been recorded in the administration papers. The cultivated náládár or hill-torrent area of the tahsíl is 17,421 acres.

Marwat.—This tahsíl has many nálás, but only three are used to any great extent, viz., the Nugram, Kharoba and the three streams, Larzan, Galra and Zarneja, which unite below Mulázai, and become the well known Sohél of Kundi in the Dera Ismail Khan district. The Nugram is turned to fair account whilst still in the stony girdle skirting the hills. Generally the *saroba-páina* rule obtains. The Kharoba is at present only used by the village of Bahrámkhel. The Marwats have in the last ten years made several laborious attempts to utilize it better. First the Adamzais erected an enormous earthen and brushwood bund across its deep bed. The bund stood for a year or two, but was at last swept away in a flood, perhaps because no adequate escape had been provided. To show that we make as bad mistakes as the zamíndárs, I may note here that two or three years back the Public Works Department threw a bund across a comparatively small hill-torrent bed near Ghaznikhel, and fully expected it to stand, but that the first heavy flood which came swept it away. Not discouraged by the example of Adamzai, Khairúkhel and Pahárhel, which are with Bahrámkhel the most upstream villages on the Kharoba, next attempted to bund its bed, and divert the flow just inside the hills, but the labour though vast proved vain. This upper position is the right one I feel sure for a bund, and if that energetic chieftain Sáhíbdád Khan again tries his hand, he should, I think, be encouraged, by which I mean the district officer might give him the best advice obtainable as to how to carry out the work, and might use pressure to induce villages which will benefit to send labour at an idle season. I tried to get an opinion on the project a few years back from an officer in the Irrigation Department then on duty in Marwat, but his superior would not allow him to visit the place, and so the opportunity was lost. I think the main thing to look to is that the level of the diverting channel through the hill side should be made as low and wide as possible to prevent a too heavy pressure on the bund, and that an escape should also be provided. As to the Mulázai torrents they are manageable and very largely utilized. Their waters are shared just as if each was a small canal. The recorded cultivated naládár area of Marwat is 21,338 acres.

Isa Khel.—The two great torrents are the Chicháli and Broch. They carry off much of the drainage of the Maidáni Range. Both are largely utilized. The general rule of partition is that of *saroba-páina*, but in families shares exist, and the position and size of most of the *gandís* or dams and training bunds are fixed. On the highest upstream

Chicháli villages shares are fixed, and the share-holding villages make and repair the head bunds. In all 9,371 acres are irrigated the two nálas. The Irrigation Department has a project for st the water of the Chicháli, by damming the bed at a narrow point inside the hills. I am inclined to think that the work will not be financial success. In an official memorandum written in January I have made some comments on the scheme which will I hope be considered should its execution ever be seriously contemplated.

Miánwáli.—Of the numerous torrents in this tahsil that known of the Salt Range as the Wahái is the largest, and is turned to account. It drains the northern slopes of the Sakesar hill, and contiguous parts of the northern and eastern sides of the Salt Range, pierces range in a narrow tortuous channel at Nammal, and once through it irrigates the lands of Musakhel and other large villages. Much of its water escapes into the Indus or percolates through its sandy bed, and is lost. It would I believe be cheaper to dam this torrent than Chicháli, and as it would command a practically unlimited area of cultivable waste, I think such a work would be more likely to succeed financially. The distribution of water in this tahsil is regulated in the same way as it is in Isa Khel. The Miánwáli náladár cultivates 33,350 acres.

Before leaving this subject I should note that, excepting in Bannu tahsil, separate maps and statements have been prepared for the larger hill torrents, as well as for each village benefitted by them. The order of subject is that followed for the Bannuchi irrigation canal as mentioned some paragraphs back.

CHAPTER VII.—LAND TENURES.

127. In the last chapter rights in water were examined. In rights in land will be similarly treated. I Apology for writing so much on tenures. aware that owing to the mass of matter which it is necessary to crowd into a Settlers Report, the subject of tenures seldom occupies many pages, and I may be rash in writing two lengthy chapters on them, instead of compressing all I have to say into one. However, as more than the money spent in this settlement has been so in order to ascertain and record water and land tenures, and as, this being a first regular settlement, I have had a good deal to do in shaping them both in their present forms, I hope this part of the report will not be considered disproportionately long. Where possible, I shall endeavour to trace the principal land tenures downwards from their origin, and give reasons for their existing forms. It will be simplest to deal with the *tahsils* and large tracts separately, and to only state a few facts regarding single villages here and there. Those held by Wain

Bhitaunis will receive more than their just share of notice as such troublesome people always do. The Nár and Landidák groups of villages having been mentioned in the last chapter, and having to be referred to incidentally elsewhere in the report, need not be described here.

128. Bannuchi communities are divided into a large number of

Land tenures in Bannu sections and sub-sections, each known by a common patronymic. The majority of the members of each are still settled in the same locality as they were generations ago, and are still inter-dependent in some material way, mostly with relation to their canal-irrigation system. The traditionary accounts of the Bannuchis respecting the original division of the country amongst themselves upon ancestral shares, and the sub-sectional apportionment of land and water within the limits of each main share in proportion to the amount of canal excavation work done, are consequently in all probability true. No periodical *vash* ever seems to have been customary amongst the Bannuchis except in the Hawed village. In some few families however an occasional exchange of plots or re-partition is made. An irrigated country is unsuitable for a communal tenure. It is difficult now to trace back any sort of measure of proprietary right to the third generation in more than a few villages. Examples of such exceptional villages are those owned by the Miris, the Moghalkhels, and the men of Hawed. Family feuds, and the necessity of finding money to meet Duráni and Sikh demands both combined to practically annihilate the regular devolution of property in families before we annexed Bannu. Under us of course all sons inherit equally, but the pressure of population causes land to be so constantly changing hands, that in this settlement it was rather the exception than the rule to find brothers on whom property had devolved ten or more years ago in possession of any thing like equal areas of land. The whole interest of Bannuchi tenures centres in those of water, which were described at some length in the last chapter. In the above remarks I only refer to old estates. Those of the Nár and Landidák tracts being of recent formation are still mostly what is technically termed *zamindári* of the communal or landlord type, or *pattidári*.

129. The Wazírs hold all the country lying between Bannu proper, the hills and the Khatak boundary.

Waziri tenures.

To the north are the Ahmadzais, to the south the Utmánzais. There was no common action between these two sections, when they were conquering or absorbing land in the plain. Once a hold was obtained on a large grazing tract each different khel or sub-section acted independently, and appropriated a portion at pleasure. According to popular testament a large portion of the Waziri possessions is said to have been acquired by purchase. "Acquired at a nominal price by involuntary sale on the part of the former owners," would, I imagine, be a less inaccurate statement of the case. In the course of the settlement I have observed repeatedly in Marwat, Bhangikhel and with respect to the Wazírs, that land undoubtedly taken in the first instance by force is said by both parties to have been "acquired

ever to have been customary amongst the Wazirs as a tribe. In particular families a practice still obtains of repeated temporary divisions, the whole holding being re-divided at each according to the or other known shares. This custom specially exists amongst the Bakkakhels and Jánikhels. Ignorance or disregard of it at times caused some trouble and confusion in the subsequent work. Matters were not put right until a careful *girdán* was carried out, after which the *báclá* was effected in a satisfactory manner. Plots found to be subject to re-partition in the above way were entered as one undivided holding in the common possession of the co-sharers. Partition depends apparently on a common agreement. It is rather occasional than periodical. No conditions have been laid down, nor has notice of the temporary independent occupation of parts of the common holding been generally taken. It was better to leave well alone, and not anticipate disputes which may not arise for many years to come. In such holdings the revenue is paid on the whole.

I shall now make a few remarks on the several Wazir holdings, taking them in order from the north, southwards.

Hathikhel—Their chief plots are called *Arl*—*stir* and *kam*, the large and small, and *Karlásta*, both of which once belonged to the *Marwats*, but were almost unoccupied owing to the few *Wazirs* of the two tribes. The larger *Arl* plot was divided on an ancient custom into shares long before annexation, and is still so held by the *Karlásta* land and the smaller *Arl* plot were regarded as tribal property. The early Deputy Commissioners held both in their disposal, and gave away thousands of acres to leading *H* who generally shared their grants with their relations. By this so-called Government land was settled on without payment to the *Hathikhel* squatters, and it was not until after measurement that this mode of acquisition ceased. Several of the grantees are now wealthy men and cultivate largely through *Khata*.

Ispirka.—Their possession consists of three tracts, Karlasta, Thal and Sadráwan, which were almost unoccupied owing to the rival claims of Bannuchis, Marwats and Khataks. The Karlasta portion was appropriated or "purchased" by the Sirkikhels; but, owing to their misconduct soon after annexation, it was treated as Government property, and some time after given partly to Sohán Khan Bághbánkheľ's sons, and partly to certain Badinkhels, who hold with the Sirkikhels. The Thal plot was squatted on by members of the Ispirka clan at pleasure. The Sadráwan tract was first divided according to the amount of canal excavation work done by each household, but, owing to subsequent alienations, little trace of such a partition is now to be found. Thus in all three plots the measure of individual possession at settlement was regarded as the measure of right.

Bizánkheľ.—Their possessions are in three plots, Sadráwan, Dabak and Adhami, and all three are said to have been mostly acquired by purchase, the first from the Surání Bannuchis and the other two from the Marwats. Individual right in the Dabak plot is derived from squatting, in the other two it depends on shares. The Sadráwan tract is still held sectionally on ancestral shares, but within the limits of each section families seem to hold by squatting. The Adhami land is as yet undivided.

Umarzai.—Their lands were obtained by seizure, and are now partly divided on shares and partly held by squatting. A large plot called Karlásta is still regarded as common undivided land. A few shareholders have squatted on it here and there. The whole plot should be divided as soon as possible. The clan has four sections, Tappai, Boza, Manzar and Sayad. The last named has hitherto taken little to agriculture. In this settlement a one-quarter share has been decreed it in the Karlásta plot, but not as yet in three others, viz., Sadráwan, Dabak and Sitti.

Muhammadkheľ.—Their plots are three, Kas or Kachrich; alluvial land in the bed of the Kurram, Patona and Khydari, the latter two on the right bank of the river. All were originally held on shares by the four main sections, consisting of Trafas, Muhammadkheľ Khas, Sadai-kheľ, Sudukheľ, and what I may call miscellaneous, but owing to dissensions and voluntary alienations the areas of individual holdings now bear no ratio to each other.

Bakkakheľ.—This clan and the cognate Jánikhels jointly acquired the tract they now occupy from the Barákzai and Nurar Bannuchis and the Musakheľ Marwats. After a time they amicably divided their conquest together. The Bakkakhels have three main sections, viz., Takhti, Sardi and Narmi, and their respective shares in the Doura or ancestrally divided lands are five, seven and six, each of which was sub-divided on customary shares. But since the original partition many changes have occurred, and the Takhtikhels, whose allotments were nearest the heads of the tribal irrigation channels, are now by far the richest both in land and water. Plots held from the first by individual seizure or "purchase" are collectively termed *dhand*. In them each man's holding has always been the measure of his right.

Jānikhel.—Most of their lands were acquired from the Marwa. Some plots are held by squatting and some on fixed shares, *data* particularly one called Doura, which is irrigated by the Shakdūni Khisor torrents. The water is also held on shares.

130. The following statement gives particulars about the Waziri Statistics of Waziri hold- estates referred to in the last paragraph and inga. as about miscellaneous plots they hold inside the limits of the Bannuchi tappas, all of which latter are supposed to have been acquired by "purchase." Many certainly were, though I think the original title to the majority of those in their possession an annexation was the right of force. The richer Waziri land-owners to the north of the Kurrai are, compared to their Bannuchi neighbours, well off and so lightly assessed that it is probable that within the next fifty years a good half of the Jhandukhel and Surāni tappas will pass by *bonā fide* purchase and mortgage into Waziri hands :—

Name of khel or estate.	Number of		Name of principal chak or locality.	Area in acres.			Remarks.
	Proprietors	Tenants.		Cultivated.	Uncultivated.	Total.	
Hathikhel ...	1,423	301	Arl. Karlāsta, and Marghādī	26,716	25,017	51,733	1. Area of nine chaks is noted in the last two columns.
Sirkikhel ...	350	95	Karlāsta, and Kas Mardikhel.	2,544	986	3,540	
Ispirka ...	823	116	Karlāsta, Thal and Sadrawan.	9,489	15,789	25,278	
Bizānkhel ...	416	...	Sadrawan, Dabak, and Adhami.	1,158	7,082	9,040	
Umarzai ...	684	...	Sadrawan, Dabak, and Sūti.	1,615	14,426	16,041	2. In some on the same proyids has been counted twice over, especially amongst the Hathikhels; all the proprietors are not Wazirs, some are Khataks.
Muhammādkhel ...	563	77	Kas, Patona, and Khy-dāri.	2,679	1,636	4,315	
Bakkakhel ...	1,180	17	Rabotak, Wazārand Mir-ali.	13,991	12,180	26,171	
Janikhel ...	816	170	Doura, Raghzai and Abūsaṭa.	13,371	26,808	40,179	
Ispirka, Umarzai, Hathikhel, Bizānkhel and Sirkikhel.	1,177	842	Miscellaneous plots in Surāni tappas.	808	58	866	All entries here refer to the lands held by Wazirs inside the limits of the Bannuchi tappas.
Ispirka and Bizānkhel.	106	17	Do. In Jhandūkhel...	206	2	208	
Miscellaneous Wazirs	407	97	Miscellaneous plots in tappas Khilat, Sherza Khan &c.	321	26	346	
Sudānkhel ...	43	10	Estate of Shahjahan Wazir in tappa Mandān	260	240	500	
Ispirka ...	43	7	Estate of Najib Khan in Bannū Nār.	740	54	774	
Total of Waziri holdings in Bannuchi tappas.	1,776	978		2,335	359	2,694	
Grand Total ...	8,003	1,749		74,698	1,04,243	1,78,941	

131. Now passing on to the Marwat tahsil I shall first take the sandy tract to the north of the Kurram which is known as Thal Tála. In shape it resembles an isosceles triangle, the base being the Kurram from Kachi Kamar to near Tang Darra; the apex, the Sekandarkhel hamlet of Abása, and the two sides being the watershed of the Maidáni Range on the east, and the villages of Landiwáh and Michaukhel on the west. The area thus enclosed is 64,670 acres or 101 square miles. For many years before, and even after annexation, it continued debatable ground, roamed over alike by the armed shepherds of the Khataks, Wazírs and Marwats. But by 1857-58 the southern limits of the two former tribes had been fixed, and the contention for exclusive possession remained to different sections of the great Marwat tribe alone. Nominally the whole area lay within the domain of the group of sections known as Dreplára, and of those sections the prominent claimants were the Achukhels and Sekandarkhels. With them also were some Ját families, and numerous representatives of the Mandrakhel clan. From annexation downwards until about 1860 the main occupancy of the tract was pastoral. Here and there were dotted small cultivating hamlets, which were abandoned in bad years, but re-occupied in good. By 1865 the number of squatters had largely increased, and the rival clans, the Sekandarkhels and Achukhels, began to bestir themselves in order to secure as much of the land as possible for themselves and their clans. Both sides appealed to the district officer, and a languid sort of investigation was carried on for the next five years. Maps were made, reports submitted by the tahsildár, and various orders were passed, but no result achieved. In the meantime the individual squatters, throwing off all tribal allegiance, were making the most of their opportunity, by extending their holdings as rapidly as they could, in disregard and probably in ignorance of orders prohibiting the breaking up of new waste, until the main dispute should be decided. At length early in 1871 the district officer (Captain Hare) passed orders in the case dividing the whole tract west of the Nushkin Nála between the rival clans, and reserving all east of it as Government property. At the same time he declared all squatters to be proprietors of their cultivated lands. Considering the weakness of all exclusive claims, and the expediency of stopping further litigation and confusion, Captain Hare's judgment, though summary and arbitrary, was both equitable and expedient. Both sides appealed to the Commissioner, Colonel Munro, but it was not until July 1873 that the appeals were decided. Colonel Munro gave the whole tract up to the Mushkin Nála to the Sekandarkhels, declared all east of that nála to be Government property and on the part of Government apportioned one-third to the Sekandarkhels and two-thirds to the Achukhels. The rights of the squatters were left for separate adjudication in the settlement courts. On special appeal to the Financial Commissioner, the Commissioner's order was upheld, and Government sanction obtained for that portion of the order disposing of the area which had been declared Government property. Meantime owing to the delays in settling the tribal dispute the position of the squatters had become very strong. Hitherto they had not been interfered with.

Between 1865 and 1874, the period occupied by the tribal case, temporary huts here and there had grown into strong permanent hamlets surrounded by cultivated fields.

132. As soon as the great case between the Achukhels and Sekandarkhels was decided, a series of suits for the ejection of squatters were launched in my court. The Sekandarkhels too quarrelled amongst themselves as to the principle on which they should divide their acquisition *inter se*, as well as about a general re-partition of all tribal lands. The judgment can be seen in the supplement to the *Punjab Government Gazette* of 27th November 1873. In most cases made the squatters, irrespective of clan, full proprietors of a portion of their holdings, giving each hamlet a small but compact area. The most recent squatters were made tenants under section 8 of the Punjab Tenancy Act, or declared to be tenants-at-will only. The rest of the land west of the Mushkin Nāla was parcelled out amongst the Sekandarkhels *per capita* on the basis of their 1857 *vesh* enumeration. In carrying out the orders of Government respecting the division of the tract east of the Mushkin over 41 square miles, both the Commissioner and district officer concurred in a proposal of mine to make a small prior *Kannah* or service allotment to the three tribal chiefs, who by personal exertions throughout the different disputes had been beneficial to their respective clans. Accordingly I gave two of them, Khan Mīr Khan and Hakīm Khan somewhat over 500 acres each, the third, Arsala Khan, 100 acres, and then divided the rest of the tract amongst their clansmen. I append hereto a statement showing the result of settlement action on tenures within the whole Thal Tāla tract.

Name of holders.	Number of holders.	Status.	Area in acres.	REMARKS.
Sekandarkhel clan west of the Mushkin } Do. Do. east of the Do. . . . }	580	Proprietors ..	22,019	Partition has been effected by Khels but not beyond.
Achukhel clan east of the Mushkin ..	2,222	Do.	16,768	Do. Do.
Kannah grants to the three chiefs ..	3	Do.	1,220	
Squatters belonging to one or other of the proprietary clans.	100	Do.	2,593	Most are Achukhels.
Squatters of the Mandrakhel clan ..	672	Do.	2,171	
Miscellaneous Jat and other squatters..	53	Do.	1,160	
Occupancy tenants of all sorts. ..	294	Occupancy tenants	2,982	Two-thirds hold under Section 5, and the rest under section 8 of the Punjab Tenancy Act.
Abdul Rahim Khan's grant	1	Granted conditionally by Government in 1871-72.	166	
Jats of Kechi Kamor	152	Inferior proprietors under Sekandar, Khels.	4,973	They pay <i>mālikāna</i> at the rate of Rs. 25 per cent. on the revenue.
Portion of hills attached to different hamlets.	..	...	3,291	
Total.	4,077	..	64,670	

133. This is a tract of arable but sandy land, intersected by several small ravines and torrent beds. It lies north of the Kurram between the Nariwah nála and the village boundaries of Maghára and Dadiwála, and has an area of 5,685 acres. Up to 1864 no squatters had settled within its limits, but the Marwats were in possession of it as graziers. In that year Shamani, a Khatak refugee from Shinwah, and some of his kinsmen located themselves on it. In the following year the Deputy Commissioner declared the whole area to be Government property, but gave the Khatak refugees and two Wazirs allotments aggregating about 1,000 acres. Their status was to be that of Crown tenants, but no rent was to be taken. Soon after the Khataks arranged their disputes with their chief, and many of them returned to their homes in Shinwah, but they occasional visits or through their relations retained a hold on their Marwat land. The Deputy Commissioner reported his proceedings for sanction to the Commissioner, but for some reason the case remained pending until 1871, when, looking to the fact of possession, the then Deputy Commissioner confirmed their holdings to the Waziri squatters and the case was filed. When in the following year settlement operations commenced, the whole area was treated as a part of the so-called Shamani Khatak estate. The Waziri and Khatak squatters growing ambitious sought to grasp all the waste for themselves. Disputes began, and an investigation into rights was made. It was established that the whole area was within the original tribal allotment of the Totazai Marwats, and belonged especially to the Ghaznikhel, Land, Titarkhel and Bayistkhel sections in equal shares. To undo what had been done in disregard of possession was inexpedient, and to divide the unappropriated waste plots *per capita* amongst the four sections above named was impracticable, the shareholders being very numerous, and the available area small. Accordingly I made certain proposals to the Deputy Commissioner and to the Officiating Settlement Commissioner (Colonel Davies), and with their concurrence settled rights in the following way. Two compact blocks of waste aggregating 2,515 acres were allotted conditionally amongst the thirty-one chief representatives of the Totazai sections concerned, and the tract erected into a separate estate termed "Kannah Totazaiyan." The rest of the land, 3,170 acres, composes the "Shamani Khatak" estate, and the Waziri and Khatak squatters have been recognized as full proprietors of their holdings. It was not considered necessary to obtain Government sanction, as the land had never been in fact Government property, and so my arrangements conformed to the wishes of the representative men of the proprietary sections of the Totazais.

134. The Marwats first settled on both banks of the Kurram, expelling the four Michankhel Niazis found there. But of the villages, Niazis the Michankhel Sarhangs being inoffensive men and known as fakirs, were allowed to remain. Their lands on the left bank of the Kurram fell to the lot of the Musakhel Marwats, who divided them amongst themselves. They then seem to have put back the old Sarhang occupants as their tenants, and these latter before long worked themselves into the position of mortgagees. For the last eleven

generations the mortgagors have been in the habit of occasionally raising money on their mortgaged holdings, and sometimes of selling and redeeming them. In this settlement I had the rare spectacle of a large proportion of the occupants of four villages, though in hereditary possession of their holdings for upwards of 250 years, acknowledging their title to be that of mortgagees only. Proof of the terms of this curious relationship had depended from the first on the verbal good faith of the parties concerned, as there were hardly any written instruments. * At attestation a series of most complex questions had to be resolved. Of the possessors, who held as purchasers, who as mortgagees, and what was now the mortgage money in each case? Of the mortgagors what was now the share or holding of each, and could that holding be redeemed? Disputes were numerous, but owing to the simple good faith of both sides solutions were easily effected. The right to redeem was seldom challenged. Those who have been entered as mortgagees are now liable to ejectment, ancient hereditary possession notwithstanding. However the redemption money has in all cases been fixed high, and some owners have accepted a few rupees and sold their holdings outright to the mortgagees. There now remain 1,296 mortgagors, whose lands are held by 230 Michankhel and other mortgagees. On all the rest of the area somewhat over two-thirds, the occupants have been recorded as proprietors. Hindús and Jats have now a great hold on all four villages.

135. Besides the tracts mentioned in the four last paragraphs and the village of Daddiwála, whose case is somewhat analogous to that of the Michankhel villages, except that the mortgagees are many of them Hindús of only eighty or one hundred years standing, there is a large extent of sandy Thal north of the Kurram, which belongs to the Totazai and Musakhel Marwats. The cultivation of the better plots began many generations ago, but progress was much hindered by attacks from Khataks and Wazirs. Owing to this and there being plenty of tribal land elsewhere, any group of families who could establish itself on the Thal, all more or less debatable land, acquired *de facto* a proprietary right, tribal claims notwithstanding. This mode of acquisition, *viz.* squatting on unappropriated communal waste and holding it successfully for a number of years against all comers is called *niwah* or "seizure." The now flourishing village of Landiwah was thus founded about 150 years ago by the Tajazai Totazais, and a few hardy outsiders. By admitting such men as co-squatters and giving them an equal share in their periodical *khula-vesh* partitions, and by their own strength, the Tajazais gradually knit together a strong well organized community on the Khatak border. Later on they had sometimes to give way before the cold weather incursions of the Wazirs, but as a rule they managed to hold their own. Of the *Niwah* estates Landiwah is the oldest and best

* The great mass of the mortgages recorded in this settlement throughout the district were so on the verbal statements of the parties concerned. The practice of drawing up a formal instrument in writing is of recent date, and is still uncommon in the litigious communities. All this I think bears high testimony to the natural honesty unsophisticated natives.

The other three, Wánda Mush, Gangú Nariwah and Maghára, date only from thirty to fifty years back, and are still little developed.

136. Vesh or khula-vesh (mouth partition) is a form of that primitive collective tenure of land which seems to have almost universally arisen when nomad communities first become sedentary. In time the collective form of "ever shifting severalty" gives place to one or other of the many existing tenures of fixed individual severalty. It has done so in most civilized countries, except in many parts of Russia and in some parts of India. In Marwat the system still survives, and shows signs of prolonged vitality in thirteen villages. In them all or most of the territorial blocks (wands), into which each village is parcelled, are held as communal property, which is periodically divided *per capita*, the portion of each share or mouth (khula) being decided by lot. After the expiry of the term of a vesh a majority may within any reasonable time demand a new partition, in which case a redistribution of the land is made. During this settlement the proprietary body of one large village (Abbakhel) commenced a khula vesh of themselves after my measurements had been completed. I stopped the work for a time, but when I found that a strong majority were anxious for the partition, I, with Mr. Hall's concurrence, allowed the village to proceed, and had to prepare my report *de novo*. The villages of Matora, Landiwah, and Mulazai also seemed to have new *veshes* early in the settlement, and hastened them in order to get them over by measurements. The village of Zangikhel also had out a *vesh* during settlement, the claim of the party, a strong minority, who opposed it, having been first heard and dismissed. Litigation during the settlement, precedents, and verified statement of custom established, that, when the term of a vesh has expired, whenever a considerable majority demand a new one it must be conceded; also that in vesh land cannot be sold, and that when mortgaged, the mortgagee is at the next vesh entitled to receive fresh shares to the number of those he held, or, if that be impossible, he should equitably be repaid his mortgage money. Conversely it has been established that on expiry of the term, a minority cannot enforce a new *vesh*, and that before the custom can be held extinct from desuetude not less than the number of years fixed as the term, dating from the expiry of that period, must elapse without a demand. In future when a considerable majority demand a new partition, if the demand is in conformity with the village custom as laid down in the administration paper, I do not see how the claim is to be refused. In a supplement to the *Punjab Government Gazette* dated 27th November 1894, contains some details on this subject, also pages 124 to 134 of my *Journal of Our Afghan Frontier*. The statements appended to both are subject to amendments and alterations due to subsequent attestation, legal proceedings, and judicial proceedings not now correct in all particulars. In the villages in Marwat, in which the practice of having general *veshes* has died out, a closely analogous custom still exists in some families under the name of *badlún* or "exchange." It is simply a periodically exchanging certain ancestral lands. The term ranges from three to twelve years and is often indefinite. Where the practice

obtains the fact has been recorded in the administration paper or in the Khewat Khatouni of the owners concerned, or in both. Cases of exchange will cause no trouble, as a mere mutation of names proceeding will suffice. I subjoin a list of the villages in which it may be expected that communal veshes will yet be made, or claims to make them be preferred. In 1873 I think I represented the vesh custom as more moribund than my subsequent experience proves it to be.

VILLAGE.	YEAR OF		REMARKS.
	Last <i>vesh</i> .	Expiry of term of existing <i>vesh</i> .	
Landiwah... ..	1873	1884	Will probably <i>vesh</i> . Term is twelve years.
Mulazai... ..	1873	1902	Term is thirty years. The <i>vesh</i> is a <i>vesh-badlun</i> of a very curious sort.
Zangi khel	1874	When Settlement expires.	
Matora... ..	1872	1883	
Mandrakhel	1870	1881	
Dabak Mandrakhel ..	Different	years	Has three tarafs each with a different custom.
Six Sekandarkhel villages...	1856	1876	Depends on a strong majority wishing it, which is very unlikely indeed.
Tála Sekandarkhel,	1876	1888	Ditto ditto ditto

137. Of special tracts south of the Kurram that of Harámatála

Bhitanni settlement of Harámatála in Marwat.

require some notice, it being a grant to certain Bhitannis. This people occupies part of the Gabar mountain, and thence southwards to the Gumal Pass in Dera Ismail Khan. In 1866 Major Minchin, the Deputy Commissioner of Bannu, took 2,500 acres of waste from several Marwat villages, allowing them some canal water as compensation, and gave the land so appropriated to the Dhanna and Wurgára Bhitannis. The conditions of the grant were that the grantees should be responsible for their passes, as the Wazirs were, should cultivate their estate themselves, and should on the expiry of a term of ten years pay a full-rate assessment. To facilitate cultivation an irrigation channel was dug from the Kachkot canal to Harámatála, as the settlement was called, and an allotment of water made for it free I believe of the obligation of doing a proportionate amount of tinga. From first to last 20,000 *kanáls* of "surplus" (*afzúd*) and 8,000 *kanáls* of "fixed" (*puktha*) water have been

given the Bhitannís. As Harámatála lies in the centre of Marwat, and in its appropriation little consideration was shown its ancient owners, the location of a thieving hill-tribe in such a place was very galling to the Marwats. Those "Masaud's jackals," as the Bhitannís were called by the Marwats, who had never ventured to show their faces in the plain in pre-annexation days, and who had been held in stern subjection by Major Nicholson, were thus bribed into better ways at the expense of a strong, loyal, but well-behaved tribe. For several years the Bhitannís showed small appreciation of their great good fortune. They did not settle on their grant. They did however sell their water to full advantage to the very men who had been expropriated on their account. But during the last six years a great improvement has taken place in this once ill-conditioned clan. They occupy their grant in numbers in the cold weather, and Marwats now cease to speak of Harámatála as the "thieves' station." Last year 839 acres were under crops, and of the cultivators a fair minority were Bhitannís. According to the boundaries and measurements of this settlement, Harámatála comprises 2,621 acres, mostly culturable. It has been divided into sixteen main shares thus:—

Wurgáras	...	...	...	...	2				
Dhannás {	Bababs	...	...	...	...	7	Tarakhels	...	3½
							Adamzais	...	3½
	Bobaks	...	...	...	...	7	Alikhels	...	3½
							Shadikhels	...	3½

The partition is so far on ancestral shares, but the allotments of the sub-sections of the clan, where a further partition has been made, are rather according to their respective strength in men than ancestral right. Many Dhanna Bhitannís still reside in the hills all the year round. The tribe has made provision for them in the administration paper to the following effect, *viz.*, absentee shareholders on settling in Harámatála and agreeing to pass responsibility will receive a proper share of land to be determined by agreement or by the Deputy Commissioner, provided they first make good a proportionate amount of past losses. The revenue-free term having expired, I assessed Harámatála at Rs. 250, which is a very light assessment. A good quarter of land is admirably suitable for well cultivation, sweet water being found at from fifteen to twenty feet below the surface. The net profits from the sale of *khár* manufactured in Harámatála are not less than Rs. 300 a year.

138. Besides the Harámatála location, the Bhitannís hold three other tracts in Marwat, each of which requires a passing notice, as the district officers may before long have to decide disputes as to tenure or the distribution of the revenue in them.

Bhitanní Paikásht Darakka.—This is a village containing 16,184 acres near Darakka. The Wurgára and Dhanna Bhitannís have been the cultivating occupants of the greater portion of it for many generations. They were originally partly squatters and partly mortgagees. In this settlement they asserted a proprietary title whilst the Marwats declared them to be mortgagees only. In most cases the summary order has been in favor of the Bhitanní occupant, and the Marwat claimant has

been referred to a civil suit, but none such has yet been brought. The Bhitannís have two hamlets within the Thakbast area and two beyond it on the eastern slope of their own hills. The revenue is very light, only Rs. 90, and is divided over the whole culturable acreage.

Ratanzai.—This little village contains 4,141 acres, and lies between Tajori and the hills. The Bhitanní portion was acquired by squatting about one hundred years ago. Ratanzai and Alikhel Bobak Bhitannís, also Marwats, are the owners. The former have two hamlets outside the thakbast limits in their own hills. The revenue is only Rs. 60, and is annually divided on ploughs by the owners themselves. This may cause dispute some day.

Bhitanní Paikásht Mulázai.—The 1,019 acres so designated are really a part of Mulazai, the largest of the three villages lately transferred to Dera Ismail Khan. The cultivating occupants are Mandikhel Warspú Bhitannís, and though many of them have been in possession for about eleven generations, they have mostly admitted themselves to be mortgagees, and have been so recorded. The whole account is very complicated. Thus the cultivating sub-mortgagee pays the Marwat owner half a topa of grain per *chhatti*, about one-forty-eighth, and the original mortgagee one-sixth the grain produce, who on his part finds a similar share of the revenue. The jama is only Rs. 100. It is distributed on the cultivated and fallow acreage. The two parties have hitherto lived in perfect concord, but should claims to redeem be brought, that concord will cease. I imposed a light assessment under the belief that the present occupants would never be ejected, and before their status had been determined. In the event of disputes arising I am inclined to think the old Bhitanní cultivators should be made occupant tenants, and redemption be refused.

139. Isakhel, west of the right high bank of the Indus, may be divided into three tracts, in most of which the Isakhel upland tenures. measure of individual right is now possession although it originally was ancestral or customary shares. Fines and other exactions, and the greed of the strong before annexation, and alienation and short-sighted action since, have wrought the change. I shall now make a few remarks on each tract, beginning with the most northerly.

Bhangikhel.—The Khataks are said to be descended from a common ancestor named Bolák, and the Bhangikhel branch is believed to have been in the possession of their present hilly home for over four centuries. Within the last four or five generations they have by purchase and other means acquired a good deal of culturable land from their Saghri kinsmen. They seem first to have divided their whole territory into blocks, allotting one or more to each of their sections. Within each block families squatted at pleasure until all the arable portion of the country was appropriated. After that property devolved in the ordinary way. But as the Bhangikhels grew in numbers, and had no objection to foreign service, many of their young men mortgaged or sold their patrimony and went elsewhere. The clan is now very

numerous, and most of the available ground is under tillage, hence alienations of land are frequent. As yet Hindús have little or no interest in the soil, but it is unlikely that this happy state of things will long continue. Cultivated plots, together with the surrounding waste, the drainage of which they receive, are held in severalty by the peasant proprietors, each of whom lives in a substantially built homestead on his own ground. But the greater part of Bhangikhel consists of stony hills suitable only as a pasturage for sheep, goats, kine and horses. All that part is still held in blocks and undivided.*

Mohár.—From Kálábágh southwards to Mítha Khatak the Bhangikhel and Gudikhel Khataks hold nine compact villages in that portion of the plain which skirts the Khatak Niázai range. Each village was settled independently. Of the nine, Mallakhel is the oldest, dating from before the Niázai influx into the country. Though all agree that the lands near the village sites were first divided on ancestral shares, such shares are now untraceable. The Niázais assert the Khatak colonists came down and settled with their permission and acted as their humble allies, but I hardly think such was the case. During the last two or three generations the Khataks have been largely displaced by the "Khwánín" and others in Kotki and Mítha Khatak.

Niázai and Ját villages.—The Trag, Kánjü, Kalú and Bhut Jats are all said to have been first settled about Tánk, and to have come with the Niázais *viâ* Marwat into Isakhel. On the partition of the country they were given land and settled down as separate communities. Both they and the Niázais divided their estates amongst themselves by lot on ancestral shares. Although the usual causes, and especially the power of Ahmad Khan and his successors, have reduced many of the Jats to the

* In this settlement out of three great disputes between the Bhangikhels and others, two have been decided and recorded, and an attempt to arrange the third has failed. They were as follows:—(1) The demarcation of the boundary line between the Bhangikhels and the Ságghris. I laid this line down early in 1871. After some small modifications it was sanctioned in 1877 by Government, and is now absolute. A printed copy of the correspondence on the subject is in the district office. Both sides are satisfied with the result. (2) The long pending question as to the Kálábágh's Chiefs' grazing rights in Bhangikhel-rakhs north of the Wagi Nála was disposed of by me in April last in the following way. The chief is only to graze his own cattle up to the following maximum numbers, viz., 150 kine, 50 horses, 50 asses during the three months of closure, one month within Babar limits, one within Jamalkhel and Jaldinkhel limits, and one within Khan-khel limits. There are some other minor conditions. (3) The Kálábágh chief used to cut grass and fuel on the Dangot mountain and convey it by boat down to Kálábágh. The Sháhikhel and Ferozkhel Bhangikhels did the same. Disputes grew frequent. In 1868 the former claimed the proprietary right to the hill, which I, at that time new to the district and people, with some reservations decreed. On appeal the decision was that the proprietary right lay with the Bhangikhels, but that the Kálábágh chief had acquired a prescriptive right to cut grass and fuel on the hill. The Chief Court upheld this order. Thus matters stand to this day. Several disputes and riots have since occurred. The entry in the settlement record is in accordance with the judicial order. I endeavoured unsuccessfully to effect a compromise in this settlement. I proposed that the proprietors should give up about 1,250 acres to the Kálábágh chief, he in return renouncing all claim to any thing beyond. The Bhangikhel would not agree. Sooner or later the dispute will have to be decided in some such way. I think that in 1868 I was deceived as to the boundaries of the hill. The decree should only have been for the abandoned site known as Dangkot and a little beyond, not for the whole mountain. For the last five or six years, I believe, the Kálábágh chief has cut neither grass nor wood from the hill, as the owners will not let him. Probably 1,250 acres are more than the Malik should receive.

position of occupancy tenants or inferior proprietors, this division of shares is still easily traceable in their villages. It is also so in *Kam Mushani*. Sultankhel, a large village north-west of Trag, seems to have been finally settled only four generations ago, by squatting. To the south amongst the powerful Isakhel *Niazais*, *talas*, *darras* and *lickhas* are still known, and to some extent followed. The first word may be translated as the allotment of a clan, the second as that of a group of families in the clan, and the third as a single share in such an allotment. As amongst the Isakhels, as with the Jats, the strength and ambition of Ahmad Khan and his successors, now represented by the "*Khwánin*," have done much to obliterate ancestral right, and shares are not acted on except where a *tal* is still held undivided, or in cases where the clan receives a fixed rent from the cultivators of the soil, *e. g.*, Kundal and Atk Paniala. Of the ten high bank villages in the south of the tahsil, of which the Isakhel clan were once proprietors, the "*Khwánin*" and Sher Khan together, now own the greater part of five. They or some of their members also own most of a large portion of four other upland and three other kacha villages. These latter three were however acquired since annexation. The "*Khwánin*" have divided almost all their paternal estate amongst themselves since 1856, and hold it on eight shares. But as the partition was effected by lot, the respective areas of the shares differ largely.

140. The lowlying tract subject to Indus inundation, known as the Kacha, covers an area of 439 square miles, pays a fluctuating revenue of from Rs. 65,000 to Rs. 1,20,000, and supports about 60,000 souls. Proprietary right in this Kacha was at annexation like the soil itself, in a very fluid state, and the tenures now at length determined and recorded owe their present forms, as much to the individual views of different officials, as to a rapid but natural evolution from earlier types. For many years subsequent to the allocation in their present homes of the communities now established on either bank of the Indus, the arable lands of the Kacha were a sparsely inhabited jungle, the home of the tiger, the swamp deer (*goon*), the boar and the hog deer. Here and there groups of Jat families, Hirayahs, Mahens, Bhambs, Chhinahs, Jakhors, Anotras, Trers, and many other góts led a pastoral life, shifting their quarters from time to time, whenever compelled to do so by the ever-shifting river. But immediately beneath the Pathan, Sayad and *Jat townships, fixed on both high banks of the river, there were strips and patches of cleared and cultivated land held in severalty on ancestral shares. In the jungle beyond lived the pastoral Jats just mentioned, each group confined to one particular locality within ill-defined limits. Those Jats were the ancient possessors of the Kacha, and seem long to have been left undisturbed by their later settled Pathan neighbours. Though practically might was right for each community

* Of the góts now holding land in the Kacha, Bhambs, Hirayahs, Mahens, Chhinahs, Chamale, Kalukhel, Narus, Kundis, Talokars, Kits, Trers, Jakhors, Kallus, Kalyars, Anotras also some Awans and Sayads seem to have been established in and about the Kacha before the *Niazai* Pathans spread from the west into the country. Some came subsequently *e. g.* Lands and Ponrahs and Utras.

ground the outside world, still men were few and land was abundant, so there was no occasion for the Pathans to hunt up and expropriate the amphibious Jat graziers. By Sikh times, however, numbers had largely increased. The villages crowning either bank at irregular intervals from Kálábágh to Piplán were strong. A common *modus vivendi* was necessary. So by degrees it came to be accepted that all the Kacha fronting each village was up to some joint boundary, generally the deep cold-weather channel wherever it happened to be, its communal property. Of the dominant communities the Mushanis and Isakhels along the west bank, and the Tajakhels, and after them the Ballukhels, and Wattakhels along the east bank held the largest domains. But on this latter side Pathan supremacy never extended south of a line drawn east and west about Kundi. There the two races met, commingled, and in conjunction formed village communities on equal terms. This Kundi was for many years the southmost limit of Sikh dominion, beyond which lay the territory of the Nawab of Mankera. On his fall, about 1822, the southern position of what now is Miánwáli became part of a separate administration and remained so until annexation. It was latterly included in Diwan Sawan Mull's Suba of Mooltan, and was administered by him, with one break of nine months from 1831 until his murder shortly before the first Sikh war. Though the Sikhs treated the whole kacha as crown land, the Pathan communities of the neighbourhood, and especially the Isakhels and Tajakhels never acquiesced in this view. Thus during Sikh rule squatters had two masters to propitiate. Many of the pastoral Jats had already settled down into a semi-agricultural life, paying, when coerced, a loose allegiance to the nearest Pathan village. Sayads too had squatted by invitation here and there, more particularly on debatable land, their sanctity securing them from attack by rival claimants. With the advent of Sikh dominion all cultivators became, so to say, crown tenants, and men of all classes were encouraged to break up jungle. A fee to the Kardárs obtained a sanad or lease, and such a title-deed was valid against all tribal rights. But despite such sanads, the neighbouring Pathan clans exacted when they could some dues. Thus the Isakhels took *loshatobra* or "plate and grain bag" i. e. corn for themselves and their horses, and the Tajakhels "*khuti*," which was a small share of the grain of each harvest. Not unfrequently some Pathan more enterprising than his fellows, either with or without a sanad, led a colony from his high bank township, and squatted on unoccupied land within the elastic limits of his tribal domain. Once a clearing was made, and a few shanties run up, miscellaneous persons would be sure to join in the undertaking. But at the best such colonies had a precarious existence. A successful one always provoked jealousies, and jealousies sooner or later provoked an attack, in which Sikh soldiery, acting under the orders or with the connivance of the fickle Sikh officials—often figured as principals or participators. The Sikh Jágirdárs and Kardárs or their underlings had small respect for each other's districts, and in order to compel the return of absconded cultivators or criminals or on some other pretext would poach freely on each others preserves, harrying cattle, burning huts and carrying off grain when they could. Though most existing estates in the Kacha were founded during the Sikh regime

yet so unstable was the tenure of possession, so fickle and changeable the character of each Kardar's administration, that the term "*alishahi*" is used to this day to describe official levity of temperament. There was one honorable exception. Within the limits of Diwan Samu Mul's Government, in which were the Mianwáli villages south of Kund, life and property were fairly secure. In those villages there was a clear distinction between proprietor and non-proprietor. When new land was required for cultivation by a person of the latter class, he either purchased it by paying a small fee called *juri*, or he held it as a sort of occupancy tenant, and paid a small fixed grain rent, *khuti*, or *sol-satárhuin*. The latter by the way was sometimes taken, not as rent but as a rate for village expenses, a cess analogous to the *malba* item of to-day. With the exception of this one favoured tract, it may be said that at annexation individual proprietary rights did not exist in the Kacha, and that whatever rights the actual cultivators may have had, they all possessed in an equal degree. Each settlement was effected on a joint-stock principle, and the founder or manager had at most a claim to some little special fee. The contrast between then and now is a favourite theme with Kacha grey-beards. There are still scores of them, vigorous old men now, who remember in the days of their youth how long stretches of the Kacha were one dense jungle tract of trees, reeds and tiger grass; how they and their countrymen would at times, having sworn a truce to all jealousies, assemble in hundreds and drive the country for days, and days snaring, spearing, and baiting pig and deer, and now and again shooting a tiger. Madad Khan Tajakhel, whose village paid Rs. 7,086 revenue in 1873-74, tells how his father Ahmad Khan led a colony from Mochh, the high bank parent settlement of his clan, and clearing land made a home for himself and his friends in the midst of the jungle, until one night the Sikhs swept down, killed his father, and burnt the whole hamlet; how after a year or two he propitiated the Kardár, resettled the deserted hamlet, and continued extending his area until in 1856-57 the bounds of his village were demarcated. Similarly Hasan Khan Isakhel, whose village paid Rs. 3,840 in 1873-74 * tells how having been robbed of his inheritance by his kinsmen, his father and uncle and himself sought safety and a new home in the jungle across the river. Established there they were attacked in turn by both Wattakhels and Tajakhels; were finally expelled by the Sikhs, and with their co-squatters, for several years sought shelter away south in Bhakra, and at last having made their peace returned to their jungle hamlet. Such was the Kacha with the exception of the divided and cultivated lands immediately under the high banks, about thirty years ago, and being such I think it is regrettable that on annexation the greater part was not declared

* I am sorry to say the *abádí* and much land were destroyed by fluvial action in June last. In trying to transport his grain to a place of safety, Hasan Khan lost two boat-loads and the boats as well. Early in May when I passed by the village, reapers were standing up to their knees in water cutting off the heads of the wheat. In other villages I saw men conveying heaps of corn sheaves to high ground by binding them together in little stacks and floating them down stream. Scenes like the above occur every year in the Kacha.

Government property, and recent cultivators crown-tenants. Had this course been followed, Government would now have been the owner of a valuable tract, and the people would have been saved from the harass of never ending litigation.

141. For the first four years of our rule, our officials had no leisure to inquire into tenures. During that period an immense area was brought under cultivation, and many new hamlets took root. Kacha tenures from annexation to the first summary settlement. In 1853-54 a summary settlement was made. Whilst it was in progress, the claims of old established communities on the Miánwáli side to levy what they called *khuti* (málikána or proprietary dues) from lately founded villages were investigated. It was found that many villages had never paid any *khuti*, that no fixed rate had ever existed, as the amount varied with the relative power of the two parties,—*khuti* itself being in fact a forced grain contribution extorted by strength from weakness, that Sayads had been exempted from payment, that *khuti* was sometimes taken by an individual, sometimes by a clan, and that the boundaries of the different so-called tribal domains were disputed. In the end most claims were disallowed, and where allowed, as they were for all the villages within Tajakhel limits and those of the "Piplán iláka" (Bhakra excepted) in the south of Miánwáli—a cash percentage on the revenue was imposed and grain rates abolished. The Tájakhels received an uniform rate of 3 per cent., and the Biloches and others of the Piplán iláka Rs.1-12 per cent. on the revenue. For villages in which the founder or leader of the colony (*bunyád-dár*) was a Tájakhel or Sayad, half of the percentage went to such founder, and half to the Tájakhel clan, in ancestral shares. Sayads and Tájakhel squatters paid, as such, the founder's share only. In other cases the whole percentage went to the Tájakhel clan. In the Piplán iláka the whole percentage went to the proprietary family. Thus all family or tribal claims over lately settled villages were either compounded for or dismissed. In every other respect every squatter was full proprietor of his holding, and could extend it at pleasure. Any man, who had broken waste, was within Tájakhel limits entered as being a *butamar asámi* or *málguzár*, both terms vague as to status; and south of such limits generally as a full proprietor. The founders were always made lambardárs, and in this latter capacity had the management of the waste. South of Khundi, within Diwán Sáwan Mull's former jurisdiction, certain families were regarded as having a right once for all to a small proprietary fee (*juri*) when a cultivator broke up jungle land. But nowhere had the recipients of fees (where maintained), whether *khuti* or *juri* or *sol-satárhwin*, any clear authority for prohibiting cultivators from extending their cultivated area. The object of investing founders or rather lambardárs with the management of waste was to promote self-government, and exclude outsiders if the community so willed. On the Isakhel side no pretence was made of making an inquiry into tenures at the first summary settlement. The Isakhel Kacha was not extensive at the best, and very little of it was at the time above water, as the main force of the Indus was then pressing towards its right bank. Such lands as were

not yet submerged, south at least of Trag, were mostly old lands in a part of the canal irrigated upland tract held directly on ancestral *shara*. But the rise and supremacy of one particular section of the Zakkukhet, and more especially of Umar Khan's family in that section, had given a shock to the old law of devolution, and encouraged individuals to grasp all they could. However there was little for them to grasp at, as most of the Kacha belonging to the Isakhel tahsíl at the time of the first summary settlement was under water. In both Miánwáli and Isakhel all the estates at any distance from the high bank, which had been settled in the preceding twenty years, were roughly classed as *butamari*. By this was meant that the breaking up of waste conferred a proprietary title.

142. Second summary settlements were undertaken in 1857-58 for Isakhel, and in 1860-61 for Miánwáli, and it was not until about those dates that village boundaries were generally demarcated, hence the most energetic communities rightly received the largest areas. In the interval between the first and the second settlements, many of the poorer squatters had sunk to the position of tenants paying in kind. Fixed assessments, coupled with the uncertain action of the river, had driven them to abandon their holdings, or compound with their *lambardárs* or others for the payment of the revenue in kind instead of cash. Besides this those who had been entrusted with the management of the waste, and who were generally shrewd, energetic men, had turned that management to good account for themselves, and were now large landholders. The 1857 to 1861 settlements did little more than repeat what had been done in 1853-54. There was no inquiry into rights. The cultivating classes in Miánwáli were generally settled with indiscriminately, whether recorded as occupancy or non-occupancy tenants or as inferior or full proprietors, and the Rs. 1-12 and Rs. 3 per cent. *khuti* dues mentioned above were raised to Rs. 6 per cent. and divided in the same way as before. In Isakhel there was little revenue-paying land, hence it was thought enough to give leases to *lambardárs* and frame no other record at all. Whilst the settlements were being made, the Indus was shifting over to its Miánwáli side. This change affected every holding, and, as the assessments were still fixed, poor cultivators, who had been settled with had no alternative but to abandon their lands or arrange with richer men for the payment of their revenue, and thereby commence a connection which has in most cases ended by reducing them to tenants. As the river shifted a general scramble ensued for its forsaken bed, most of which was after much litigation secured, and rightly so, I think, by Isakhel villages. The lands in the south, some of which had once been canal-irrigated, were mostly obtained by the whole clan, and the more distant lands by Umar Khan's descendants. The Deputy Commissioner too stepped in and appropriated a share for Government, in all about 11,000 acres, of which now only one compact portion of 2,772 acres remains as Government property. But the changes caused by the reversion of the Indus to the Miánwáli side were so tremendous, that it soon became an impossibility

to maintain fixed assessments, and so between 1862 and 1864 a fluctuating system of assessment was introduced (paragraph 203). This saved needy cultivators from the necessity of further relieving themselves from the responsibilities attaching to their position as revenue payers, and gave a great impulse to cultivation. The managers of waste everywhere strained their powers to the utmost, and by importing tenants, and clearing land, and other means, acquired for themselves what they could to the total or partial exclusion of their co-squatters. Knowing that a regular settlement was at hand, and aware of the ambiguous entries in the summary settlement records, the most sagacious lambardars and colony leaders (*Bunyád-dárs*), or their successors, strengthened themselves by inducing many of the cultivators to formally acknowledge themselves to have no higher status than that of tenants-at-will or at most occupancy tenants.

143. When at length the regular settlement did come, the two burning questions related to the status of those who

Tenures under the regular settlement.

had cleared waste, and whether they or the colony leaders had the right to clear what remained. As to the former it was evident that in the newer villages the founders had for years bid, so to say, against each other for cultivators, until a period arrived when waste became scarce and valuable, and tenants competed against each other for permission to cultivate it. The supposed transition year was fixed for each village, up to which anyone who had cleared jungle was declared to have thereby acquired occupancy or superior rights, the precise status depending on summary settlement entries, form in which revenue or rent had been paid &c., whilst those who had settled subsequently were held to be tenants-at-will. The year so fixed was for different villages, but was some one between 1861 and 1867. As to the second question, it was found that the area of the still unappropriated waste, except here and there in the actual channel of the Indus, was nowhere extensive. The right to cultivate what remained was generally declared to appertain to the founder or his representatives. In a few cases, *e. g.*, Bân Mahê, an allotment of waste was made to the body of the inferior proprietors, before the rest declared to be at the founder's disposal. In the case of the Isakhel Kacha south of Trag the question of proprietary right was not an easy one to decide. Most of the land had re-appeared after 1861, and the lease-holders, the cultivators and the Isakhel clan had all some grounds to claim. The latter had, I think, the best for all land which had a century before been on the high-bank and canal irrigated. The period of erosion was seventy or more years ago, and the date of emergence was in all cases recent. In the end the clan secured for itself on ancestral shares most of the Kacha of the villages of Kundal, Atak Paníála, Kacha Núr Zamán Shah, and Khaglanwála. The "Khvánín" succeeded in retaining more outlying estates. Of the many Kacha proprietors, besides several of the "Khvánín", who have now handsome and well secured properties, though twenty years ago their rights were little superior to those of their co-settlers, the richest are Daráz Khan, Hasn Khan, Maded Khan, and Ali Khan. Of the 6402 tenants in the Kacha

2,723 have occupancy rights,* 308 holding under section 5, and 1,848 under section 8 of the Punjab Tenancy Act, and 567 under special agreement. The remaining 3,679 are tenants-at-will. Of the occupancy class a large majority have been recorded as having a right to recover their holdings in the same way as a full proprietor can on the re-appearance of the land on the same site after any period of submersion or erosion. There was no custom to the contrary, and it would I think have been unfair to the descendants of the old Jat graziers of the Kacha not to safeguard to them such a privilege. Moreover it is an established principle of law that mere submersion does not alter the ownership of land, and that "tenancy with a right of occupancy is just as much ownership in its way, and as far as it goes, as any other right of property. It is a dismemberment of the proprietary right" (See Full Bench judgment of the Chief Court appellate side, civil case No. 1389 of 1876).

Those who hold by agreement are mostly the "butamárs," who would have been made inferior or full proprietors of their holdings had they not admitted in writing that they were of a lower status. Of the 14,396 proprietors, other than superior, 9,358 are full and 5,038 inferior proprietors. Both classes are almost entirely self-cultivating. It must be acknowledged that the Kacha tenures are complicated; but considering the past history of the tract, I do not think I could have made them simpler, and been just to its ancient Jat inhabitants, who loosely owned the Kacha before the influx of Niázais and Sayads.

144. The Miánwáli upland tracts are three, the Mohár and Danda villages to the north, which receive the drainage from the western side of the Salt Range, and which are mostly owned by Niázai Pathans, the Thal proper to the south held by Jats and miscellaneous communities, and the Pakhar iláka east of the Salt Range owned by Awáns. I shall briefly mention the forms of proprietary right in each.

Mohár and Danda--Each of the existing Pathán communities settled independently. Land being plentiful, and cultivators few, no regular partition seems ever to have been made. Each family squatted and cultivated where it chose. But as soon as the available area had all been loosely appropriated, regular partition became the rule, and holdings began to devolve in equal shares to sons. Thus much of the land now appears *pattiwand*, the shareholders in each patti being descended from a common ancestor, and collectively known by his name. As with the land so with the hill torrent water. But owing to its limited supply, the difficulty of dividing it, and the almost excusable greed of the upstream holders, the general rule now approaches one of *saroba páina* i.e., of highest, first, and lowest, last. But in many cases the size and position of dams or training spurs, and the share of water each is meant to intercept, have been determined by civil suit. Similarly, in many families, a like result has been amicably attained, and been entered in the settlement record.

* About 100 more tenants were declared by me to have occupancy rights under section 8 after this paragraph was written.

Thal.—Both communities and individuals acquired their exclusive rights by squatting. Until boundaries of estates were laid down in 1856-57 Government had, I think, a better claim to all outlying waste than any of the villages within whose limits it was measured. To the south, whoever sunk a well became *de facto* regarded as the proprietor of the culturable area around it, and of a sufficiency of grazing waste as well for the pasturage of his plough oxen. Every member of the so-called village had a right to sink a well, and sometimes outsiders did so too with or without the permission of the sub-divisional officer. This was the practice until a few years after the second summary settlement. To the above general rule there is one exception. The lands immediately surrounding Van Bhachrán were acquired about one hundred years since by a Bandiál chief named Malik Súrkhurú, progenitor of the present Maliks. He built a fort there, and each workman was recompensed with a strip of land adjoining it. The land so allotted was called *thobíwand*; *thobí* meaning as much earth as a man can raise in his two hands. Theoretically all the rest of the land was at the disposal of the chief, and after him of his descendants. But the colonists soon proved too strong for them, and broke up new land in all directions. After annexation the then chiefs, two brothers named Maliks Sardár Khan and Ahmadyar Khan, instead of combining against the encroachments of the men of their village, opposed each other, and much litigation ensued. At this settlement I have endeavoured to rehabilitate the family by recording all unappropriated lands in the names of the two heads of the house. As to the Ván Bhachrán waste south of the high road and elsewhere, what now remains unappropriated by either individuals or the state has been recorded as *shánílát deh*. On partition shareholders cultivating plots here and there will be entitled to retain up to the area of their respective shares, but it is not contemplated that any partition should be made, as only a small area is culturable without an increased water-supply, and as pasturage is wanted for the village cattle.

Phakar iláka.—Awáns have owned this tract since, it is alleged, the time of Sultan Mahmud. It is divided into five large and two small villages. The way the Kálabágh chief acquired Masán and Niki is described in paragraph 151. In Thammewáli and to some extent in Chakralla, the two large central villages, one family obtained pre-dominance in Sikh times, and made itself proprietor of nearly the whole of the former village, and about one-fifth of the latter. After long litigation the custom of primogeniture was ruled to obtain in the family. With the above exceptions the holdings in the tract are not large and possession is the sole measure of right. For years after annexation any villager who chose seems to have brought waste under the plough and became thereby the proprietor. In Sikh times cultivation was not extensive, as there was no security for life and property, and owing to the irregularity of the ground much labour was required to level a plot and divert water on to it.

BANNU TAHSIL.

145. *Bannu proper*.—The measure of right of each proprietor is his holding. There is hardly any *shāmīl* land at all. Almost all tenants are tenants at-will. The proprietors are mostly self-cultivating, and the area of each holding is something very small, generally under two acres in all but poor villages. Rent rates vary greatly in the different tappas, and according to the crop grown or whether cultivation is by the spade, or plough. They range from a half to three-fourths of the produce. The average for good land is two-thirds. There are no cash rents. In all but the two lately settled Nār and Landidāk circles the rule is that the landlord supplies both seed and manure. Canal clearance work generally falls on the tenant, as an ordinary condition in his lease. The following table condenses information on this subject.

Name of Circle.	Number of			Percentage of tenants to owners	Average area in acres of cultivated land held by each individual of classes.			REMARKS.
	A. Non-self-cultivating owners.	B. Self-cultivating owners.	C. Tenants-at-will.		A.	B.	C.	
Lohra ...	196	2,901	251	8	...	4	4	1. There are only 104 occupancy tenants in Banna proper. 2. As the numbers of the various classes here and elsewhere have been obtained by adding up the numbers in each class in each village some of one class appear in another, but not many. 3. The average area of tenants holdings is larger than that of proprietors because they generally cultivate the poorest and most distant from the village site lands. Besides they could not live on smaller holdings and pay the heavy rents they do
Landidāk ...	55	265	124	89	...	6	12	
Bannu ...	1,130	17,038	3,843	21	...	1	3	
Nār ...	46	97	659	464	...	22	18	
Trikha ...	685	4,765	815	15	...	1	6	
Total ...	2,111	25,066	5,689	23	...	2	5	

(2). *Waziri country*.—The Wazirs are mostly self-cultivating. The Ahmadzais employ Khataks and fellow clansmen as tenants: the Utmanzais, Marwats and fellow clansmen. The rent is generally a share of the produce, but sometimes it is the revenue and a small kind rate in addition. The prevalent rates are one-fourth and one-fifth the grain produce amongst the Ahmadzais, with frequently one rupee per plough added, and from two-fifths to one-fourth amongst the Utmanzais. In no case is a share of straw taken by the landlord. Rents amongst the Wazirs are rising, and I have no doubt that before many years pass the average rate will be about one-third, if not higher. The number of non-self-cultivating landlords is very small—only 366 amongst the

Ahmadzais, and 142 amongst the Utmánzais. There are only 190 occupancy tenants amongst the Wazírs. Other particulars are supplied in the following statement :—

Section or Village.	Name of		Average area in acres of cultivated land held by an individual of classes.	
	A.	B.		
	Self-cultivating owners.	Tenants-at-will.	A.	B.
Hathikhel	1,345	285	16	18
Birkikhel	335	95	3	15
Iperka	843	116	3	5
Bisankhel	450	19	3	2
Umarzai	606	4	2	4
Muhammakhel	668	95	3	5
Bakkakhel	1,210	29	7	12
Janikhel	842	17	7	29
Total.	6,299	660	7	13

MARWAT.

The great mass of the Marwat peasantry are self-cultivating proprietors, each holding containing on an average six cultivated acres. Occupancy tenants are only 766 in number, and are mostly a creation of this settlement. Other tenants, who are mostly Jats and Marwats, hold from harvest to harvest. The average extent of their cultivated areas is six acres. The general rent-rate in sandy unirrigated tracts is equivalent to one-half of the grain produce; on stiff hill torrent or kaslahdar land to a little under one-quarter; and on irrigated lands to one-third. Until within a year or two ago tenants generally paid the revenue in cash plus a kind rate of from one-fourth to one-sixteenth; but since the distribution of the new jamas pure kind rates are becoming general. The above rates are very high for the sandy tracts, when compared with the lowness and uncertainty of the yield. I was inclined to attribute them to the heaviness of the assessment coupled with the entire dependence of the Marwats on agriculture, and their reluctance to leave their homes, and Mr. Lyall's experience enabled him to instance a case in which the high pitch of an assessment raised the rent rates over a large area of country.* But he added that "the little labor involved in the cultivation

* Since the distribution of the Isakhel assessments the higher pitch of the revenue in the Kacha has been repeatedly urged as a plea for enhancing the rent-rates paid by occupancy tenants.

in all parts of the tahsil, and in the light sandy soil of the three southern circles in particular is, in my opinion, one great cause of the high rent-rates." I subscribe to this view. When it is sufficient to drill in the seed without previous ploughings, and then to leave the rest to the season, as is the case in sandy soils, it is reasonable that rent-rates should be high. The following statement exhibits details:—

Circle	Number of			Average cultivated acreage held by individuals of classes.			REMARKS.
	A. Non-self-cultivating owners.	B. Self-cultivating owners.	C. Tenants-at-will.	A	B	C	
Pakha ...	387	7,551	619	...	5	5	The areas held by men of classes A and B are really larger than these shown, because some twenty per cent. of them hold land in different villages and are therefore counted more than once in this statement. Of class A I am convinced fully half, though employing tenants on some lands, are also self-cultivating.
Gadwad ...	97	4,998	476	...	8	7	
Tandobah ...	240	4,141	775	...	5	5	
Nár ...	40	961	464	...	7	13	
Shiga ...	235	9,908	848	...	6	6	
Shiga Khatina.	125	9,119	481	...	6	4	
Total	1,124	3,678	3,663	...	6	6	

ISAKHEL

Unlike tahsils Bannu and Marwat, nearly half of the cultivation, if we exclude Bhangikhel and Khatak villages, is done in Isakhel by tenants, and of that class nearly two-thirds have occupancy rights. In the two exceptional tracts just named the cultivators are mostly peasant proprietors. Owing to the power of the landlord class, the uncertain status of many of the tenants since declared to have occupancy rights, and in cases the heaviness of the old jama, there was at the beginning of this settlement, and there is still in the Kacha and on lands owned by men of the Isakhel clan, a great sameness in the rent-rates of both occupancy and non-occupancy tenants. The majority of the former and a large minority of the latter now pay the revenue in cash plus from a one-twentieth to a one-sixth share of the grain produce, the average being one-tenth. Such a rate is generally held to be equivalent to a full one-third share of the produce, which is the prevalent tenant-at-will rate, when the rent is paid in kind alone. There has been for the last year or two a general movement on the part of landlords to enhance their rents. In the Kacha the tendency is to raise kind rents to one-half the grain produce, and tenants are easily found willing to pay at this rate. The increased acreage revenue demand, and the general improvement in the soil of the Kacha during the last few years, are the two reasons which are inducing

landlords to insist on being given a larger share of the produce. The following table shows the relative numbers and classes of proprietors and tenants. As five acres represent the average area of cultivated land held by both tenants and self-cultivating proprietors, there is no occasion to specify it in each case :—

Circle	Number of				Percentage of tenants to owners.
	Non-self-cultivating owners.	Self-cultivating owners.	Occupancy tenants	Tenants-at-will.	
Angikhel	...	1,432	25	353	26
Bār... ..	68	1,585	455	240	42
Ida... ..	32	2,810	568	663	43
Sha... ..	393	1,594	1,209	622	92
Sha-Pakka...	1,034	543	192	104	19
Miri... ..	58	1,960	1,773	601	118
Total	1,585	9,924	4,222	2,583	59

MIANWALI.

Of the whole cultivated area 31 per cent. is so by tenants, who as Isakhel are most numerous in the Kacha. There are many too in the large villages in the Pakhar circle. The rent-rates are various, and at first sight perplexing, as a large number of tenants, and many of them tenants-at-will too, pay the jama themselves, and in addition the rent or proprietary due either in cash or in kind as the case may be. The cash payments range from Rs. 6 per cent., which is the commonest, to Rs. 15 per cent. and such kind payments from $\frac{1}{4}$ to $\frac{1}{2}$. This state of relationship between tenant and landlord is most frequently found in the Kacha, and is to be explained partly owing to the heaviness of the tax on some of such lands, and partly, and in several villages solely, owing to the state of uncertainty in which the want of a regular settlement had long kept both the būtamār, and the so-called proprietor of the broken waste, with regard to their respective rights and status. In a few cases attestation or decree of court has brought about the anomalous result that a tenant-at-will or occupancy tenant is paying the rent to his landlord as an inferior proprietor to his superior proprietor, namely, revenue and six per cent. on it. For tenants-at-will paying in kind alone, one-half the produce is the usual rent rate in the Kacha and

one-third elsewhere. In the Pakhar iláka a one-third share of the straw is also taken. Elsewhere landlords generally left all the straw to the tenants, but of late many of them even in the Kacha have commenced to exact a share. The average cultivated area held by a self-cultivating proprietor is four to seven acres, and seven acres by a tenant. The following statement gives the same particulars as given in the last paragraph for Isakhel:—

Circle.	Number of				Percentage of tenants to owners.
	Non-self-cultivating owners.	Self-cultivating owners.	Occupancy tenants.	Tenants-at-will.	
Kacha	126	4,440	426	2,085	55
Kacha-Thal	41	2,806	301	190	17
Kacha-Pakka	403	3,713	555	988	37
Pakhar	160	1,668	486	1,109	87
Mohar	37	1,413	156	191	24
Thal	48	1,603	204	194	24
Total	815	15,643	2,128	4,767	42

146. Occupancy tenants are classed under their respective sections and clauses of sections of Act XXVIII of 1868 (Punjab Tenancy Act). A number also hold by special agreement. The few who exist in the Bannú tahsíl are found amongst the Wazírs, and have received their rights in this Settlement. The same may be said of those in Marwat. There they are confined to tracts brought under the plough since annexation. Most of them have received their rights in virtue of having cleared waste in dangerous outlying tracts, and held for some years as *quasi*-proprietors. They pay at various rates either revenue in cash and a small share of the produce, or from a fourth to an eighth in kind plus an equivalent share of the revenue. Most of those holding under section 8 in the Isakhel and the Mianwali tahsíl are found in the Kacha, and derive their status from having broken up and cultivated jungle waste at a time when tenants were less easy to obtain than now. They generally pay the revenue in cash plus Rs. 6 per cent. on it, or plus a kind due of from one-eighth to one-twentieth. In addition to the privileges secured them under the Act some have also the right

to alienate their holdings, and most have a title to resume possession of submerged land on its reappearance :—

The following statement gives some particulars about tenants of all sorts in the district.

Name of Tahsil.	Number of tenants entered in Khewat.	Occupancy tenants according to section 5.		Occupancy tenants according to section 8 and special agreement.		Tenants-at-will.		Percentage of Total cultivated area held by tenants.
		Cash.	Kind.	Cash.	Kind.	Cash.	Kind.	
Banru ..	6,643	9	170	30	85	..	6,349	5
Marwat ..	4,429	17	82	34	633	912*	2,751	2
Isakhet ..	6,805	445	233	2,430	1,114	882†	1,701	9
Mianwali ..	6,885	142	63	1,600	323	1,181	3,276	5
Total.	24,782	613	648	4,094	2,155	3,275	14,077	4

In the above statement all tenants, who pay the revenue in cash are entered under the heading "cash" whether in addition they pay *malikana* or *khuti* in kind or by way of a percentage on the revenue. A few occupancy tenants holding under section 2 are included as if holding under section 5 of the Punjab Tenancy Act. The total number, holding by special agreement are 263 in Marwat, 966 in Isakhet, and 608 in Mianwali. As claims to enhance rent will be frequent and persistently pressed, it is advisable to say a few words on the subject here. Those holding under section 5 or under special agreement are more or less protected. But the Punjab Tenancy Act is silent as to the limit of enhancement for those holding under section 8; yet they are as much entitled to a privileged rate of rent as any others. I lately held in a case that the law applicable is that laid down for tenants under section 6 of the Punjab Tenancy Act, *i. e.* that their rent can be enhanced up to 15 per cent. below the general rate paid by Kacha tenants-at-will of the neighbourhood. Mr. Lyall on reference concurred in my view. When rent is paid in the form of revenue in cash and kind due over and above, I think the revenue in cash should be held in the Kacha to be equivalent to one-fourth a gross produce rate, and elsewhere to one-fifth. On the whole I hope the district courts will be able to leave the rent-rates much as they are during the term of settlement. For the last year I have in as many cases as possible fixed the rent-rates for the term of the settlement.

* They are mostly ejected proprietors who now cultivate their former holdings as tenants and pay a part of the revenue in cash and a kind rate as well.

(†) Here and in Mianwali such men pay the revenue in cash plus a kind rate over and above. Probably they will all soon have to pay purely kind rents.

147. In this and the following four paragraphs I propose to give outline of several remarkable land cases decided during the settlement. In Duráni times, over a hundred years ago, a Kabul adventurer named

Nusrat Jang and Garhi Sher Ahmad.

Sher Ahmad, married a Bannuchi woman, and settled in Bannu per. Before his death he had acquired for himself a handsome estate, since known by his name. His last male descendant died in 1861, on which various claimants started up striving unsuccessfully to win the rich prize from the person in possession, the late owner's step-mother. She died early in 1872, when the Deputy Commissioner declared that the greater part of the property had by Muhammadan law escheated to the State. On appeal the Commissioner of the Division waived the claim to escheat, and bestowed the bulk of the estate on a relation by marriage of the last proprietor. This led to renewed litigation amongst the deceased's Bannuchi connections. Suddenly a new claimant appeared upon the scene, one Nusrat Jang, a man of position in the court of the Amir of Kabul, who, through his agent, asserted himself to be sole heir, his father having been full brother to Sher Ahmad, the original acquirer. The proof of his identity being very unsatisfactory, his suit was dismissed. On appeal he was allowed to withdraw his claim, and sue *de novo*, could he bring witnesses from Kabul. After a time his agent brought four, and through a misunderstanding took them first to Mooltan. Subsequently a commission was issued for the taking of evidence in Kabul, which, being taken, I, with some misgiving, decreed for the plaintiff, and the judgment was upheld by the appellate courts. This was in 1875-76. Soon after Nusrat Jang, the successful man, paid Bannu a visit, and after a time returned to Kabul, leaving an agent named Ganga Ram in possession of his estate, which consists of one-fifth of a rich little village close to Edwardabad now assessed at Rs. 450. Since his return nothing certain has been heard about him. I mention this case as it illustrates how land could be, and was, in places acquired generations ago amongst the Bannuchis, and how in this settlement a foreigner's persistence gained him a handsome property, when almost to the last his chances of success seemed hopeless. The fact is that owing to the waiver of claim by the state, the land went a-begging, and any Alkozai, to which clan Sher Ahmad and the successful claimant undoubtedly belonged, had in the opinion of most Muhammadans a preferential claim to a mere marriage connection of the latest Alkozai holder.

148. The Lohra is a hill torrent bed extending northwards for about seventeen miles from near the Marwat base of Shekh Budin. From time immemorial Kakakhel, a tail village, had used its water

The Lohra dam in Marwat.

whenever there was any, until about two generations ago when a Marwat chief acquired that village's rights in the channel. He and after him his successor have since taken a water-rate in kind from one or other of the tail villages irrigated from the Lohra. In 1862 several of the upstream villages constructed a dam in it; but each within their own limits, in order to intercept what water they could.

A case ensued, and they were ordered to desist until they should establish a right to the water by judicial decree. Meanwhile their dams were carried away, so no action was brought. Early in this settlement the village of Masha Mansur ran a bund across the channel, within its own bounds, and afterwards sued for a declaratory decree for right to do so. The broad question at issue was whether an up-stream community had a right to intercept water which had long passed on unused through its lands to those of a down-stream community, which had long applied that water to its own benefit. A consensus of opinion in Marwat affirmed the right of the upstream village, and that abstention from the use of a channel for any length of time did not affect that right. At most it was held that the up-stream village could be equitably required to break its bund, after that bund had fulfilled its object. There were a few weak precedents, but no decisions in support of this view of the general custom. I decreed accordingly. As no appeal was instituted, although I pressed the defendant to appeal, I referred my decision to Mr. Lyall, and he held that it was very doubtful whether the broad principle could be asserted. The fact is that the bunding of hill-torrent beds is in its infancy in Marwat, and that the view taken by the Marwats was rather what they considered the custom should be, than what it is. A Marwat argues much as an Englishman might :—"A man may do what he likes with his own : whatever is within my boundaries is my own : therefore all water flowing inside them is at my disposal." Though I at the time intended my judgment in the above case as a precedent, and it will be so quoted locally in future, I now think that each dispute, as it arises, must be decided on its special merits, and that easements can and ought to be recognized as much between communities as individuals. In cases like the above the way any change will affect the revenue-paying capacity of land must also be taken into account.

149. The Jalálpurs had between 1814 and 1848 sold and mortgaged different plots of their Kacha to the Kálabágh chief. Then had followed a long period, during which the greater part of it was submerged. In 1857 the boundaries of Meher Shah's adjoining village of Mukimanwála were demarcated, but Jalálpur representatives were not present at the time, and as the uncultivated land between the two estates was mostly a sand waste, neither side took possession of it. Some years after patches here and there became fit for the plough or otherwise valuable. Meher Shah claimed them in virtue of his *thákbast* boundaries. Disputes ensued, which culminated in 1867 by an attempt at arbitration by the tahsildárs of Isakhel and Miánwáli. Finally Meher Shah was, owing to his 1857 *thákbast*, declared in possession, and the other party referred to a civil suit. This was brought in 1871, the plaintiffs being the Kálabágh chief and the Jalálpurs. I decided the case in the following year mainly on the old mortgage and sale deeds produced by the plaintiffs, and an admission made in 1855 by the defendant. By my decision, which was upheld on appeal, plaintiffs only received 1,500

Proprietary right to part of the bed of the Indus between Jalálpur and Mukimanwála.

acres, but the boundary line between the parties' villages was so laid that fluvial action will probably some day give plaintiffs much more. Whenever the Kacha, now secured to Jalálpur, does become culturable, it is probable that the Kálábágh chief and his late co-plaintiffs will differ about their respective shares and interests. The settlement record, as far as now possible, provides for such a contingency. The special interest of this case lies in the fact that it was the last of the series of cases between Isakhel and Miánwáli villages contending for the alluvion thrown up between them, when the Indus forsook channels near its right bank for others near its left.

150. A year or two before annexation some Tájakhels squatted within their jungle domains in the Kacha. Proprietary right to Zarif-wála in the Kacha. Soon after a Sayad did the same, but was ejected by the Tájakhel squatters. In 1853-54, they refused their assessment, whereon the Sayad was put in as farmer. The Tájakhels repented of their folly as soon as the Sayad's tender was accepted, but were told to wait until the next settlement. When it came, the Sayad again managed to obtain the lease, having in the past five years trebled the cultivated area, and secured ample boundaries to the estate. From first to last the litigation and quarrelling about the right to cultivation of jungle lands was incessant, but in effect the Sayad was always victorious. In this settlement the Tájakhel family sued to eject the Sayad on the ground that he was a revenue farmer only, and I found for the plaintiffs, but gave the defendant in consideration of his long connection with the estate a proprietary title to about one-fifth of it. On appeal, Mr. Lyall, holding that results, rather than the wording of the different orders which had been passed since 1853, should govern his judgment, gave each party half the village. This case is instructive, as it illustrates how weak a proprietary title in the Kacha was for some years after annexation; how in those early days Government officers regarded the jungle lands of the Kacha as almost at their disposal; how a clever pushing Sayad was able to carve out for himself a large estate, in which he first gained a footing in 1853 as a farmer; how a slow stupid Pathan and his party were throughout twenty-five years of dispute, in and out of court, always worsted by their intriguing Sayad adversary; and how, lastly, the different courts, who passed orders in the different cases, used the same revenue terms and words descriptive of status with very conflicting ideas as to their respective meanings.

151. Niki is an outlying village in Pakhar, and has had a chequered history. When the Sikhs early in this century pushed their conquests to the Indus, they found the Awán occupants of Masán and Niki in a very weak and divided state. Neither village possessed any strong man. The former was managed by the Kálábágh chief, who had already so established his hold over its few scattered hamlets as to be regarded as its proprietor. In the latter, internal and external feuds had stripped the leading Karmalikhel family of all real authority, thus giving their powerful kinsman, who held Masán, an opportunity to

thrust himself into a dominant position. The Sikhs made over both tracts, villages they could hardly be called, to a *jágírdár*, who after a time entrusted the realization of his dues to the Kálábágh chief, allowing him the usual fee of one-fourth of the collections. This was about 1822. From that date until annexation the men of Niki paid one-fourth produce, and the Kálábágh collector became their patron and quasi-landlord. After annexation the proprietary right to the village was disputed by three parties, the Kálábágh chief, the hereditary peasant cultivators, and the descendants of the old resident Karimalikhel family. The latter's claim was very weak and easily dismissable. Until this settlement the two former never brought the question at issue between them fairly into court. The cultivators were weak and short-sighted, the chief strong and astute enough to see that every year's delay in the determination of his status strengthened his position. Every disagreement ended in a compromise, until in 1862 many of the villagers loosely agreed to pay one-third grain and call themselves occupancy tenants. But still the dispute continued, the one party periodically complaining of exactions and petitioning for the fixation of a money demand, and the other year by year riveting his hold on the village. Then this settlement came, and at last the villagers sued boldly for proprietary rights. After a lengthened inquiry I made the Malál, Ganjál, Garjál and Buchál cultivators inferior proprietors, and certain others occupancy tenants. On appeal Mr. Lyall reduced the status of the former to that of occupancy tenants under section 3 clause 5 of the Punjab Tenancy Act, and fixed their rent at one-third grain alone, without a share in chaff or stalks, and he also declared that a rate locally termed *būha*, something between house-tax and a ground rent, could not be taken. The other plaintiffs he declared to be tenants under section 8 of the Act. On further appeal to the Financial Commissioner, that court modified the latter part of Mr. Lyall's order, laying down certain restrictive conditions, under which alone such tenants were to be declared to have occupancy rights awarded them. The case was not finally decided until July 1876, and rights in the village have since been settled in the way ordered by the Financial Commissioner. In Masán the Kálábágh chief's *jágír* village, tenant, rights have been determined on much the same grounds, but the number of occupancy tenants there is not large. I draw special attention to the status of the cultivators in both villages, as both lie in a little visited tract, and Yár Muhammad Khan, the Kálábágh *jágírdár*'s eldest son and future successor, who manages Masán and Niki, is a vindictive, unscrupulous landlord, and will take every opportunity to render life a burden to dependents who act as if they had any rights of their own. Unless curbed, I fear he will on some pretence or other prevent them cutting their crops until over-ripe, and when cut, keep the grain undivided on the threshing floor until it rots.

152. The waste lands near Dadiwála in Marwat have been used as a grazing ground for regimental and other Government camels for upwards of twenty years, but it was not until early in 1871 that
- Government grazing rights near Dadiwála,

any attempt to form a rakh was made. Until that year the Pawindah had occasionally pastured animals there in common with those of Government, although no doubt the Military guard in charge of the latter had at times warned off outsiders. At last in 1871 an area reported to be 4,000 acres was demarcated, within which Pawindah and Wazirs were prohibited from grazing their animals. Early in the settlement the Military authorities, and the Deputy Commissioner, suggested that the above area should be recorded as appropriated exclusively for the use of Government camels. As however the land was owned by and in the possession of the villagers of Dediwala, and their rights of pasturage and breaking up waste could not be challenged, I replied that such rights must be respected. On measurement the demarcated area turned out to be only 3,081 not 4,000 acres. Under the circumstances I have declared grazing rights in waste lands within the whole *thakbast* area of the village, 10,169 acres, to belong exclusively to Government and the village community.

153. Mention has been more than once made of the Indus having between 1856 and 1863 shifted over from the Isakhel to the Mianwali side. In doing so, much of its old bed became dry, and was from a point fronting the large village of Kamar Mushani down to one opposite Meher Shahwali taken possession of by the Deputy Commissioner as Government property, on the ground that it was the ancient bed of the river, or if beyond the limits of its cold weather banks or channels, was ancient waste. As the different plots emerged or became culturable, they were disposed of in the way which at the time appeared most appropriate. A portion, which was properly an accretion to Kamar Mushani, and had once been owned by that village, was distributed on ploughs indiscriminately amongst all the cultivators of that village, the grantees being recorded as crown tenants. Another portion was farmed out for Rs. 750 per annum to selected lambaridars of villages, to which, had the Deputy Commissioner not interposed, much of the new land would have accreted. But the largest block was reserved as unappropriated Government waste. From this latter small grants of from 80 to 150 acres were irregularly made from time to time in favor of military pensioners and other deserving men. During settlement the whole case was reported to Government, and on the receipt of orders* rights in the different plots were determined in the following ways:—

- (1). Where land had been allotted on ploughs, each cultivating tenant was made proprietor of his holding, and the waste which had been allotted, but not yet divided, was declared the joint property of the proprietary brotherhood of the village. The area thus disposed of was 5,075 acres.
- (2). In a similar way the farmers and their fellow cultivators were made proprietors of their holdings in the farmed plot, and the unappropriated waste therein was declared the joint property

* No. 662, dated 6th April 1876 from Secretary to Government Punjab to Secretary to Financial Commissioner.

of the proprietary brotherhood of the three villages to which the land would otherwise have accreted. The whole area has been erected into an estate called Harseh Kallari. Its area is 2,079 acres.

(3). The twelve grants made on the Commissioner's authority were confirmed up to the limits of the areas respectively granted. The total amounts to 1,016 acres.* The land has been assessed with Kamar Musháni.

(4). All the rest, which consists of four blocks, has been reserved as a Government rakh. Its area is 2,772 acres. Masonry pillars have been erected round it. Regarding it the Financial Commissioner recorded that he thought it "very desirable that some of this land should be sown with *sissu* or other forest trees. The land should be kept free from all encumbrances of cultivators, and this can best be done either by making plantations on it, or by leasing it for grazing, and for collection of spontaneous produce such as bulrushes or grass for thatching. If the area is to be planted with trees, a proper establishment will be required." I doubt whether under the present uncertain action of the Indus a plantation can be advantageously formed with a fair prospect of twenty years stability. For the present I have leased the land for grazing purposes for a small sum. In future it should be leased at the same time as the new Miánwáli rakhs. Should the river deposit much silt on it, as seems probable, it would be much more profitable to Government to give a longish-term lease, making some condition for arboriculture, and permit cultivation, charging a heavy acreage rate thereon, and bringing the cultivated portion under the fluctuating system of annual re-assessment, which is now in force in the Kacha.

154. I shall close this chapter with an account of "the Kacha Shisham Forest," and explain how the conflicting rights and interests of Government and the people therein have been settled.

Government *shisham* trees
and blocks in the Kacha.

I have shown in paragraph 140 how in Sikh times much of the Kacha was an uncultivated jungle studded with trees, the most valuable of which was the *sissu* or *shisham*. These were loosely regarded as crown property, but villagers were allowed to cut and remove them on payment of a small fee. No restrictions were imposed on grazing or cultivation or the lopping of branches for an agricultural purpose, *e. g.*, making ploughs. Thus the Sikhs confined their action to realizing a royalty on the felling of timber. For many years after annexation no special steps were taken for conserving what has since been officially called, though the term is a misnomer, "the Kacha Shisham Forest," the ordinary local police being supposed to look after it. At length in 1860 a small but inadequate

* Two grants aggregating 100 acres made in this settlement to Sher Khan and Sultan Ali Shah are not included here.

establishment was entertained. Correspondence had then commenced on the subjects of conservation and demarcation of blocks. In the meantime the number of the trees was rapidly diminishing. Systematic plundering went on. Trees were surreptitiously cut for boat building and charcoal burning purposes, and periodical jungle firing prevented reproduction. Added to all this, cultivation was extending; and the reversion of the Indus to the Miánwáli side had the effect of annually carrying away much valuable timber. In 1865-66 the late Dr. Stewart, then Conservator of Forests, inspected the tract, and at his instance an enumeration of the trees was made. They were admittedly Government property, but the ground on which they stood belonged to the people. However the best blocks were demarcated and appropriated as state property, and soon after a conservancy establishment at an annual charge of Rs. 1,500 was entertained. Though the land had been appropriated in 1866, the compensation question was still in abeyance when settlement operations began. It had already been decided that the management of the "forest" was to be made over to the Forest Department. An officer deputed by that department had demarcated fresh lands: and the Deputy Commissioner had been directed to arrange "for the transfer of the lands on payment of the compensation on the basis formerly proposed" in 1866. But the land owners concerned had never assented to that basis. The value of land had meantime increased, the cultivated area was much larger, and, greatest bar of all, the Land Acquisition Act had been passed in the previous year. Nothing was done, until in the cold weather of 1872-73, the Lieutenant Governor (Sir Henry then Mr. Davies) visited Miánwáli, when the state of the case was represented to him, with the result that I was directed to frame a new compensation estimate. I did so, and found that the land could not be acquired under an outlay of Rs. 57,000. At the same time I expressed a strong opinion that it was not to the interest of the State either to incur such an expenditure, or to hand over the management to the Forest Department. My reasons were that the land proposed to be purchased was very unstable, that were it devoted to arboriculture there would be some actual and much prospective loss of land revenue, that it was improbable any financial success would ensue, and that the practical difficulties in the way of management by the Forest Department were serious. I also proposed an alternative scheme of my own.

155. Eventually Government suggested a compromise, and it was proposed that one-third of the land appropriated in 1866 together with the outlying trees should be given up to the land owners, in return for their renouncing all rights over the remaining two-thirds of the appropriated land and trees growing thereon. This proposition was, subject to final sanction, put into effect by me in 1874-75, with the general result that Government has secured full proprietary right over 1,413 acres of forest land, comprised in ten separate plots, and containing in 1873-74, the year of enumeration, 11,383 *shisham* trees; whilst it has resigned all proprietary claim to 65 acres containing 3,256 trees. Besides this the right of Government to

Rights of Government in the trees and of the land owners in the land settled by compromise.

two-thirds of the submerged plots, that is to say, to an area of 901 acres in seven separate plots, has been asserted and admitted, and their position and boundaries have been fixed in my field maps. The villages concerned have also entered into an agreement whereby both the conservancy of the released trees and reproduction will be secured.

156. The conditions of that agreement are as follows:—
 Terms and objections of an agreement about released trees and land stated.

- (1) Right of pre-emption in all cases to belong to Government, also right to purchase full grown trees for a public purpose at the following scale of prices:—
 Rs. 18 for first class trees, *i. e.*, over 5 feet in girth.
 Rs. 12 for second do., *i. e.* over 3 feet do.
 Trees under 3 feet in girth not to be cut.
- (2) All *sissus* within released area, and those outside it not recorded in *khasrah*, *i. e.*, under 12 years old in year of measurement, to be the property of person on whose land they may be growing, whether he be occupancy tenant, inferior or full proprietor. Thus superior proprietors have no interest in them.
- (3) All released and recorded *sissus* to be held *shámilat deh*, until contrary be proved, except in zamindári villages, where the zamindár is proprietor.
- (4) No. recorded *sissus* to be cut down without permission, except in cases of necessity, *e. g.*, owing to danger from river, and in every case a report to be entered in the patwari's diary.
- (5) Out of released area about 5 per cent. provided that in no case shall more than two acres be required, to be reserved as a *sissu* plantation, and such trees to belong to village.
- (6) In any village in which the number of *sissus* shall greatly decrease, and no good cause for such decrease be shown, Government to have right to take any steps it may deem necessary for the preservation of the remaining *sissus*, and for reproduction.

My object in requiring the above conditions to be subscribed to was to secure conservancy and reproduction, and prevent as far as possible useless litigation. The trees having been hitherto admittedly Government property, I had the right to decide to what class each tree, on its release, should belong. Had I not done so a door to endless litigation would have been opened. As to unrecorded trees, the principle is clearly sound that the actual cultivator of the soil on which they are growing, if of the status of occupancy tenant or higher, should be presumed to have best claim to them. Being saplings it must have been owing to his care that they ever sprang up and thrived. Again as to the

prohibition to fell recorded trees without permission (rule 4) such a rule was necessary to prevent their general destruction. Probably some fifteen or twenty years hence all such trees will have been cut down and eroded, and by that time the zamindars will have learnt that such culture and cultivation can both go on together. I think this rule should be worked very vigorously, and any infringement of it punished by an appreciable fine. At the same time an application should not be refused when any good reason for felling a tree can be shown.* As to rules 5 and 6 I think they should only be enforced when it is clear a village is doing its best to prevent reproduction.

157. The arrangements described in the last two paragraphs were sanctioned by the Punjab Government (No. 355 F dated 18th November 1875) as well as a proposal I had made to reduce the cost of the establishment from Rs. 1,500 to Rs. 600 a year. The administration of *shikhar* trees and reserved blocks of the Kacha is conducted by the Deputy Commissioner through the officer in charge of the Midwadi sub-division. Some of the isolated blocks belonging to Government have been lately trenched and lightly fenced in, by which a measure of reproduction has been secured as well as considerable profit from the sale of bulrushes and the silky headed *munj* grass for thatching purposes. The plots still open for grazing should, I think, be similarly treated. The income in 1876-77 was Rs. 1,815 and in 1877-78 Rs. 2,300. In both years two-thirds of this income was derived from the sale of the grass and reeds in enclosed blocks.

CHAPTER VIII.—FISCAL.

158. In this chapter I propose to sketch the fiscal history of each tahsil separately from pre-annexation times up to the close of the second summary settlement, and then to take a rapid survey of the work done during the measurement, attestation, fairing and distribution stages of this settlement. I shall next describe in some detail the data and principles on which my assessments were made, and shall attempt to explain why I thought it advisable to pitch them considerably below the half assets maximum standard. I shall then explain and endeavour to defend the method on which I framed my revenue rates, put on record my own opinion on the

* This hot weather (1878) the river has been very destructive to the *siew* cutting away several hundreds. The fine reserves in the villages of Madatwala and Dhallia Asmat seem doomed to disappear in a year or two, as the main stream of the Indus is now close to them. Care should be taken to cut and remove the best timber before it is too late. Scores of fine trees were needlessly lost this year, the zamindars, being afraid to fell them, and the Superintendent not doing so. The prospects of the central blocks, which contain the best timber are not bright. The river after leaving them untouched for upwards of forty years, seems now about to make a clear sweep of them.

weight of the new assessments, and make some suggestions relative to the future working of this settlement. Some cases of special assessment will then be noticed.

Finally the arrangements for the administration of the newly formed Government grazing rakhs in Miánwáli, and for the working of the fluctuating system of assessment in the Kacha will be detailed.

159. What amount of revenue was extracted by the rulers who

Early fiscal history of
Bannu proper.

preceded us, it is impossible to ascertain. The Sikh demand, less all deductions, was nominally Rs. 40,000, and had the Bannuchis agreed to transmit this sum annually to Lahore, and kept to their engagement they might at this day have been not subjects but simple tributaries. Their maliks possess the original document, bearing date the 17th March 1847 and signed by Lieutenant Edwardes, Assistant Resident Lahore, in which the offer to leave them to themselves, provided the above sum was regularly paid, was made. However, that offer was rejected. The country was in fact so distracted by dissensions from within and Waziri encroachments from without that the tappa maliks could not have distributed the tribute on themselves, and sooner or later annexation and direct management would have been necessary. In Duráni times, and to a certain extent during the plundering visitations of the Sikhs, the unit of assessment was the tappa, the limits of which corresponded with the limits to which the chief of the tappa had for the time being extended his authority. There was thus no fixity. Each tappa was a little independent state, now warring with a neighbour, now at peace, now gaining and now losing territory. When the tax gatherer, whether Durani or Sikh, came with his army and demanded tribute or revenue, he rated his demand on the tappa Maliks, and they in turn with the aid of the Sayads and Ulama, who were generally exempted from contributing, realized the sum required as best they could from those of the landholders under them who had not absconded, and in all cases he who paid the quota of a defaulter became *de facto* owner of that defaulter's property. The rule was a harsh one, engendered and upheld by the necessities of the times. By another and still harsher rule the mortgagor of land remained responsible for its revenue; hence even up to the present date the important issue in pre-annexation mortgage cases is which of the two parties to the suit paid revenue on the disputed plots in Sikh times. When Lieutenant Edwardes occupied the valley in 1848-49 on behalf of the Sikh Darbar, he found the confusion of rights in land so supreme that he conferred proprietary right on all who could prove five years possession.

160. For the first four years of our rule the duties of border

Bannu proper continued.
hām tahsil years (1849-50
1852-53), and first sum-
mary settlement (1853-54 to
1857-58).

management precluded any attempt at the making of a summary settlement, and the revenue was collected by crop appraisalment of each field. From Bannuchis was taken the money equivalent of one-quarter, and from the Sayads, Ulama and Wazirs of one-sixth of the gross produce, less certain small preliminary deductions. Five per cent. of the collections were remitted to the village

maliks, and a similar additional percentage to the tappa. In 1852-53 a first summary settlement was made, the demand being the average of the collections of the preceding four years. The hamlets were grouped together and called a *mauzah*, and the holdings, wherever situated, of those resident within each of hamlets, and of the average of the past collections on them, respectively the area and the assessment of the so formed *mauzah*. But in most cases the tahsildár performed the work for them. If he did so, he generally followed the old collection returns, each individual field at one-fourth or one-sixth as the case might be, of the average yield of the four *khám-tahsíl* years. The papers turned out, some in Persian but most in Hindi, are, considering the place, wonderfully elaborate and accurate. The settlement was every thing but in outward form closely akin to one of a ryot.

161. It ran for five years, after which a second settlement was made, which came in 1858-59. The new settlement was but little from its predecessor. Here the *jama* was slightly raised. No other change was then introduced. Ordinarily at both settlements each field was separately measured, although at the first the areas were worked out from foot measurements, whereas at the second an improvised chain was used, the measurements proved remarkably correct. The *jama* imposed at the second settlement was, judged by the tests now applied, a full one, equal in its incidence on villages, and the careful discrimination shown proves what good revenue officers Majors Nicholson and Wazirs were. In some villages the distribution owing to the indifference of the proprietors concerned, was faulty, but the cases of hardship were not numerous, and the revenue has generally been collected with

162. The above paragraphs concerned Bannu proper and the Wazirs. On either side lay the plain possessions of the Wazirs. In all revenue matters they were treated much as their Bannuchi neighbours, but having very little *bárání* cultivation, and being still more nomadic than agricultural and sedentary, little revenue was extracted from them. Amongst them some few sections of

those Ahmadzai Wazirs, who possessed flocks of sheep and goats, there was also levied a grazing fee in kind of 250 fat-tailed sheep each year. At the first summary settlement the land revenue was fixed in the same way as for the Bannuchis, and the kind grazing fee was commuted into a cash demand of Rs. 359 per annum. Some tracts of land were however not assessed, but remained under direct management. With regard to the assessed plots within the Bannuchi tappas, the demand on them generally fell lighter than that on adjoining Bannuchi held land, because, owing to the careless way in which such plots were cultivated, their gross produce estimate was lower. At the second summary settlement some directly held plots were brought on the rent-roll, and the demand here and there slightly raised. At neither settlement was the cultivated area actually measured. In both cases either the early khám tahsil measurements were taken, or the area under the plough was roughly guessed at and no more. Up till about fourteen years ago, when different sections began to apply for a survey with a view to distribute their revenue on their cultivated acreage, the methods of distribution had been various, either on shares in water or on houses, ploughs or heads.

163. At the first summary settlement the jama was Rs. 1,04,163.

Working of the two summary settlements.

At the second the demand was raised to Rs. 1,13,467. The amount of potential revenue lost to the State by the assessment of lands

held by Sayads and Ulama at a rate one-third lower than the general standard rate was not ascertained at either settlement, but it now appears to have been Rs. 6,458. At both settlements the five per cent. allowance to Bannuchi tappa maliks, now treated as an inám from revenue, was an extra cess. The Bannuchis have always paid their revenue with creditable punctuality. Owing to the certainty of a crop, and the assessments being based on actuals, their villages were generally fully but fairly assessed. As the years went on, communications improved, belief in the stability and absolute justice of our rule increased, trade with the hills, and particularly with Dowar and Khost, became more secure, and consequently larger, and the population of the cantonments and adjoining town grew greatly in numbers. The tracts which benefitted most were the villages adjacent to cantonments, and others less central, which possessed surplus water and waste culturable land on which to apply it. High prices too generally prevailed from 1864-65 to 1871-72 inclusive, and during those years the Bannuchis were very prosperous because of the constancy of their crops. Drought or a small return on táráni lands means prosperity for the Bannuchis, and *vice versá*. For the six years preceding 1878, Bannu proper may generally be said to have been in bad circumstances. During them the cheapness of wheat, maize and barley, and the impending assessments, appreciably lowered the market price of land, which generally ranges from twenty to forty years purchase of the revenue. As to the Wazirs, it is enough to say that, although in the first year or two of the currency of the two settlements their assessment may not have been very light, they soon became so from the expansion of cultivation, until at last they became for several of the clans, notably the Hathikhels, hardly more than nominal.

164. The Marwats state they first paid tribute in the reign of Bahadar Shah, son of the Emperor Aurangzeb. Early fiscal history of Marwat. Be that as it may, it is certain that in Duráni times they sometimes paid as tribute or revenue from Rs. 12,000 to Rs. 40,000, and that a force had generally to come to enforce the payment. Between 1819 and 1836, the sum said to have been annually extracted from them by the Mankera Nawab or the Sikhs was from Rs. 30,000 to Rs. 40,000. In 1836 Maharaja Ranjit Singh formally annexed Marwat and farmed it to one Diwan Lakhi Mull for Rs. 40,000 a year. To him succeeded as revenue farmer the well-known Malik Fateh Khan Tewana, who in 1844 built a fort at old Lakki. In theory the farmer took a fixed share of each crop, but in practice he took all he could. Malik Fateh Khan made a sort of revenue settlement with the tappa headmen by agreeing to take only one-sixth the gross produce and *roti*—a small extra cess to defray the charges of hospitality. This extra cess was in fact a poll-tax, and brought in about Rs. 12,000 a year. The people rose against it. On Major Edwardes entering Marwat in the spring of 1847, he found the rebellion had just been quelled. He at once abolished the hated *patkai*, as the poll-tax was called, and raised the Government share for all but the Sayad and Ulama from one-sixth to one-fourth—an act which he says “was hailed as a perfect enfranchisement by the people.”

165. For the next five years—1848-49 to 1852-53 inclusive—Marwat was held under direct management, the Government share being the money value of one-fourth of the gross produce calculated by appraisement of standing crops, but an abatement of one-third was made in favor of the Sayads and Ulama, and the village and tappa headmen received certain grain allowances as *baráts*. Marwat continued. Revenue arrangements in 1848-49 and from annexation to first summary settlement. There are no trustworthy records extant to show what was the sum annually realized during this period. The only document bearing on the subject is a sort of revenue note book, prepared by Pandit Hari Shankar, once tahsildár of Marwat, when making the second summary settlement of the Parganah in 1857-58. In it is a column showing the average of *khám-tahsíl* collections from 1848-49 to 1851-52 inclusive; and putting them at the enormous figure of Rs. 1,33,818. The estimated area under cultivation is also shown at 92,577 acres. It does not appear whether the sum of money above given is meant to represent the commuted cash value of gross produce before or after deductions in favor of Sayads, Ulama, head-men, *barát-khors*, appraisers, &c., but it seems to me that most probably it refers to Government's gross demand, *i. e.*, full commuted value of one-fourth and one-sixth produce, and not the net demand, *i. e.*, amount actually credited to the state.

166. The first summary settlement was made by Major Nicholson. The revenue rate adopted by him was one-fourth the supposed average annual produce. The collections of the preceding four years furnished the data for assessment. The initial jama imposed was Rs. 1,11,357 to increase progressively to Rs. 1,13,840, and the

cultivated area was estimated at 88,351 acres, to which must be added areas of ten villages not then measured, or about 11,000 acres. The Sayads and Ulama were assessed at the full quarter rate, and the grain allowances to leading men were in many cases resumed. The jama was an excessively severe one, and a year or two after its imposition in some of the most severely assessed villages remissions were made to a total of Rs. 5,852. This settlement was of the roughest possible description, and ran for five years, namely, from 1853-54 to 1857-58 inclusive.

167. Major Coxe, Deputy Commissioner, made the second summary settlement of Marwat. The standard of demand was the same as that in the former settlement. This settlement was almost as rough as its predecessor, but of course there were better data at hand to assess on. The cultivated area was guessed at—it cannot be called measured—by *ghora kashi*, i. e., a man on horseback rode through the fields at different angles counting his horse's paces. Each pace was held to be so many feet and inches, and then by multiplying length by breadth the area of a plot was obtained. A lump sum was assessed on each village, and its proprietors were left to arrange amongst themselves for its distribution. They either paid on shares, or on the appraised out-turn of each plot or supposed area held by each. No sooner was the jama announced, than first one village and then another applied to the tahsildár to distribute it on their acreage. This process commenced in 1859, and was still going on when this settlement began, by which time the acreage distribution had been effected for forty-two large villages. The second summary settlement record was made up of three documents, a *patta*, a *kabuliyat* and a *khewat*, the latter being a sort of administration paper showing amount of jama, how it was to be paid, and generally the relations between Government and the revenue payers. Pandit Hari Shanker, Tahsildár, was the local Superintendent of the settlement, and it was to assist his assessment work he prepared the sort of rough village note-book referred to in the second last paragraph. The entries in the book are in the hand-writing of a subordinate tahsíl official, and unfortunately few are initialled or signed by the Pandit in proof of his having tested their accuracy. The gross produce estimate was partly obtained from the *khám* tahsíl collections of the first three years of our rule, and partly from a statement prepared by the *patwaris*, showing the supposed yield of the preceding four years. The jama then imposed was Rs. 1,23,417, and the cultivated area was put down at Rs. 1,59,934 acres, but to this must be added about 5,000 acres of villages not then measured. As a whole, this assessment was undoubtedly lighter than that which preceded it, owing to expansion of cultivation, but it was still a much heavier one than the country could pay and thrive under, and its incidence was very unequal.

168. The working of such a settlement was necessarily unsatisfactory. It is true the revenue was always realized without much difficulty, but its punctual payment reduced many villages to great poverty,

and the amount of land mortgaged in the last eighteen years has been very great. Had timely remissions and suspensions been granted in years in which the out-turn was much below the average, the settlements might have worked fairly well for all villages but some eight or ten which had been ruinously over-assessed. Unfortunately such laxities were neither applied for, nor granted, between 1858-59 and 1868-69, except in a few solitary instances, and then only for small sums. During that decade hardly a year elapsed without the failure of the spring crop in some villages. In 1861-62 both the spring and autumn crops were generally so poor that it may be called a famine year, yet during all those years only Rs. 42,220 were suspended, and subsequently realized, Rs. 7,596 were remitted, and Rs. 4,300 were reduced.

From 1868-69 to 1871-72 inclusive, a period of four years, not one good crop was cut in Marwat. The first three were almost famine years, the last saw some improvement. During each of those years the amount of relief, though less niggardly than had been the rule formerly, was far from adequate, * and the process of impoverishment of the peasantry went on rapidly. With 1872-73, a brighter time dawned on Marwat. The rains have since then been more abundant, and seasonable, the harvests have been generally above the average and at times bumper; and the Deputy Commissioner and I have in several cases in which immediate relief seemed imperative obtained speedy sanction to a remission or reduction. Though the past few years of plenty have wrought a wonderful change on the condition of the peasantry, and enabled many to pay off some debts and redeem some of their mortgaged lands, the amount still in mortgage and likely to remain so is very great, and the pernicious *ghàrah* and *topah-rupai* debts (paragraph 67) are still considerable.

169. What were the revenue arrangements in Moghal times, it is

Revenue system before
annexation in Isa khel.—

impossible to say, but as the Niázais were good soldiers, it is probable that the southern portion of country was held in *jágir* by their chiefs on a sort of feudal tenure. With the Duráni irruptions the Moghal empire passed away, and its eastern provinces became a part of the newly established kingdom of Kabul. Isakhel fell under Duráni rule about the middle of last century and continued under it for between sixty and seventy years. By 1816 the last vestiges of royal authority in these parts had disappeared. Whilst incorporated with Kabul, the chief for the time being of each community, sometimes without, but oftener after coercion, collected the revenue from his clansmen and paid it to the king's collector. When Duráni rule ceased, the country was for about two years independent, a prey to internal dissensions. But in 1818 Umar Khan, the then head of the Isakhel clan became a vassal of the Nawáb of Makera. Southern Isakhel was then incorporated with the Nawáb's kingdom, and remained so, though latterly much afflicted by the Sikhs, until 1836, when they formally annexed it. During the Nawáb's time the Isakhel Fort, now dismantled, was built and garrisoned by his soldiery.

* In them Rs. 17,171 were remitted and Rs. 450 suspended, and no more.

Umar Khan, and after him his son Ahmad Khan, administered the country and collected the revenue, which was calculated much in the same way as described for Bannu proper and Marwat. One-fourth of the collections were allowed to Umar Khan. Besides the fixed proportion of produce taken, there were various other cesses, amongst which one of the most important was *nazarānah*, a plough cess varying from Rs. 2 to Rs. 5 per plough. In Sikh times the demand continued the same as it had been during the Nawāb's rule, but the extra cesses were much heavier. Diwan Lakhi Mull was for some time the collector or farmer, and for two years Fateh Khan Tewāna acted in a similar capacity. A grazing tax of Rs. 2-4-0 on every full-grown camel was imposed for the first time by the Diwān, also *kamiāna*, which seems to have been a house tax on non-agriculturists. It is not known how much was annually realized,

170. For the first four years of our rule the revenue was collected in

The first and second summary settlements of Isakhel. the old crop appraisalment way of the preceding Government, one-fourth the revenue commuted into cash being the standard of demand. In 1853-54 Major Nicholson, made the first summary settlement, and framed his estimates on the average collections of the previous four years. The settlement was for three years, but ran on for five, and was decidedly heavy. In 1857-58 a second summary settlement was made by Major Coxe, the then Deputy Commissioner, for five years, but continued to run until the end of 1875-76. The estimate was again one-fourth the supposed average gross produce of the land, but in fact a good deal less was taken. On the whole it was a full and fair assessment, generally not too heavy, but somewhat unequal in its incidence,—too light in some villages, too heavy in others, especially in some of the Mohār Khatak villages. At the first settlement the total demand on estates now in this tahsíl was Rs. 35,915, and at the second Rs. 37,761, being an increase of 5 per cent. In both settlements I may mention that the persons settled with were mostly the actual cultivators of the soil, whether proprietors or tenants.

171. It is impossible to say what the revenue was in Sikh times,

but, judging from the 1848 assessments of Mr. Bowring, Extra Assistant Resident, it must have been upwards of a lakh. According to the agreement deeds taken by that officer in 1848 and 1850-51, the annual demand was Rs. 1,29,350. The sum looks almost incredibly large, but in those days there was no separate grazing tax, and there were no extra cesses; nor are there any records to show how much of the original demand was each year realized. Besides this, the jama was for many villages very severe; so much so that in them many abandoned their lands and absconded. On annexation all the area now comprised in this tahsíl to the west of the Salt Range was included within the Leiah district, and remained so until that district was broken up on 1st January 1861, when Miánwáli became a tahsíl of the newly formed Bannu district. The tract east of the Salt Range, known as the Pakhar or Awánkári country, was not transferred to Miánwáli until 1st May 1862. It had originally been tacked on to the Jhelum, and then in 1857

to the Shahpur district. Owing to the position of the head-quarters of the different districts surrounding this tract, its allocation has always been difficult. Various other small changes have taken place since 1861. In the Thal, Harnoli and Wichwin were received from Bhakkar in the Dera Ismil Khan district in 1862, and several river villages have been transferred to or from Isakhel at different times. The last change of this sort occurred in 1874, when eight villages were transferred to Isakhel.* In the following paragraph and elsewhere, when referring to a past summary settlement, it must be understood I write as if the limits of the tahsíl were then what they are now.

172. The lump sum assessments of 1848 and 1850-51 ran until 1853-54, when a first summary settlement was made by Mr. D. Simson, Deputy Commissioner of Leiah, for all the country west and south of the Salt Range. The Pakhar tract east of the range was summarily settled at the same time by the Jhelum Deputy Commissioner. The joint result gave an area of 94,091 acres as under cultivation, on which the jama imposed was Rs. 1,26,641. The measurements were rough, but pretty accurate. A regular khewat was prepared. No maps were made. Mr. Simson's work was especially good and reliable, and his assessments were generally fair and full, and only in some few villages severe. In 1860-61 the country south-west of the Salt Range was again summarily settled by Captains Parsons and Smyly. The records then prepared, though, if we exclude the field map and index, as elaborate as those of a regular settlement in those days, were in my opinion less trustworthy than their unpretending predecessors. In 1863-64 the Pakhar tract similarly came under summary re-settlement, the assessing officer being Mr. Cowan, Extra Assistant Commissioner. The result of the above two second summary settlements was to show an area of 119,683 acres as under cultivation on which the jama imposed was Rs. 1,37,148. Up to between 1862 and 1864 the alluvial lands in the river villages were assessed as elsewhere, but between those years the fluctuating system, as now obtaining on the Indus in this district, was regularly introduced, and has since been worked with gain to the State and satisfaction to the people. Since annexation the land revenue has generally been paid punctually, and with no greater coercion than that of squatting a peon or two on a dilatory village or putting some of the lambardárs in the lock-up.

173. The settlement nominally began on March 27th 1872, but work was not fairly started, except in the Bannu tahsíl, until seven months later. Munshi Ganga Ram, Extra Assistant Commissioner, and the Superintendents of Marwat, Isakhel and Miánwáli, joined their appointments in August and September 1872, as did several of the subordinate supervising and judicial establishment. The patwáris of Isakhel and Miánwáli had some survey knowledge, but those of the two

* The Kacha boundary between the two tahsís is now very irregular, but in proposing the transfers, I explained that I thought considerations of convenience should outweigh those of mere symmetry of form.

frontier tahsils had none, and many of them could only read and write Hindi. Thus for many months various causes combined to retard progress: the patwáris were untrained, and had to be instructed, the field establishments were small and incomplete, new comers were ignorant of Pashto, and funds were wanting. By January 1873 all preliminary difficulties had disappeared. As Rs. 10,000 had been advanced in anticipation of the sanction of an extra establishment, and most village boundary disputes had been decided, the numbers of chains were now largely increased, until in the following October no fewer than 154 were at work throughout the district. By the end of April 1874 measurements were finished. The same procedure was followed throughout the district.

The only points to be noted in it are that, by Mr. Lyall's advice, the boundaries of all the existing territorial divisions or blocks (*wands* or *chaks*) of large villages were separately measured and shown in the *thákbasts* before the interior or field survey was begun. By this means a greater degree of accuracy was attained than had nothing but the exterior boundary line been first measured, and an error in the field survey, instead of affecting the whole area of an estate, was limited to the block in which it had been made. But the great gain of this *chakwár* system of *thákbasts* was found on distribution of the revenue. The people, whilst ignoring my fine soil classifications, freely distributed the demand at proportionate general rates on their several recognized blocks. The dimensions of most of those blocks had, except for Bannu proper, been fixed generations before on some tribal or sectional partition, the object having been to so divide the communal land that all the soil in each portion should be of equal quality.

The other point to be noted is that in the field measurements of the two frontier tahsils I made a uselessly minute soil classification, by which delay was caused in attestation, and a power liable to abuse given to men on small pay. Such men, where outsiders, came mostly from the Rawalpindi Division. Many had served in the Dera Gházi Khan, Hazára or Pesháwar settlements. Two-thirds were Hindús, and of them the majority were Khattris or Brahmans. There were only three or four Hindustanis employed in the settlement, all the others being Punjabis. When measurement began in earnest, Pathan villages generally showed such utter indifference to the work, that it was frequently necessary to quicken them by fining their lambardárs. Wherever the persistent non-attendance of owners seriously impeded work, an extra peon was entertained at the expense of the recusant community. Throughout measurements the chainmen were supplied by the villages. A casual zamindár served well enough for the front man, but the rear man was frequently a person entertained for the purpose until the conclusion of work. It requires some practice and intelligence to peg the chain correctly, especially in light soils.

Summary of measurements for each tahsil.

174. I shall now briefly review the survey work for each tahsil:—

Bannu.—Work here began four months earlier than elsewhere, and the Superintendent had the pick of candidates. The patwáris were

mostly Hindi writers, and few had ever seen a plane table before. The Bannuchi villages were all mapped by October 1873, when work amongst the Wazirs was commenced. The measuring parties were escorted by frontier militia men, and always slept in the outposts. The Wazirs, the Hathikhels excepted, were as obstructive as they dared to be, and gave little information. One clan, the Bakkakhels, refused to allow my men to enter their lands until a promise should be given that their jama would not be raised. After a time they gave in when they saw the other clans were quiescent. The work was accomplished during the cold weather with only one accident. A measuring party proceeding along the road without escort were surrounded, robbed and stripped naked in broad daylight, and then allowed to go. As to the quality of survey, it was generally good except for several Bannuchi and two Waziri villages, and for particular plots here and there, the greater parts of which had subsequently to be re-measured. On the completion of the *thakbasts* the agreement of the boundary lines between conterminous villages was in some cases not sufficiently established before the field survey began. This omission caused some trouble. The only trees recorded were date palms.

Marwat.—The good-natured apathy of the Marwats retarded work here. In some cases peons had to be entertained at the cost of the villagers to force their attendance; in others, the lambardárs were fined. Such fines were after measurements often remitted in whole or part. At first only ten chains were employed, but by degrees as funds were provided, and fit men obtained, the number was raised to sixty, and the work was finished in the spring of 1874. Hindús generally hated field service in this tahsíl, as water had to be conveyed long distances to them in skin on donkey back. Beyond non-attendance the Bhitannis were not obstructive. The frontier measurements were effected without mishap, and the police and militia gave every assistance required of them. Only one small Nar village had to be subsequently re-measured owing to original fudging. Another (Abbakhel) had to be mapped over again after attestation, as the village unexpectedly agreed to a repartition (*vesh*), and insisted on having it, map or no map. In *vesh* villages the width of each strip at either end was generally chained to feet and inches, and then straight longitudinal lines drawn on the map to connect the points.

Isakhel.—Work was completed here sooner than any other tahsíl, although the maximum number of chains employed at one time was only thirty-five. The Kacha was measured in the early part of the cold weather of 1873-74. The men who gave most assistance were the Jats, the Patháns generally gave the least. The hill Bhangikhels behaved admirably, and showed great interest in the work. At attestation only one village (Tola) was found to require partial re-measurements.

Mianwali.—The patwáris here were from the first fairly well-trained men. The maximum number of chains in use at one time was forty-nine. Excepting some of the Pathán villages, the peasantry gave ready assistance, and were keenly alive to their own interests. There are now

cores of them, who, with a little help, can pick out their holdings in the field map. The field survey of the Kacha occupied the whole cold weather of 1873-74. No village required subsequent re-measurements.

175. On the conclusion of measurements, but before attestation, I calculated what the actual cost of the out-door work of the survey had been per square mile for different classes of land. In the account no portion of the pay of the Superintendents or other superior officers is included, as they only devoted a fraction of their time to supervision. An addition of Rs. 10 per cent. would approximately represent this fraction. I insert the result of the calculation here, as such a statement may be useful for purposes of future comparison :—

Tahsil.	Kind of land measured.	Scale of inches to the mile.	Cost per square mile.				Daily average area mapped per chain.
							Acres.
Bannu	Canal irrigated, mostly cultivated, fields very minute.	32	127	5	9		7
Do. ...	Unirrigated, large fields, much waste ...	16	18	13	7		55
Narwat ...	Unirrigated, fields in strips, much cultivation.	16	23	12	8		26
Isakhel ...	Of all sorts, fields smallish ...	16	19	8	2		29
Do.	Hilly Bhangikhel country, little cultivated, but where so fields very small, hills mostly waste and held in common.	16 & in places 8	29	10	8		62
Mianwali.	Unirrigated and sailaba, fields largish, waste extensive, but all divided.	16 & in places 8	20	10	8		37

176. The revenue survey of the district was not begun until the Revenue survey of the cold weather of 1875-76, since which time it has been languidly progressing season by season. Bhangikhel, part of the Khatak Niázai or Maidáni Range, and all the Mianwali tahsil east of the Kacha, still remain to be measured, and are now in hand. The revenue survey thus commenced more than a year after mine was finished, and is not over yet. Coming so long after my own measurements its utility as a check upon them has therefore been small. The scale is four inches to the mile for the whole district, except for the central and best irrigated portion of Bannu proper; for which sixteen inches to the mile were sanctioned. The area statements and village plans were, as received each year from the revenue survey department, compared with my own; the result has been noted in the proper place in the "final proceeding." In addition, wherever discrepancies have been found, the fact and its explanation

year, and that from one to four years elapsed after the many measurements before those of the revenue survey percentage of difference in cultivation is very small—in few five or six. But in the cases of “lately out of cultivation,” “waste,” and “unculturable waste,” there is little or no cor- This too is hardly surprising, as the revenue surveyors are possessed of little agricultural knowledge, unacquainted with facts, and not perhaps so severely supervised as settlements.

Considering the elaborate system of test and check which every proceeding in a settlement survey is now established accuracy of our maps, their large scale and of detail, I venture to record an opinion that an independent survey of the costly kind followed in this district is an expensive method for procuring a result of no great practical value. I am not blind to the value of a scientific boundary survey; but an interior revenue survey, unless it proceeds almost *pari passu* with the settlement, I fail to see any real value in it at all; proceeding simultaneously, it must I think yield in accuracy to a scientific rival. Its scale is comparatively so small, and its proceeding so minuteness, and what I may call agricultural intelligence from a settlement stand-point it must be worthless. It often serves as a check on wholesale fudging, but that with our system of independent local attestation is now hardly possible. I think the expenditure of the two or perhaps three lakhs, on a complete revenue survey of this district will cost Government before long, has been a great waste of public funds, and that as much might have been obtained for half or a quarter the sum.

177. On the conclusion of measurements several months

measurements. The Superintendents were, however, better able to complete the attestation of each circle at its head station without much locomotion, as the class of dispute which came before them referred mostly to questions of tenure. The number of disputed entries was largest in Marwat, where it was 21 per cent. Miánwáli came next with 14 per cent. In Isakhel and Bannu proper there were about 9 per cent. When a summary award had to be given, parties not coming to an agreement, it was frequently as lengthy as a judgment. All such awards with their *parchas* have been preserved, except when a law suit arose after them. I have found a perusal of the whole *parcha tasdik* of great assistance in case-work during the last year. I trust the district courts will refer to them occasionally in future, as they will elucidate obscure or unreasonable looking entries, as well as the origin and shaping of a case before the plaintiff brings it ripe and ready into court. In the two frontier tahsils most disputes were connected with shares or mortgages. In the two other tahsils the majority were about tenant rights, possession of waste land and shares. Regarding old mortgages, I should note here that in most cases the amount of the mortgage money has been entered in accordance with a summary award or by agreement. In Bannu proper, when the data for a decision were insufficient, the amount stated by both parties has been entered, and it has been added that on redemption the oath of the mortgagee should settle the question. Attestation was over earliest in Isakhel (March 1876); Bannu tahsil came next (September 1876), and Marwat and Miánwáli last (March 1877). The work occupied from eighteen months to two years and a half. It could not well have been done quicker. The statements of every person in any way connected with the land, from the superior proprietor down to the tenant-at-will, had to be taken regarding every field in the district, and each statement had to be repeated before either three or four different officials. Then, owing to the various branches into which the work was divided, tenant-right, mortgages, and rights in canals and hill torrents being each independently attested, a good deal of repetition was inevitable. Finally canal irrigation rights in Bannu proper had all to be re-attested (see paragraph 104). The apathy displayed during measurements was not prolonged to attestation. All men, even Marwats and sometimes Wazirs, showed themselves keenly anxious to secure the correct recording of what they believed to be their rights. The fact is that during the survey the belief was universal that the one great object of the settlement was to increase the land revenue, but the truth became apparent as soon as the next stage began. I think I should not omit to record that men were generally truthful during attestation. As every statement was made in the presence of the whole village, shame and the feeling that lying would be detected, probably explains a good deal of this creditable honesty.

178. One heavy work carried out during the attestation stage

Other progress made during attestation. The amalgamation of estates and transfer of holdings from one to another noticed.

deserves special notice. In the Bannu and Marwat tahsils the lands of an "estate" had been at both summary settlements determined by the place of residence of a proprietor, and not

by an imaginary ring fence round a given area. Thákbasts and boundary pillars it is true existed for most villages, but hundreds of plots within them belonged to other estates. The tappa was in fact the old collective unit, and at annexation bore a closer analogy to the "*mauza*" of Cis-Indus than did the communities and their scattered holdings we chose to call by that name. However, in the thirty years preceding this settlement a great deal of land changed hands, proprietors aiming at getting rid of outlying plots, and concentrating their holdings near their homes. This was particularly the case with the Marwats.

The opportunity of this settlement was taken to remedy the old misleading and anomalous conditions of the "*mauzas*." In Bannu this was chiefly effected by amalgamating estates. In all 147 were fused with others. But for Marwat this method was unsuitable. There I arranged matters by transferring plots freely from one estate to another, and now for both tahsils the general rule is that all lands included in a *thákbast* belong to one and the same estate. Of course, there are still many exceptions. The labour of effecting the change was great, as every objection had to be met and answered, and the ascertainment of the old revenue of a given area required much patient labour. For instance, the old stated rent-roll of a Marwat village was, say, Rs. 1,000, and its *thákbast* area 2,000 acres, but when this area was picked out, plot by plot, it was found that the revenue of 700 of its acres was distributed amongst four or five other villages, and conversely that of its Rs. 1,000 revenue, Rs. 200 were derived from scattered strips elsewhere. Thus the shuffling of land and revenue necessary in this settlement rendered assessment and distribution both delicate and difficult.

Another work done during attestation was the preparation in great part of the village administration papers and tribal codes. Early in the settlement lists of appropriate questions had been drawn up, which were from time to time added to and amended. Then at attestation the munserims recorded the answers to the former, and the Deputy Superintendents to the latter in the first instance. The statements were subsequently repeatedly attested and revised. Thus from first to last much deliberation was bestowed on them, and I trust they will be useful (see Chapter IX). As the attestation of each munserim's circle was completed, checking and comparison were taken in hand, which call for no remark. Perhaps I should note that by the time attestation was over, I had partly filled in the columns of my English village Note Books, had made my village assessment estimates, and submitted the assessment reports for all four tahsils.

179. Another important work commenced immediately after attestation, and not completed until a month ago,

Arrangements made for the partition of Miánwáli Kacha now under water. was the making of arrangements for the partition of Miánwáli Kacha now under water. I have in a former chapter explained how between 1856 and 1868 an enormous area of Miánwáli Kacha was destroyed by fluvial action. The right to new alluvion, as it formed, was always contested in court. The rule throughout the whole Kacha for both villages and

individual holdings was and is, once a boundary always a boundary. Thus, wherever land appeared numerous claimants started up asserting that it had formed on the site of an old possession of theirs. There being no old maps, judgments were both very arbitrary and haphazard. In 1870 and 1871, when I was in charge of the subdivision of Miánwáli, I felt my helplessness in such cases. I found the best plan was to prohibit cultivation on a new plot until it had been divided on some equitable principle amongst those who seemed best entitled to share in it. In the 1873-74 measurements of this settlement individual rights in 92,388 acres belonging to thirty-six villages could not be shown in the field maps, the land being under water. I explained to the communities concerned the necessity of making some arrangements for the partition of such plots on their re-appearance, in order to check future litigation and ensure justice. All the villages agreed, and, treating the submerged areas as if held in joint ownership, proceeded under the supervision of the Superintendent to effect their partition. The result is that the whole area has been mapped, and divided in such a way that each shareholder will receive his allotted portion as it re-appears without having first to litigate for it. In the case of four villages the basis of division has been former field maps. But for the other thirty-two those interested have mostly divided their submerged lands into blocks or strips according to their proportionate shares, the area to be allotted to individuals in each being recorded and no more. That area is generally for an occupancy tenant, inferior or full proprietor, the maximum acreage entered in any one year in his name either at the first or the second summary settlement, or in any of the subsequent annual measurements under the fluctuating system of assessment. The balance, if any, has been recorded in one or more plots in the names of the founders (*bunyáddárs*) or as *shámilát-deh*, as the case may be. To safeguard the rights of absentees and others, a clause has been inserted in each administration paper to effect that the partition proceedings do not estop a civil suit, and that decrees are to be made good from the *shámilát-deh* or founder's portion. The files together with the Superintendent's attestation orders have been placed in the record room, and the results themselves have been incorporated in the settlement records. The reason why it was better to arrange matters now was, that the settlement could do so best, and that agreement as to positions of blocks, strips and fields was only now possible when every man's chance was equal.

180. During the interval between the submission of the assessment reports and receipt of orders thereto, fairing, copying and distribution. Fairing was progressing. For the Marwat and Isakhel tahsils orders were received well within the year, and consequently I was enabled to announce in good time. But I did not receive orders on my Bannu and Miánwáli reports until fifteen and seventeen months after they were sent up. The consequence was that the progress of the settlement was somewhat retarded, and I had to endeavour to crowd the very delicate work of distribution into a few months instead of doing it deliberately and spreading it over a good year. One result was that the new assessments began to run before

ny distribution lists were ready. I might perhaps have delayed the dates from which the new demands would be current for another harvest or year, but there were strong reasons against doing so. Such a course would have involved a sacrifice of revenue, a longer maintenance of the old burden on over-assessed estates, and besides it is always advantageous that the first collections under an enhanced assessment and a new distribution should take place before the termination of settlement operations, because it is only then that the fairness of the distribution is put to a practical test, and it is the settlement officials who can best answer the objections which are sure to be then made.

In Isakhel and Miánwáli very few objections were raised. The revenue payers were reasonable and intelligent, agreed generally to one uniform rate on cultivation and fallow for the whole estate, or for each block or *chuk* in it, and when the revenue had been so distributed, very few complained that uncultivated land had been assessed as cultivated. But in the Marwat and Bannu tahsils the case was different. In Marwat the principle of *chakwār* rates was readily accepted, but as to what the proportions should be, and what plots in each *chak* should on account of their exceptional goodness or badness of soil be assessed at special rates or at lump sums, there was no agreement. The Marwats would not leave the matter to the decision of their grey-beards, but most proprietors insisted on having a voice in its disposal. A good half of the owners of many villages were wrangling together outside and inside the Superintendent's kachhery for several weeks together before they would come to any sort of concord, and what they agreed upon one day they often repudiated the next. Then after the rates were distributed, and the results announced to the owners, another series of wrangles ensued. The Marwat distribution occupied fifteen months.

In the Bannu tahsíl it was pushed through in eight and a half. Before announcements each Bannuchi village had formally agreed to a method of *bachk*. About one-third had accepted the settlement soil classification, and the remaining two-thirds a *chakwār* distribution, and both had fixed the proportions between the different rates before announcements were made. When the results were communicated to the different owners, a large minority protested strongly. On that arbitration was tried, the men selected being mostly persons presumed to be uninterested. The arbitrators proved one and all dishonest, favouring comparatively rich at the expense of the poor. Objections now show in. A general field inspection and a disposal of every objection or spot was now necessary. Accordingly from March to the middle of last, the Extra Assistant Superintendent and the two Deputy Superintendents were kept at this work, and the distribution effected. It was generally *chakwār*, each *chak* being very small with a number of taken out and assessed at special rates.

Of the Wazirs the only clans who gave much trouble were Muhammakhels, Bakkakhels and Jánikhels. They had all the obstructive at measurements, and somewhat indifferent

attestation,* and they refused even to discuss the method of *bākh* until a greater or smaller portion of their lands should be re-measured. When that was done, much the same wrangling commenced as had occurred in Marwat. At last by labour and patience, Munshi Ganga Ram and Mián Ghulām Farid arranged most objections and disputes, and by the end of June last the work was fairly finished, and the revenue was being paid in.

The assessment of the scattered Waziri holdings in the outlying Bannuchi tappas gave little trouble, as in most cases I put lump sums on myself, and then left the Bannuchis to distribute the balance on their own holdings. In some few cases I treated Wazirs as *shasham khors*, i. e., I left the Bannuchis to distribute the whole village assessment as they liked, and then gave the Waziri holders a one-sixth abatement. I should add here that disappointment was caused to some families, who had managed at the summary settlements to get their holdings assessed in the *bākh* at exceptionally light rates. They hoped to do the same in this, but their hopes were fallacious.

181. After annexation the standard of assessment in the Punjab Assessment instructions: was in some cases one quarter, and in some a old and new principle compared. smaller share of the gross produce estimate. In time it fell to one-sixth. It continued so until between the years 1872 and 1875, a half net assets demand was fixed as the maximum standard. The change, though a radical one in principle, has not, I believe, much influenced village assessments since made, because the assessing officer generally imposes on each estate the highest jama which, with reference to all its circumstances, he thinks it can bear. An illustration will show the vast difference between the old and the new principle of assessment. On the richest irrigated lands of Bannu proper the rent rate, after making allowance for the cost of seed and manure supplied by the landlord, is equivalent to two-thirds of the gross produce. Under the old rule the full assessment rate would represent only one-fourth of this rent; under the new one-half. Taking an opposite case of poor *bīrdāni* land paying a small rent a one-sixth gross produce pitch of assessment might have left nothing over for the proprietor at all. Thus a rigid application of the old rule rack-rented poor villages, but threw away revenue on rich irrigated lands. The half net assets rule is therefore a great improvement on it.

My assessment instructions in this settlement were received early in 1875, and were the same as those issued about the same time to the Settlement Officers of the Delhi Division.

They were—

“1. The principle on which the revenue is to be assessed is that the Government shall not demand more than one-half of what may be

* One consequence was that each proprietary cultivator was recorded as the independent owner of his holding. But at distribution it turned out that many such were only co-sharers in a temporarily divided ancestral plot held severally under a sort of *resh* tenure. The revenue of such jointly held plots had to be paid on shares, and each plot to be treated as one holding instead of several.

expected to be the net assets to the proprietor during the period of settlement, leaving to the proprietor one-half of his profits and to cover expenses of collection.

"2. In applying this principle, the instructions contained in section 4 of Directions for Settlement Officers, North-Western Province, and in paragraphs 36 and 37 of Appendix XX of that publication, shall be borne in view."

Such being my orders, it follows that the essential bases for a fair assessment were that both gross produce and rental estimates should be approximately correct. Were they framed honestly, and on sound principles, the reviewing authorities would have ample data for passing judgment on the appropriateness of the actual assessment proposals I should submit. Did such latter differ materially from the half net assets standard I was bound to give reasons for going below it.

182. On the conclusion of measurements I had before me, to assist me in framing my gross produce estimates, the materials on which gross produce estimates were based. actual area sown in the year of measurement, classified according to its soils, and their relative productiveness with reference to both natural and artificial advantages. I had too the results of crop experiments made each harvest from 1818 to 1875 inclusive, and I may add that I myself had seven years experience of the district, and that my Extra Assistant Commissioner, Munir Ganga Ram, and Fakir Abdullah, Superintendent of Marwat, had each similar experience of twenty or more years, whilst my other three Superintendents were old settlement officials, and shrewd capable men besides.

183. In classifying the soils I everywhere learnt and adopted the popular terms in use. In practice their correct application was sometimes difficult. The shades of distinction between two classes was often fine; moreover, definitions are never easy, and zamindárs in particular attach no very precise meaning to many of their agricultural terms. Considering that many disputes occurred at attestation about soil classifications, and that a large majority of the villages disregarded them entirely at distribution, and that for revenue rate purposes I had to group several classes together, I am inclined to think fine soil distinctions are a mistake, and that except in Miánwáli I attempted too much. However, Mr. Lyall held that an elaborate classification formed a good basis for the village assessments, and that consequently I had not been too particular.

I now append a statement of soils grouped in order of excellence and in classes and sub-classes as adopted by me when framing the revenue rates.

sfl.	Class or tract.	Native name of soil.	Definition.
u ...	1st Irrigated.	<i>Sarrah-Khara-Warboi</i>	Comprises all land near the village site (<i>warboi</i>) also land in receipt of silt from the (Kurram <i>Khara</i>), also all manured land (<i>sarrah</i>). As a rule land near the village site enjoys both the adjuncts of manure and silt, hence best land of all is " <i>sarrah khara warboi</i> ." It is mostly " <i>do fasli</i> " or devoted to the culture of single crops of the greatest value, <i>e. g.</i> turmeric, sugar-cane, tobacco, vegetables. It is seldom fallowed and is generally spade worked.
	2nd do. ...	1. <i>Pallon</i> ...	Is the opposite of <i>warboi</i> ; is not near village site; is generally " <i>ek fasli</i> ;" gets neither manure nor silt; is generally good land disadvantageously situated.
		2. <i>Lwara</i> ...	Is high lying land to which water reaches with difficulty, but which is otherwise good.
		3. <i>Kas or Kach</i>	Is low lying land in bed of Kurram, or Kach Kot.
		4. <i>Sira nartia</i>	Is a rufoous clayey low-lying soil, workable only with the spade and common in the Trikha circle.
	3rd do. ...	1. <i>Trikha or Tar-kha.</i> (saline or bitter)	Is affected by <i>reh</i> efflorescence, but not seriously so.
		2. <i>Non or Ward-na.</i>	Marshy soil, and often has springs bubbling up in it.
		3. <i>Kurri.</i>	A broken, uneven, but otherwise good soil.
	1st Unirrigated.	<i>Pakha</i> ...	A clayey soil containing three sub-classes <i>viz.:</i> — 1. <i>Barah</i> or hill torrent (<i>ndladar</i>). 2. <i>Bunduna</i> , equivalent to the " <i>kaslah-dar</i> " of Marwat and Isakhel. 3. <i>Pakha</i> , a loamy soil, light, but fairly cohesive. Each cultivated plot only receives its own rain water.
	2nd do.	<i>Uma</i> ...	A light sandy soil equivalent to the <i>shigha-khatina</i> of Marwat, but rather more sandy perhaps.
	3rd do.	<i>Shiga</i> or sand.	Has several sub-classes which need not be given; is a poor soil.
	4th do.	<i>Raghzai.</i>	A pebbly stony soil, common at foot of the hills; is a wretched soil.

Tahsil.	Class or tract.	Native name of soil.	Definition.
Marwat ...	1st Irrigated.	<i>Tandobah</i> or canal irrigated.	This word is used for the <i>fi</i> those possessing a good soil fixed share of water or <i>dehn</i> village site. The few ac <i>jhalari</i> irrigated land are al
	2nd do.	<i>Lisi</i> or poor (un-productive)	Is commonly applied to lands, and includes land receive an occasional suppl the spring crop only (<i>afzad</i> which <i>kanhar</i> gravel is four
	3rd do.	<i>Trikha</i> or <i>tarkha</i> (saline or bitter)	Is applied to soils in prevalent.
	1st Unirrigated stiff soils.	<i>Barah</i>	Land irrigated from hill or <i>mladdr</i> of elsewhere) w of three classes, viz.:— 1. <i>Pakha tora</i> , clayey soil. 2. <i>Pakha sira</i> , loamy soil. 3. <i>Kachhna</i> , alluvial is torrent.
	2nd do.	<i>Dagar</i> also <i>haslah-dar</i> .	Clayey land which rece higher lying waste, cor means of small dyke (<i>warraura</i> or <i>haslah</i>). <i>dagar</i> land, that is clayey drainage from the lower
	1st Unirrigated sandy soils.	<i>Shiga khatina</i> or <i>gadwad</i> .	Applied to the best of which either contain earthy or clayey matter superficially very san which retains moisture
	2nd do.	<i>Shiga yaj</i> .	A sandy soil whos large-grained thick se good moisture retain
	3rd do.	<i>Shiga</i>	Seems almost pr included <i>shiga topa</i> soil when lying on s It is the poorest soil in some places have tarable but for the
	1st Bhangikhel.	<i>Sam</i> (smooth level.)	A rich loamy surface formed by surrounding hills, it gets.
	2nd do.	<i>Ddg.</i>	A stiff clay soil

hsil.	Class or tract.	Native name of soil.	Definition.
hel— td.	3rd do.	<i>Ghasda.</i>	Stiff poor pebbly soil on a slope.
	4th do.	<i>Gor (or gar).</i>	A stiff poor soil full of stones hardly culturable with profit.
	1st Uplands	<i>Ratti.</i>	A light loamy soil of a reddish tinge, most prevalent in northern parts, and in lands irrigated from the Chichali nala.
	2nd Uplands.	<i>Ghasar.</i>	A light greyish soil with a varying admixture of sand in it; most prevalent in southern parts. Often, especially in irrigated lands, has a sandy subsoil which prevents retention of moisture.
	1st <i>Sailaba.</i>	<i>Mat Khalis.</i>	Where the alluvial deposit of silt is two or more feet in thickness and has little or no sand mixed with it.
	2nd do.	<i>Drahhkar.</i>	In which the deposit is under two feet in thickness or has a large admixture of sand. With plenty of moisture it will often produce as good a crop as <i>mat khalis</i> .
	3rd do.	<i>Kallari.</i>	Soil of any sort impoverished by a saline efflorescence.
	<i>Sailaba</i> lands.	as above.	The same as for Isakhel.
	1st Uplands west of Salt Range.	<i>Naladar.</i>	Land which receives hill torrent water.
	2nd do.	<i>Kaslahdar or raridar.</i>	Land which besides its own rain-fall receives that of higher lying waste conducted on it by small dykes and trenches.
vali	3rd do.	<i>Maira.</i>	Level land which only receives its own rain-fall, may be <i>pakka</i> or <i>reti</i> (sandy).
	4th do.	<i>Langa.</i>	Depressions between billowy Thal undulations: only common to south; produces <i>bajra</i> mostly.
	5th do.	<i>Tibba ret.</i>	Land mounds or wavy sand indulations: produces nothing but water melons: only common in southern parts of Thal.
	1st Pakhar Ilaka.	<i>Hail.</i>	(1). Hill torrent land, or (2) land in a hollow receiving drainage from surrounding hillocks or washings from village site.
	2nd do.	<i>Maira.</i>	Equivalent to the <i>kaslahdar</i> of uplands west of Salt Range.
	3rd do.	<i>Rakkar.</i>	Equivalent to the <i>maira</i> of uplands west of Salt Range but which is gravelly or stony.
			<i>Note.</i> —Wherever there is a well or <i>jhaler</i> the word <i>chaki</i> or <i>jhalari</i> is prefixed.

184. A uniform method was followed in all four tahsils. During

Out-turn experiments
generalizations therefrom
untrustworthy.

measurements a number of ropes were provided, each of which was marked off into four equal lengths, so that held square each would exactly enclose the sixteenth part of an acre, *i. e.* ten *marlās* or 302½ square yards. Selected men made the experiments. After each harvest the results were reported, translated into English, and entered in a register kept for the purpose. The practice was continued in each tahsíl, until I took its assessment report in hand. I thus secured observations for about three years. The yields obtained were of course only true for small specific areas, and for particular harvests. From 1873 to 1875 the rains were seasonable, and the sown acreage much above average. The whole area observed in any one year was only *one-sixteenth thousandth* of the measured cultivated area of the district. Owing to such considerations generalizations from crop experiments are, I think, untrustworthy. Here is one. "The average yield per acre for the whole province, as worked out from a large number of experiments in the Financial Commissioner's Office in 1876, was" observes Mr. Ouseley in criticising my Miánwáli gross produce estimates, "10 maunds 30 seers." This statement, I think, goes far to prove my contention. Though 1876 was a good year, no one who knows the Punjab and the large percentage of ground sown even in good years, on which the return ranges from *nil* up to five or sixfold only, can suppose that the average yield of the province in 1876 could have been within several maunds of that deduced from the experiments.

Commenting on my remarks as to why a yield worked out from the infinitesimal area experimented on, appears excessive, Mr. Ouseley, in paragraph 6 of his letter on Miánwáli assessment report, wrote as follows:—

"Nevertheless the Financial Commissioner thinks that a good deal of weight is due to the remarks which Mr. Thorburn makes regarding the way in which produce estimates are generally worked out and applied. He writes: 'The reasons why results obtained from experiments and generalizations therefrom evolved cannot be trusted are that (1) observers never select the worst land of the class, but generally the best or at least land above the average; (2) in any large area there is always a certain percentage of a sown crop which never reaches maturity and no allowance is made for it; (3) owing to greater than ordinary care being taken that none of the observed grain should be lost, the proportion of waste on an observed area is much less than that which occurs with the zamindars: To the last alleged cause of fictitious increase of yield, Mr. Ouseley does not subscribe, and the first alleged cause should be guarded against by the Settlement Officer and some of his higher native subordinates' own observation; it is natural for the lower observing agency to select the best patches of ground, and to show their zeal for the interests of the Government and their freedom from corrupt influences by supplying maximum returns of yield from the small plots which they test. But the Settlement Officer and his Extra Assistant Settlement Officer should take a large area, say two or three acres of the worst land in any given chak, and test what it yields. The real reasons why produce estimates, as they are generally obtained, give fallacious results, is to be found, Mr. Ouseley thinks, in the second cause assigned by the Settlement Officer, and by the fact that whilst measurements are being made under a Settlement Officer, the tendencies of the patwaris is to exaggerate the area under cultivation."

On the whole, then, I think I was justified in regarding the crop experiments rather as the maximum yields procurable in good years for each class of soil than as indices of average yields.

185. The following statement shows maximum and minimum yields of wheat per acre obtained from experiments in all four tahsils.

Tahsil	Irrigated and sailaba.				Unirrigated.				Remarks.
	Highest.		Lowest.		Highest.		Lowest.		
	M.	S.	M.	S.	M.	S.	M.	S.	
Bannu ...	15	37	4	11	9	24	2	10	The heaviest yield I myself obtained was 1 md. 2 seers on the sixteenth of an acre in the Kacha, i. e. at the rate of 16 mds. 32 seers to the acre.
Marwat ..	9	31	4	3	10	37	2	3	
Isakhel ...	11	25	2	2	13	35	...	26	
Mianwali ...	11	11	6	...	10	11	2	30	

186. To assist assessment work each tahsil is divided into circles.

Assessment circles.

The primary object is to group villages with soils of pretty equal productive capacities together. To really effect this object, circles should be very small—often single villages. But as convenience requires circles to be large, such a course is impracticable. Hence the revenue rates framed for a whole circle are often, in fact, only suitable for a minority of villages in it. The following is a description of the assessment circles as framed by me for each tahsil. The account being taken from the assessment reports, some of the figures may differ very slightly from those entered elsewhere in this report, which generally represents results after the completion of the comparison and attestation stages, whereas the statistics in the assessment reports were prepared before either was well in hand.

BANNU TAHSIL.

I—Western Waziri Circle.—Consists of a strip of land stretching along the base of the Waziri hills from the right bank of the Kurram to the Shakdu Pass. Its length is 18 miles, and its width progresses from two above cantonments to eight opposite Janikhel. Immediately under the hills the soil is stony and poor, but away from them it is clayey and good. There is little or no true *barani* cultivation. Irrigation is derived from canals from the Kurram and the Tochi, in both of which cases it is perennial, or from hill torrents, or from higher lying waste lands. On the whole the tract is fairly well off for water, for a spring crop at least, and in good years for an autumn crop. Allowing 6,000 acres for under-estimate in 1858, the increase is twofold. The tract is held by the Janikhel and Bakkakhel Utamanzais and by the Muhammadkhel Ahmadzais. Excepting the Muhammadkhels, who have 227 acres *do fasli*, there is no true *do fasli* land in this circle.

II—Lohra.—This tract lies south-west of the Bannu circle between the Barán and Lohra streams and the Tochi (Gambila) river. Its soil is a tenacious clay, but is not so stiff as that of the Bannu circle. Its villages are mostly old-established, and some are fairly prosperous. It is partly irrigated from the Kurram and partly from the Tochi, but the supply of water from both is very deficient. Want of water involves want of cultivators; hence if more water were available much culturable waste would be broken up. Fallowing is practised throughout the tract. One large old-established village, Hawed by name, has been tacked on to this circle, though separated from it by the width of the Landidák circle. My reason for doing so was that Hawed generally assimilates with the other villages of this circle, but does not do so with those of Landidák. The increase of cultivation in the circle since 1858-59 is by the statistics 20 per cent., of which perhaps 15 is genuine, and the rest due to difference of measurements. Of the cultivated area 20 per cent. produce two crops in year of measurement, but the second crop was mostly clover.

III—Landidák.—Is a compact tract on left bank of the Tochi, with a clayey, but friable soil. It was waste until in 1854. Major Nicholson had one of the minor Bannuchi canals, that of the Mamashkhels, extended to it, and parcelled out the area to Government servants, rural notables, and neighbouring villages, much in the same way as the Nar tracts were divided and allotted. The head village lies nine miles from the head of the canal, which during its course to Landidák is tapped by the villages it passess through to such an extent that this circle is more an irrigated one in name than in reality. Much of the soil is broken by clefts and cracks in the surface, and the *reh* evil is prevalent. Fallowing is practised. Only two or three of the estates show signs of thriving. By statistics cultivation has diminished 58 per cent., although in fact there has been a large increase. The reason of this conflict between facts and figures is that given in explanation of the analogous case of the Nar circle. The water-supply is now less than it was in 1858-59, because several grants have been made in the last fifteen years to different up-stream villages, thereby curtailing the original scanty supply. There is no true *do fasti* land in this circle.

IV—Bannu.—The cantonments and Edwardes-abad are in this circle. Its villages are canal irrigated from the Kurram, and, with a few exceptions, very fertile, fully cultivated and densely populated. Water is generally abundant; is, except in cold weather, surcharged with a rich silt, which perpetually renovates the soil of all lands to which it is applied but those at the tail ends of the various canals. Some of the finest villages lie on the left bank of the Kurram, but most are on the right bank immediately adjoining cantonments. In all manure is highly prized, and is bought and sold as a valuable commodity. In most the "village" consists of from two to twelve separate hamlets; and as the value of land rises according to the ratio of its propinquity to the hamlet site, as a rule, that village is the richest which has the largest number of such hamlets within its limits. In every village sugar-cane is cultivated, and in some turmeric also. They are the two most remunerative crops grown. In no other

There is any turmeric produced, and in those only here and there is sugarcane, and that to a very small extent. Excluding from the account area and population of cantonments, Edwardesabad and twenty-three village frontier, and comparatively poor villages, the number of souls to the square mile of cultivation is 1,106, and to the whole square mileage 14. The total increase in cultivation since 1858-59 is by the area statistics 30 per cent., but of this about 9 is real. Of the cultivated area of the circle 30 per cent. produced two crops in year of measurements, but if turmeric, sugar-cane and cotton be added, the percentage would rise to 48.

V—*Nár*.—Lies immediately north of the Marwat *Nár*, to which it assimilates in tenure, source and method of irrigation, but, being higher than the Kachkot canal, it is much better irrigated and in all respects superior. For most villages the water-supply is deficient, but being constant there is always enough to bring a certain amount of the cultivated area to maturity. All the estates are new, formed mostly in 1852, and as yet not fully developed. Compared to the Marwat *Nár*, there is much less difficulty in attracting and retaining cultivators, and every year the difficulty is diminishing. The soil is generally clayey and good, but here and there the *reh* evil is visible, though to no serious extent. The increase of cultivation since 1858-59 is really very considerable, though statistics give a diminution of 9 per cent. The reason is that in 1858-59 that number of acres was presumed to be cultivated for which water had been granted. Of the cultivated area 5 per cent. produced two crops in year of measurements, but the inferior of the two was only clover.

VI—*Trikha*.—This tract, occupying both banks of the Kurram, and commencing about seven miles below cantonments, is a vast half reclaimed marsh, more or less affected by *reh* (hence name of circle). In the lower-lying lands, especially during the cold months, the bubbling up of springs is a perpetual nuisance, against which the agriculturist fights by surface draining and surrounding each cultivated plot by a dyke and deep drain. Except in the villages on the left bank of the Kurram, three out of five of which lie comparatively high, and rather want moisture than possess a redundancy of it, little of the fertilizing silt, so general in the Bannu circle, is contained in the canals of this circle. The reason is that the villages lie either at the tail end of their canals, or the canals have their sources in springs and not in the Kurram. The increase of cultivation since 1858-59 is, according to the statistics, 23 per cent., of which perhaps 12 is real. Of the cultivated area 21 per cent. produced two crops in year of measurements, but the second crop was mostly clover.

VII—*Eastern Waziri Thal*.—Comprises the plain possessions of the Isperka, Hathikhel, Umarzai, Bizankhel, and Sirkikhel Ahmadzais. Except a little partially irrigated land on the outskirts of the Surani and Jhandukhel (Bannuchi) *tappas*, the whole tract is *barani*, and assimilates closely in quality of soil to the average of sandy soils of Marwat. Towards the hills the sand is displaced by a clayey soil, and immediately under the hills by stony ground. The average rain-fall is about the same as that at Edwardesabad (14.5 inches), and is therefore

considerably more than that of Marwat. This corner of the district owing to the close proximity of the hills and of the extensive vegetation of Bannu proper, seems exceptionally favored in its rain-fall. In 1858 the cultivated area was recorded as 5,838 acres; it is now 38,965. Making due allowance for the 1858 area having been considerably underestimated, the increase cannot be less than four or fivefold. There is no *do fasli* land properly so called.

MARWAT TAHSIL.

I—Pakha.—Is the frontier circle, and comprises Western Marwat, lying between Gadwad circle and hills of independent Waziristan. Its villages are therefore all more or less exposed to the troubles incidental to a border position. Soil is mostly clayey, but still friable and easily worked with the ordinary plough. Distribution of crops between the two seasons is more equal than in the Shiga-Khatina circle, viz., of cultivated area, 54 per cent. bear spring, and 46 per cent. autumn crops. Crops grown are the same as in Gadwad circle; 45 per cent. of the cultivated area is hill torrent; 46 per cent. *dugar*, i. e. receives drainage from higher lying waste; and the rest is pure *bārāni*, i. e. each cultivated plot only receives rain which actually falls on it. The increase of cultivation since 1858-59 may be set down at 40 per cent.

II—Gadwad.—Comprises central Marwat. Part of its soil is very sandy and part loamy or clayey. It is almost entirely *bārāni*; for, though 9 per cent. of the cultivated area is entered as hill torrent, the torrents affecting it are small and the supply of water is very scant and never certain. Of the cultivated area 29 per cent is under autumnal cultivation, almost entirely confined to *bājra*, *moth*, and a little *jowar*. Thus 71 per cent. is devoted to production of gram and wheat. The villages are mostly old and fully cultivated. Water is generally at some distance, but not so great as in most of the villages of Shiga and Shiga-Khatina circles. The increase of cultivation since 1858-59 may be set down at about 12 per cent., and most of this is in a few new estates.

III—Tundobah.—Lies mostly between Gambila and the Kurram. Its irrigated land has a soil much like that of Pakha circle, but generally stiffer. Irrigation is from two sources,—(1) from canals with heads in the Kurram near the land irrigated thereby, and whose water is impregnated with *reh*, and (2) from the surplus water of the great Kachkot canal, whose water is sweet. In the former case water-supply is plentiful, but, owing to the canal heads being below point at which the Kāshú joins the Kurram, the water is very brackish. *Reh* efflorescence has increased much of late years in lands so irrigated, owing to the increase of canal irrigation, in Bannu proper, diminishing the supply of sweet water below the Kāshú. Steady deterioration has been long going on in such lands, and large reductions in the present assessment have been required for them. In the latter case the supply of water, though still very deficient, has considerably increased since 1857-58, and a corresponding increase of *jama* has been made. All the land is *ek fasli*. Of the cultivated area 40 per cent. is irrigated and 51 per cent. *barāni*. The increase of cultivation—

almost entirely confined to *baráni* lands for Káshú villages, and to irrigated lands for Kachkot villages—may be set down at 60 per cent. in the last eighteen years.

IV.—Nár.—Was made a separate circle, as villages are mostly *zemindari*, owned by miscellaneous grantees, who, with a few exceptions, received their lands from Government at different periods before the second summary settlement. Previously tract had been a jungle, much infested by robbers, whence the designation of *Nár* (fire in Arabic). Water-supply, and almost all the land is canal irrigated, is very deficient, as tract lies at the tail end of the Kachkot canal, and only that which is over after irrigation of higher-lying lands in Bannu proper reaches it; what water there is, is sweet, as canal head is above the point at which the Káshú discharges itself into the Kurram. The soil is mostly stiff and clayey. All the land is *ek fasli*. Lands of villages Marmandi, Shákh, Gaudí Sahib Khan Mammakhel are included within this circle, as, though not literally a portion of the *Nár*, they could not, owing to their situation, have been put into any other circle, and as they get water from the Kachkot much in the same way as the true *Nár* villages. In them 34 per cent. of the cultivated area is *baráni*.

V.—Shiga.—Comprises much of eastern and a portion of southern Marwat. As the name implies, the soil is to all appearance pure sand, and the crops are generally very light. Wheat and gram are the two staples. Only 11 per cent. of the cultivated area was under autumn cultivation in year of measurements, and in that year the quantity of *bajra* sown was unusually large. For eight or nine months in the year drinking water has to be conveyed from the Gambila or hole-like wells in some of the hill passes, distances of from one to fifteen miles. Cultivation is entirely *baráni*. Each cultivated plot only receives the actual rain-fall on it. Many of the villages are of recent formation, and in several there is still room for a large expansion of cultivation in the poorest class of soil. The increase of cultivation in this circle since 1858-59 may be set down at 58 per cent., and most of this is in new estates.

VI.—Shiga-khatina.—Comprises some of central and much of southern Marwat, and in all respects resembles the Shiga circle, except that, as a rule, its surface is more level and its sandy soil has a more appreciable immixture of earthy matter in it, and is therefore more productive. Most of its villages, too, are old ones and fully cultivated. Originally this circle was included in Shiga circle.

There has been no general increase of cultivation since 1858-59,

ISAKHEL TAHSIL.

I.—Bhangikhel.—Is a mountainous region inhabited by a hardy race of Khataks, who, owing to their numbers pressing hard on the soil, have pushed cultivation to the extreme limit at which it is profitable, so that if *ghazán* and *gor* lands are not to be abandoned, the revenue rate on them must almost be nominal. The *sam* lands (3,950 acres) lie mostly together, south-east of Mánjhi Ghúndi and opposite Shakardarraha, are entirely *náládár* and produce excellent wheat and *bajra*. The

peasantry as a class are thrifty and industrious. Each is self-cultivating proprietor of his holding, and, as a rule, every man's homestead—a substantial stone-built structure—has been erected on or close to his land. Before annexation the tribe is said to have been little better than professional thieves. Though poor, the Bhangikhels are little in debt, as they paid no revenue before 1868-69. Surplus grain is generally taken to Kohát, and sometimes to Kálábágh, for sale by its producers themselves.

II—Mohár.—Is the name locally applied to the country lying along the foot of the eastern base of the Khatak Niázai Range, and is equivalent to the Damán of other parts. Its soils are *rattí* and *ghassar*, the former of which is prevalent to the north, the latter to the south. All its lands are irrigated by hill torrents, but some are also supplemented by the surface drainage of the stony ground, which lies immediately under the hills. As the soil is very friable, gets the first burst of the hill drainage and is on a considerable slope, the labor of dam and dyke making and repairing is great and constant. The hill torrents, more especially the Broch and the Chicháli, the two largest, spread out fan-shape as soon as they enter the plains, and intersect the lands of this circle in all directions. The Broch, when the rains are excessive, brings down quantities of sand and thereby causes much damage, but with ordinary rain its deposits are fertilizing. The Chicháli, on the other hand, seldom casts sand over the fields, however high its floods may be; it often brings down a rich silt of a reddish tinge. Both sometimes erode cultivated land. The crops are wheat and *bájra* and a little cotton. Fallows are seldom resorted to, so long as the land yields any return. As a rule, though, rotation of a sort is practised; the soil is over-worked. The cultivators are almost all Khataks, Sultánkhel being the chief exception, and own and till their own holdings; but several members of the Isakhel clan and others have acquired a good deal of land in two of the villages in various ways. The cultivated area has, according to statistics, increased 57 per cent. since last settlement. Of this more than 30 per cent. is real.

III—Danda.—Is the name given to the line of villages dotted along the right fixed bank of the Indus, all of which with one exception have, in addition to their Thal possessions, large alluvial *chaks* in the Kacha as well. The Thal soil resembles that of the Mohár circle, but is more level, less intersected in proportion to area, with hill streams; has 46 per cent. of its cultivated area *kaslahdár*, and is not quite so certain of getting hill torrent water for its *náladár* lands, as the Mohar villages lie between them and the hills and intercept all they can. The best lands are those which are both *náladár* and *kaslahdár*. Thal cultivation has increased 13 per cent. since last settlement. Most of the Kacha lands were thrown up subsequent to 1856-57, and though as yet hardly a fourth part of their area is immediately culturable, a steady improvement in them is observable each year. The bulk of the land is cultivated by the proprietors themselves. The crops, both Thal and Kacha, are almost entirely wheat and *bájra*. Cotton is also grown to a small extent and vegetables on well lands. There are 72 irrigation wells in the circle, being four-fifths of the total number in use in the whole parganah. The

average area cultivated each year by a well is, however small, only four acres, and the number of yoke of oxen only two. The people are in the whole well off, and little of their land is in mortgage to Hindús or other outsiders, though a good deal is amongst themselves.

IV—Kacha.—As the name signifies, is the group of villages whose lands are entirely in the alluvial bed of the Indus. Of its fourteen villages eight were during settlement received by transfer from Mianwali, and, including them, in only two of the whole number has the greater part of the land been in continuous existence over ten or fifteen years. One characteristic, then, of this circle is that its lands are new, not yet good but improving. Wheat is the great crop, being grown on 70 per cent. of the cultivated area. Next comes *bájra* on 15 per cent., barley, *táramira* and cotton are also produced, but in very small quantities. There is no purely well cultivation. The 17 wells in the circle merely supplement the *sailáb*. It is improbable that more than half a dozen new wells will be made in the next twenty years, as fear of changes in the Indus will prevent capitalists from sinking them. *Sailáb* is in most years pretty certain. A general failure of crops in the Kacha has never occurred, at least not in the last twenty years. The people are, on the whole, well off and pay their revenue with ease owing to the system of annual re-assessment of cultivation in force.

V—Kacha-Pakka—Contains only two villages situated at the mouth of the Kurram. They have been made a separate circle, partly because of their isolated position, and partly because their soil is different from that of any other circle. Their Thal has a light sandy *ghassar* on which little but *bájra* is grown, and their Kacha is largely impregnated with *reh* from the Kurram, but not sufficiently so to allow more than plots here and there to be classed as *kallari*. The Kacha, too, is always undergoing change owing to the floods in the Kurram. The principal crops are wheat, which is grown on 73 per cent. and *bájra* on 20 per cent. of the cultivated area. Barley and cotton are also produced, but in no great quantity.

VI—Nehri.—Is so called from its major portion being irrigated by a series of small canals from the Kurram, the largest and most important of which is that known as Kas Umar Khan. The town of Isakhel is in the centre of the circle. Besides irrigated lands it has a large area of Thal and Kacha as well. The Thal lands are poorer than in any other circle, as the soil which is mostly *ghassar* has a good deal of sand intermixed with it, often a subsoil of pure sand, and the hill torrents which irrigate it are few and of insignificant volume. The canal irrigated portion is mostly fairly good *ghassar* land, somewhat stiff and tenacious, but unfortunately it is much impregnated with *reh* (locally designated *kallar*), and consequently produces very poor crops. This *reh* is brought down by the Kurram from the Káshú, a hill torrent which empties itself into the Kúrram on the left bank of that river about fourteen miles south-east of Edwardesabad. Should the newly introduced *tinga* system succeed and water become more abundant, it is certain that the crops will be improved and the evil effects of *reh* diminished. At present the water-supply is

insufficient for the irrigated area. The Kacha is nearly all new land thrown up since 1856-57, and as yet only about one-fifth of it is cultivated or immediately culturable. Of the whole area under cultivation in the circle half is cultivated by tenants, and the rest by the proprietors themselves, of whom the Isakhel Pathaus are the most numerous, and are very indifferent husbandmen.

MIANWALI TAHSIL.

I—Kacha.—Contains a group of villages in the bed of the Indus, which are islands in the hot weather, being entirely cut off from the main land on either side. The central villages being the oldest are the best; generally the soil is good, but towards the south are several very poor villages. As the surface of the country is perfectly flat, and only from a few inches to about three feet above the ordinary flood-level of the Indus, the soil is generally so well moistened by inundation or percolation between the months of June and September, that all profitably culturable land is sown for the spring crop as soon as dry enough for the purpose. A fair crop is pretty much a certainty on all but the poorer soils, and on the best lands the yield per acre of wheat, the great staple, is in good years very large. Even when no rain has fallen throughout December and January, I have seen the dying crops revived by a down-pour early in February and the yield prove after all fairly good. There are a few wells in this circle and in the Kacha of circles Kacha-Thal and Kacha-Pakka, but they are all more for drinking than irrigation purposes, and at most only supplement the natural irrigation from the river.

II—Kacha-Thal.—The river lands of this circle are on the whole older and better than those of the Kacha-Pakka circle, but in several villages the shifting over of the Indus to this side has wrought serious evil, by either the erosion of their oldest and best lands, or the conversion of a deep silt soil into a shallow or sandy one. The Thal is almost worthless for cultivation, being very sandy and receiving nothing but its own rainfall. Its main use is as a pasture ground at the proper seasons. Small patches of cultivation, nearly all new since 1860-61, exist here and there, but a crop is never certain. There are now also a few wells, used more for drinking than irrigation purposes, scattered about it, and there is room for many more; but as the soil is very poor and sandy, and the average water-level is from thirty-five to forty-eight feet, it is not clear that they could be profitably worked at present.

III—Kacha-Pakka.—Of the two classes of land of which this circle consists, alluvial Indus and stiffish Pakka soil, the former is similar to that of the Kacha circle, but much of it is somewhat newer and therefore poorer. Indeed, most of the river lands of this circle have been engulfed during the last sixteen years, and what has accreted in this period and not been subsequently lost is as yet inferior. The Pakka soil is good, but owing to the increase of cultivation in three of the Mohar villages, the quantity of hill torrent water which reaches the said Pakka soil has since 1860-61 greatly diminished. The hill torrents too are, compared to those of the Mohar and Danda circles in Isakhel, of insignificant volume;

hence the outturn on land benefitted by them is smaller and less certain. The loss of the Indus lands has driven many villagers to the cultivation of their Pakka lands, on which the increase of cultivation is consequently large; but notwithstanding this fact the proprietors in this circle are generally poor. In 1860-61 there were 69 wells and *jhalárs* in use; now there are only 48, each with about four acres attached. They are nearly all in the Pakka, and partly used for drinking purposes. The diminution in the number is owing to the Indus having eroded many.

IV—Pakhar.—Consists of a series of crumbling sand-stone, hillocks, and parallel ridges, furrowed between by torrent beds and ravines. Here and there are small flat hollows and depressions, which, as the distance from the hills increases, widen into broad plain-like expanses. The soil is generally light, somewhat stony and shallow. Owing to this latter quality, and the fact that sand rock at two or three feet below the surface forms the substratum, the natives term all but the best or *trail* soil, *garm*, i. e. hot, irretentive of moisture, whence the crops wither readily under a strong sun and scant rain-fall. But in some of the hollows and in most of the hill torrent land, the soil is deep and rich, or what the natives call *sard*, i. e. cold and retentive of moisture. Spring and autumn crops are about equally cultivated, and wheat and *bājra* are the two staples. The former is grown on 39 per cent. and the latter on 49 per cent. of the cultivated area.

V—Mohár.—The water-shed of the Salt Range divides the greater part of this circle from that of Pakhar, and as, between the two, the hills rise to their crests much more abruptly on their eastern than on their western side, the amount of drainage derived from them is larger in this than in the Pakhar circle. In addition to this, the two hill torrents which drain the northern slopes of Sakesar, after partially irrigating the lands of Lāwa in Jhelum and Nammal in this district, unite near the latter village, and, immediately piercing the range by a narrow cleft or gorge, shed their rich mud-bearing waters over the fields of Musakhel and other Mohár villages. The supply of water in this torrent—the most important in the parganah, whence its name on the western side of the hills *wahi* or “the stream” is so constant that it may be called a perennial one. In July and August it generally comes down two or three times and fills the bunds of from 5,000 to 7,000 acres. Compared to it all the other hill torrents are small and insignificant. As regards the soil of this circle, at the foot of the range it is gravelly; but the gravel soon gives place to a loamy, friable soil, which slopes away gently towards the Indus. Comparing this with the corresponding circle in Isakhel, I may say that the soil here is quite as good, and as the lie of the ground is not on so great a slope, dyke and dam making are less laborious; but except for Musakhel the hill water-supply is much less. Most of the cultivation is “hill torrent” and the staple is *bājra*, which was grown in year of measurements on 78 per cent. of the cultivated area. In the Mohár of Isakhel only 56 per cent. of the cultivated area was sown with *bājra*.

VI—Thal.—The central and southern parts consist of a very light sandy soil, mostly culturable, but chiefly used as a grazing tract. Towards the north the sand merges into a firm, loamy soil, the product

of centuries of washings from the Salt Range. There is hardly any hill torrent cultivation. Where the soil is firm each cultivated plot has five or six times its area of waste lying above it, the drainage of which it receives. In the sandy parts, that is to say, throughout four-fifths of the circle, small patches of pure *barani* cultivation are to be seen here and there, and towards the south the country is dotted with eighteen or nineteen irrigation wells, each with its own clump of trees and cluster of cottages. *Bajra* is the staple, and was in year of measurements sown on 56 per cent. of the cultivated area.

187. The gross produce estimates were, after all, rude guesses. I had no other materials to assist my judgment than those already noted in this chapter. Proprietors are mostly self-cultivating, and few of those who are not so keep any accounts, and what accounts are kept are very unsatisfactory. Thus I had no record of past actuals. In estimating the average yields of different crops, I accepted the area measured as cultivated as "the cultivated area," although I think that area was much above the area sown in any preceding average year, and considerably above that too on which what is sown yields any return in a good year. It would, I think, have been legitimate for me to have deducted fifteen or even twenty-five per cent. from the area returned as cultivated, and called the balance "the area cultivated in an average year." Had I done so I might have represented the average standard of yield as much more than I did. But I did not do so. Again I treated "the average annual out-turn" and "the out-turn of an average year" as equivalent terms. I mention this, because I subsequently learnt from Mr. Lyall that under the latter phrase years of no crop are generally understood not to have been taken into the account at all.

I annex a table showing my assumed average yields of wheat throughout the district.

1	2		3		4		5		6		7		8		9	
Tahsil.	Irrigated or sailāba.						Unirrigated.						General tahsil average.		Remarks.	
	From		To		Average for tahsil.		From		To		Average for tahsil.					
	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.	M.	S.				
Bannu ...	8	...	2	...	5	18	5	20	1	10	3	31	4	24	1. Yield for well lands not shown, area under wells being very small. 2. For the two Frontier tahsils irrigated lands are referred to in columns 2 to 4, and for the two Indus tahsils sailāba lands.	
Marwat ...	6	30	4	...	4	28	5	10	1	15	3	13	3	21		
Isakhel ...	8	...	3	...	6	6	7	.	1	10	6	35	6	14		
Miānwāli	8	...	5	...	7	22	7	10	4	...	5	32	6	22		

188. In commuting the gross produce estimates of the different crops into their cash equivalents, my best guide was the published tahsil rates for the preceding twenty years. I endeavoured also to obtain from *bunniah's* books their wholesale selling prices for the same period. In this I was fairly successful for the chief staples. After that I prepared my settlement commutation rates. In doing so I bore in mind that the prices at which the poorer zamindárs of the district are constrained to sell a large portion of each crop, in order to meet their revenue engagements, are much below either of the rates noticed above. Though I have been liberal, I do not think I have been too much so. It must not be forgotten that I framed my rates at a time when the prices of all food grains, to the surprise of most men, had fallen nearly as low as they had been in 1857-58 and the two following years. From 1856 to the close of 1860 all food grains were very cheap. Then came two famine years, then a year of plenty, and then eight consecutive years during which all food grains were excessively dear, so much so that the two culminating years 1869-70 and 1870-71 were almost famine years. With 1872-73 a cycle of good years commenced, which, so far as wheat is concerned, has continued up to the present time. I trust the above remarks will suffice to explain the fairness of the figures given in the last column of the following statement:—

Tahsil.	AVERAGE FOR THE 20, 18, OR 15 YEARS * PRECEDING 1876-77.												MY COMMUTATION RATES.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	Tahsil retail price current.						Wholesale selling price by bunniah's books.						Wheat.			Gram.			Bajra.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Bannu .. { Irrigated }	0 33	12	0 38	1	0 32	13	0 35	7	0 39	11	0 34	4	{ 35 0 0 } { 32 0 0 }	1	0	0	1	0	0	1	0	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Marwat	0 32	0	1	3	8	0 36	6	0 38	0	1 10	14	1 9	8	1	0	0	1 15	0	1 10	0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Isakhel .. { Canal .. }	0 27	4	...	...	0 33	12	0 34	4	0	0	0	1	1	4	{ 0 36 0 }	0	0	0	..	{ 1 0 0 }																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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* The average for Isakhel is on 18 years and for Mināwālī on 15 years only. The actuals for a longer period were not obtainable.

189. The next step was to eliminate *Kamin's* dues from the gross produce. They amounted to one-tenth for Isakhel and Mināwālī, one-ninth elsewhere, except Kamiana deductions, for the sandy tracts of Marwat, in which they were fixed at one-eighth. This exceptionally high rate is mainly owing to the heavy expense of carriage of drinking water to reapers, farm servants, and others engaged in harvesting operations, which last for, say, forty days. The extra

expenditure of water during this time is about two donkey loads a day per 100 maunds of grain ingathered, and as each donkey receives while working a seer of grain a day or more, two maunds ($\frac{2}{100}$) are thus consumed during harvesting. The items in the whole account for the three sandy circles of Marwat are as follows :—

	Per 100 maunds of grain—average yield of a plough of land = 25 acres.		
	M	S C	
Blacksmith	1	50	
Carpenter	1	50	
Crop watchman	1	100	
Cobbler	0	250	Half his dues only allowed on account of his repairing water-skins.
Sweeper	0	150	Winnows the grain, prepares <i>trangers</i> (nets for <i>dhisa</i> , &c).
Reapers	5	250	They are universally employed. The rates vary from one-tenth to one twentieth, depending on the out-turn as they must. I allow here a little over half full rates, as proprietors reap so much themselves.
<i>Topak Bismillah</i> , or alms given to ensure a blessing on the crop ...	0	150	
Donkeys for water	2	00	
Total.	12	200	or one-eighth.

The detail of items is very similar throughout the district. In Bannu proper allowance had to be made for the whole dues of the *chal-weshta*, or watchman of irrigation channels, and for half those of the *kutwāl* or village bailiff, one of whose duties it is to collect the canal working parties. Where hired reapers are not employed, as for the finer crops, like sugar-cane, or amongst the Bhangikhels and to some extent amongst the Wazirs and the pettiest Bannuchi proprietors, my rates for *kamiana* deductions are very liberal indeed. But, speaking broadly, I think they are nowhere too much so. Harvesting operations are, as a rule, conducted in a very wasteful manner.

190. *Kamiana* dues being eliminated, the other items making up the total cost of production had next to be deducted. The balance would represent the net assets, half of which were to be taken as the maximum

Evolution of half net assets,

standard of assessment. The "other items" were for most of the district the tenant's share of the produce and nothing more. In some of the irrigated tracts certain extra items had to be also cut out of the landlord's receipts before the net assets were attained. Thus for Isakhel and the Nar and Landidák circles of Bannu tahsíl, canal clearance charges, and in a number of the tappas of Bannu proper, seed and manure, when supplied by the proprietor, had to be allowed for. In calculating the tenant's share the practice is to treat all land as if cultivated by tenants-at-will, paying at the average rent rate of the circle. This renders the account very simple. Where rent rates were various, as in Bannu proper and in Isakhel, I was, however, more particular. In the former case I used for each tappa the average rent rate of the tappa, and in the latter that of each village for itself. This made the account more accurate. How it was worked out was detailed in my several assessment reports, and need not be repeated here, especially as the rent rates of the district have been elsewhere described.

191. Having thus made out a thoroughly honest and independent half asset's assessment, I next considered the circumstances of each circle as a whole, and where necessary of each village in it in particular. Where villages were numerous they were carefully graded in their supposed order of productiveness. By the above means I obtained a rough estimate of the limit to which enhancement was practicable within the prescribed maximum standard. Soil or revenue rates were then devised with reference to the assumed revenue bearing capacity of the different soils, and the rough estimate just mentioned. In this process I had nothing to assist me, but the two guides above noted. I could not compare my rates with those of a former settlement because there were none. I could not manufacture any by dividing former assessments on former measurement areas because such areas were unreliable. I could not even compare my Trans-Indus rates with those accepted for other adjacent tracts, because none such had yet been sanctioned for either the Kohat or the Dera Ismail Khan districts. Moreover, had they already been so, such a comparison would have been of little practical value, because the Trans-Indus and *sailaba* portions of this district stand to a great extent alone. But for the Cis-Indus lands, such a comparison was usefully made, the Mohár of Mianwali assimilating to the Mohár of Isakhel, and the Pakhar ilaka to the Tallagang tahsíl of the Jhelum district.

Having then devised revenue rates as best I could, I should, according to the rules, have applied them only to a few average villages in each circle, and then have submitted my assessment or revenue rates reports. But in so doing it would have been necessary to explain that in making my village assessments, it was probable that I should have to depart so materially from the revenue rates product, that I might finally propose an assessment of Rs. 10 per cent. or 12 per cent. above or below it. Such a result would, I think, stultify the value of orders passed on a revenue rate's report. Acting rather on a common sense view of the case than in strict accordance with the letter of the rules, I applied

my rough rates to all the villages in each circle ; then the Superintendent and Extra Assistant Commissioner recorded their independent opinions as to what assessment should be imposed on each estate, and after that I did the same. Finally, I modified my rough rates, when necessary, so as to bring their product into closer accord with that of the village assessment estimates. In reporting, instead of observing a discreet silence about this latter process, and justifying my rates on general grounds alone, I explicitly avowed all I had done, and with a great want of precision of language wrote of my "village assessment estimates" as "village assessments." The fact is I did not consider I was contravening any rule, and as Mr. Lyall throughout approved and endorsed my procedure, it never struck me that any part of it would be challenged and condemned by Government. The Isakhel assessment report was the first submitted, but provoked no strictures. That for Marwat was the next. Here Mr. Egerton, then Financial Commissioner, pointed out that my mode of operation rendered "criticism impossible except upon the general consideration whether the assessments are fair as a whole." His view was partly endorsed by Sir Henry Davies. Unfortunately for myself, I did not receive orders on Marwat until after the submission of the assessment reports for the two remaining tahsils. I say "unfortunately," because had Mr. Egerton's comments been communicated to me in time, I would, of course, have drawn up the remaining reports in strict conformity with the letter of the rules, and either not have made any village assessment estimates at all, or, if I did, said nothing about them, but justified my revenue rates entirely on general grounds, which would have been easy.

By the time the Bannu tahsil assessment report, the most important in the district, reached the Financial Commissioner, Mr. Egerton was Lieutenant-Governor, and Mr. Ouseley Financial Commissioner. The latter approved of my procedure, but the former did not. On that I attempted to justify it, and show that it was not in opposition to the spirit of the rules. My strong point was that as the rules laid down that "the produce (i. e. half assets) estimates form the standard by which the assessment of a tract of country will be judged as a whole," it followed that as I had furnished elaborate and honest half assets estimates, I had supplied the prescribed data for criticism. Besides that, I had in all my reports given general reasons for pitching my assessments at the figure I proposed below half assets. Mr. Lyall was generous enough to support me. In forwarding the papers to His Honor the Lieutenant-Governor, Mr. Ouseley made the following comment :—

"Mr. Thorburn took into account the circumstances of individual villages in reporting his revenue rates; and as the circumstances of each village could not be reported with the revenue rates, without exceeding the scope of a report on revenue rates, the rates were in reality beyond criticism. He was, in short, too *particular*, and not sufficiently general in reporting his revenue rates for any general criticisms to be made on them. The proper stage to consider individual circumstances is at the announcement, and the report on assessment of estates, not in a revenue rate report."

His Honor, too, did not consider that I had made a successful defence; and, with reference to my half assets jama, condemned it as too high and misleading, and pointed out that in framing it I ought to have

taken into consideration factors such as the following: the great percentage of enhancement, the Wazirí impatience of taxation, the large expenses of proprietors, the minute subdivision of holdings, &c. I regret deeply His Honor's decision. All I can say is that, in preparing my half assets estimates, I followed Mr. Lyall's instructions, and that I understood from him no factor was to be then taken into account except those comprised in the cost of production, all others being left over for consideration until the hour of assessment.

192. I have explained that I adapted my revenue rates to my village assessment estimates. In making these

Summary of reasons for pitch of assessment below half assets maximum.

latter every circumstance bearing on the revenue paying ability of each tract, clan, and even community, was taken into account. I propose here to run over the general reasons for the pitch of assessment actually imposed for the different tracts of each tahsil. The assessments, as distributed, nowhere differ largely from those first proposed. Mr. Lyall's recommendations were in most cases accepted, and he endorsed mine in their entirety for Marwat, raised them by Rs. 650 in the Bannu tahsil, and by Rs. 600 in Miánwáli, and reduced them by Rs. 2,697 in Isakhel. Then, in applying the circle sanctions to villages, though I every where revised my former village assessment estimates, the circle totals generally came out in close accord with the sanctions, a little over them in most cases, except for Marwat and Indus *stalaba* lands. The main differences were in Bannu proper and in Miánwáli. In the former case the distributed exceeded the sanctioned total by Rs. 3,286, and in the latter in the non-*sailaba* or upland by Rs. 539. Underlying the special considerations, which will be noticed below, is one which applies everywhere, viz., that the extra cesses on the jama, including the recent famine enhancement by Rs. 2-1-4 per cent. of the local rate cess, range from Rs. 21-13-4 to Rs. 26-13-4 per cent.* In the latter I am including a special irrigation cess of from Rs. 1-8-0 to Rs. 5 imposed in irrigated tracts.

Thus it will be seen that if we add cesses, the total demand—except for Wazirs, Bhangikhels, Bhitannis, and in a few localities which on special grounds required a very light assessment—generally rises to a full half assets standard, and in places to a higher figure.

BANNU TAHSIL.

I.—*Wazirí Tracts*.—Half assets gave Rs. 25,472. The full assessments give Rs. 16,459, but those actually imposed only Rs. 8,277, or about half. This jama is very light and represents only *one-thirty-third* of the gross produce estimate. The Wazirí being hill men, impatient of taxation, and having pass responsibility, it was the declared policy of Government to assess them very lightly. The difference between the so-called full and actual jamas represents the abatements allowed on account of their pass obligations, and the border position of their villages, viz., Rs. 8,175, also Rs. 7 on other grounds. The enhancement is Rs. 34 per cent. on the jama imposed in 1858-59.

* The cesses in the two Wazirí circles run up even higher, viz., to Rs. 27-1-4 per cent.

(2) *Bannu proper*.—Half assets gave Rs. 1,55,495. The jama imposed, after deducting all abatements,* Rs. 1,28,292, or Rs. 27,203. under half assets. Still the enhancement on 1858-59 is Rs. 20,263. The reasons for not claiming more were that the villages in the Nár and Landidák tracts are weak and of recent date, and held by influential men. Elsewhere the land is fully cultivated; holdings are very minute, and proprietors are poor, and live up to their incomes, and the pressure of population on the productive capacity of the soil is very great. Added to all this, Bannu is a border tahsil.

MARWAT TAHSIL.

Half assets gave Rs. 1,56,078. The jama imposed, less an abatement of Rs. 3,415 for border villages, is Rs. 1,13,448 † or Rs. 42,630 under half assets. It is Rs. 9,969 under that of 1858-59, and Rs. 7,095 under that of 1876-77, with which year the summary settlement expired. At both summary settlements the sandy villages of Marwat were much over-assessed, and in consequence many were half ruined. The sandy soil is not productive, bears very little *khariif*, and a crop is always very uncertain. The people too are very poor, and for drinking water, fodder, and dairy produce are, compared to any of their neighbours, very disadvantageously circumstanced. In this settlement it was necessary to largely reduce the jamas of the old villages in the sandy tracts, hence all gain from the extension of cultivation elsewhere has been absorbed in this tardy act of justice. Regarding the Nár tract the same reasons held good for a light assessment as for the Bannu Nár noted above. Like Bannu too, it should be remembered that Marwat is a border tahsil.

ISAKHEL TAHSIL

(1). *Bhángikhel*.—The jama is only Rs. 2,200, or Rs. 2,219 under half assets. Being an obscure mountainous tract only recently brought under taxation, and its inhabitants being hardy highlanders, who supply us with good soldiers, lightness was thought advisable.

(2). That portion of the rest of the tahsil, which in not sailába and therefore under a fluctuating system of annual assessments, pays Rs. 34,444 or Rs. 7,738 under half assets. Considering the scant rain-fall and uncertainty of crop for báráni tracts, and the careless cultivation of the Isakhel clan, the jama is not light.

* The abatements are:—

Reductions allowed exposed border Bannuchi villages	...	...	Rs. 795
One-sixth reduction for learned and priestly classes of villages...	...	...	" 2,136
Miscellaneous	...	...	" 295 †
Total			Rs. 3,226

† Of this Rs. 229 are on account of the prohibition of certain high and other crops on certain lands immediately adjoining cantonments. Formerly a large sum, about Rs. 600 or 650, I think, was allowed as compensation, and paid from the Treasury. Such payments have now ceased, hence by the new arrangements Government saves about Rs. 400 a year.

‡ After submission of Statement E, land assessed at Rs. 3 was by judicial decision transferred from the Bannu to the Marwat tahsil.

Indus sailāba lands.—I shall include here those of Miánwāli as well as of Isakhel. The sanctioned rates gave an assessment on the cultivated area of the years of measurements for which the rates were first worked out, of Rs. 1,05,224. The half assets estimate was Rs. 1,18,687; but owing to the contraction of the cultivated area in the year in which the sanctioned rates were first imposed, the distributed jama only amounted to Rs. 75,581. This jama is a fairly full one, and the acreage rate on cultivation is within some pies of what it fell at the last summary settlements.* As a fluctuating system of assessment, to be shortly described, is in force, the jama varies each year with the acreage under tillage, and that mainly depends on fluvial action between June and September.

Miánwāli tahsil, excepting the sailāba portion.—The jama is Rs. 64,375, or Rs. 22,884 under half assets. It is an enhancement of Rs. 10,310, or Rs. 19% on that of the last summary settlement. It is a light assessment, but a crop is never certain, and a large proportion of the zamindars are Pathans and not very laborious. In the above figures the assessment on grazing waste is not included. It is, excluding Government rakhs, Rs. 3,675. To this must be added Rs. 335 in the Kacha. The former is fixed, the latter fluctuates. Particulars will be given towards the end of this chapter.

193. The following statement compares the fiscal results for the whole district, except for the Indus sailāba lands of the new assessments with those of the last summary settlement, and with the demand of the year preceding that on which they began to run:—

* Subsequent to the distribution of the jama, new and simplified rates have been proposed, and were sanctioned last month (October 1878), and will be described at the end of this chapter.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	A. Revenue at the second summary Settlement.		B. Revenue of year preceding that on which the new assessments began to run.		C. Actual demand under new assessments.		Increase or decrease under C. compared with								
	Jama.	Cases.	Jama.	Cases.	Jama.	Cases.	A								
							Jama.	Percentage.	Cases.	Percentage.	Jama.	Percentage.	Cases.	Percentage.	
Tahsil															
Bannu	1,13,467	17,333 15-4-0	1,13,697	25,616 22-8-0	1,37,465	30,254 22-2-0	plus 24,002	plus 17	plus 13,051	plus 43	plus 23,773	plus 17	plus 4,765	plus 16	
Maryat	1,23,417	13,496 10-2-0	1,20,543	20,243 16-14-0	1,13,443	24,533 21-10-0	minus 3,869	minus 9	plus 13,037	plus 49	minus 7,095	minus 6	plus 4,121	plus 17	
Isakhet	23,331	3,375 10-2-0	26,287	5,933 16-14-0	24,351	8,249 22-13-0	plus 3,360	plus 9	plus 4,974	plus 60	plus 1,334	plus 4	plus 2,396	plus 29	
Mianwali	61,453	9,373 9-12-0	64,231	9,593 16-8-0	70,770	14,904 21-3-0	plus 9,317	plus 13	plus 9,071	plus 60	plus 6,939	plus 9	plus 6,043	plus 24	
Total	5,31,663	59,177 11-12-0	5,35,726	61,562 16-8-0	5,68,278	78,260 21-11-0	plus 35,610	plus 7	plus 28,023	plus 60	plus 34,260	plus 7	plus 18,286	plus 51	

REMARKS.

1. In C. statements of every sort have been first deducted. The demand will rise Rs. 183, as well lands become fully assessed, and when in 1882-83 a progressive jama fixed for one village reaches its maximum.
2. Under C. the assessments on water mills in Bannu - Rs. 900, and that on grading waste in Mianwali and the sum for which new rakhs have been leased for 1878-79 which together take the place of *Wari* - Rs. 6,395, are also included.
3. Under cases in C. the 21.4 per cent. added to the old local rates under Act V of 1878 are included, also certain special irrigation cesses.

Regarding the Indus sailábá lands, their land revenue and *trini* amounted to Rs. 89,039 at the second summary settlement, and to Rs. 89,293 in the year preceding that from which the new assessments came into force, and to Rs. 75,916 in that year. Each year's demand depends on the area cultivated in the year, which again, as already said, depends on fluvial action.

194. In the above statement the enormous increase of the extra cesses since the first summary settlement is exhibited. These cesses now require explanation. The following are uniform for the whole district, except for the two Waziri circles in which the lambardárs receive Rs. 10 per cent. instead of 5 per cent.:—

Cess.			Percentage.		
			Rs.	A.	P.
Lambardari	...	...	5	0	0
Road	...	...	1	0	0
School	...	...	1	0	0
Dák	...	...	0	8	0
Local	...	...	8	5	4
Total ...			15	13	4

The following are not uniform :—

Patwári.—For Miánwáli it is Rs. 4-12; and for Isakhel Rs. 5 per cent.; for Marwat it is Rs. 4-4 per cent.; for Bannu proper Rs. 4, and for the Waziri circles Rs. 5-12; for the Government grazing rakh of Miánwáli a patwári cess of 5 per cent. on their annual letting value has been fixed, as patwáris will have a good deal of enumeration and other work to do in connection with them. No other cess is chargeable on the rakh leases.

Stationery.—For Isakhel it is *nil*, being there met out of *malba*; for Bannu proper, Marwat and Miánwáli it is 4 annas per cent. and for the Waziri circles 8 annas per cent.

Malba.—For Bannu tahsil it is *nil*; for the other tahsils it is 1 per cent. on an average, but a maximum of 2 per cent. is allowed in certain villages.

Irrigation.—For Bannu proper it is 1-8-per cent. and for the two Nár and Landidák tracts 5 per cent.; for villages in the Kas Umar Khan in Isakhel it is 5 per cent., and on Kurram *vials* below the Kas, 2 per cent.

Cesses on Water-mills in Bannu Tahsil.—They are : lambardári 5 per cent.; patwari 4 per cent.; and irrigation 1-8 per cent.

195. I propose now to criticise the new assessments, and to make suggestions regarding their future working. I venture to do so because of my long acquaintance with the district, and of my having conducted its first regular settlement.

Opinion on the weight of the new assessment.

I think the new assessments are, except for two tracts, rather light, that is, that the revenue payers will with judicious suspensions and rare remissions be able to pay the demand without feeling it burdensome. Some of the Wazirs profess to grumble, because their previously almost nominal revenue has been enhanced 34 per cent. But in point of fact they have been very lightly assessed, and did Marwats hold their lands, they would gladly pay double what we are taking, and still consider themselves lightly taxed. The Bhitannis, though ruder highlanders than the Wazirs, now openly express their satisfaction. Their jamas have been increased* 49 per cent. and are not so light as those of the Wazirs. They, however, have the sense to compare their state in this district with that of their brethren in Dera Ismail Khan, who pay at nearly full rates. The Bhangikhels are to a man loud in expressing their satisfaction with the Sarkár. Their jama was increased 18 per cent. and is now sufficiently high for such a wild inaccessible country. One reason, however, why they are so contented, is that they now pay a fixed sum on each holding, whereas formerly it was a tax on ploughs and varied each year. The Bannuchis—whose jama has been increased by Rs. 20,263, or 16 per cent. exclusive of cesses thereon—are, I think, really pleased, though many of them profess disappointment and call themselves hardly used.† The villages in which the highest enhancements have been taken are those in the neighbourhood of cantonment. Comparing them with similar lands in Pesháwar, such villages have been lightly assessed, and I am sure Government is taking throughout the richest parts of Bannu proper, considerably under the maximum standard, and quite Rs. 10 per cent. below what the land could pay without either depreciating its market value or its present pitch of tillage. There is only one part of the country held by the Bannuchis which is comparatively higher assessed than any other portion of the Bannu tahsil. I allude to the Lohra circle, and more particularly to those villages in it whose canal irrigation is supplied from the Tochi stream. As to Marwat, the people are really grateful. The jamas are, I think, with one exception, nowhere high, and for most of the border villages they are decidedly light.

The exception is the sandy tract which was until lately over-assessed. Throughout it Rs. 15,653 have been reduced in 75 villages, and an increase of Rs. 8,558 has been taken in 65 other villages. The net

* Haramtála is not here included, as it used to pay *nil*, and now pays Rs. 250.

† I went carefully into the cases of some of those who had objected the loudest, and had persistently clamoured for a *Kham-tahsil* arrangement. I found the objections frivolous or untrue generally. When it came to the test, it always resulted that he who had offered to give up one-fourth of his produce to a revenue farmer declared he had meant one-fourth of the tenant's share, i. e. one-eighth of his gross produce.

result is a reduction of Rs 7,095. I could not well have been more liberal. But I still think that the new jamas of the 75 villages above referred to, and of a few others, are even now severe, because their whole culturable area is under tillage; a crop is always very uncertain, there is very little kharif cultivation possible, and at best the yield per acre is very low.

As to Isakhel and Miánwáli, with the exception of Bhangikhel and *sailāba* lands, the new assessments are in most villages somewhat light, and the people know it, and are thankful. The *sailāba* lands have always paid at a high rate, but owing to the fluctuating system of assessment in force they can well afford to do so, and consequently the jama of no village can be called heavy. The very small amount of land alienated in the Kacha in the last twenty years, only about 4 per cent. supports this view,* as also that elasticity keeps down the sale and mortgage of land.

I should note generally that throughout the district I now think my tendency has been to assess the less productive estates relatively heavier than the more productive. In distribution, too, villages did the same with regard to the good and bad blocks and parcels of land inside their own bounds. Observing my own mistake, I tried to prevent them from, as I believe, making a similar, but was not often successful. Were I re-distributing the present jama, I would put more than I have on good estates, in which a crop is pretty certain, and less on others.

196. I wish now to offer a few suggestions on suspensions and remissions, and the working of the settlement in general. My meaning will be clearer if I write of each tahsil separately.

Suggestions regarding suspensions and remissions and the working of the settlement.

BANNU TAHSIL.

Bannu Proper.—I think neither remissions nor suspensions will ever be required, except in the rare case of loss from hail, by the abrasion of its bank by the Kurram, and in the case of the failure of the Tochi stream in the winter and spring months. When that occurs, certain villages in the Lohra circle will lose their *rabi* crops. I stated in the last paragraph that the assessment of this circle is comparatively higher than that of any other circle in the Bannu tahsil; and of its villages, perhaps Shahdeo is the highest assessed.

Waziri Country.—The jama is so very light that remissions on any ground except that of diluvian will seldom be either advisable or wise. An occasional suspension, when the wheat crop fails after a poor or average preceding spring crop, is all that I would recommend.

In cases of partial damage by hail, I would in good or average years distribute a part or the whole of the jama of the ruined crops over

* It is only just to here observe that the Kacha zemindars assert it was the high pitch of the old soil rates which deterred outsiders from buying Kacha land. One good reason was, however, the instability of the soil. The new Kacha rates just sanctioned cannot be called high. The zemindars one and all praise their fairness and simplicity.

essed lands bearing good crops. Provision has been made for this administration papers. It is unreasonable that the State should have in ordinary or good years a considerable area, which has been brought under cultivation subsequent to assessment, and therefore practically unassessed. This remark is applicable to all villages throughout the district except to Bannu proper, *sailāba* lands and the fully cultivated sandy villages in Marwat. In the excepted tracts I would allow a remission on account of the destruction of crops by hail.

MARWAT TAHSIL.

Government has already given orders on the subject (see paragraph 8 of Government's letter No. 1548, dated 7th October 1876). For convenience of reference, I transcribe the orders here:—

"In his 31st paragraph the Settlement Officer makes certain proposals for the occasional relaxation of the fixity of the annual demand, which have attracted the special notice of Sir Henry Davies. These are:—

1. That failure of the kharif crop should be at most a cause for suspension, and that only in the Pakha circle.
2. That half the annual demand should be suspended on failure of one rabi crop.
3. That on failure of two rabi crops in succession the sum suspended in the preceding year should be remitted, and another similar suspension granted.
4. That in the Shiga, Shiga Khatina, and Gadwad circles, and in the Thal portions of the Tandobah circle, remissions should occasionally be made in addition to suspensions.

The Settlement Officer adds that, except in a very special series of bad years, suspensions alone should suffice for the Pakha circle, and that none should be required at all for the Nār circle, or for the irrigated lands of the Tandobah circle, unless the *reh* evil should increase. These suggestions appear to the Lieutenant-Governor to be judicious, and to contain considerations which he desires may be carefully and continually adverted to by the District Officer in the practical working of the settlement. In bad years wholesale suspensions of the revenue will be necessary, and recoveries should be enforced in good ones. Subject to these remarks, His Honor does not wish that any precise rules should be laid down, but the tahsildars should be made fully acquainted with the views of Government on this head."

In carrying out the orders of Government, I venture to hope that the District Officer will interpret the word "failure" liberally. When the return is very small, say for wheat no more than three or four grains for one sown, a zamindār would describe the crop as "a failure." I anticipated my remarks receiving such notice, I would have more careful to be precise in my language. I here refer especially to the still heavily-assessed, fully cultivated sandy villages of Marwat.

have no autumn crops at all, or at most in good years a very little *bajra*, and as their peasant proprietors live from hand to mouth when the spring crop "fails," it means to many indebtedness or parting with land. I used to think a "cyclic" assessment would be the panacea for Marwat, and reported lengthily on the subject as on the indebtedness of the Marwats (No. 72, dated 10th October 1875). But such an assessment would not be of much use unless the District Officer remained in charge for a whole cycle, and that is hardly likely. Should the present assessment break down, i. e., the people get more and more impoverished through the fault of our system, I am now of opinion that the sandy tracts of Marwat should be held *khām-taksīl* at fixed money acreage rates. Thus I would have two rates for each village, viz., that now distributed to be applied to the area in which crops come to maturity in average years, and another, say from Rs. 10 per cent. to 25 per cent. higher for above average years. Government would gain by this; and, judging from the case with which annual measurements are effected over the Kacha—an area of 439 square miles, paying from Rs. 75,000 to Rs. 1,20,000 a year—with the ordinary staff of *patwāris*, I think the plan is quite feasible.

ISAKHEL AND MIANWALI.

For the canal irrigated lands of Isakhel and the Kacha, I think a remission is necessary when hail destroys crops. In both, the whole area is fully cultivated, and pays revenue at cultivated rates. With this exception I think occasional suspensions should meet all shortcomings of the season throughout both tahsils. Every four or five years at the worst, a very heavy wheat or *bajra* crop is in-gathered, and I can see no reason why suspended revenue should not remain so until a really good year comes. A fair yield in the Kacha to the acre sown is so certain that suspensions there can seldom be required.

197. In 1876 I made at Mr. Lyall's suggestion careful inquiries into the ways and means by which revenue payers meet the *rabi* demand. I had previously proposed the postponement of the *rabi* kist dates by fifteen days for the Isakhel and Marwat tahsils. The results of my investigations were reported in a letter from which I almost literally transcribe several paragraphs. I venture to do so, because I believe district officials are hardly aware of the straits to which the poorer peasantry are put in order to meet their revenue engagements. I certainly was not until I went into the subject.

"Wheat is the great *rabi* crop throughout the district. In Marwat gram is also largely cultivated, but even there wheat is the important staple, from the sale of which the peasant expects to pay most of his revenue, and provide for most of his household expenses. The last *rabi* harvesting operation is seldom over until about the 10th of June, and often; in good years or when rain in May or June retards work, not until a week or ten days later. These dates are broadly correct for the whole district. On the Indus alluvial lands, however, the spring crop is generally in-gathered a few days sooner than elsewhere. Taking June 10th as the average district date for the completion of harvesting, the revenue payer has theoretically three or four days for making arrangements to pay his first revenue instalment. But in practice he has not even this; for June 15th is the date by which the first kist has to be paid in to the tahsil, and a tahsildār, who is "an energetic revenue officer," begins to dun for payment long before that date. The case is similar for the

second kist. Again, each individual revenue payer is pressed for payment by his lambardār and patwāri days before the money actually reaches the tahsīl. He has thus to worry himself to raise money at the very time in all the twelve months of the year when money is dearest, and when his whole attention should be concentrated on getting in his crop.

"Under the above facts the question arises from what sources is the first kist met? I find that thrifty or well-to-do revenue payers pay their quota from a balance in hand, but that the mass of the peasant proprietors of the district either sell a portion of their half-harvested crop or borrow money to pay theirs. Both these are eminently losing transactions. When the revenue is paid with borrowed money, as is commonly done by the smaller peasants in the Kacha, the borrower hopes to pay off debt, and interest two or three months later by selling after prices have settled, and to lose less in the process than had he sold before that event occurs. He speculates, in fact, on a rise in prices, and of course his hopes often prove fallacious. In an exporting district like this prices of exportable agricultural produce mainly depend on the outturn in tracts bordering on the Indus to the south of Isakhel, and on the state of the grain markets in centres like Dera Ismail Khan, Mooltan, Sakhar, &c. Prices, therefore, cannot "settle" here until July and August. Now, no landholder would think of selling largely until prices do settle, except from the dire necessity of having to find money to pay his revenue with. Many, as I have said, prefer borrowing. As to the proportion of grain to outturn sold by the 15th July, I find that under one-fifteenth is sold by June 15th, and not more than one-sixth, if so much, by July 15th. The great export season cannot well commence until after the rains and inundations be over, that is, until September. Export is largest in the cold months.

"Our beneficent Government cannot desire a continuance of the selling-at-a-loss or borrowing practice described above, provided that by a liberal postponement of the kist dates the probability of revenue defaulting by individuals, or even communities, be small. I believe that the existing dates were originally fixed with the special object that in case of default the collector should have the tangible security of unsold grain at hand from which to realize his demand. That was in the days when land was of little value. Now the reverse is the case, and every peasant knows what are the processes legalised for compelling payment of the land revenue. Hence if the dates, by which the rabi kists are required to be paid in, be so adjusted as to save the peasantry the necessity of selling-at-a-loss or of borrowing, the risk of default, will, I think, not be appreciably increased.

"To recapitulate facts and arguments, the rabi kists are due on June 15th and July 15th, but in practice they are paid earlier. The harvest is barely in-gathered by the former date, and prices have hardly settled by the latter, hence a large proportion of the two kists are paid from borrowed money or the proceeds of losing sales. Under the circumstances it would, I think, be wise and generous to re-adjust the dates for the payment of the said kists, provided that thereby the risk of revenue defaulting be not materially greater than now. The growth of intelligence amongst the landholders, the rise in the value of land, and the impossibility of selling profitably until after the rains, have already, it seems to me, minimised that risk."

Under the circumstances, I urged that the dates should be changed throughout the district from June 15th and July 15th to July 15th and August 15th. The dates ultimately fixed by Government are July 1st and August 1st for all tahsils, but Bannu itself. On reconsideration, I am not sure that, in the interests of Government, my proposals were entirely prudent *as a whole*, because I think I did not allow sufficiently for the improvidence of the poorer classes, and the temptation Wazirs would have felt to slip away to the hills without having previously paid their revenue. Indeed, partly on this account, and as Bannuchis largely grow crops which ripen earlier than wheat, *e. g.* barley and clover, and have good markets close at hand, I did not in the end think it necessary to ask for any postponement for them. For that Bannuchi circle, however, in which the kharif revenue is partly met from profits derived from sugar-cane and turmeric, I asked and obtained a month's postponement for the second kharif kist.

The sanctioned dates throughout the district are now:—

Tahsíl.	RABI KISTS.		KHARIF KISTS.	
	First.	Second.	First.	Second.
Bannu ...	15th June ...	15th July ...	15th December For all villages but those of the Bannu circle in which they are:—	15th January
Marwat, Isa Khel and Miánwáli ...	1st July ...	1st August ...	15th December 15th December	15th February, 15th January

I need hardly say that the revenue payers throughout the district are very grateful to Government for the measure of relief which has been accorded to them.

198. The only water-mills in the district are in the Bannu tahsíl. The most profitable are near cantonments, and on the Kachkot canal. They are only used for grinding grain. Most of them are owned by village headmen and leading agriculturists, who lease them out for cash-rents to working millers, generally Hindús. The seventy-eight now working have been each separately assessed for the first time, at rates ranging from one-seventh to one-third of the estimated net profits. The pitch of assessment is probably somewhat lower, as I made a very liberal deduction from the gross receipts for the cost of maintenance. The aggregate revenue is Rs. 900 a year. The only cesses payable are 5 per cent. to the village headman, who collects, and the patwári and irrigation cesses aggregating Rs. 5-8 percent. According to the terms of the Financial Commissioner's sanction, the assessment now imposed on each mill is to be for the term of settlement, but if a mill falls out of use from a cause beyond the control of the owner, a remission is to be given. Such remission is not to be allowed for the first six months during which the mill is out of work, and is to cease whenever it is again brought into use. New mills are to be assessed by the District Officer at the rates paid by mills of similar power in the neighbourhood. Should during the term of settlement the profits from any good mill, now highly taxed, so seriously and permanently diminish that a reduction of assessment is thought advisable, the District Officer is to report in accordance with the procedure prescribed for the analogous case of a reduction of land revenue. I may note here that no new mill can be erected without the District Officer's permission. I trust such permission will be given very charily, as water-mills generally interfere with the irrigation, and there are already a sufficient number of them. To divert water into the mill-race a partial dam is thrown across the supply channel, by which the pace of the flow is diminished, the suspended silt is deposited where it is almost useless, and the branch canals taken off immediately above, the race get more than their proper quantum of water. Besides this the water passed off into the mill-escape becomes frequently unavailable for irrigation purposes.

Date-palms are mostly confined to twenty-four villages adjoining the Kurram in tappas Shamsikhel, Musakhan, Ghoriwál, and Jhandúkhel, all in Bannu. In them 4,819 female trees were enumerated, and taken proper. In distribution, the revenue payers, as count in the assessments. In particular cases the class of such land imposed a rate of two annas a tree on those growing on unassessed. In the number of fruit-bearing trees growing partly determined by the above date-palms, there are a few on the right bank of the Indus south of Kundal in Isakhel. The profits from the trees in and about the village sites in Bannu proper are sufficient to make the owners preserve the ripening fruit in bags, and fight over their respective shares in our courts. On the whole, however, the Bannu date is a poor fruit compared to that produced in the groves of Paniála and Kiri Khisor in Dera Ismail Khan.

200. With the exception of a so-called cavalry grazing rakh of 255 acres near Ghoriwál, some small *shisham* reserves in the Kacha, some waste plots under Kamaf Musháni—all already described, and a rakh of the Shekh Budín hill, all the rest of the Government rakh in the Mianwáli Thal.

formed from the upper part of the Thal proper of Mianwáli. This Thal area comprises, in its most limited sense, all the sandy upland tracts to the south of the Mianwáli, Van Bhachrán road, and contains 415 square miles. It is essentially a grazing country, having a light soil, little suitable for *baráni* tillage, and, generally speaking, except close to the high bank of the Kacha, and in the extreme south about Dab, the water level is too low for profitable well cultivation. In Sikh times most of this tract was over-grown with scrub and low jungle trees. But in the immediate neighbourhood of the then existing ten or twelve wells of Dab and Harnoli, and for a mile or so in the rear of the villages, which at intervals had all been cleared away. On annexation wherever a community was found, an enumeration of its cattle was made, and *trinni* imposed, after which graziers had, irrespective of residence, a right of pasturage over the whole Thal or elsewhere, except in one locality known as the old Harnoli rakh. This the Sikhs had been in the habit of preserving in a loose fashion for the use of the cattle belonging to the Harnoli garrison. We, as their successors, maintained it in much the same careless sort of way, until in 1864 it was carefully demarcated since which time it has been leased annually as a Government grazing rakh. In 1856-57 boundaries were laid down in the Thal in such a way that its whole area was allotted to different so-called village major portion going to Van Bhachran and Harnoli. But no change made in the then existing Thal villages from their inter-delimitation accruing to the different the boundary up to which they could sever for the future the boundary was fixed. A strong feeling of protest

right in all the waste included within its boundaries soon sprang up in each community, and gave rise to a give-and-take custom in grazing, the rules notwithstanding. Thus year by year outsiders, and especially Pawindahs and others who were not neighbours, began to find it more and more difficult to graze their cattle at will over the Thal without first coming to an understanding with the village within whose limits they wished for the time to sojourn. At last this settlement commenced, and shortly after I was advised by the Financial Commissioner, with reference to Thal waste, that "as much as possible of this land should be reserved as Government property," because, amongst other reasons, the question whether the Sindh Sagar Doab Canal, surveys for which had been begun and completed during the two preceding field seasons, "shall or shall not be made, may depend to a great extent upon the amount of land which can be reserved as Government property." Upon that I proposed the appropriation under section 28 of the Land Revenue Act of 1871 of somewhat over a lakh of acres, on the ground that such land was surplus waste in excess of village requirements, and had not hitherto been taken into consideration in the two summary settlements of the Thal. Mr. Lyall and Colonel Munro, whilst inclined to concur that technically the Government claim might be asserted, held that its assertion was inexpedient, except within the limits of Harnoli. Government, however, "generally approved" of my proposals, but directed me to treat the grazing requirements of the Thal villages with great liberality. Accordingly I reconsidered the claims of each village, and submitted fresh proposals, which were with some reservations in favour of Pawindah graziers, and annual in preference to long termed easements, sanctioned. The result is that 78,964 acres or 123 square miles have been now absolutely appropriated as Government property. This, coupled with the old Harnoli rakh of 13,820 acres, raises the Government reserved land in the Miánwáli Thal to 145 square miles. Besides this in the contingency of certain wells falling into disrepair, and continuing so from two to four years, lapses to the extent of about 4,000 acres more will occur. The Thal villages have been, I think, very handsomely treated, and they are very satisfied, whilst at the same time Government has secured a property which will be of high value should the projected canal ever be made. The soil, though now light and poor, is mostly culturable, and Indus silt would soon make it rich.

201. The following statement gives some particulars about the Mianwāli rakh leases for 1878-79. The following statement gives some particulars about the rakh, which may be useful as a guide to their leasing value in future years :—

Mianwali rakh leasing 1878-79.					REMARKS.	
Number.	Name of rakh.	Area in acres.	Amount of lease for 1878-79.	Incidence per 100 acres.		
1	Old Harnoli ..	13,820	400	2 14 4	There are a few Crown tenants here with occupancy rights. They pay to lessees. I think in future Rs. 450 may be taken, but not more.	
2	Wichwinbala ...	2,535	50	1 15 7	A poor little rakh. Rs. 10 more might be taken.	
3	Southern (Lamma) ...	29,050	700	2 6 7	I think in future Rs. 890 may be taken. Rs. 900 should the term of lease be extended three or more years. I expect Pawindahs mostly confine themselves to this rakh.	
4	Northern or Bhachran. Van	36,770	1,200	3 4 3	The rate is heavy, as the landless Jat camels of Mianwali have a share in the lease. Interests should always be considered as to a good half of the camels required for government purposes in the district. Mianwali are very anxious to get a long term lease of this rakh. The file on the subject made over to the Deputy Commissioner.	
5	Kundian ...	...	6,017	230	3 13 2	The rate is very high, and should not be taken, I think.
6	Bhakra ...	...	4,592	140	3 .. 9	Rs. 150 or 160 Rs. might be taken.
					average rate 2 14 11	
	Total ..		92,784	2,720		

of the rakh question conducted by that of trinni for all under this tax

202. The disposal of the rakh question conducted by the decision of that of *trinni* for all up to the old form of this tax. We saw the last paragraph but one, how the graziers were assessed in their villages according to the number of camels they were computed to possess without reference to the size of the rakh.

* Hitherto Pawindahs with their sheep, goats and camels have visited the sort especially the parts nearest the Kacha in order to get drinking water free of charge, in years when pasturage was plentiful, everywhere they have not cared to spend the Thal. In future it won't pay them to graze their cattle in any but the largest rakh.

which their cattle grazed. Thus *trinni* was a poll-tax on cattle. The same system prevailed elsewhere in Miánwáli and in the Leia and Bhakkar tahsils as well. Each community owning a fair stock of cattle or camels was assessed at a fixed sum, and that sum was periodically re-distributed. The possession or non-possession of pasture lands was a matter of no importance. Mr. D. Simson, made a settlement with each village in 1852, and Mr. Cowan revised it in 1864. Practically he only re-adjusted the old amount, increasing it by Rs. 176, and thereby raising the whole demand to Rs. 8,725. As graziers are somewhat migratory, and murrain of some sort is occasionally very destructive, the annual imposition of the settlement amount on each village caused serious inequality of taxation. In some villages in the same year the rate per camel or buffalo was, say, Rs. 2-4; whilst in another it was only 8 annas. Evasion of payment was easy. Graziers assessed, say, with Piplan, retired to some village in the Bhakkar tahsil, and until hunted up escaped taxation. The necessity of revising the system was early felt in this settlement, and the Lieutenant-Governor himself pressed its consideration, as, when in 1872 he visited Miánwáli, the people clamoured loudly to him against the capricious oppressiveness of the old mode of distribution. A report on the subject was submitted in the following year, and Government immediately sanctioned the abolition of *trinni* in Kacha villages, in which the old system was most burdensome, and the substitution therefor of a light acreage rate on valuable grass lands. Meanwhile the question of appropriating Thal waste was under consideration, and that being decided in the way it was, it followed that such villages having now only sufficient pasture for their own requirements should be in future allowed a discretionary power to exclude or tax foreign cattle according to their own interests. Such a right, too, naturally accrued to other villages, all whose open grazing lands had been divided, and were held in severalty, and whose cultivation had so expended that practically they now possessed few extra cattle and but little grazing waste. This was particularly the case in villages north of the Miánwáli, Van Bhachran road, and lying between the Salt Range and the Indus. Under such an altered aspect I proposed to abolish *trinni* in some villages, and where retaining it to adopt as the measure of the tax, not a cattle enumeration, but an acreage rate on the available pasture area. My proposals were generally sanctioned. The result is as follows:—*trinni*, measured by an acreage rate on grazing waste, is paid on 129 square miles of the Salt Range, yielding Rs. 1,105, by 13 Thal villages yielding 2,570, and throughout the Kacha a rate of Rs. 3-2 per 100 acres has been fixed for imposition whenever the grazing area, exclusive of village site, barren waste, and the like, equals or exceeds the cultivated area. The income therefrom in the current year for Miánwáli was only Rs. 335. The same system has been extended to the Isakhel Kacha, and will come into force next year. The Government rakhis in the Thal have been split up into six blocks, and let for an aggregate sum of Rs. 2,720 to reliable men for this year, but may be expected to realize about Rs. 3,000 *per annum* in future. The conditions of each lease have been clearly specified in each lease deed. The most prominent points are:—

lessee can cut grass but not trees; can close rakh for three or four months; can put in tenants to cultivate a single crop; maximum rates are laid down; the cattle of Pawindahs and neighbouring villages can not be excluded, the former are to pay at half rates only; lessee is responsible that no *lanah* shall be uprooted: Government can take possession of land at any time, reducing the amount of lease *pro tanto*. The whole income from *trinni* for this year (1878-79)—the first of the new settlement—is Rs. 6,730 or Rs. 1,253 under what it was last year. In the plain portion of the Pakhar tract, *trinni* has never been customary nor has it now been imposed. *

203. I stated in paragraph 142 that "the changes caused by the Alluvion-diluvian system reversion of the Indus to the Miánwáli side in the Kacha, were so tremendous, that it soon became an impossibility to maintain fixed assessments, and so between 1862 and 1864 a fluctuating system was introduced." That system was briefly the annual measurement under the 10 percent rule of all cultivated land in the Kacha, and the imposition thereon of the village acreage rate on cultivation. The assessment on fallow, abandoned, eroded and other plots rendered for the year unculturable, was at the same time remitted. Though a boon to the people and a gain to the State, the new system was still not as elastic and accommodating as it might have been. There was no specially light rate, as was advisable for *nou-abád*, and the retention of the settlement village rate was only wise on the assumption that, as years went by, no change would take place in the productive power of the soil; whereas, in fact, such change must always be of annual occurrence. In 1871-72, at the request of the revenue payers, the "one per cent." was substituted for the "ten per cent" rule, and in that or the following year I introduced and applied the rates for the assessment of *nou-abád* and abandoned land, when again brought under the plough. In 1875 I reported on the system to Mr. Lyall, and it was determined to improve and continue it. It was thought so suitable for districts possessing Indus frontage that fluctuating assessments have since been introduced in the Dera Ismail Khan district, and I believe throughout the Mooltan Division as well. During settlement the alluvion-diluvian work of the district was done under my supervision, owing to which I acquired some practical insight into the subject. On receipt of orders on the Kacha revenue rates assessment, I drafted a set of instructions for the future guidance of the District Officer and his officials in applying the fluctuating system of assessment. That draft simply gave effect to the Financial Commissioner's orders, and embodied the results of my own experience. Since it was made, new revenue rates have been proposed and sanctioned for future application to the whole of Kacha, by which at a small immediate sacrifice of revenue, a great simplification of procedure has been effected. I have now re-cast my rules, and at Mr. Lyall's suggestion insert them for approval.

* No grazing tax in any form is taken in the two frontier tahsils. In Isakhel camels have a prescriptive right to graze over the whole of the upland tracts to the Kalabághí boundary. The rates levied are—per he camel Rs. 2-4; under two years nil. The lease is sold annually. Last year—1877-78—it fetched Rs. 2,100.

I.—Field Maps.

204. Ten uncoloured tracings of the settlement field maps have been prepared on Serámpur paper with a view to facilitate work in future. The sheets have not been gummed together, but are numbered. They are in the immediate charge of the tahsíl kanungo, who should early in October each year make over to the patwáris those sheets on which the work of the year is to be shown. One set of sheets may often suffice to show the work of two years. As Serámpur paper is flimsy, the kanungo should have each sheet, as it comes into use, backed with cheap country paper before distribution; cost to be met from Patwari Stationery Cess, and backing to be done by an expert patwári.

II.—Measurements Procedure.

On receipt of his sheets each patwári should compare them with those of the preceding year, and amend them, if necessary, up to that year. He should begin his measurements before the end of October, and the kanungo should begin attesting soon after, so that both his and the patwári's field work be over by January 15th. In late years the kanungo should be on the alert to pick up plots sown after the patwáris have finished their measurements. Sowings are late in low lands in years when floods are late. In late years sowings are not over before the middle of December, but ordinarily they are over by November 20th. The tahsildár's inspection should begin by January 1st, and be over by February 10th. His superior officer's inspection should be over in time to secure the abstract *mílán khasrah* or *girdárwari* statements reaching the district office, and the general district abstract statement being compiled therefrom and translated into English early in March. This work completed, and passed by the Deputy Commissioner, a *fard báchh* should be prepared for each village in anticipation of the Financial Commissioner's sanction.

III.—System of Assessment.

The whole area cultivated for the year, *i. e.* that on which an autumn crop was grown, and that lately sown for a spring crop, is measured and assessed, and that alone. Thus the actual assessment on new fallow and newly-abandoned plots is remitted, just as if they had suffered diluvian.

Notes.—(1)—Land ploughed but not yet sown should be entered by patwári and kanungo as cultivated. Should it not have been sown by the time the tahsildár goes round, he will treat it as unassessable.

(2). Land entered as "cultivated" by the patwári, but subsequently eroded by the Indus, is only to be allowed for up to, say, February 10th. Indus erosion in the cold weather is generally gradual and foreseen, and once the crop on the threatened land is high enough to be cut as fodder, it is so cut. This observation does not apply for Kacha lands subject to the fluvial action of the Kurram.

IV.—The Sanctioned Rates.

Subsequent to the announcement and distribution of the assessments the following two uniform rates on cultivation, in substitution of certain

rather complicated revenue rates previously approved, were sanctioned for the whole of the Isakhel and Miánwáli sailabá lands, viz. :—

	Per acre.
	Re. A. P.
1. On <i>nou-barámad</i> , <i>nou-ábád ta do sál</i> , and <i>banjar nou tor ta do sál</i> , and true <i>kallari lands</i> .	0 12 0
2. On all other cultivation	1 4 0

Notes—(1) Land impoverished with *kallar* or *reh* rarely exceeds 5 per cent. of the cultivated area in any village, except in those marginally noted, which lie at the mouth of the Kurram and are frequently flooded with its brackish water. In those six villages from 15 to 50 per cent. of the cultivated area suffers from *reh*.

1. Atak Paniala.
 2. Kundal.
 3. Banmahli.
 4. Khgianwala.
 5. Gajranwala.
 6. Kacha Narzaman.
- (All in Isakhel).

(2) As the Kurram occasionally comes down in high flood after sowing, and before reaping, and lays waste some of the cultivated and therefore assessed lands of the villages named marginally above, whenever damaging floods are known to have occurred, the tahsildár should make an inspection in April, and propose a remission, if necessary. This course was preferred by the Financial Commissioner to that proposed of delaying the submission of the alluvion-diluvian return for the villages marginally named until April or May.

(3) A special *chahi* or well rate was originally sanctioned by the Financial Commissioner and applied in assessing, but as there are very few wells in the Kacha, and all merely supplement river inundation or percolation, are more used for drinking than agricultural purposes, as the villagers too in every case put the ordinary *sailaba* rates on lands under them, and as during term of settlement only *sailaba* rates could be imposed on new wells, Government has sanctioned a subsequent proposal that there should be no separate well rates for the future. Well land will, therefore, pay at the full quarter rate and no more.

(4) The course of tillage for *nou-ábád* land is generally, first year *shamuka* grass the field pea, or other coarse pulse, second year, field pea or other coarse pulse, or even barley; third year, by which time all jungle has been cleared, best crop land can bear. Here for the first two years the lower, and in third year the full rate has been fixed. The years at the lower rate will count from the first year of assessment, thus land found *tor* in the approaching *girdanari* will be entered as "*nou tor*, S. 1935", but the period of grace or half rates will count from S. 1936, the first year of the assessment.

(5) In some villages, e. g. *bhakra*, *kiri*, grass is rotated with wheat. No allowance can be made on this account. The *kiri* is fodder for buffaloes and renovates the soil.

(6) *Kanah*, *kanh*, and *kundar* grass and reeds used in thatching, though of spontaneous growth, are cultivated in some villages as a crop especially near the town of Isakhel, and are profitably sold. Wherever they are preserved and sold, the full rate should be imposed.

(7) *Taramira*, or *jamaun*, as it is locally called, is often loosely hand-sown on poor or shallow land without previous ploughing. When sown, and not of spontaneous growth, the land should be assessed at the full rate. Discrimination is necessary, as in wet seasons *taramira* springs up spontaneously over large areas, but is not gathered.

(8) Melons are grown in the hot weather here and there, and when not succeeded by an autumn crop have hitherto escaped assessment. Patwaris should measure up such crops at the time, and when not followed by a crop the full rate should be imposed; when so followed the land would in any case be assessed. The area under melon cultivation is small.

V.—Grazing Lands.

The rate of Rs. 3-2 per 100 acres is to be imposed on all fair pasture land in the Kacha, when such lands equal or exceed the area under cultivation in a village, or whenever any village is rich in cattle but slow in extending its cultivation. Though the land so assessed will be generally found to be held in severalty, all cattle will graze on it, hence this tax should generally be distributed as *trinnee* over the

cattle of the village. As the amount will never be large, and only a small number of villages will be assessable at one time, the Tahsildár should effect the distribution during his inspection tour.

An abstract of the three last rules has been inserted in clause one of the administration papers of Kacha, possessing villages in Miánwáli, and at the end of the tenders of engagement for similar villages of Isakhel. Besides this a general reference to, and acceptance of, the rules has been made in the body of the tenders for all Kacha villages: the rules, too, have been translated and copies distributed to the patwaris and to others concerned.

CHAPTER IX. TRIBAL CODES AND VILLAGE ADMINISTRATION PAPERS.

205. This district has been the last or one of the last in the province to be brought under a regular settlement. The delay, however, regrettable on many grounds, has been of marked benefit in one respect. It has prevented the recording and perpetuating of several harsh so-called "customs," which obtained at annexation, and were the outcome of the old law—

General remarks on the state of customary law in Bannu.

That they should take who have the power,
And they should keep who can.

Had Bannu been regularly settled five and twenty years ago, one series of consequences to-day would most likely have been that women would have had no rights, that the custom of preëmption in any shape would have been declared non-existent, and that "the deep stream boundary" that *haddi-Sikandar*—as it is called—would have been established as the ancient riverain law of the country. This latter was a practice, engendered from necessity, and suitable enough in the days when might made right; but it is, I think, a most inequitable and unreasonable rule in an "age of law" like the present. This "deep stream boundary" has been recorded as the "immemorial custom" of thousands of villages in the province, just because their "customs" were stereotyped too soon after annexation. Such villages seem bound for ever to the gambling uncertainty of their recorded position, although I imagine most of them would gladly be released from it, and agree to the rule in force for the Kurram and Indus villages of this district, *viz.*, fixed boundaries both for communities and individuals, whether the area be above or below water. The objection about the costliness of the survey of the whole of the river-beds is, I think, insufficient, as the village patwaris are quite capable of doing the work themselves. In this settlement my men had completed their river-bed measurements before the revenue survey commenced their more scientific survey. And what is more, I have been able to amicably

divide and map in parcels amongst the proprietary and occupancy individuals in every village of the Miánwáli Kacha, the beds of the channels within its limits. The channels so treated occupy 144 square miles (see paragraph 179).

In the thirty years which have elapsed since Edwardes first came to Bannu, tribal "customs" regarding rights in property have been gradually changing and assimilating to those current amongst other Musalman communities, who have lived longer under a settled Government. The key to the present state of the customary law of the different tribes in the district is to be found in their relative degrees of freedom from barbarism and priest-rule. Thus most of our wildest tribes, the Wazirs and Bhitannis, scorn the idea of a woman having rights in property; tell you that she is as much a chattel as a cow is, and that if she when widowed wants to retain any interest in her late husband's property, she must marry his brother, and that a man to be entitled to hold his share of land should be an able-bodied fighting man. And yet when cases come into court, our courts, as a rule, do not uphold such "customs," and the settled Wazirs are now inclining to accept the general rule of the district, that a widow, so long as she remains a widow, and there be no sons, has a life interest in her deceased husband's property, and that all sons, whether strong or sickly, have equal rights of inheritance. Now, take an instance or two of the mental servitude a strong priesthood can impose on an ignorant superstitious people. It is, of course, to the interest of the Akhund and Mulla classes to exact an observance of the Shara law where possible. Owing to this, in Marwat two opposite practices have been, so to say, concurrent. Disputes as to the devolution of property used generally to be decided at home by a board of "ancients," or grey beards, who in their judgments followed custom, which was analogous to that of the Wazirs as noted above. But whenever the parties could not agree they went into court. As often as not they had previously determined that each should be bound by the Shara law, although neither of them had any conception of what that law ordained. If Shara was not followed, the court decided the suit according to its own lights of what ought to be the custom, and its own lights naturally caused it to decide that all sons should share equally, that widows should retain a life interest in their husband's property if he left no sons and so forth. Take another instance. The extent of the *patria potestas*, with reference to inherited property was a question which had to be answered. Could a father alienate his whole inheritance, though male issue were alive? If not all, how much? The Bannuchis at first unanimously declared he could give away all to whomsoever he chose, such being the Shara rule. Asked for examples of the exercise of such a power, not one was forthcoming. Had any man so alienated half his land? No cases known. As with the Bannuchis, so with the Isakhels and others. Thus reasoning from a series of negatives, the people over and over again were driven to admit that their first replies were erroneous, and we had to record our answers to effect that no custom on the point existed, but that all were of opinion that on disputes arising, if such and such a rule were adopted, an equitable custom would grow up. Here and there I shaped public

opinion on moot questions in the direction in which I myself, and others of longer experience, thought most equitable. Of course it was open to us to merely record "no custom;" but for matters in which I knew disputes in future must be not infrequent, I thought it best that the courts of the future should have the benefit of the deliberate and matured opinions of the people and the superior Settlement Officers. No court need accept such an opinion; and yet if it does not I cannot help thinking a mistake will be made. No "custom" will grow up, but each case will be decided according to the personal view of the court at the time, and the statements of natives interested in the case.

206. I trust I have made clear in the last rather discussive paragraph that many of the so-called tribal customs

Object of last paragraph.
Numbers and form of the
Tribal Code.

in respect to rights in landed property are still in a transitional stage, that I have not attempted to fix and stereotype any such as yet established, and that how such customs will ultimately crystalize, depends much on the value the courts will put in cases where only opinions have been expressed. As to the number and form of the different Tribal Codes, only one has been prepared for each tahsil. First comes the statement in full in a narrative form of the largest or most important tribe in the tahsil with most fixed customs, and then in shorter terms those of the other tribes. Only where such differ from the general custom are particulars of that difference recorded. Precedents are only given in support of conflicting or of the less universally-acknowledged practices. It would have been a waste of space to give them in proof of customs none would ever dream of disputing. I give below a condensed translation of the questions, the statements having first been prepared in the form of questions and answers, and underneath each a concise abstract of the customs prevalent amongst the leading tribes. In all four tahsils the sequence of numbers is the same, so it will be easy for a court to make a rapid reference to any particular clause. I prepared no Customary Codes for Hindús. I did not think any necessary.

Condensed questions of
Tribal Code, with abstract of
custom noted below each.

207. *Part I.—Rights of widows over deceased husband's real property and of wives over their peculium.*

Q. 1. If a proprietor, living apart from his brothers, and possessed of ancestral or self-acquired real property, die without leaving male issue :—

- (a) Can his widow take possession as proprietor, or has she only a right to maintenance?
- (b) Does she enjoy the same right whether she has cohabited with her husband or not?
- (c) If the property be jointly held, can she separate off her share or not?
- (d) If her interest in the property be only for life or conditional, e.g., should she not re-marry—can she administer it as she likes

(a) She has, as a rule, a life interest in the property if she be a widow. Wazirs, Bhitannis, hill Bhangikhels, and many others only admit a widow's right to maintenance: contradictory precedents common: custom still shaping.

(b) Yes; but some say that besides the performance of the *nikā* should also have entered her husband's house.

(c) Yes; generally: no established rule.

(d) She holds for life or until re-marriage: so long as she holds she can, as a rule, administer as she likes.

Q. 2. Does a widow, whether childless or not, receive a share in her husband's estate, though he may have left male issue?

A. No; she has only a right to maintenance.

Q. 3. If a man die, leaving a widow and a son's widow, and no other heirs, will both share alike or what?

A. Yes; alike.

Q. 4. Under what circumstances, if any, does the widow succeed to a share in her deceased husband's brother's (*dewar*) estate?

A. Only possible if there be no near agnates of her deceased husband alive; few precedents. Isa Khels admit widow's right.

Q. 5. Has the widow power in any case to alienate by sale, gift, or mortgage, real property of her deceased husband, whether ancestral or acquired, divided or jointly held?

A. In cases of necessity, *e. g.* to pay deceased husband's debts, marry a daughter, maintain herself, she can mortgage. In no case can she sell or give away. If the reversioners meet necessity, it ceases.

Q. 6. Should the widow re-marry, or be of bad character, can she retain what she possesses of her deceased husband's property?

A. No: but her "bad character" must be notorious.

Q. 7. Has the wife authority to alienate her own *peculium*, *e. g.* *jahéz*, or self-acquired property? Has the husband any power over it?

A. Yes; but the common practice is that what becomes the wife's at once merges into the husband's estate. Few precedents of separate alienation by wife. Bannuchis have some, but mostly judicial, and admit that a woman can have *peculium*, custom not fixed. General opinion inclines to favour the woman's right to hold *peculium*, and dispose of it at pleasure.

Part II.—Devolution of Real Property.

Q. 8. Do sons born in wedlock share equally in their father's estate of their several ages?

Q. 9. On death of father, do sons inherit by *chünduwand* or by *pagwand*?

A. By *pagwand*.

Q. 10. Do sons of gentle and low caste wives inherit equally, or how?

A. Equally everywhere, except in the Isakhel clan, in which they each get one-third less than their otherwise full shares.

Q. 11. If a father divide his estate during life, and after partition a son be born, whether posthumous or not, will old partition hold good or not? and if a new partition be necessary, then how will shares be settled?

A. As a general rule every son, whether posthumous or not, has a right to his full share.

Q. 12. If a father leave legitimate and illegitimate sons, do latter share in his estate? If so, to what extent, or are they only entitled to maintenance?

A. Illegitimate sons are of two sorts, viz. (1) chance bastards, and (2) those born out of wedlock but treated as sons: the first class get neither share nor maintenance; the second their full share. Precedents numerous. Marwats often do not marry until the woman becomes pregnant or has a son.

Q. 13. If there be no legitimate sons what rights of inheritance or maintenance have illegitimate sons with reference to near agnates?

A. As under No. 12.

Q. 14. Does a step-son (*pichhlag*) share in his step-father's (*pitandar*) estate or not? If not, is he entitled to maintenance from it?

A. He gets no share, but is entitled to maintenance until puberty. Precedents numerous.

Q. 15. If the father put his step or illegitimate son in *quasi* proprietary possession of some of his property during his lifetime, can the heirs on his death deprive him of it?

A. No fixed custom. No precedents. General opinion is, the holder's right would be that of a stranger holding by gift, and no more.

Q. 16. What rights have a woman's children by her first and second husband over her *peculium*, or other special property?

A. No fixed custom. General opinion in favour of sons by first husband. Some say equal shares. Doubtful precedents exist.

Q. 17. If a man die leaving no near agnates (*Karibiyak jaddian*), and there be daughters and a widow, how will his estate be divided amongst them?

A. Generally *per capita*. There are precedents. Many Bannuchis say that the Shara law should be applied.

Q. 18. On a father's death, to what share, if any, does a daughter or her issue succeed :—

- (a) When there are sons ?
- (b) When there are none, but other near agnates ?
- (c) And in a case of *Khána-dámádí*, can the daughter or her husband receive a share when there are sons or other near agnates alive ?

A. (a) As a rule, she receives no share ; but she is generally entitled to a usufructuary interest in half a brother's share until marriage, i. e. the real meaning is, that brothers must maintain her properly until she marries.

(b) As above.

(c) *Khána-dámádí* makes no difference in the rights of either.

Q. 19. Does a sister receive a share of her brother's estate—

- (a) Should he die without male issue ?
- (b) Should he leave daughters only ?

A. (a) As in the case 18 (a) unless she succeed in default of near agnates.

(b) She would get *nos hare*. *Bannuchís* would follow *Shara* : No precedents.

Q. 20. If a daughter die, leaving no male issue, after having received and held property from her father by inheritance (*irs*) or by revocable or irrevocable gift (*hiba mawak-at ya tamlík*), do her husband and his agnates or her father and his succeed ?

A. General rule is that the husband and his, agnates succeed. The *Isakhels*, however, say the father and his, and have some precedents.

Q. 21. If a man die without male issue, up to how many degrees in the ascending scale do agnates succeed, to the exclusion of daughters and their issue ? And who are "near agnates" (*karabatán yak jaddi*) ?

Remarks.—The old practice was that any agnate, no matter how distant, succeeded ; in fact, that daughters and their issue could not inherit in any case, the clan succeeding jointly when no man in it could prove his closer propinquity. But since annexation such a rule has been little recognized, and judicial precedents exist in all *tahsils*, except *Isakhel*, under which a daughter or her issue succeeds in default of near agnates within the fifth or sixth degree of affinity, ascending and descending to the deceased. No custom can be yet said to have been established. The question has generally been answered to effect that, in default of "near agnates," the daughter or her issue should succeed, and that "near agnates," are all males up to the fifth generation, the deceased being counted as one generation, in the ascending scale, and their male issue for a similar number of generations in the descending scale, for all plain dwellers but *Bannuchís*, with whom the fourth.

generation takes the place of the fifth. Judicial precedents support this restriction, which is peculiar to the Bannuchís.

Q. 22. What rights of inheritance have unmarried daughters on their father's death with reference to his male descendants and near agnates ?

A. Each to half a brother's share until marriage ; but, as a rule, they are content with maintenance. Numerous precedents.

Q. 23. In the case of one daughter whose husband lives *Khána-dámád*, and another elsewhere, would each share alike in their father's estate, should a share fall to them ?

A. Yes ; each would share alike.

Part III.—Partition of Real Property.

Q. 24. If one son during his father's lifetime increase the paternal estate by his own exertions, will he on partition be entitled to a larger relative share on that account over his brothers ?

A. He would not.

Q. 25. Should one son pay the expenses of a parent's funeral out of his own pocket, will he be entitled to larger share on partition on that account or what ?

A. No : but others must pay their shares of the burial expenses up to a proper amount.

Q. 26. Should two or more sons remain partners on their father's death, and one by his energy acquire more property, on partition will he on that account receive a larger share ?

A. If they hold and work jointly the energetic one would not get a larger share ; but if, notwithstanding property being undivided, their profit and loss account is separate, each would be entitled to the fruit of his own special exertions.

Q. 27. Does a half-brother (*sotela-bhāī*) share when a deceased half-brother leaves whole brothers ?

A. He would not. There are, however, many exceptions.

Q. 28. Should two full or half-brothers live undivided after partition, and one of them die without male issue, will his share go to his partner, or be divided amongst all the brothers ?

A. Amongst all the brothers.

Q. 29. Should a man die leaving orphan grandsons and sons, will former receive their father's share or not ?

A. Yes.

Q. 30. A father divides his estate, but reserves a portion to himself and lives in partnership with one son ; on his death how is that share divided ?

A. Each son would get his full share.

Q. 31. Should a father, without actual partition, give one son a portion of his estate, and separate himself from him, on the father's death how will that portion be treated ?

A. The general opinion is, that if the gift was meant to be accepted as a final allotment of portion, it could not be interfered with unless exceeding or falling short by one-third of that son's full share. If it did so it could be curtailed or raised to such a limit. There are no clear precedents fixing a limit, though cases connected with the question are frequent.

Q. 32. If a father on partition reserve no share to himself but live with one son, and by his labor increase that son's share, on his death is that increase divisible or not amongst the other sons ?

A. It would accrue to the son with whom the father was living. Precedents numerous.

Q. 33. If several brothers or cousins live undivided and one by inheritance or gift obtain property from his maternal grandfather (*nānā*) or wife's father (*susar*), on partition, can he reserve such property to himself or not ?

A. He can.

Q. 34. A father leaves married and unmarried sons, are the married sons entitled to an extra share or to anything to defray their marriage expenses from former, or not ?

A. Yes; to their marriage expenses.

Part IV—Power of an Owner over his Real and Personal Estate

Q. 35. If a man during his lifetime place another in possession of his property as proprietor, will the transfer hold good on his death, and up to what amount of property ?

Remarks.—There are no precedents of a father disinheriting or giving away most or a very large portion of his estate to one of his heirs or to a stranger. The general opinion is, that, though such alienations are permitted by Shara, the owner's power of alienation is restricted to one-third, unless there be no "near agnates," in which case there would be no restriction. Thus the answer is that there is a fixed custom, but that if "near agnates" survive, the alienation is not upheld up to one-third of the property.* In Miánwáli, however, especially amongst the Awáns, there are precedents of sonsless fathers alienating their whole estate to a daughter or son-in-law.

Q. 36. To what extent is a will valid—

(a) If there be sons or near agnates alive ?

(b) And if not ?

A. Wills are seldom made: the Shara limitation of one-third of the estate holds good about a will, or a life-made gift not subsequently revoked by proprietary possession.

In above, the right of a man to squander his property is not meant to be restricted.

Q. 37. When a transfer of property by gift, verbal or written, has been followed by possession as proprietor, to what extent, if any, does it have effect on transferor's death?

A. As under No. 36.

Q. 38. To what extent, if at all, can a man expend his property *abil-illah*? When a periodical charge is made on the property, are his heirs under any circumstances bound to continue it.

Remarks.—No large alienations for such a purpose are ever made but small ones are frequent. The general opinion is that such an alienation should be upheld up to one-third of the estate, not more. No heir is bound to maintain a periodical charge. No cases of such a charge being made are yet known.

Q. 39. Can sons or other heirs compel a father to divide his property or put them in possession of any part?

A. They cannot.

Part V.—Miscellaneous.

Q. 40. Does preëmption obtain in your tribe? If so, what is the difference, if any, in custom regarding preëmption of agricultural and building lands, and if relations in degree of propinquity have not first right, who have? Does preëmption obtain in cases of sales disguised as mortgages, e. g. a man mortgages his land at nearly full market value for a long term of years?

Remarks.—There used to be no recognized right of preëmption, but a court made right has grown up since annexation, and the custom now is in accordance with the present Statute Law. It is universally acknowledged that sales disguised as mortgages, i. e. when the so-called mortgage is for twenty or more years, and the mortgage-money amounts to the market value of the land, or nearly so, must be subject to a right of preemption. There are judicial precedents. In no case was the decision appealed against.

Q. 41. Is a married woman always dowered? If so, what is the custom about it on marriage?

Remarks.—Commonest practices are as follows:—

A dower is always fixed—from a few rupees to several hundreds. It is often given in the form of jewels or even of a plot of land. It is fixed at the time of marriage generally by verbal agreement, sometimes by an instrument in writing. After marriage man and wife often agree that of the alms the former gives, a certain portion shall be considered the wife's, in return for which she renounces her dower in his favour. There is seldom any proof of such a renunciation; hence when a woman is divorced without good cause, the courts generally decree her the full amount of dower agreed on at marriage, or, failing proof about it, the amount fixed by the Shara law, or a good round sum.

Q. 42. What are the requisites in the ceremony of marriage?
 A. Mutual consent, and the reading of the *nikāh* before two witnesses as laid down by Shara.

Q. 43. What are the requisites for divorce? Should it be given without good cause, has the divorcee a right to her dower or not?
 A. Either a duly drawn up deed of divorce, or a verbal divorce repeated three times in the presence of two or more trustworthy witnesses. It is not necessary for the divorcee to be turned out of the house. She can claim her dower (see remarks under Number 41 last sentence).

Q. 44. Is personal property on the demise of its possessor inherited in the same way as real? If not, state wherein the difference lies; also whether female ornaments are held to be the wife's *peculium* and, at her absolute disposal on her husband's death.

A. Yes; female ornaments received from her parents are the wife's *peculium*, and generally at her absolute disposal.

Q. 45. Who has the right of guardianship of the children in the two following cases:—
 (a) divorce?
 (b) father's death?

A. In case (a) the father, unless the child be an infant. In case (b) the mother, and after her the nearest agnate.*

Q. 46. Should *bhora* assessed land be taken up for dwellings, who pays its revenue?
 A. The owner or occupant of the dwelling.

Q. 47. What is the ordinary sum spent on a funeral?
 A. From Rs. 10 to Rs 20 for an ordinary zemindar (see para. 66 of Report).

Q. 48. Does a widow or daughter succeed to an occupancy tenant's holding?
 A. Yes; just as she would to a proprietor's holding.

Q. 49. If no term of mortgage is fixed.—
 (a) Can mortgagor redeem when he likes?
 (b) Can mortgagee foreclose or recover his mortgage money?

A. In case (a) yes; when he likes—the time being *hārh* for under a spring crop, and *chetar* for land under an autumn crop. In case (b) he cannot. Precedents numerous; but there are judicial decisions which are in direct opposition to the established custom as recorded above.

Q. 50. When mortgaged land undergoes diluvian, who is mortgagor or mortgagee,—in the absence of any special agreement?
 A. The mortgagee. Precedents numerous.

A. As a rule, however, a court uses its own discretion,

Q. 51. What is the custom if settlement be made out of court for compensating—

(a) A man whose wife is abducted or seduced.

(b) Parents or others when an unmarried girl is abducted or seduced.

Remarks.—In case (a), he is given a marriageable young woman and a young girl, or a sum of money according to the fixed scale of the tribe. Precedents numerous.

In case (b), the same as above. The female being married or not makes no difference. Most tribes have their own peculiarities of practice. Miazais, Jats, and the zemindárs of the Mianwali tahsil, always refer such cases to the courts.

208. The arrangements and sequence of the sections of the administration papers are nearly the same for all four tahsils. Of course many of the sections under the first three headings are only applicable to particular tracts or classes of villages. When such is the case, the usual indication of subject is made in the margin, and the fact of its inapplicability is shortly stated in the body of the page. Down to the fourth part or heading, then, the numbering of the sections is everywhere the same. I preferred this plan, as I thought it would facilitate reference in cases. I give below an abstract list of the subjects—with short explanatory notes thereon where necessary—which once studied will enable a court to readily find what it wants in any administration paper in the district. The paper itself has faults of repetition and of incorrect classification, which it would have been easy to remedy had not some of the statements been fairied and copied before I had time to make a final examination of them.

Part I—Between Proprietors and the State.

209. 1. Mode of distribution of the revenue; dates and proportions of revenue instalments payable in *rabi* and *kharif*, authority of Deputy Commissioner on good cause being shown to order a redistribution during the term of the settlement.

Abstract of subjects dealt with in each administration paper with explanatory notes where necessary.

Note—(a) For the Indus *sailba* villages and *chaks*, for which a fluctuating assessment has been sanctioned, the mode in which the announced assessment was distributed is entered, and for the future a reference to the rules is made (paragraph 204 of report). (b) I was aware that in some settlements the settlement *bachh* has been fixed—except for *sailab* estates—for the term of settlement. But as in the course of twenty or thirty years the relative productiveness of soils do change, I consulted Mr. Lyall, and he held that an entry acknowledging the District Officer's authority as above would be useful. A new *bachh* will, perhaps, only be required for villages containing irrigation wells, those in which a great extension of cultivation takes place, and in a few other cases.

2. Detail of cesses with an acknowledgment that they are subject to alteration, and that new cesses may be imposed during term of settlement.

3. Acknowledgment that mines of metal and of coal, *kankar* quarries and gold washings are Government property: a list of Government property in the village.

Note.—For Kurram and Gambila villages, and those in which there are hill torrents, the right of Government to take stones and sand without payment is also admitted.

4. Acknowledgment of revenue obligations regarding alluvion, lapsed and other plots.

Part II.—Between proprietors themselves.

5. Detail of proprietary tenures.

Note.—This section especially refers to the Indus *sailāb* village and *chaḥs* in many of which there are superior and inferior proprietors, the latter being divided into two classes, viz., *mālikān bunyāddās* and *mālikān kabza* (see paragraph 143 of report).

6. Partition of common holdings and arrangements connected therewith.

Note.—This is a very important section. Generally the right of one co-sharer to separate off his share is recognized: where the holdings are large and sharers many, e. g. a *taraf* or *patti*, it is entered that due weight should be given to the wish of a majority of the co-sharers, but that the civil officer has the power to order partition for any sufficient reason: the rights and disabilities of individual co-sharers respecting the occupancy and cultivation of a portion of a common holding are also entered: reference is also made to the special agreements inserted in the *khenat-khatounis*: for well villages acknowledgment is made that the *bārāni* rates will be partition or new *bachh* notwithstanding, maintained on new well land, unless otherwise specially ordered.

7. Respecting management and partition of common village lands.

Note.—There is not much *shamilāt-deh* of any extent except hill grazing waste and uncultivated Thal land in Mianwali, the Waziri country, and in half a dozen villages in Marwat. The proprietors have in a number of villages recorded that such being necessary for grazing purposes they have no intention of cultivating or dividing it. Where the management is vested in the *lambardars* or any other body, it is not meant that they have any exceptional rights to make use of such lands for their own exclusive benefit, or to act in any way against the general opinion of the proprietary body. The object of the entry is that one small body should have power to arrange for the promotion of cultivation. I should have noted above that *vials* water-courses, village roads, and paths have mostly been entered *shamilāt-deh*, and that it is here explained such entries were made to curtail unnecessary work, and that should such areas ever become culturable they will be divided in a certain way.

8. On rights in trees.

9. Custom with reference to new *abādīs* or wells in lands held in common or in severalty.

Note.—(a) In the two frontier tahsils an acknowledgment is here made by all proprietors, except Wazirs and Bhitannis, for the areas within their own village limits that no new *abādī* can be made without the special sanction of the Deputy Commissioner.

(b) To encourage the extension of well sinking and well cultivation in the Mianwali Thal, proprietors here agree that should they oppose the sinking of a new irrigation well by one of their number, he may refer to the local civil officer, who will have the power to arrange conditions and sanction the sinking of the well. Any man has a right to sink a *nakh* well for drinking purposes; but if he do so he cannot charge *hakk piri*.

10. Respecting *sayer* income.

11. On irrigation rights in canals, torrents and wells.

Note.—The separate supplemental statements on the subject are generally referred to for particulars, and nothing but a list and description of irrigators are given under this section. An admission is also here made that should the District Officer sanction excavation of a new canal or water-course, no proprietor can object to the appropriation of his land, full compensation being first paid him.

12. Custom regarding utilization of the natural rain drainage from waste lands (*dag, dagar, &c.*).

13. Partition of natural rain drainage of common waste lands.

14. Respecting (a) land taken up by the State lost by fluvial action or otherwise: (b) land accreted from river or a hill-torrent: (c) bounds of alluvial *chaks* and riverain custom in force.

Notes — As to (c) see paragraph 108 of report.

15. On receipt and expenditure of *malbah*.

Note.—No *malbah* has been realized in the Bannu tahsil, and none has now been proposed or authorized. It was neither necessary nor expedient to have such a cess. Elsewhere the maximum rate fixed is Rs. 2 per cent., but, as a rule, the entry has been made that not more than one per cent., except for Indus *sailab* lands, is to be levied without a special order on each occasion. Certain restrictions are also imposed regarding the levying of the one per cent., the object being to prevent *lambardárs* from making an improper profit out of the proceeds.

16. The *lambardárs, patwári* and *choukidár*.

17. Respecting absconded and absentee proprietors, also those from other causes out of possession, and those holding land in trust for others.

18. Custom regarding the succession to and transfer of land.

Note.—Generally reference is made to the Tribal Code under this section, and nothing more.

19. Usages regarding grazing, cutting, or collecting grass and fire-wood from inside and outside village limits.

20. Recovery of fine imposed on the village.

21. Rights in the village site.

Note.—For Bannu proper, a *khana shunári* register containing details as to position of each house, its occupants, whether they are *hamsayáhs* liable to ejection, whether they use their own house-refuse for their own fields, &c., was prepared. Having been attested in the regular way, it will, as the proprietors say in this section, "assist the courts in dispute." It is not meant to do more. The original papers have been preserved. No faired copy was prepared.

22. Rights in common *dykes* and *bunds*, and trees growing thereon.

23. Practice regarding *hakk pivi* in Miánwáli.

Note.—No charge is anywhere made except in the Miánwáli Thal frequented by graziers of sorts. The customary rates are surprisingly high. As the wells are very deep, and loss would ensue to owners by the diminution of their supply of water and by the country being overrun by the cattle of outsiders, e. g., Pawindahs, charging for drinking water is fair.

Part III.—Between proprietors and others.

24. Respecting rights and obligations of occupancy tenants other than those holding under section 5 of the Punjab Tenancy Act or under special agreement.

Note.—See paragraphs 143 & 146 of report.

* The word *war-par*, which is not a local term, has here been inserted in some Isakhel cases as if synonymous with *kishti-banna*. I am under the impression that it is generally used in an opposite sense.

25. Customs regarding fallows and rotations, and right of the proprietor to interfere when such custom is not followed by the tenant.

26. Respecting rights to be in future derived from clearing waste or jungle (*butamári*) in the absence of a special agreement.

Note.—The only right will be compensation as laid down in the Punjab Tenancy Act. The section was wanted to establish clearly that future *butamárs* will not acquire any occupancy rights.

27. As to who of several interested persons—the superior or inferior proprietor, the founder (*bunyáddár*), or occupancy tenant—has the right to take possession of land on its re-appearance from the river or becoming culturable.

Note.—See paragraph 140 of report.

28. Rights of tenants in trees.

29. Rights of tenants to their own house-refuse or manure.

30. Custom as to disposal of house-refuse (*sarrah*) in Bannu proper and to village refuse generally, when collected on common land.

Note.—See paragraph 89 of report.

31. Respecting the giving and taking of marriage fees.

32. On *wakf* institutions, especially mosques.

Note.—Chouks are mentioned here for Marwart instead of in a separate section. Also see paragraph 70 of report.

33. As to grave-yards, and who can and who cannot use them.

34. Practice regarding the giving and resuming of *kannah* or *totah*, i. e., service grants of lands.

Note.—See paragraph 69 of report.

25. Usages regarding trees of general utility (*rafa-i-am*).

36. As to drinking water, and right of one village to restrain another from using its stored water.

37. As to village menials (*kamián*), their duties, and their wages.

38. Regarding tanks, who use them, and who repair them.

Note.—Formerly headmen used to levy *nagha* fines for non-attendance on the periodical clearings of the larger village tanks of the country. Of late years the authority of village headmen has waned. In this settlement the zamindars generally desired the power of the District Officer to compel them at an idle time of the year to clear the tanks should be prominently noticed in their administration papers. I have therefore referred to the old custom, and recorded acknowledgment of such a power vesting in the District Officer. As many tanks are not in such a state of repair as they should be, I hope the District Officer will at times take action under this section.

39. Usages as to drawing water from *kacha* and *pakka* wells.

Part IV.—Miscellaneous.

40. Regarding released *shisham* trees in the Kacha.

Note.—Here reference is made to the rules given in paragraph 156 of the report.

41. Acknowledgment of the right of a superior Civil Officer to restrain former occupants from taking possession of new alluvion of any

sort until he shall effect its partition according to the way it was held at the settlement measurements, or in any way arranged for during the settlement, or in some other equitable manner.

Note.—See paragraph 179 of report. In 1870 and 1871, when in charge of Miánwáli, I in several cases prohibited entry on large plots of new alluvion until I had effected an equitable partition. The majority of those concerned were always grateful at such a proceeding, and few subsequently brought a suit into court. My interference secured justice being done to the poorer zamindárs, and prevented both riots and expensive litigation. Other officers had now and again done the same before me in similar cases. I am sure that if occasional action be in future taken in accordance with the acknowledgment made under this section, much good will result. In a scramble for new alluvion, the zamindárs cannot be expected to exactly re-occupy their old areas, or to act justly towards each other unless the Civil Officer interposes with a high hand.

42. As to *haq-júri* in Miánwáli.

43. As to *kár begár* of man and beast.

Note.—Besides the *begár* requisite for the laying in of supplies for outposts, or connected with the marching of troops, or the tours of Civil Officers, there is another kind, which falls heavily on the Marwat villages near Shekh Budin. When during the hot weather the drinking tanks of that sanitarium fail, a levy of donkeys is made in a number of the southern Marwat villages, and the station is then supplied with water from Panisla. In such cases each village taxes itself and hires the requisitioned quota of donkeys and men, and sends them up. It is this which is particularly referred to in this section. Luckily the tanks only fail once in three or four years. At such a time the village tanks are also dry, as a rule; hence the demand for donkeys falls on the people at a season when all such animals are most wanted by their owners for themselves. Thus the Shekh Budin *begár* is very oppressive. Its only defence is necessity, and that it is not of frequent occurrence, and generally only lasts for from one to several weeks.

44. Village *chouks* in the two frontier tahsils, and prohibition of new *chouks* without the special sanction of the District Officer.

Note.—See paragraph 70 of report.

CHAPTER X.—ASSIGNMENTS OF LAND REVENUE.

The several classes of assignments. 210. The assignments of Land Revenue held in the Bannu district are as follow :—

			Rs.	
Jágirs	...	...	20,960	} For particular of items, see appendices Nos. VII to X.
Maáfis	...	...	2,971	
Baráts	...	...	5,200	
Ináms	...	...	10,905	
Total	...	...	40,036	

Jágirs.—There are only four large jágirs in this district, viz., that of the Kalabágh chief described in paragraph 79, that of the Khwánín of Isakhel, of which some particulars will be given in the next paragraph; and two others in Bannu proper, about which some mention will be made in column for remarks in appendix No. VII.

Maáfis.—That of the Miáns of Miánwáli referred to in paragraph 80, and that of a Sayad family in Isakhel are the only large maáfis

in the district. All the others are petty. I propose to give an account of this latter class alone in paragraphs 212 and 213 of this chapter, as most of them are new.

Baráts.—These are large inám grants made to certain of the leading chiefs in Marwat. As all such allowances have been revised and enhanced in this settlement, I shall devote a paragraph (No. 216) to describing them.

Ináms.—These are of two kinds, *viz.* :

- (1).—An allowance of 5 per cent. out of the revenue made to tappa maliks throughout the old tappas of Bannu proper (paragraph 216), and to village headmen in the Nár and Landidák tracts (paragraph 217).
- (2). Petty *zamíndári ináms*—termed *lúngi* for Wasing, but for others simply *inám*. Both kinds are almost entirely creations of this settlement. They will be described in the last two paragraphs of this chapter.

211. Muhammad Khan Rais of Isakhel used to enjoy a cash ^{of one-eighth of the land revenue collections of the Isakhel tahsíl, and one-third share of the proceeds from the alum works at Kotki.} Hereditary cash *jágir* of the Isakhel Khana. At his death, which occurred in May 1856, the Government of India mentioned, with one small modification, a continuance of the “dues” of the late chief to his seven sons and one grandson in equal shares “for their lives, and that of their male issue in the direct line.” The modification was the reduction of the one-third share in the alum proceeds to one-sixth share.

From that time until last year the *jágir* consisted of the following items :—

			Rs.	A.	P.
One-eighth the land revenue	...	...	4,336	12	0
One-sixth the alum proceeds	...	...	822	2	1½
Cash <i>abíána</i>	...	...	1,064	7	8½
Total			6,223	5	10

The share of each of the eight recipients was therefore Rs. 777-14. Towards the close of my settlement operations the Khans petitioned for an increase of their allowance, proportionate to their share in the enhanced assessment of the tahsíl. On that I made out an account on the villages in the tahsíl in 1856, and after making various deductions thereupon, including a large marginal one of 10 per cent. cover prospective remissions, loss by fluvial action, and the like, I recommended that the petition should be acceded to. By Government letter No. 1680, dated 12th September 1877, my proposals were sanctioned with this proviso that, “should, owing to the action of the river or other causes, the assessment of the villages on which the eighth share is calculated diminish, their allowances will proportionately decrease. As I had already made the large deduction named above to meet

such contingency, the chances are that during the term of this settlement there will be no occasion to reduce the amount of the *jágir*. Its items are now as follow :—

			Rs.
One-eighth the land revenue as above calculated	...	...	5,395
One-sixth the proceeds of the Kotki alum works	..	...	519
Cash <i>abiána</i> as formerly	...	...	1,064
Total	...	...	6,978

Thus each of the eight assignees now receive Rs. 872 instead of a little under Rs. 778 per annum. As the enhancement now made was hardly obligatory on Government, I think the Isakhel "*Khwánín*" have been very handsomely treated.

In reporting the case I took the opportunity to suggest that the succession to each Khan's share should be—excepting as regards the *abiána* item—restricted to his eldest son or worthiest descendant, as the comprehensive phrase "their male issue" seemed to cover an indefinite multiplication of sharers which was unadvisable. No orders have yet been passed I believe.

In addition to the hereditary *jágir* detailed above, several members of this family also receive life *jágirs* or pensions for services rendered during the mutiny or earlier. The amounts are specified in appendix No. VII.

212. Bannu contains several thousand mosques besides other

Reasons why new petty *maáfis* were proposed.

religious or charitable institutions, and its Trans-Indus portion teams with men whom the people respect as holy Sayads and learned doctors, yet the whole amount of revenue released in the form of petty specific *maáfis* was up till this year under 430 rupees. Before annexation the priestly and learned classes—the *Sádat* or Sayads and Ulama just referred to, were generally exempt from taxation, the people themselves excusing them from contribution, did the ruling power of the day not do so. At neither of the two summary settlements, which preceded this, did a general *maáfi* inquiry take place, the subject being rather in abeyance than purposely ignored. However, in the distribution of their assessments most villages treated their Sayads and Ulama with special lenience, and in Bannu proper we assessed both classes at one-third lighter than their neighbours. Thus, on the whole, those classes had little reason for complaint. In 1862 an extended *maáfi* inquiry was attempted, and was, considering the absence of field maps, fairly successful. In some cases, however, a serious mistake occurred, the estimated net assets being represented as the estimated assessment of a plot. From the first Míanwáli fared best, having a special Sub-divisional Officer over it, and its people knowing how to push their own interests. The Marwats being, as a rais once described them to me, a "dumb people," naturally fared worst.

Taking each tahsil in succession, I shall now briefly state its case—

Bannu Tahsíl.

I considered new *maáfis* were required in order to redeem a promise made by Major Edwardes at annexation, and repeated by Major Taylor some years later, the fulfilment of which circumstances had as yet prevented. Besides it was politic to render the most influential of the Ulama better affected to our rule by treating them with distinction, instead of at the dead level of their whole class, especially as we were now approximating their old exceptionally light rate of assessment to the general tahsíl standard, as will be explained in the next paragraph but one. Did we not make their leading men some special concessions, our action would be open to the logic of the following criticism. "We now pay one-sixth less than our Pathan neighbours: we used to pay one-third less: the Sarcár is thus gaining thousands and withholds from us, the holiest and wisest in the land, a few hundreds: therefore we have been hardly treated." I was in favour of propitiating such men with small *maáfis* to an aggregate of Rs. 1,000, but the higher authorities were against such liberality. At the time about 300 claims were under investigation. Seeing that the only chance of obtaining sanction for any *maáfis* was to be very moderate, I summarily rejected all the claims I could, selecting from the mass some representative men and institutions.

Marwat Tahsíl.

Here the Sayads and Ulama, although as deserving as their more fortunate but more bigoted brethren in Bannu proper, received no privileged rate of assessment at either of the summary settlements. But though their rulers overlooked their claims, the Marwat peasantry did not, and on distribution were creditably generous to them. In 1865 some small life *maáfis* were made, and it was estimated that Rs. 335 of revenue were then released, but in point of fact not more than half that sum was; thus, from first to last, this class received scant favour at our hands. What they had hitherto enjoyed was summarily resumed without investigation in 1852-53, and not until 1862-63 was a very imperfect inquiry into their claims to considerations made, and some *maáfis* granted. I thought from the first that they should be treated as liberally as their Bannu proper brethren; but, understanding that Government was not prepared to admit this, I framed very modest proposals.

Isakhel and Miánwáli tahsils.

Here *maáfis* claims had been generally investigated, hence they only required revision and a few new deserving cases, especially of institutions hitherto unconsidered, were reported for orders.

213. My recommendations amounted to the moderate sum of Rs. 325 in favour of 24 institutions and Rs. 555 in favour of 56 individuals. I thus selected the eighty most deserving cases out of 402 investigated. As to conditions I had the same object in view as when making my zemindari inam proposals, *viz.*, uniformity

Orders of Government on petty *maáfis* recommendations.

and simplicity, and the giving of the Officer, who would some day revise the settlement, a *tabula rasa* to work on. The superior local Officers generally supported me, but Mr. Ouseley, the Financial Commissioner, found himself unable to do so, not being in favour of creating new *maáfis*. On the subject of rent-free grants for the maintenance of institutions, he remarked, "I think that there is a great difference between maintaining revenue free tenures in favour of institutions, which have already and perhaps for a very long period enjoyed their benefit, and creating new endowments for the support of Mahammadan and Hindú religious institutions or charities, and for this reason I am unable to concur in any of the propositions made by the Settlement Officer in register." The Lieutenant-Governor decided to agree to the new grants, remarking that many of them had "been in a manner promised, whilst there is at the same time very little revenue alienated in the district." I may here note that when making my recommendations, I calculated that the enhanced standard of assessment decided on for the privileged classes of Bannu proper would reduce concessions in their favour by Rs. 2,500; whereas, for the reasons explained in the next paragraph, the result is a reduction of nearly Rs. 4,500. Had I known this earlier I might have been bolder in my proposals, for I am persuaded that such grants are politic, as tending to conciliate the leaders of public opinion amongst a bigoted frontier Musalman population.

Referring again to the conditions on which the *maáfis** have been sanctioned, they are as follow :—

- (1). Each is for life or term of settlement only.
- (2). The grants of assignees—if persons—dying during term of Settlement will lapse, and be assessed at full rates. When Deputy Commissioner thinks a half-rates assessment advisable, he will report.
- (3). Assignees have been permitted to elect for cash ináms out of the village jamas instead of receiving revenue free plots.†
- (4). The continuance of each grant, as above, depends on good conduct on the part of a person, and proper maintenance where the grant is towards the endowment of an institution.

214. The Sayads and Ulama of Bannu proper were up to annexation generally exempt or excused from the payment of revenue on their ancestral lands. In 1848 Major Edwardes assessed them at a one-sixth and others at a one-fourth gross produce rate. The former privileged rate was continued

to the *Shasham-Khōrs* (literally "one-sixth eaters"), as they were called at both summary settlements. When in 1872 the operations of this settlement began, the Sayads and Ulama, on the strength of old royal *sanads* from Ahmad Shah, Timúr Shah and others, claimed to hold their

* I did not think it necessary to give each *maáfidár* a *sanad*. Particulars of each grant are entered in the *Khenat*.

† Such ináms were generally preferred.

lands revenue-free, failing which they sought an assurance that their old standard of assessment would not be raised. In reporting the case for orders, I proposed, after revising the lists, to assess the lands of the *bona fide* learned and priestly classes at full rates, and then to grant a rateable reduction of about one-fifth on the Government demand, and, besides this, to give small plots revenue-free up to an aggregate of Rs. 1,000 to the most influential of the above classes. The grounds for this latter proposal were that, owing to the elimination of many names from the lists, and the lowering of the general rate of remission from one-third to one-fifth, a large saving to the State would be effected, a portion of which it would be wise to spend in distinguishing the best men amongst the privileged class. Colonel Davies, when officiating for Mr. Lyall, and subsequently Mr. Lyall himself, concurred to a large extent in my views; but in submitting the case for order each suggested certain modifications in detail of a restrictive character. Mr. Egerton, then Financial Commissioner, considering that the concessions would be more appreciable and definite if specific, was at first inclined to recommend revenue-free grants, the value of each to be measured by the amount of the old indulgence. As, however, such grants would have been very numerous, and for very insignificant amounts, he subsequently accepted Mr. Lyall's proposals, which were sanctioned by Government.

The pre-existing form of endowment was therefore maintained, but it was laid down that the amount of reduction in each case should depend on what proportion of the gross produce the general assessment rate of each village was calculated to represent. When I, in carrying out my orders, reported the probable results, Mr. Lyall saw how very intricate the account had become, and recommended that it would be simpler to allow a one-sixth reduction in each case, as the general assessment rate for the circles concerned fell at about one-fifth of the gross produce estimates. This amended proposal was approved. As to small revenue-free grants for selected individuals, my limit of Rs. 1,000 was from the first thought too liberal, and accordingly I only made proposals, and obtained sanction as related in the last preceding paragraph. Thus, in the end my original propositions were accepted in principle, but the measure of indulgence proposed by me was largely curtailed.

215. The old rate of concession was, as above explained, one-third lighter than the general standard of assessment. Owing to the want of nominal lists and records, other than those contained in the Patwaris' rough Hindi papers, it was extremely difficult to ascertain what sum had been remitted on each holding, especially as the rate of abatement was not always uniform, being in some cases less or more than one-third. Owing to this difficulty, the sum remitted to the privileged classes was at first estimated by me at under Rs. 5,000, and latterly in my assessment report I stated it to have been Rs. 6,458, whilst I calculated that at the reduced rate sanctioned, it would fall to under Rs. 4,000. That was early in 1876. Since then, in the process of revising the lists, and applying the Government orders, every holding

Old and new *Shasham-khori* concessions compared.
The new conditions.

has been separately attested. The exact sum of the old under-assessment (remission is hardly the right word), appears to have been considerably under that reported in 1876, and of those who enjoyed that under-assessment, it has been found that 1,001 have, since 1857, alienated their whole holdings, and are now no longer revenue payers. Most of them have disappeared or cultivate as tenants. Under these hardly expected circumstances, I thought it best to entirely eliminate all such men from the new lists, as there was little chance of redemption being ever effected, in cases where the land has been mortgaged only. I have also struck out the names of those who had been erroneously treated as *Shasham-khors* in 1857 or previously; and, in order to balance to some extent the large reduction in numbers caused by such a purgation of the lists, I have admitted a few new men, who had hitherto through some mistake been excluded. The result is that the total number of privileged holdings is now 1,742, with an aggregate acreage of 6,635, or nearly four acres per holding. The full assessment is Rs. 12,772, and the one-sixth remission, which has been deducted therefrom is Rs. 2,143, or Rs. 832 less than the calculated and sanctioned amount. The average abatement per holding is Rs 1-3-8.* The conditions on which the above remissions are to be held are laid down in paragraph 2 of Government letter No. 1368, dated 19th July 1875, viz., "that this privilege should be continued in every case during the term of settlement, and, further, in permanency, so long as the land to which it applies is not alienated out of the family of the grantee."

216. The custom of granting leading men in Marwat grain and cash allowances, termed *baráts*, arose in Sikh times about ten years previous to annexation.

Marwat barat grants. The object the Sikhs had in view was to secure the good will of prominent chiefs, and thereby facilitate the collection of revenue. For the first four years of our rule Marwat was held under direct management, and the pre-existing *barát* system was maintained intact. But in 1853-54, when a first summary settlement was made, the payment of such allowances was discontinued pending report and sanction. However, during the currency of that settlement no report was submitted, and the question therefore remained in abeyance. In 1857-58, whilst the second summary settlement operations were in progress, Major Coxe, Deputy Commissioner, reported the case, but imperfectly, and the Supreme Government sanctioned "the grant of an allowance of Rs. 3,150 per annum for the Maliks of Marwat, as noted in the margin, with retrospective effect from the year 1853-54." Subsequently a life grant of Rs. 600 per annum was made to Muhammad Khan of Ghaznikhel, another Marwat chief and a *barát* of Rs. 460 per annum was allowed, under certain conditions, to the leading men of the Sekandarkhel clan. Thus the *barát* question appeared disposed of, but not in a satis-

	Rs.
Abdul Samand Khan	800
Sarwar Khan	800
Purdil Khan	560
Langar Khan	390
Musakhel Chief	600
Total	3,150

* The *Shasham-khori* inquiry register and papers connected therewith have been preserved and bound up, as one *misal* for the whole tahsil.

any way, as it had never been taken up and examined as a whole, no fixed and uniform principle had been followed in determining amount of each grant, and the conditions on which it should be granted. The opportunity of this settlement was therefore taken, with the full concurrence of superior authorities, to review the position of *barát* holders comprehensively. The urgency of such a review may be illustrated by the case of the "Musakhel chief." The grant was Rs. 600, and that sum had been divided amongst 42 headmen in amounts ranging from Rs. 1-8-0 to Rs. 70 each.

However cogent the reasons were for such a partition originally, it was clear that they now no longer existed, for we now knew who of the recipients were strong, who weak, who could and did help our border administration, and who could not, or did not. To have perpetuated such a partition would have been to fritter away a large sum of public money uselessly, instead of turning it to the purpose for which it had been granted. Besides having by the Divisional and Settlement Commissioners that a moderate increase should be recommended. The former (Colonel Munro) wrote, "the Khans of Marwat generally are as well disposed towards Government as any chiefs Trans-Indus. The pargana is the least troublesome, if not the best managed by its chiefs, of any Trans-Indus, and the fact should not be lost sight of. The latter (Mr. Lyall) recorded an opinion much to the same effect, adding significantly with respect to the little trouble Marwats give, that "perhaps on that account they enjoy, I think, smaller favours or immunities than any others."

I accordingly revised, all the *barát* grants in conjunction with the Deputy Commissioner, and we submitted a joint proposal, one effect of which was to raise the value of the grants from an aggregate of Rs. 4,210 to Rs. 5,200 per annum—a sum which is less than 5 per cent. of the revenue—and the other and perhaps more important, to gradually reduce the number of holders as death lapses and other vacancies should occur to fifteen.* The Supreme Government sanctioned the recommendations made in letter No. 330 P, dated 16th February 1877. In the correspondence it is nowhere distinctly specified on what terms the *baráts* are to be held in future. But from the spirit of the original orders, and of those recently passed, it seems clear that the intention of Government is that each *barát*, as now sanctioned, is perpetual in favour of the most influential man or men for the time being, in each of the main sections or tappas, into which the Marwat tribe is divided. I presume, too, that in deciding the succession to a vacant *barát* it will not be necessary for the Commissioner of the Division to refer to the local Government, except when he proposes not to follow the rule of primogeniture with respect to a holder or his natural successor whose name the grant was originally and specifically made. It will some years before the number of *baráts* will be reduced to that

* In each case a *sanad*, containing all particulars, has been prepared and the *barat-khan* concerned.

sanctioned. During settlement I was able to simplify the case of the "Musakhel chief" considerably, as some death lapses took place, and several old *barāts* were converted into *zemindāri ināms*.

217. The two Nār tracts, the one in the Bannu the other in the

Five per cent. *inām* out of revenue to *lambardārs* in the two Nār and Landidāk tracts.*

Marwat tahsil, were, as elsewhere stated, a jungle country infested by robbers until reclaimed between 1852 and 1862. They were then divided into convenient lots, and granted to old Government servants and rural notables, and in each

case 10 per cent. of the collections were remitted to the grantee, half as his *lambardāri* percentage, and half as a sort of *inām*. When a fixed assessment was imposed, no mention of this 10 per cent. was made, though I presume it must have been taken into account in assessing. Up to this settlement it had never been realized, as originally each estate belonged entirely to the grantee, and there was no object in his recovering the allowance from himself, and paying it back to himself. Of late years, as the grantees have begun to die off, and portions of the estates have been alienated, the number of proprietors has begun to increase, still that particular shareholder, who held office as *lambardār*, never thought of realizing his special percentage. Family considerations, and the previous omission to collect, had brought about this result. In this settlement the right to the percentage was urged, and could not well be denied. Now that the grants had begun to devolve, it was all the special allowance the head of the family, if also *lambardār*, could receive. The Nār proprietors, being men of various stock, had no inter-connection or common interests; hence exalting one over his fellows as a *tappa malik* or *barāt-holder* was undesirable, and the obviously better plan was to grant each *lambardār* an *inām* of 5 per cent. out of the revenue of his village. This course being recommended, was sanctioned for both the Nār tracts as well as for that of Landidāk, the circumstances of which were in some respects analogous. The revenue thus assigned is Rs. 799.

218. The question whether *zaildārs* and *āla lambardārs* (chief

Ināms proposed in substitution for a *zaildāri* and *āla lambardāri* agency.

headmen) should be appointed or not, went through several phrases before determination. In the Bannu and Marwat tahsils an agency, in many respects analogous to that of *zaildārs*

had long existed, but not elsewhere. On annexation we found Bannuchi villages grouped into *tappas* under *tappa maliks*, for whose fighting men and other purposes each village in each group paid certain customary contributions. These we abolished, and in their stead imposed a uniform rate of 5 per cent. on the revenue which was realized as an extra cess by the *tappa maliks* themselves from the rate-payers. Here, then, the only change, which appeared necessary, was to substitute the terms *zail* and *zaildār* for *tappa* and *tappa malik*, and to permit the office of *zaildār* to be no longer a sinecure. In Marwat there were a few leading and a large number of petty chiefs, each of whom was in receipt

* No *sanads* have been given. They are not wanted, I think, as generally the *inām* follows the *Lambardāri*.

of a *barát* or cash allowance ranging from Rs. 1-8-0 to Rs. 800 a year. Here, then, the proposal was to comprehensively review and systematize the *barát* grants, convert the recipients into zaildárs or ála lambardárs, and appoint, where advisable, new men. In the other two tahsils, in which no such office-holders in any form existed, the idea was to introduce an agency occupying a middle place between that of the chief headman of a village and the zaildár of a circle. My proposals being approved, I was directed to make provisional appointments, subject to the ultimate sanction by Government. This I proceeded to do. But before long I began to perceive that the new agency was in the highest degree distasteful to the village lambardárs and generally unpopular. The very terms, zaildár and ála lambardár, conferring, as they seemed and did both authority and a superior status over his fellows on a few selected men, were intolerable to every Pathan of the district, who had always looked on his malik or lambardár rather as his representative than as an officer, having power over him and exalted above him. I gradually came to the conclusion that neither new terms nor new office-holders should be introduced, and that cash allowances in the shape of *zamindári-ináms* to selected village headmen would be as much appreciated by the recipients, would create no jealousies, and be, on the whole, money better spent. In 1875 Colonel Munro, Mr. Lyall, the Deputy Commissioner and myself discussed the question together, and we all agreed on the inexpediency of attempting further to press the new agency on the people, and on the policy of granting *ináms* instead, and requiring good service from the holders. So my original design was given up and the anxiety of those, who had been provisionally appointed as zaildárs or ála lambardárs was relieved, when they were told that *inám* would be proposed for them instead. Accordingly with each assessment report I submitted an *inám* proposition, and explained why the introduction of the new agency had been found unadvisable.

219. It will suffice here to state concisely for each tahsil the numbers and amounts of the *zamindári ináms* sanctioned for it. There is no occasion to give a list of the holders, as the grants are generally small in amount, and are not hereditary, and as registers in English and vernacular have been made over to the Deputy Commissioner.

Bannu tahsil. (1) *Bannuchi ináms.*—Owing to the existence of tappa maliks, who enjoy, as already explained, handsome percentages on the revenue, there was no occasion to be very liberal. In fact, but for the existence of certain exceptional cases, there was no occasion to assign any more revenue in *ináms* at all. The old 5 per cent. allowance of the tappa maliks had been maintained in their favour, the only change being that that percentage was, by the orders of Government, now added to the revenue and paid out of it as an *inám*, instead of being treated, as formerly, as an extra cess. Under the circumstances ten grants, aggregating Rs. 900, have been made, *viz.*, five for Rs. 50 each, three for Rs. 100 each, one for Rs. 150, and one for Rs. 200. In the event of either of the

two latter grantees obtaining a share in the representation of his tappa, it was arranged that his *inám* should suffer a *pro tanto* abatement. This contingency has occurred in the last case, and the *inám* allowance has been consequently reduced by Rs. 149.

(2) *Waziri ináms*.—At the first summary settlement a few maliks were granted small sums, aggregating Rs. 199, out of the revenue under the name of *lungi*. At this settlement the jamas of the Wazirs, though still very light, have been enhanced by about 34 per cent. Very little of their revenue had hitherto been alienated in their favour. Their maliks being numerous, received very small percentages. For these reasons I recommended that the *lungi-ináms* should be raised to a uniform rate of 10 per cent. out of the revenue, and the amount bestowed on selected maliks in each clan. Government having sanctioned the proposition, the Deputy Commissioner and I made the best selections we could. Amongst the Utmánzais, generally there are no specially prominent maliks, owing to which we found it necessary to make small grants of Rs. 5 and 10 each to a large number of men. Amongst the Ahmadzais, on the other hand, selection was easier. In all Rs. 820* were divided in sums ranging from Rs. 5 to Rs. 50, and in one case of Rs. 125 amongst fifty maliks.

Marwat tahsil.—Here twenty-six *ináms* were given, fourteen of Rs. 50 each, and twelve of Rs. 25 each, being Rs. 1,000 in all. One of the Rs. 50 *ináms* is for a lambardár of Múlazai, which village has been transferred to Dera Ismail Khan. Owing to this the total for the tahsil will in future be Rs. 950. The above grants are distinct from *baráts* and certain Nár *ináms*, which have both been already described.

Isakhel tahsil.—Here Rs. 600 have been laid out on twenty *ináms*, four being of Rs. 50 each, and the rest of Rs. 25 each.

Miánwáli tahsil.—Here one *inám* of Rs. 100, seven of Rs. 50 each, and twenty-two of Rs. 25 each, making a total of thirty grants, representing Rs. 1,000 † have been given.

Summary.—Thus for the whole district, Múlazai included, 136 petty *ináms* ‡ aggregating Rs. 4,320 have been granted, and the amount of each—if we except those of the Bannu tahsil, and the one Rs. 100 *inám* in Miánwáli—is either Rs. 25 or 50. I framed my proposals with a view to strengthen the Deputy Commissioner's hands as much as possible, and leave the officer who will some day revise my settlement quite unshackled. Thus the conditions for sanction for all the *ináms* are, except in two cases, as follow:—Each is personal for life or term of settlement, as the case may be, and is dependent on good conduct, and the rendering of assistance in the district administration. As lapses occur through death or otherwise, during the currency of the settlement, the Deputy Commissioner is authorized, after obtaining the sanction of the

* In this the Rs. 199 old *lungi* enjoyed by the Wazirs are included.

† Two old *ináms*, aggregating Rs. 30 in Miánwáli, are excluded.

‡ Sanads containing the conditions, &c., were granted in all cases except, if I recollect rightly, to the Waziri maliks,

Commissioner of the Division, to confer a vacant *inam* on a worthy successor. Thus it should be noted the grants are distinctly non-hereditary. Except in the case of the Waziri holders, who are very numerous, the local authorities are not, I apprehend, empowered, under the terms of the sanction, to reduce the number or alter the amounts of the grants in any tahsil. These grants are essentially, except in three special cases, petty *zemindári ináms*, for leading agriculturists being mostly village headmen. They are not intended for Khans and Raíses, for whom appropriate provision exists in the form of jagírs, *baráts* and pensions. In all cases in which a lambardár is dismissed for misconduct, I think he should be also deprived of his *inám*.

CHAPTER XI.—MISCELLANEOUS*.

220. At neither summary settlement was there time for an exhaustive inquiry into hereditary right or fitness amongst the then candidates for the post of lambardár. The consequence was that at the earlier settlement any pushing fellow with a good party to back him, and being such he was in most cases as fit a man as any other was made a lambardár. The only record of the fact—Trans-Indus at least—was an entry in what did duty for the administration paper that so and so was appointed with the consent of his *warhi* or *taraf* or of "all the *khewat-dárs*." At the later summary settlement much the same procedure was repeated. After that up till the commencement of the operations of this settlement a son generally succeeded his father as a matter of course, and new candidates were required to wait for the coming regular settlement. In the two frontier tahsils it not unfrequently happened that a son or brother took possession of a vacant lambardárship without the formality of the preparation of any *dákhil khárij misl*. By the time this settlement did come, the lambardári question was throughout the district a burning question. Half the thousand and odd existing incumbents were in trepidation lest they should lose their appointments, whilst hundreds of candidates for office were courting popularity amongst the revenue payers of their respective villages and hamlets as eagerly and anxiously as ever did a would-be M. P. amongst those whom he hoped one day to call his constituents.

I shall now in a few lines describe the state of the question in each tahsil immediately before its solution, and then that solution itself.

Bannu.—Most lambardárs had up till 1872 shared their percentage with their more prominent relations, the latter having originally consented to their appointment only on the promise of being given a share of its

* This chapter deals with a number of miscellaneous subjects, for some of which a place was not found earlier in the report from oversight, whilst for others no place seemed so fitting as the end.

emoluments. In many families the allowance was looked on, and treated as if a part of the jointly inherited estate. Here then it was necessary to lay down from the first that the recognized lambardár had the same right to his whole percentage as a servant to his pay. This was done. But wherever a share had been recorded in 1857-58, or subsequently its payment was made obligatory until the death of the payee. I was both in this tahsíl and in the others at first inclined to make a good number of reductions and changes in the *personnel* of the office bearers. Mr Lyall, however, was of opinion that no incumbent should be reduced, no matter what his original title had been except for proven unfitness or abject poverty. In the Bannu tahsíl only 9 lambardárs were reduced, and 74 new appointments were made out of a total of 430 applications. The number of new lambardárs would not have been over 20 or 25 at most, but for the fact that none yet existed in the Nár and Landidák tracts. In only 29 cases were appeals made.

The case of the Waziri lambardárs requires a few words. They were very numerous. Their allowance was 10 per cent., not 5 per cent. as elsewhere. Of this some few men received the whole percentage from their own *khels*, and half from those of others, just as if they were tappa maliks. Then sharing amongst relations was common. Thus the accounts were very intricate, and it was not always easy to ascertain who the recognized lambardárs were, and what were their correct percentages.

The Deputy Commissioner and I then agreed that every lambardár should receive the whole 10 per cent., and that the fortunate few, who had as yet received more, should be compensated in the *lungi-inám* distribution, which, was described some paragraphs back. From first to last all Waziri appointments were made by the Deputy Commissioner and myself concurrently.

Marwat.—The case here was very simple, as the office bearers had generally kept their percentages to themselves, and as most *khels* were represented by fit men. In all 548 applications were heard, 12 lambardárs were reduced, and 87 new men were appointed, including upwards of 50 for the Marwat Nár hitherto without lambardárs. Only 12 appeals were preferred.

Isakhel.—Here there was no difficulty except with the "Khwanín" and the Bhangikhels. The cases of the former were settled by the drawing of lots, and of the latter by appointing the best man available for each petty *khel*. Previously there had been no lambardárs at all in Bhangikhel; now there are 17, also half a dozen recognised *warhidárs*. In all 198 applications were heard, 12 lambardárs were dismissed, and 61 new appointments made. There were 27 appeals.

Miánwáli.—In 1853-54 a large number of men were made lambardárs, and no great nicety was shown, nor was then possible, in discriminating between the numerous *khels* and *gots*, which each and all asserted itself to be a *warhi*. At the next summary settlement a number of men were reduced, they having been originally appointed on no ground but that of a temporary popularity. In consequence showers of appeals rained in upon the Commissioner of the Derajat, who promptly ordered

statement of all the reduced lambardárs and their gradual reduction should occur. However, reductions were not made, matter was still in abeyance when this settlement began. By me it was rather late to turn out men who had been in office for 20 years. I had, too, to carry out Mr. Lyall's conservative policy. Thus only 9 lambardárs have been reduced or dismissed. 297 applications have been heard, and 53 new men have been appointed. In 82 cases appeals were preferred.

General Remarks.—There are now 1,315 lambardárs in the district, and their average percentages range from Rs. 14 in the Bannu and Marwat tahsils to Rs. 26 in Miánwáli. Between the above averages the individual allowances run from two rupees to several hundreds. In some villages, particularly in Miánwáli, the formerly vague and undefined position of *warhidár* has now been recognized. Where so, he is generally excused the payment of *pachotra* on his own holding, and has the privilege of collecting the revenue from his own little *got* or *khel*, and making it over to the lambardár. In a large majority of cases the revenue payers have been grouped under particular lambardárs; but in those villages in which the lambardári is held on fixed shares, whether equal or unequal, no such grouping has been made. In them each *khewatdár* will pay as before through whom he prefers. The number of such villages is 143, or 29 per cent. of the total number in the district. I myself was at first opposed to such a course, but a little experience of the trouble which would ensue from distributing the *khewatdárs* amongst the lambardárs convinced me of the wisdom of the maxim *quieta non moveat*. Where this rather loose arrangement has been upheld, it is in deference to the revenue payers of a village want a distribution and agree to a method, it can be easily effected.

221. Up to the commencement of this settlement the Trans-Indus patwáris of the district generally drew the pay of their respective circles. The Cis-Indus men did the same up to 1868-69, when they were reported in favour of funding my circles, and grading the patwáris throughout the district. My reasons were that, except in Marwat, I found it impossible to so make the work to be done. The incidence of assessment varies much in adjoining villages; fluvial action is uncertain amongst the Indus sailábas to year; it was necessary to make circles in Bannu proper conterminous with tappas; these causes rendered the grading of patwáris advisable in all tahsils but that of Marwat. In it the incidence of assessment was pretty equal over large areas, but there were poor tracts in which the work would be disproportionately heavy, and besides this there was the expediency of uniformity of system throughout the district. Ap from all special considerations was the general one that patwáris, other servants, require an incentive to work to make them work without grades they would have no such incentive, as individual

being freely transferable about like clerks from one office to another, would have no prospect of promotion. Mr. Lyall, supported my proposals for the special grounds adduced, but remarked that otherwise the advantages and disadvantages of grading *versus* non-grading were pretty equally balanced. Up to date no orders have been received. The settlement being finished, and it being necessary to do something, I have ventured to act in anticipation of sanction, and so have made new circles throughout the district, and graded the patwáris according to their respective fitness. The result is as follows:—

Tahsil.	Number of circle.	Pay of the different grades.	NUMBER OF PATWÁRIS IN EACH GRADE.				
			First.	Second.	Third.	Fourth.	Total.
Bannu ...	32	Rs. 15, 12, 10 and 7	6	7	18	16	47
Marwat ...	35	Rs. 12, 10, 8 and 6	9	9	14	13	45
Isakhel ..	20	Rs. 15, 12, 10 and 6	1	5	16	3	25
Mianwáli ...	32	Rs. 15, 12, 10 and 7	5	10	17	19	51
Total ...	119		21	31	65	51	168

All the men now appointed have had a thorough settlement training. Most of them belong to the district or have now permanently settled in it. In allocating the men the wishes of the revenue payers have been met as far as possible. The reason why the number of circles and of patwáris does not tally is, that in many circles there are two patwáris. I at first meant to call all the fourth grade men assistants or agents, but changed the designation at their request.

222. Hitherto the five prescribed patwáris' annual papers have not been prepared, but in future they must be so. Patwáris' annual papers and Indus alluvion-diluvian statements. All five are more or less important. The least so is perhaps the "statement of crops;" the most So the "register of mutations," and the "rent roll." The amount of writing work patwáris will now have to perform is so heavy, that I am sure fudging will be common unless a strict supervision is exercised over them. This will only be effectually performed by the tahsil kanungos or their assistants, making several tours of inspection in the year, and by the district kanungo making at least one such. The sanctioned kanungo establishment is as follows:—five kanungos—one for the district, and one for each tahsil, also four assistants, one for each tahsil. Besides the above, there is at present one assistant district kanungo on Rs. 20

per month kept up from the patwári cess. This establishment is ample,* if kept to its proper work. I earnestly hope the Deputy Commissioner will insist on the kanungos making inspection tours, and on the tahsildárs only using their kanungos as such, and not as general Munshís. The "register of mutations" should be specially subjected to local scrutiny and testing. Otherwise mutations will be imperfectly reported and recorded. It should be remembered that every change of possession amongst revenue payers has now to be reported, and an order for mutation passed on the case.

For the Kacha villages the patwáris will have, in addition to the duties performed by their brethren elsewhere, to carry out the annual alluvion-diluvian work, which alone will occupy their whole time for not less than four months each year. A *khatouniwár girdáwari* statement, with a supplemental *khassrah* for new fields, has been lately prescribed for recording the annual changes in cultivation and assessment in the Kacha. The *girdáwari* statement being by holdings and not by fields will not always be easily prepared in the fields as it ought to be. In such cases it will be necessary to first make a new general *khassrah*, and fill in the prescribed form from it. Owing to the extra work this would cause, I proposed to Mr. Lyall to substitute a *khassrahwár girdáwari* statement for his form, and in other ways to simplify and reduce the number of the patwáris' annual papers for Kacha villages, but he did not see his way to support my proposals. At the same time he admitted that he thought the Kacha patwáris "will have more work to do than they can be expected to do properly," and that he would "like to try and reduce some of the annual returns." Thus it is pretty certain that the Kacha patwáris will fudge extensively if not very closely watched. To reduce fudging to a minimum, I have given the Kacha a very strong and well-paid staff of patwáris. Their circles and numbers will require revision from time to time, as the assessments of villages rise and fall under fluvial action. Should the experience of a few years demonstrate that the burden of statement making is excessive, and that the *khatouniwár girdáwari* statement cannot well be prepared in the field, I trust the District Officer will not scruple to propose a reduction and simplification in the number and forms of the papers required from Kacha patwáris.

223. The "Village Statements" give in a condensed form every fiscal fact about each "estate," which can assist the Settlement Officer in assessing it. They also explain in detail the grounds of his assessment. Correctly speaking the entries should not be advanced towards completion, or at least recorded indelibly until orders have been received on the Revenue Rates Reports.† I, however, made the mistake of

Village statements or Lál
Kitábs.

* The Financial Commissioner has sanctioned for one year three extra kanungos, whose duty it will be to see that all cases of mutations of names are reported and written up to date. This work has been finished for Isakhel, but there are two or three years of arrear to dispose of in the other tahsils. The extra men will be paid from settlement savings.

† These reports are generally called "Assessment Reports", which is, I think, a misnomer and misleading. The above name, which is also in use, is certainly more accurate.

entering the area statistics in ink before the comparing' (*mukābila*) stage was over, and also of recording in the same way my grounds of assessment, and in fact of assessing in a way before the receipt of orders on my Revenue Rates Reports. Between making such an "assessment," or rather "assessment estimate," and the receipt of orders, there was always an interval of from ten to seventeen months, and in it some new facts had transpired about many villages, or the erroneousess of some of the entries was detected, or the orders I received necessitated the revision of some of my proposed village assessments. Thus, from one cause or another, when I did come to announce, I had in many cases to make additions and corrections to what I had already written. Owing to this, some of my village statements do not present as neat and finished an appearance as they might have. But in every one of them the whole fiscal history of each estate is laid bare, and the grounds of his opinion on the proper assessment is entered in detail by the Superintendent and the Extra Assistant Commissioner independently, and finally my own assessment with its reasons. The remarks of the two native officials have been transliterated into Roman-Urdu for all tahsils, but for Isakhel, in which case I translated them into English. There are in all seven large handsomely bound volumes of village statements in English, and about the same number in vernacular. In future, when a remission or reduction of revenue is proposed for any village, I would suggest the utility of consulting the above books. They are not being submitted with this report, as they are very bulky and weighty, and as Mr. Lyall has been carefully through them all already, if required, they can be sent by parcel post or by cooly.

224. The quantity and weight of country paper used in a settlement for *khewat* purposes is something enormous. From first to last I purchased 3,222 *gaddis*, at a total cost, carriage inclusive, of Rs. 20,837.* The price per *gaddi* at the place of manufactory ranged from Rs. 2-13 to Rs. 11-8, and the weight from six seers to eighteen. The cheapest class, and especially that procured from jails, contained, as a rule, ten half quires of small sheets; whereas the superior classes, and particularly all the Bazar made Siálkot paper, contained eleven full quires of large-sized sheets. The average cost per *gaddi* was a fraction under Rs. 6-2, or excluding carriage Rs. 5-8, and the average weight rather under ten seers. Thus in all 778 maunds of paper were used. Although the aggregate weight of the settlement records is only about 222 maunds, and of the miscellaneous bundles† connected therewith about 112 more—thus leaving 444 maunds to be accounted for—I do not think much paper was wasted, and I am sure very little, if any, was misappropriated. Several camel-loads were lost in crossing the Kurram, and in all about 200 *gaddis* were rendered useless by rain during transit. But such losses

* There is now a surplus balance of 140 *gaddis* un lithographed, and 242 lithographed paper on hand. The value of the whole lot here is Rs. 3,300; it will be sent to Hoshiarpur or elsewhere.

† *Khasrahs*, *chitha-parchas* given to zemindárs during measurements, *parchas-tasdik* in cases where there was no dispute, *chitha-shijra nasabs*, &c., &c.

account for a very small fraction of the remaining maunds. They all have been used on those rough original papers which are preserved,* and on miscellaneous work.†

As to the quality of paper itself, the bulk of that used in the fairer records is very thick, strong, and smooth. It was almost all obtained from the old Siálkot manufactories. That procured from jails was comparatively inferior, and more expensive. Lately the Dera Ismail Khan Jail succeeded in making some really fine paper at a reasonable price. The very coarse, cheap paper supplied to the Kohát Jail was also fairly good at its price. As to the papers in the patwaris' copies of the records (*part-patwár*), it is mostly strong and durable, but rather coarse and yellowish.

225. Early in 1876, I engaged, through Colonel Davies, C.B., a Binder, Ghulam Moula by name, who bound the Shahpur settlement records. I had to pay him Rs. 50 per month, but in return for this I made a large amount of work. I then collected binding materials from different places, and prepared a supply of mill boards from waste paper in *part-patwára*. The Isakhel records being by this time ready, were then bound, and after them those of the other tahsils in succession. The work is now finished at a total cost of Rs. 3,047, which, distributed over 2,013 volumes and 266 map cases,‡ gives an average rate of Rs. 1.51 per volume or cover. The binding of all the records for tahsils of Bannu, and Miánwáli is very strong and handsome, having been performed or superintended by Ghulam Moula himself. The Marwat are also strong, but I cannot call them neat or handsome. They were done independently by a hard-working pupil of the head binder.

226. From first to last judicial work was very heavy and clogged to progress. In all 9,157 claims and 1,807 rent suits and suits under the Tenancy Act, were decided. Most disputes were fought out to the end; confessions of judgment, agreements and withdrawals by the parties. Two-fifths of the litigation occurred in Miánwáli, in which the right to the exclusive possession of uncultivated land was the subject most contested. Such cases were, as a rule, decided after inspection, as little evidence was obtainable but parole, and

* I may add the *khatouni-paroha* sold to zemindárs after fairing, and the books I gave the patwarís at the close of the settlement for the first set of the annual papers.

† The miscellaneous bundles, *bastah mutfarak-dehi*, of which there is one for each estate, contains the following papers:—(1) Disputed *Parchahs*; (2) Tenant Register; (3) Mortgage Inquiry Register; (4) *Bachh* Proceedings. For Bannu there is a fifth, viz., *Khánashumári* register.

‡ I regret to say that the district record room is not yet ready to receive the settlement records, although the necessity of providing for them was repeated years ago, and I promised to contribute funds for a handsome almirah. I have made about Rs. 200 over to the Deputy Commissioner for the purpose.

seldom convincing. The most litigious villages in the district were Chakrála (jama Rs. 6,000) 459 suits, and Van Bhachrán (jama Rs. 6,100) 276 suits. Both are in Míanwáli.

The judicial appellate work was also very heavy, rather more than one decision in nine being appealed against. In all there were 1,274 appeals decided, 11 by Mr. Montgomery, during the three months he officiated for me in 1875, 428 by Munshi Ganga Ram, and 835 by myself. In the prescribed statement of judicial cases decided during settlement, which is to be found after the final proceeding in each record, all decisions, also the more important boundary and partition cases, are entered up to the end of November 1878. The list may not be quite complete for Isakhel, the settlement there having been practically finished in 1876, and cases subsequently decided being now only added. Where decrees have been executed and acted on in the records, the fact is noticed in the column of remarks for all tahsils. For further particulars, see Appendices XI, XII and XIII.

The cost of the settlement. 227. The aggregate cost of this settlement has been, to the end of November 1878, Rs. 5,15,922, thus :—

From				Expenditure.	Cost per cultivated acre.	
Imperial Revenue	...	...	...	4,79,444	...	13 6
Settlement fees	...	...	...	36,478	...	1 0
Total	...	...	...	5,15,922	...	14 6

In the above, expenditure from the patwári cess is not included, that cess being an ordinary district charge. In part diminution of the cost of the settlement to the Imperial Revenue certain items,* such as Court Fees, the value of buildings and properties, of sorts made over to the District Officer, savings from talabána. &c., may be treated as a set off. Their sum, however, only amounts to about Rs. 34,511. The net direct cost of the settlement to Government is thus reduced to Rs. 4,44,933. Other particulars are given in Appendix XIV.

* Court Fees, Rs. 23,388; settlement buildings made over to the District Officer, Rs. 1,500; tents and other articles consigned to Settlement Officer, Ludhiána or Hoshiárpur, Rs. 2,000; Talabána savings, Rs. 1,323; petty balances of sorts, Rs. 3,000; also surplus paper Rs. 3,300.

Times of the day and night.

228. The following statement gives the terms in local use for expressing the times of the day and night :—

Pashto,		Hindi or broken Punjabi.		English time.
Chásht wakt	...	Chhah * wela		Early breakfast time (Sunrise to 9 A. M.)
Maraí mal	...	Roti-wela		Food time, i. e. 10 to 11 A. M.
Gharma	...	Do-pahar : ádha din		Mid-day.
Más-peshín	...	Peshin-wela		Early afternoon.
Máz-digar	...	Digar-wela		Late afternoon.
Má-shám	...	Shám-wela: trikála wakt (Hindus); Namashám.		Evening.
Mà-khustan	...	Pahla-sota-wela: rátda-roti wela...		Supper or bed time, say 9 P. M.
Níma-shpa	...	Adh-rát		Midnight.
Star-wakt	...	Asúr-wela : wada-wela : fajar- wela.		Day-break.
Umar-khatah	...	Deo-ubhra : din charha. ...	...	Sunrise, also east.
Umar-prewatah	...	Dilha-wela : din latha. ...	...	Sunset, also west.

229. A settlement creates a sort of *imperium in imperio* in a district. The whole revenue staff becomes subordinate to the Settlement Officer, although the revenue administration remains in the hands of the Deputy Commissioner.

The border land of jurisdiction between the two officers is neither nicely defined nor definable. Thus, unless District Officer and Settlement Officer alternately yield to each other, their respective works will not proceed harmoniously. As, however, Major Johnstone, Mr. Beckett, and for the last nine months Mr. Udney, who alternately held charge of the district during this settlement, all pulled most cordially with me, I trust I may be excused in here recording the fact, and acknowledging their assistance. Of course we did not always agree in matters of border assessment, or when the supposed rights of the Government and of the people were in conflict. But such differences of opinion never interfered with our hearty coöperation, and hardly any proposal relative to the appropriation of rakh land, to the disposal of Government waste, to any sort of assignment of the revenue, or in short to anything smacking of change ever emanated from me until it had been talked over with the District Officer, and his concert obtained.

* Chhah-lassi—butter-milk.

230. Should this settlement prove a good one, the chief credit will be due to Munshi Ganga Ram, Extra Assistant Commissioner, and to the Superintendents, for they were one and all good men, and worked infinitely harder than I did.

To Munshi Ganga Ram's twenty years' experience of the district, to his conciliatory disposition, to his simple honesty of character, and to his sound common sense, is due the fact that from first to last no hitch or unpleasantness of any sort occurred.

Of the Superintendents Mián Ghulám Faríd had the most various and perhaps interesting work, having been in charge of Isakhel from the commencement of its settlement until he had practically finished it, and then on the unfortunate death of Mír Mumtáz Hosain, late Superintendent of the Bannu tahsil, having been transferred there. He thus obtained an insight into the fluctuating system of assessment in the Indus *sailāba* villages, carried into operation the new *tinga* canal system in Isakhel and in the Bannu tahsil, he re-attested and revised all the irrigation files and statements, and distributed the revenue, both of which required nice discrimination in such a country. He is a well-educated man, of good family, and of a very quick natural intelligence. His faults, if they can be called faults, are that he is perhaps too rapid in work, and does too much with his own pen.

Harbuns Lall, Superintendent of Miánwáli, and since 1876 accepted candidate for an Extra Assistant Commissionership, proved himself a slow but very thorough and accurate worker, and as a judicial officer he was sound and reliable.

Fakir Abdullah, Superintendent of Marwat threw his whole being into his work, and continued to the last most enthusiastic and untiring at it. I trusted him, I think, more than any of the others. He began his public life twenty-six years ago in this district as a writer on Rs. 10 a month, and now he is ending it here as an Extra Assistant Commissioner, having just been promoted, and almost unexpectedly so, by His Honor. He well deserves his reward. Of the Deputy Superintendents, Muhammad Azim Khan and Mahesh Dass have both been promoted to Officiating Superintendentships. Both did very well, also Nanak Chand in Miánwáli.

Takht Ram, English Clerk, began in 1872 as a help in the office, and by attention to his duties, and doing a quantity of private copying for me, he so improved his knowledge of English and his handwriting as to be made Clerk on the translation of Babú Woomesh Chandar to the District Office in 1875. Since then Takht Ram has been invaluable. He understands and tests every thing put before him, can decypher any writing, can be trusted to be silent about office secrets, and is an assiduous worker.

231. In finishing this Report, it only remains for me to write a few lines regarding the term of years for which I hope this settlement may be sanctioned. I have deferred expressing any opinion on the

A long term of settlement proposed,

subject until this the concluding paragraph, because I thought that the information gained from a perusal of the whole report would be the best argument for a long term.

I myself would like to see a thirty years' sanction accorded, and for the following reasons:—

(1). This the first regular settlement of the district has only resulted in enhancing the fixed * land revenue by Rs. 24,550 or 7 per cent.

The expenditure out of Imperial Revenue has been Rs. 4,79,444, or nearly twenty years' purchase of the increase of fixed revenue the settlement has brought in.

(2). Quite 80 per cent. of the area culturable in an average year and with the present means of irrigation, being now cultivated and assessed; and the present assessments, though somewhat light on the whole, being still as heavy as a frontier district and a Pathán population can well bear, it follows that at a revision of settlement no very large enhancement of the revenue can be expected.

(3). Bannu proper being fully cultivated, the fluctuating system of assessment in the Kacha annually anticipating the increase of revenue obtainable from an expansion of cultivation, and the other parts of the district being *bārānī* tracts, the additional revenue a revision of assessment would yield will be mostly drawn from the poorest lands in the district.

(4). Though costly Government projects exist for extending irrigation, I hardly think that any of them will be executed for many years to come, and I know that the people are unlikely to do much in that way of themselves. Then there is no likelihood that the means of communication between this district and grain-purchasing markets will be shortly improved. Thus it is improbable that new canals or water storage works will be made, or that the prices of agricultural produce will greatly rise in the next twenty or thirty years.

(5). As to a revision of the settlement of rights, I trust this report, and the settlement records themselves, will afford good evidence that, provided the patwāris' annual papers, and especially the mutation of names statement, are properly kept up to date, no such revision will be required for the next thirty years at least.

EDWARDES-ABAD: }
26th November 1878. }

S. THORBURN,
Settlement Officer, Bannu.

* In using this word I mean to exclude the revenue obtained from the Kacha in which a fluctuating system of assessment obtains.

APPENDICES.

APPENDIX I.

GOVERNMENT NOTIFICATIONS RELATING TO THE BANNU SETTLEMENT
REQUIRED BY FINANCIAL COMMISSIONER'S CIRCULARS OF 1874 AND 1878.

1. *Powers.*—The Gazetted Officers and their Judicial and Revenue powers were as follows:—

Number.	Name.	Office.	Period of service.			POWERS.
			Yrs. about	M	D.	
1	Financial	Commissioner ...	6	9	0	Under the provision of section 22 of Act XIX of 1866 invested with the powers of Chief Court for the purpose of trying special appeals from the Officiating Commissioner of Settlement and Settlement Officer in all decisions passed by them in regular appeal under section 21 of the said Act with the powers of a court of final appeal in suits regarding land, or the rent, revenue or produce of land, the said powers to be exercised in respect of suits arising in the Bannu district.
2	J. B. Lyall, Esquire	Settlement Commr	about 5	6	0	Under sec. 21 of Act XIX of 1866 invested with the powers of a Commissioner of division for the purpose of deciding suits relating to land, or the rent, revenue or produce of land within Bannu district.
3	S. S. Thorburn, Esq.	Settlement Officer	6	4	3	Do. Do. but of a Deputy Commissioner.
4	J. A. L. Montgomery, Esquire.	Offg. Ditto.	0	3	0	Do. do. do. do.
5	M. Gauga Ram ...	Extra Assistant Settlement Officer	6	1	2	Do. do. do. do.
6	Mumtáz Hosain ...	Supdt. Bannu ...	5	6	16	Do. do. do. but of a tahsildár.
7	Shekh Abdullah ...	Ditto. Marwat ...	6	2	9	Do. do. do. do.
8	Ghulam Farid ...	Ditto Isakhel ..	5	8	26	Do. do. do. Jurisdiction extended to Bannu tahsil in 1877.
9	Harbuns Lall ...	Ditto. Miánwáli ...	6	2	0	Do. do. do. but of a Tahsildár.
10	Hari Ram ...	Deputy Superintendent, Bannu	1	10	17	Do. do. do. do.
11	Nanak Chand ...	Ditto. Miánwáli	2	1	0	Do. do. do. do Rs. 100.
12	Diwán Chand ...	Naib Tahsildár deputed to Settlement	0	2	12	Under section 49 Act XVII of 1877 with the powers of a tahsildár with special powers as defined in section 32 clause (d) of the said Act for the purpose of trying suits relating to land, or the rent, revenue or produce of land in which the amount or value of the subject matter does not exceed Rs. 150, and which may arise in the Bannu district.
13	Mahesh Dass ...	Extra Deputy Supdt. Miánwáli	0	6	0	Do. Do. to Rs. 100 in Miánwáli tahsil.
14	Alam Shah ...	Dy. Superintendent, Marwat.	0	3	0	Do. Do. Do. Marwat tahsil.

2. *Reduction of Stamp duty.*—Notification No. 3348, dated 9th September 1870. In continuation of Notification No. 385, dated 12th May 1870, the Governor-General in Council, under the provision of section 35 of Act VII of 1870, is pleased to prescribe that the stamp duty on plaints in judicial suits cognizable by the settlement courts under section 21 of Act XIX of 1865, in all districts under settlement in the Derajat and Peshawar divisions be reduced to one-fourth of the rate prescribed in schedule 1 of Act VII of 1870.

3. *Remission of stamp duty on instruments relating to land.*—Notification No. 1739, dated 13th March 1874. In exercise of the powers conferred by section 16 of the General Stamp Act of 1869, the Governor-General in Council is pleased to remit the whole of the duties chargeable under the said Act on instruments relating to land or benefits to arise out of land, executed by members of the following tribes residing in the Bannu district within the limits hereinafter specified :—

This Notification does not apply to any instrument executed after 31st December 1876.—

Ahmadzai Wazirs	...	...	...	} NOTE.—It does not seem necessary to transcribe here the bounds of each of the above clans.
Utmanzai Wazirs	...	...	...	
Bhitannis	...	...	...	
Bhitanni location of Harámatála	...	...	...	
Bhangikhel Khataks	...	...	...	

4. *Instructions about assessments.*—The instructions were as those given to the Officers in charge of the Settlements of the Delhi, Gurgaon and Karnál districts. The instructions were not notified in the Gazette I believe. Their first two paragraphs have been quoted in full in paragraph 181 of this Report. The third paragraph was as follows :—

3. "Para. 5 of Book Circular No. XXI of 1871 of the Financial Commissioner of the Punjab shall not be regarded, but the instructions contained in the rest of that Circular shall be observed."

The fourth paragraph does not apply to this district.

5. *Withdrawal of favorable rates of stamp duty.*—Under No. 2127, dated 4th December 1877, from the Secretary to Government, Punjab, to the Secretary to Government of India, Foreign Department, the Lieutenant-Governor agreed that the Notification quoted above under paragraph 2 should be withdrawn, and ordered in anticipation of sanction that full stamp duty both in plaints and appeals should be levied from 1st January 1878.

6. *Withdrawal of powers.*—The special Civil Judicial powers with which Settlement Officers were invested from time to time during settlement were withdrawn and conferred on the Civil Courts under Notification No. 1706, dated 27th November 1878.

General abstract of area, resources

1	2				3	4	5	6	7
Tahsil.	Name of Assessment circle.				NUMBER OF MEHALS.				Sq.
					Khalas.	Shared.	Jagir.	Total.	
BANNU.	Western Waziri Circle	...	...	...	4	...	...	4	70,595
	Lohra	...	...	...	11	...	...	11	22,167
	Landidak	...	...	...	23	...	...	23	7,330
	Banna	...	...	...	131	...	...	131	44,233
	Nár	...	...	...	29	...	1	23	13,039
	Trikha	...	...	...	31	...	...	31	21,367
	Eastern Waziri Thal...	...	...	...	5	...	...	5	105,997
	Total	...	...	...	226	...	1	227	284,728
MARWAT.	Pakha	...	...	...	26	...	...	26	194,467
	Gadwad	...	...	...	17	...	...	17	138,149
	Tandobah	...	...	...	19	...	...	19	115,811
	Nár	...	...	...	40	...	...	40	22,751
	Shiga	...	...	...	25	...	...	25	271,656
	Shiga-Khatina	...	...	...	21	...	...	21	109,870
	Total	...	...	...	148	...	...	148	852,684
	Carried forward	...	...	...	374	...	1	375	1,137,412

1 from the faired Settlement Records.

	10	11	12	13	14	15	16	17
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S ARRANGED FOR ASSESSMENT IN ACRES.

iri or assessed.

	Total.	Abandoned.	Fallow.	CULTIVATED.				
				Sailaba.	Irrigated from canals and wells.	Unirrigated.	Total.	Total of assessed.
9 3 12	30,943	11,196	9,583	...	7,120	11,753	18,873	39,652
	3,685	3,348	1,484	...	13,650	...	13,650	18,482
	1,420	2,024	805	...	3,081	...	3,081	5,310
	7,913	2,592	760	...	32,968	...	32,968	36,320
	684	978	403	...	10,974	...	10,974	12,355
	4,177	5,535	506	...	11,149	...	11,149	17,190
	24,038	39,918	2,554	...	1,412	38,075	39,487	81,959
9 3 12	72,860	65,591	16,095	...	80,354	49,828	130,182	211,868
62	184,913	16,365	4,034	...	...	39,155	39,155	59,554
	90,061	7,080	1,833	...	...	39,175	39,175	48,068
	66,785	22,757	3,336	...	11,174	11,759	22,933	49,026
	8,445	2,058	1,696	...	9,467	1,085	10,552	14,306
	199,221	11,232	2,421	...	...	58,762	58,762	72,415
	45,039	2,879	423	...	...	61,529	61,529	64,831
	544,464	62,371	13,743	...	20,641	211,465	232,106	308,220
	617,324	127,962	29,838	...	100,995	261,293	362,288	520,088

1	2	18	19	20	21	22	23
Tahsil.	Name of Assessment Circle.	II.—RESOURCES AND CAPABILITIES CONSIDERED					
		Area in acres and percentage on cultivated and abandoned area as given in column 17.				Percentage	
		Manured.	Irrigated.	Zabti.	Pakshat.	—rice, turmeric, sugarcane, garden produce, tobacco, cotton, rice and wheat, &c.	%.
BANNU.	Western Waziri Circle ...	272	7,120	71	806	47	40
	Lohra ...	1	18	...	2	41	34
	Landidak ...	10	100	5	1	61	37
	Bannu ...	175	5,910	147	329	61	38
	Nar ...	3	100	2	6	61	38
	Trikha ...	9,339	36,320	6,501	1,456	67	43
	Eastern Waziri Thal ...	26	100	18	4	55	45
	Total ...	1,455	12,355	470	391	61	38
MARWAT.	Pakha ...	12	100	4	3	55	45
	Gadwad ...	1,833	17,190	667	604	61	38
	Tandobah ...	11	100	4	4	61	38
	Nar ...	250	1,412	50	674	61	38
	Shiga ...	7	47	4	2	61	38
	Shiga-Khatina ...	...	...	...	1	...	...
	Total ...	15,089	98,789	8,763	4,355	61	38
	Carried forward ...	7	47	4	2	61	38
MARWAT.	Pakha ...	...	...	411	590	49	44
	Gadwad ...	...	...	1	1	49	48
	Tandobah ...	...	...	51	679	49	48
	Nar ...	667	11,174	470	2,206	50	45
	Shiga ...	1	23	1	4	67	31
	Shiga-Khatina ...	268	9,467	387	42	63	37
	Total ...	2	66	3	3	55	43
	Carried forward ...	...	...	368	290	...	...
MARWAT.	Pakha ...	935	20,641	1,763	5,757	55	42
	Gadwad ...	...	...	1	2	...	...
	Tandobah ...	...	...	...	...	...	...
	Nar ...	...	...	...	...	...	...
	Shiga ...	...	...	...	...	...	...
	Shiga-Khatina ...	...	...	...	...	...	...
	Total ...	...	...	...	...	...	...
	Carried forward ...	...	...	...	...	...	...
MARWAT.	Pakha ...	16,724	119,430	10,526	10,112	...	...
	Gadwad ...	...	...	...	...	...	...
	Tandobah ...	...	...	...	...	...	...
	Nar ...	...	...	...	...	...	...
	Shiga ...	...	...	...	...	...	...
	Shiga-Khatina ...	...	...	...	...	...	...
	Total ...	...	...	...	...	...	...
	Carried forward ...	...	...	...	...	...	...

-continued.

24	25	26	27	28	29	30	31	32
DIFFERENT ASPECTS.			III.—SUMMARY AND LAST SETTLEMENT JAMA COMPARED.				JAMA OF PRESENT REGULAR SET- TLEMENT.	
Produce arranged in classes.			Jama of first sum- mary settlement.	Jama of second sum- mary settlement.	Rate per culti- vated acre.		Amount.	Rate per cultivated acre.
III.	IV.	Total area un- cultivated and percentage of area uncultiva- ted to total area (in block type).			First summary Settlement.	Second summa- ry settlement		
...	...	51,723	2,676	2,779	...	0 14 10	3,834	0 3 3
...	...	73						
...	...	8,517	13,219	15,235	2 4 1	1 5 2	16,667	1 3 6
...	...	38						
1	1	4,249	...	1,300	...	0 3 0	1,812	0 9 5
...	...	58						
...	...	11,265	68,293	72,856	3 5 9	2 14 0	86,476	2 10 0
...	...	25						
...	...	2,056	6,424	5,816	0 8 7	0 7 10	8,360	0 12 2
...	...	16						
...	...	10,218	13,311	12,822	2 4 3	1 6 9	14,977	1 5 6
...	...	48						
...	...	66,510	240	2,659	...	0 7 3	4,443	0 1 10
...	...	63						
...	...	154,537	1,04,163	1,13,467	...	1 8 8	1,36,569	1 0 9
...	...	54						
4	3	155,312	12,005	17,078	1 5 6	0 11 7	17,350	0 7 1
...	...	80						
3	...	98,974	20,170	21,720	1 3 4	0 11 3	18,580	0 7 7
...	...	72						
1	1	92,816	12,175	12,085	1 10 0	0 15 1	11,568	0 8 1
...	...	80						
1	1	12,199	1,307	5,499	2 5 4	0 13 4	6,880	0 10 5
...	...	54						
...	...	212,792	22,011	21,125	1 3 11	0 11 4	23,755	0 6 6
...	...	73						
1	1	48,316	46,172	45,910	1 3 11	0 12 2	35,315	0 9 2
...	...	44						
2	1	620,409	1,13,840	1,23,417	1 4 7	0 12 0	1,13,448	0 7 10
...	...	73						
...	...	774,946	2,18,003	2,36,884	...	...	2,50,017	...

1	2	3	4	5	6	7	8
Tahsil.	Name of Assessment Circle.	NUMBER OF MEHALS.				SECTION I.	
		Khalsa.	Shared.	Jagir.	Total.	Total area.	Mah.
							Barabar.
ISAKHEL.	<i>Brought forward</i> ...	374	...	1	375	1,137,412	611,148
	Bhangikhel ...	1	...	...	1	112,145	102,441
	Mohar ...	9	...	...	9	71,734	48,048
	Danda ...	8	1	1	10	118,261	88,967
	Kacha ...	11	1	2	14	46,564	27,176
	Kacha-Pakka ...	2	...	...	2	26,422	22,131
	Nehri ...	9	...	...	9	56,890	36,473
	Total ...	40	2	3	45	432,016	332,166
	Kacha ...	31	...	...	31	80,302	57,558
	Kacha Thal ...	8	...	...	8	110,957	98,021
MIANWALI	Kacha-Pakka ...	15	...	...	15	191,753	139,478
	<i>Carried forward</i> ...	468	2	4	474	1,952,440	1,234,38

-continued.

9	10	11	12	13	14	15	16	17
1A AS ARRANGED FOR ASSESSMENT IN ACRES.								
guzari or assessed.								
Lakhriji.	Total.	Abandoned.	Fallow.	CULTIVATED.				
				Sailaba.	Irrigated from canals and wells.	Unirrigated.	Total.	Total of assessed.
181	617,324	127,962	29,838	...	100,995	261,293	362,288	520,088
—35	102,548	243	159	...	6	9,189	9,195	9,597
—72								
107								
...	48,043	11,813	1,153	...	...	10,725	10,725	23,691
—327	87,562	12,413	1,105	3,960	317	12,904	17,181	30,699
—1,328								
1,655								
...	27,175	2,154	1,158	16,018	59	...	16,077	19,389
—137	22,703	292	772	2,144	...	511	2,655	3,719
—441								
578								
—498	37,088	2,946	1,691	1,640	11,567	1,958	15,165	19,802
—116								
614								
—997								
—1,957	325,119	29,861	6,038	23,762	11,949	35,287	70,998	106,897
2,954								
—108	57,692	816	1,997	19,727	70	...	19,797	22,610
—49								
157								
—313	98,505	436	1,034	10,034	130	818	10,982	12,452
—130								
443								
—93	139,814	19,059	5,749	5,433	173	21,525	27,131	51,939
—243								
336								
4,071	1,238,454	178,134	44,656	58,956	113,317	318,923	491,196	713,986

1	2			3	4	5	6	7
Tahsil.	Name of Assessment Circle.			NUMBER OF MEHALA.				Total area.
				Khāla.	Shared.	Jāgir.	Total.	
ISAKHEL.	<i>Brought forward</i> ...			374	...	1	375	1,137,411
	Bhangikbel	...	...	1	...	...	1	112,141
	Mohār	...	...	9	...	...	9	71,73
	Danda	...	...	8	1	1	10	118,26
	Kacha	...	...	11	1	2	14	46,56
	Kacha-Pakka	...	...	2	...	...	2	26,42
	Nehri	...	...	9	...	...	9	56,89
	Total ...			40	2	3	45	432,010
	Kacha	...	...	31	...	...	31	80,30
MIANWALI	Kacha Thal	...	...	8	...	...	8	110,95
	Kacha-Pakka	...	...	15	...	...	15	191,75
	<i>Carried forward</i> ...			468	2	4	474	1,952,440

[illegible]

1	2	18	19	20	21	22
Tahsil.	Name of Assessment circle.	II.—RESOURCES AND CAPABILITIES CONCERNING				
		Area in acres and percentage on cultivated and abandoned area as given in column 17.				
		Manured.	Irrigated.	Zabtd.	Palktcht.	1-crore, turmeric, sugar-cane, cotton, tobacco, cotton, rice and wheat.
ISAKHEL.	<i>Brought forward</i> ...	16,024	119,430	10,526	10,112	-
	Rangi Khel ...	...	6	506	...	...
	Mohār ...	...	...	617	1,387	...
	Danda ...	267	317	531	6	...
		1	1	2	3	...
	Kacha ...	59	59	193	3,353	...
				1	17	...
	Kacha-Pakka ...	...	...	100	516	...
				3	14	...
	Nehri ...	810	11,567	1,320	1,725	...
MIANWALL.		2	58	7	9	...
	Total ...	636	11,949	3,267	7,941	...
		1	11	3	7	...
	Kacha ...	70	70	413	2,681	...
				2	12	...
	Kacha Thal ...	130	130	853	173	...
		1	1	7	1	...
	Kacha-Pakka ...	173	173	837	764	...
				2	1	...
	<i>Carried forward</i> ...	17,033	131,752	15,896	21,670	...

--continued.

4	25	26	27	28	29	30	31	32
DIFFERENT ASPECTS.			III.—SUMMARY AND LAST SETTLEMENT JAMA COMPARED.				JAMA OF PRESENT REGULAR SETTLE- MENT	
Duce arranged in classes.			Jama of first sum- mary settlement.	Jama of second sum- mary settlement.	Rate per cultivated acre.		Amount.	Rate per cultivated acre.
III.	IV.	Total area un- cultivated and percentage of area uncultiva- ted to total area (in block type).			First summary settlement.	Second summa- ry settlement.		
...	...	774,946	2,18,003	236,884	...	...	2,50,017	...
...	...	102,915	...	...	...	...	2,200	0 3 10
...	...	92	...	...	...	...	...	...
...	...	61,009	7,444	9,345	0 12 4	0 15 6	10,190	0 15 2
1	1	85	K—79	12,869	0 13 6	1 1 6	K—4,469	1 0 4
		100,753	P—9,835	12,869			P—13,103	
		85	9,914				17,572	
1	5	30,487	5,082	4,233	1 8 4	1 7 0	18,640	1 2 7
		65						
...	...	23,630	K—	119	0 9 5	0 11 6	K—2,391	1 0 11
		89	P—490	481			P—412	
			490	600			2,803	
1	...	41,227	—105	78	0 15 2	0 12 6	K—1,974	0 13 4
		72	P—12,880	10,636			P—10,686	
			12,985	10,714			12,660	
1	1	360,021	K—5,266	4,430			K—27,474	
		83	P—30,649	33,331	0 14 9	0 15 6	P—36,591	0 14 5
			35,915	37,761			64,065	
1	5	60,397	24,215	28,610	1 9 3	1 9 0	C—27,940	1 6 7
		75					G—W.240	
							28,180	
7	14	99,662	K—20,435	K—21,703	1 8 7	1 11 5	K—15,065	1 6 4
		90		P—46			P—265	
				21,749			15,330	
							G.W1,075	
1	2	164,529	K—32,039	32,770	1 8 7	1 4 0	16,405	0 14 5
		86	P—11,336	12,704			K—7,331	
			43,375	45,474			P—17,150	
							24,481	
...	...	1,459,555	3,41,943	3,70,478	...	...	G.W—410	
							24,891	
							383,558	...

1	2	3	4	5	6	7	8
Tahsil.	Name of Assessment Circle.	NUMBER OF MEHALS.				SECTION I.	
		Khalas.	Shared.	Jagir.	Total.	Total area.	Population.
MIANWALI—(concluded.)	<i>Brought forward</i> ..	468	2	4	474	1,963,440	1,74,100
	Pakhar	3	...	2	7	210,043	15,000
	Mohar	4	...	...	4	104,639	6,000
	Thal	8	...	...	6	248,784	230,000
	Total ...	63	...	2	71	946,477	712,100
	GRAND TOTAL ...	483	2	6	491	2,515,905	1,68,100

continued.

9	10	11	12	13	14	15	16	17
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AS ARRANGED FOR ASSESSMENT IN ACRES.

szári or assessed.

Lakulaj.	Total.	Abandoned.	Fallow.	CULTIVATED.				
				Sail&ba.	Irrigated from canals and wells.	Unirrigated.	Total.	Total of assessed.
4,071	12,38,454	178,134	44,656	58,956	113,317	318,923	491,196	713,986
— 56	147,537	16,427	4,153	...	177	41,748	41,925	62,505
— 230 — 64	69,611	10,631	2,240	...	153	22,004	22,157	35,028
294								
— 94 — 326	230,786	4,692	1,675	...	325	11,306	11,631	17,999
420								
— 894 — 812	743,945	52,061	16,848	35,194	1,028	97,401	133,623	202,532
1,706								
— 2,069 — 2,772	1,686,388	209,884	52,724	58,956	113,972	393,981	566,909	829,517
4,84								

1	2	18	19	20	21	22	23
Table II.	Name of Assessment Circle.	II.—RESOURCES AND CAPABILITIES CONSIDERED					
		Area in acres and percentage on cultivated and abandoned area as given in column 17.				Percentage	
		Manured.	Irrigated.	Zabti.	Palkdsht.	1—rice, turmeric, sugar-cane, garden produce, oil seeds, cotton, rice and wheat.	
MIANWALI—(concluded.)	<i>Brought forward</i> ...	17,033	131,752	15,896	21,670	...	...
	Pakhar ...	177	177	2,553 4	318 1	45	...
	Mohâr ...	...	153 ...	606 2	206 1	17	...
	Thal ...	325 2	325 2	2,634 15	848 5	12	...
	Total ...	875 ...	1,028 1	7,896 4	4,989 2	44	...
	Grand Total ...	17,535 2	132,407 16	21,689 3	23,042 3	54	...

included.

25	26	27	28	29	30	31	32
PRESENT ASPECTS.		III—SUMMARY AND LAST SETTLEMENT JAMA COMPARED.				JAMA OF PRESENT REGULAR SET- TLEMENT.	
see arranged in classes.		Jama of first summary settlement,	Jama of second sum- mary settlement.	Rate per culti- vated acre.		Amount,	Rate per cultivated acre.
IV.	Total area un- cultivated and percentage of area uncultiva- ted to total area (in block type).			First summary settlement.	Second sum- mary settle- ment.		
...	1,459,555	3,41,943	3,70,478	...	...	3,83,558	...
1	168,061 80	18,926	21,486	0 12 10	0 9 7	C—23,470 G. W. 460	0 8 11
						23,930	
1	82,252 79	13,900	14,350	1 8 2	1 2 7	C—17,210 G. W. 430	0 12 5
						17,640	
27	237,059 95	5,790	5,479	1 4 6	1 6 4	C—9,000 G. W. 1,395	0 12 5
						10,395	
3	811,960 86	K. 76,689 P. 49,952	83,083 54,065	1 5 6	1 2 4	K. 50,336 P. 67,095	0 14 1
		1,26,641	1,37,148			1,17,431 G. W. 4,010	
						1,21,441	
2	1,946,927 77	K. 81,955 P. 2,98,604	87,513 3,24,280	1 6 11	1 0 7	K. 77,810 P. 3,53,703	0 12 2
		3,80,559	4,11,793			4,31,513 G. W. 4,010	
						4,35,523	

1) The numbers in black type are the percentages.

2) K = Kacha, P = the pakka or unlands and G. W. = Grazing waste.

3) The jama of the Kacha is that announced for 1876-77 for Isakhel and that of 1878-79 for Mianwan.

APPENDIX

General abstract of area, resources and jama

1	2	3	4	5	6	7	8
Tahsil.	NAME of Assessment circle.	NUMBER OF MEHALS.				SECTION L.—	
		Khalsa.	Shared.	Jagir.	Total.	Total area.	<i>Minhai</i>
							Banjar.
BANNU.	Western Waziri Circle ...	4	...	...	4	70,595	30,943
	Lohra	11	...	...	11	22,167	3,685
	Landidak	22	...	...	22	7,330	1,420
	Bannu	131	...	...	131	44,233	7,913
	Nar	22	...	1	23	13,039	672
	Trikha	31	...	...	31	21,367	4,177
	Eastern Waziri Thal... ..	5	...	...	5	105,997	24,038
	Total ...	226	...	1	227	284,728	72,848
MARWAT.	Pakha	26	...	...	26	194,467	134,913
	Gadwad	17	...	...	17	138,149	90,061
	Tandobah	19	...	...	19	115,811	66,723
	Nar	40	...	...	40	22,751	8,445
	Shiga	25	...	...	25	271,636	199,139
	Shiga-Khatina	21	...	...	21	109,870	45,014
	Total ...	148	...	...	148	852,684	544,295
	Carried forward ...	374	...	1	375	1,137,412	617,143

II.

prepared from the faired Settlement Records.

9	10	11	12	13	14	15	16	17
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AREA AS ARRANGED FOR ASSESSMENT IN ACRES.

malguzari or assessed.

Lakhiraj.	Total.	Abandoned.	Fallow.	CULTIVATED.				
				Sailaba.	Irrigated from canals and wells.	Unirrigated.	Total.	Total of assessed.
...	30,943	11,196	9,583	...	7,120	11,753	18,873	39,652
...	3,685	3,348	1,484	...	13,650	...	13,650	18,482
...	1,420	2,024	805	...	3,081	...	3,081	5,310
...	7,913	2,592	760	...	32,968	...	32,968	36,320
C— 9	684	978	403	...	10,974	...	10,974	12,355
U— 3	4,177	5,535	506	...	11,149	...	11,149	17,190
12	24,038	39,918	2,554	...	1,412	38,075	39,487	81,959
C— 9	72,860	65,591	16,095	...	80,354	49,828	130,182	211,868
U— 3								
12								
...	134,913	16,365	4,034	...	...	39,155	39,155	59,554
...	90,061	7,080	1,833	...	...	39,175	39,175	48,088
C— 62	66,785	22,757	3,336	...	11,174	11,759	22,933	49,026
...	8,445	2,058	1,696	...	9,467	1,085	10,552	14,306
C— 82	199,221	11,232	2,421	...	...	58,762	58,762	72,415
C— 25	45,039	2,879	423	...	...	61,529	61,529	64,831
C— 169	544,464	62,371	13,743	...	20,641	211,465	232,106	308,220
181	617,324	127,962	29,838	...	100,995	261,293	362,288	520,088

APPENDIX III.

Statement of Tenures as prescribed by C. V. 7. (3) of the Act

Tahsil	ZEMINDARI.		Pattidari.	Bhyachara,	Mixed Pattidari and Bhyachara,	Total.	REWAHA
	Landlord.	Communal.					
Bannu	9	13	6	183	11	227	
Marwat	9	13	4	98	24	148	
Isakhel	...	3	...	86	6	45	
Mianwali	2	3	...	34	32	71	
Total	20	32	10	356	73	491	

* No annual demand statement is submitted, a progressive jama having for only one estate in the district.

APPENDIX IV.

1	2			3	4	5	6	7	8
Tahsil.	Name of Assessment Circle.			NUMBER OF MEHALS.				SACRED.	
				Khalas.	Shared.	Jagir.	Total.	Total area.	Khalas.
ISA KHIL.	<i>Brought forward</i> ...			374	...	1	375	1,137,412	617,140
	Bhangikbel	...	...	1	...	...	1	112,145	100,000
	Mohar	...	...	9	...	...	9	71,734	64,000
	Danda	...	...	8	1	1	10	118,261	65,000
	Kacha	...	...	11	1	2	14	46,564	27,100
	Kacha-Pakka	...	...	2	...	...	2	26,422	23,100
	Nehri	...	...	9	...	...	9	56,890	36,000
	Total	...	...	40	2	3	45	432,016	322,340
	Kacha	...	...	31	...	...	31	80,302	57,500
	Kacha Thal	...	...	8	...	...	8	110,957	90,000
MIANWALI	Kacha-Pakka	...	...	15	...	...	15	191,753	139,400
	<i>Carried forward</i>	...	...	468	2	4	474	1,952,440	1,234,500

II—continued.

9	10	11	12	13	14	15	16	17
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AREA AS ARRANGED FOR ASSESSMENT IN ACRES.

malguzari or assessed.

Lakhiraj.	Total.	Abandoned.	Fallow.	CULTIVATED.				
				Sailaba.	Irrigated from canals and wells.	Unirrigated.	Total.	Total of assessed.
181	617,324	127,962	29,838	...	100,995	261,293	362,288	520,088
C—35	102,548	243	159	...	6	9,189	9,195	9,597
U—72								
107								
...	48,043	11,813	1,153	...	...	10,725	10,725	23,691
C—327	87,562	12,413	1,105	3,960	317	12,904	17,181	30,699
U—1,328								
1,655								
...	27,175	2,154	1,158	16,018	59	...	16,077	19,389
C—137	22,703	292	772	2,144	...	511	2,655	3,719
U—441								
578								
C—498	37,088	2,946	1,691	1,640	11,567	1,958	15,165	19,802
U—116								
614								
C—997								
U—1,957	325,119	29,861	6,038	23,762	11,949	35,287	70,998	106,897
2,954								
C—108	57,692	816	1,997	19,727	70	...	19,797	22,610
U—49								
157								
C—313	98,505	436	1,034	10,034	130	818	10,982	12,452
U—130								
443								
C—93	139,814	19,059	5,749	5,433	173	21,525	27,131	51,939
U—243								
336								
4,071	1,238,454	178,134	44,656	58,956	113,317	318,923	491,196	713,986

1	3	18	19	20	21	2
Tahsil.	Name of Assessment circle.	II.—RESOURCES AND CAPABILITIES COMPARISON				
		Area in acres and percentage on cultivated and abandoned area as given in column 17.				Percentage of area under cultivation.
		Measured.	Irrigated.	Zabti.	Palkshet.	1—viz., turmeric, cotton, sugarcane, garden produce, tobacco, oilseeds, etc.
ISAKHEL.	<i>Brought forward</i> ...	16,024	119,430	10,536	10,112	1
	Rangi Khel	...	6	506	...	...
	Mohar	...	...	617	1,387	...
	Danda	267	317	531	960	...
		1	1	2	3	...
	Kacha	59	59	193	3,353	...
				1	17	...
	Kacha-Pakka	...	...	100	516	...
				3	14	...
	Nehri	810	11,567	1,320	1,725	...
MIANWALI.		2	58	7	9	...
	Total ...	636	11,949	3,267	7,941	...
		1	11	3	7	...
	Kacha	70	70	413	2,681	...
				2	12	...
	Kacha Thal	130	130	853	172	...
		1	1	7	1	...
	Kacha-Pakka	173	173	837	764	...
				2	1	...
	<i>Carried forward</i> ...	17,033	131,752	15,896	21,670	...

II.—continued.

24	25	26	27	28	29	30	31	32
DIFFERENT ASPECTS.			III.—SUMMARY AND LAST SETTLEMENT JAMA COMPARED.				JAMA OF PRESENT REGULAR SETTLE- MENT	
<i>produce arranged in classes.</i>			Jama of first sum- mary settlement.	Jama of second sum- mary settlement.	Rate per cultivated acre.		Amount.	Rate per cultivated acre.
III.	IV.	Total area un- cultivated and percentage of area uncultiva- ted to total area (in block type).			First summary settlement.	Second summa- ry settlement.		
...	...	774,946	2,18,003	236,884	...	...	2,50,017	...
...	...	102,915	...	...	...	...	2,200	0 3 10
...	...	92	...	...	...	...	...	...
...	...	61,009	7,444	9,345	0 12 4	0 15 6	10,190	0 15 2
...	...	85	...	...	...	...	...	...
1	1	100,753	K—79	12,869	0 13 6	1 1 6	K—4,469	1 0 4
...	...	85	P—9,835	12,869	...	...	P—13,103	...
...	...	...	9,914	...	...	...	17,572	...
1	5	30,487	5,082	4,233	1 8 4	1 7 0	18,640	1 2 7
...	...	65	...	...	...	...	...	...
...	...	23,630	K—	119	0 9 5	0 11 6	K—2,391	1 0 11
...	...	89	P—490	481	...	...	P—412	...
...	...	...	490	600	...	...	2,803	...
1	...	41,227	—105	78	0 15 2	0 12 6	K—1,974	0 13 4
...	...	72	P—12,880	10,636	...	...	P—10,686	...
...	...	...	12,985	10,714	...	...	12,660	...
...	...	...	K—5,266	4,430	...	...	K—27,474	...
1	1	360,021	P—30,649	33,331	0 14 9	0 15 6	P—36,591	0 14 5
...	...	83	...	...	...	...	...	...
...	...	...	35,915	37,761	...	...	64,065	...
1	5	60,397	24,215	28,610	1 9 3	1 9 0	C—27,940	1 6 7
...	...	75	...	...	...	...	G—W.240	...
...	...	...	...	...	...	...	28,180	...
7	14	99,662	K—20,435	K—21,703	1 8 7	1 11 5	K—15,065	1 6 4
...	...	90	P—46	P—46	...	...	P—265	...
...	...	...	...	21,749	...	...	15,330	...
...	...	...	...	...	...	...	G.W.1,075	...
...	...	...	...	...	...	...	16,405	...
1	2	164,529	K—32,039	32,770	1 8 7	1 4 0	K—7,331	0 14 5
...	...	86	P—11,336	12,704	...	...	P—17,150	...
...	...	...	43,375	45,474	...	...	24,481	...
...	...	...	...	...	...	...	G.W—410	...
...	...	1,459,555	3,41,943	3,70,478	...	...	24,891	...
...	...	...	...	...	...	...	383,558	...

1	2	3	4	5	6	7	8
Tabul.	Name of Assessment Circle.	NUMBER OF MEHALS.				Sums.	
		Khalas.	Shared.	Jagir.	Total.	Total area.	Number.
MIANWALI—(concluded.)	<i>Brought forward</i> ..	468	2	4	474	1,953,440	1,541
	Pakhar	5	...	2	7	210,042	154
	Mohar	4	...	...	4	104,639	63
	Thal	6	...	...	6	248,784	231
	Total ...	69	...	2	71	946,477	731
	GRAND TOTAL ...	483	2	6	491	2,515,905	1,681

II—continued.

9	10	11	12	13	14	15	16	17
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AREA AS ARRANGED FOR ASSESSMENT IN ACRES.

undiguzari or assessed.

Lakhiraj.	Total.	Abandoned.	Fallow.	CULTIVATED.				
				Sailaba.	Irrigated from canals and wells.	Unirrigated.	Total.	Total of assessed.
4,071	12,38,454	178,134	44,656	58,956	113,317	318,923	491,196	713,986
C- 56	147,537	16,427	4,153	...	177	41,748	41,925	62,505
C-230 U- 64	69,611	10,631	2,240	...	153	22,004	22,157	35,028
294								
C- 94 U- 326	230,786	4,692	1,675	...	325	11,306	11,631	17,998
420								
894 812	743,945	52,061	16,848	35,194	1,028	97,401	133,623	202,532
1,706								
C-2,069 C-2,772	1,686,388	209,884	52,724	58,956	113,972	393,981	566,909	829,517
4,84								

1	2	18	19	20	21	22	23
Tahsil	Name of Assessment Circle.	II.—RESOURCES AND CAPABILITIES CONSIDERED					
		Area in acres and percentage on cultivated and abandoned area as given in column 17.				Period of year	
		Manured.	Irrigated.	Zabti.	Palkasht.		
						1—rice, turmeric, sugar-cane, garden produce, tobacco, cotton, etc.	
MIANWALI—(concluded.)	Brought forward ...	17,033	131,752	15,896	21,670	...	...
	Pakhar ...	177	177	2,553 4	318 1	45	...
	Mohar ...	...	153 ...	606 2	206 1	17	...
	Thal ...	325 2	325 2	2,634 15	848 5	12	...
	Total ...	875 ...	1,028 1	7,896 4	4,989 2	44	...
	Grand Total ...	17,535 2	132,407 16	21,689 3	23,042 3	54	...

II—concluded.

24	25	26	27	28	29	30	31	32
DIFFERENT ASPECTS.			III—SUMMARY AND LAST SETTLEMENT JAMA COMPARED.				JAMA OF PRESENT REGULAR SET- TLEMENT.	
<i>produce arranged in classes.</i>			Jama of first summary settlement,	Jama of second sum- mary settlement,	Rate per culti- vated acre.		Amount,	Rate per cultivated acre.
III.	IV.	Total area un- cultivated and percentage of area uncultiva- ted to total area (in block type).			First summary settlement.	Second sum- mary settle- ment.		
...	...	1,459,555	3,41,943	3,70,478	...	...	3,83,558	...
1	...	168,061 80	18,926	21,486	0 12 10	0 9 7	C—23,470 G. W. 460	0 8 11
							23,930	
1	...	82,252 79	13,900	14,350	1 8 7	1 2 7	C—17,210 G. W. 430	0 12 5
							17,640	
27	...	237,059 95	5,790	5,479	1 4 6	1 6 4	C—9,000 G. W. 1,395	0 12 5
							10,395	
3	3	811,960 86	K. 76,689 P. 49,952	83,083 54,065	1 5 6	1 2 4	K. 50,336 P. 67,095	0 14 1
			1,26,641	1,37,148			1,17,431 G. W. 4,010	
							1,21,441	
2	1	1,946,927 77	K. 81,955 P. 2,98,604	87,513 3,24,280	1 6 11	1 0 7	K. 77,810 P. 3,53,703	0 12 2
			3,80,559	4,11,793			4,31,513 G. W. 4,010	
							4,35,523	

(1) The numbers in black type are the percentages.

(2) K = Kacha, P = the pakka or unlands and G. W. = Grazing waste.

(3) The jama of the Kacha is that announced for 1876-77 for Isakhel and that of 1878-79 for Mianwālī,

1	2	18	19	20	21	22
Table	Name of Assessment Circle.	II.—RESOURCES AND CAPABILITIES COME				
		Area in acres and percentages cultivated and abandoned area as given in column 17.				Per
		Measured.	Irrigated.	Zabti.	Palkasht.	1—rice, turmeric, sugar-cane, and other products.
MIANWALI—(continued.)	<i>Brought forward</i> ...	17,033	131,753	15,896	21,670	.
	Pakhar	177	177	2,553 4	318 1	
	Mohar	...	153 ...	606 2	206 1	
	Thal	325 2	325 2	2,634 15	848 5	
	Total ...	875 ...	1,028 1	7,896 4	4,989 2	
	Grand Total ...	17,535 2	132,407 16	21,689 3	23,042 3	

APPENDIX IV.

APPENDIX III.

Statement of Tenures as prescribed by C. V. 7. (3) of the Bill

Tahsil	ZEMINDARI.		Pattidari.	Bhynchara.	Mixed Pattidari and Bhynchara.	Total.	REMARKS
	Landlord.	Communal.					
Bansa 	9	13	6	185	11	227	
Marwat 	9	13	4	98	24	148	
Isakhel 	...	3	...	36	6	45	
Mianwali 	2	3	...	34	32	71	
Total 	20	32	10	356	73	491	

* No annual demand statement is submitted, a progressive jama havin for only one estate in the district.

APPENDIX IV.

Statement showing how the jama has been

Taluk	Name of Assessment Circle.	DETAIL OF AREA UNDER					
		From 1 pie to 3 annas.	From 2 annas to 4 annas.	From 4 annas to 6 annas.	From 6 annas to 8 annas.	From 8 annas to 10 annas.	From 10 annas to 12 annas.
	Western Waziri circle ...	29,211	2,733	2,017	23	14	...
	Lohra ...	...	125	879	2,498	3,971	3,372
	Landidak ...	236	124	1,176	2,325	431	180
	Bannu Nar ...	...	46	540	2,167	2,475	985
	Trikha ...	93	...	...	2,108	997	2,950
	Eastern ...	36	34	124	1,592	2,842	88
	Waziri Thal ...	49,365	...	306	...	...	...
	Total	78,941	3,062	5,042	10,713	10,730	7,477
	Pakha ...	12,393	9,862	16,171	12,014	4,008	2,174
	Gadwad ...	455	4,530	8,527	5,319	18,390	880
	Tandobah ...	5,343	7,232	5,294	9,864	2,325	2,751
	Nar ...	...	1,289	2,240	2,082	3,169	3,603
	Shiga ...	53,214	7,637	14,080	28,875	5,947	189
	Shiga-Khatina ...	676	21	1,587	9,690	40,366	10,735
	Total	71,981	30,471	47,899	67,844	74,205	20,334
	Bhangikhel ...	1,396	3,778	4,021	...	...	...
	Mohar ...	...	...	...	...	...	2,957
	Danda ...	...	...	...	378	79	1,370
	Kacha ...	...	...	...	17	150	...
	Kacha-Pakka ...	...	...	...	48	3,322	7,600
	Nehri ...	457	132	308	4,357	...	...
	Total	1,853	3,910	4,329	4,800	3,551	11,909
	Kacha ...	...	...	...	270	...	...
	Kach-Thal ...	403	178	210	106	...	38
	Kacha-Pakka ...	...	...	448	499	3,299	4,98
	Pakbar ...	14,900	9,129	4,105	7,904	6,111	7,34
	Mohar ...	...	...	...	382	3,713	8,8
	Thal ...	1,663	129	1,128	...	5	7,7
	Total	16,966	9,436	5,891	9,161	13,128	29,2
	GRAND TOTAL ...	1,69,741	46,879	63,161	92,518	1,01,614	69,

DIX V.

of crops in year of measurement.

AREA IN ACRES OF OTHER CROPS.								REMARKS.
Wheat.	Gram.	Barley.	Bajra.	Maize.	Miscellaneous.	Total.	Total area in acres under crops.	
79,156	897	18,454	10,938	17,934	4,666	132,045	145,571	
125,338	43,102	7,175	43,063	...	12,193	230,871	232,106	
18,597	372	1,134	3,642	...	1,572	25,317	25,692	
18,557	17	3,878	19,784	...	278	42,514	45,305	
37,154	389	5,012	23,426	...	1,850	67,831	70,997	
39,613	2,362	2,776	3,480	...	4,836	53,067	53,618	
22,761	2,393	748	61,162	...	6,944	94,008	98,207	
62,374	4,755	3,524	64,642	...	11,780	147,075	151,825	
58,210	2,734	3,910	7,122	...	6,408	78,384	79,310	
245,812	46,409	30,255	134,947	17,934	24,081	499,438	521,189	
304,022	49,143	34,165	142,069	17,934	30,489	577,822	600,499	

Statement showing the distribution

Tahsil,				AREA IN ACRES OF RABTI CROPS							
				Turneric.	Sugar-cane.	Henna (mendi).	Vegetable.	Cotton.	Rice.	Tobacco.	Clover.
Bannu	...	...	...	485	4,047	11	365	3,462	1,489	188	3,479
Marwat	...	...	...	...	...	...	159	1,063	...	13	...
Isakhel	{	Kacha	...	...	...	...	121	235	...	19	...
		Pakka	...	...	...	...	108	2,604	...	79	...
		Total	...	...	...	...	229	2,839	...	98	...
Mianwali	{	Kacha	...	...	...	...	287	249	...	15	...
		Pakka	...	...	...	...	72	4,098	...	29	...
		Total	...	...	...	...	359	4,347	...	44	...
GRAND TOTAL	{	Kacha	...	...	...	...	408	484	...	34	...
		Pakka	...	485	4,047	11	704	11,227	1,489	309	3,479
		Total	...	485	4,047	11	1,112	11,711	1,489	343	3,479

V.

crops in year of measurement.

AREA IN ACRES OF OTHER CROPS.								REMARKS.
	Gram.	Barley.	Bajra.	Maize.	Miscellaneous.	Total.	Total area in acres under crops.	
,156	897	18,454	10,938	17,934	4,666	132,045	145,571	
,338	43,102	7,175	43,063	...	12,193	230,871	232,106	
,597	372	1,134	3,642	...	1,572	25,317	25,692	
,557	17	3,878	19,784	...	278	42,514	45,305	
,154	389	5,012	23,426	...	1,850	67,831	70,997	
,613	2,362	2,776	3,480	...	4,836	53,067	53,618	
,761	2,393	743	61,162	...	6,944	94,008	98,207	
,374	4,755	3,524	64,642	...	11,780	147,075	151,825	
,210	2,734	3,910	7,122	...	6,408	78,384	79,310	
,812	46,409	30,255	134,947	17,934	24,081	499,438	521,189	
,022	49,143	34,165	142,069	17,934	30,489	577,822	600,499	

Canal irrigation from the Kurram and Tochi (Gar

Number.	Tahsil and River.	Name of canal and its chief branches or distributaries where any.	General description.	Units (Cusecs) under irrigation
1	Bannu (Kurram)	Kachkot (oldest portion) Sangari, right bank. Chetawar or amandi } left Al-soka ... } bank Mitakhal ... }	See paragraph 112 of Report	12.5
2	Do. ..	Barda from left bank of Kachkot Zambila right bank.	..	8.5
3	Do. ..	Banna Ndr, extension of Kachkot Khula Amirin, left bank.	..	11.5
4	Marwat (Kurram)	Marwat Ndr, extension of Kachkot.	..	15.5
5	Bannu (Kurram)	Landidat	..	6.5
6	Bannu (Tochi) ..	Bakthal Wairan ...	..	10.5
7	Do. ..	Bandhal	Very old: irrigates tappa Barakhi chiefly: held to own two-thirds of Bannuchi share of the Tochi.	5.5
8	Do. ..	Zara Vial Nurar	Very old: position of head not constant: only waters the Nurar lands.	10.5
9	Bannu (Kurram)	Batana A. Mashar B. Kashar C. Muhammadkhal ..	Head is now inside Muhammadkhal bounds: old head eroded 18 years ago: is second highest Nal on Kurm, the highest being the Batana Wairan just above it: irrigates tappa Dadd Shah wholly, two Mamashkhal villages and part of the Muhammadkhal tract.	1.5
10	Do. ..	Mandan A. Mandan } Lower Man- dan Badewa. B. Fatimakhal .. C. Hinjal (out of repair.)	Head is behind old artillery lines: is very old: irrigates 83 villages all but two of which are in the Fatimakhal and Mandan Tappas: all are in one compact block; canal is only about four miles long.	2
Carried forward				86

VI.—*Concluded.*

Modes of distribution of water.	Proprietary rights in water and land.	Canal labour.	REMARKS.
Is generally abundant. When no exact divisions are required: when short, each distributary takes according to its share: individuals according to <i>tinga</i> performed.	One property	Full levy 240 men, 40 from Khamboh and 200 from Chasna villages, rate on shares <i>inter se</i> : inside on acreage.	Down to No. 11 inclusive, all the Kurram canals entered have their heads on the right bank, and all of them above the line at which the Kohat road bisects the Kurram.
Villages <i>inter se</i> divide on some distributaries by "turns" on some by open outlet heads of width of share, and inside each village on <i>tinga</i> .	Ditto ..	Full levy 178 men (108 Dodai, 70 Kharai) rated on villages according to their shares; inside on acreage.	
A, B, C have each nearly equal shares: their heads are always open: for villages <i>inter se</i> , &c., same as No. 12.	Ditto ..	Full levy for <i>tinga</i> 180 men divided thus: A 45, B 45, and C 90: each village quota is according to its share in its particular distributary: inside this is rated on the acreage. Besides the above are 30 share watchmen supplied in same way.	During Settlement operations the separate Bozakhel vial was cut away by Kurram. Many attempts to repair it failing. I gave the Bozakhel and Kotka Peros villages a share in the Matla (B) and Tarna (C) branches of the Shahjoya on which they now have to do double <i>tinga</i> . There was plenty of water, so no vested interests really suffered, and Government had a right to secure its revenue.
Generally by "turns."	Ditto ..	Generally on acreage: men supplied as wanted.	Nos. 12, 13 and 14 are all on the left bank of the Kurram.
Various	Generally one property.	Generally on acreage.	
Ditto	Ditto ..	Ditto	Includes a small vial from the Gambila (Tochi) for Paharkhel.
See para.	See para.	See para.	The great Kashu or Jur-cum Kashu hill torrent discharges itself into the Kurram nearly opposite Ghorival. All water taken out of the Kurram below that point is brackish, hence lands irrigated from Nos. 16 and 17 are poor and impregnated with <i>reh</i> or <i>raitar</i> salts.

APPENDIX VII.

Jagirs and large and petty Maafis (paragraph 210 of Report).

Tahsil.	Names or Numbers of Jagirdars and Maafidars.	Amount of revenue released.	Terms of sanction	REMARKS.
	<i>Jagirs.</i>			
Isakbel and Mianwali	Malik Wazir Khan Chid of Kalabagh }	6,190	Perpetuity	I have only here entered the land revenue released to the jagir, the monopoly of making salt in Kalabagh and extracting the alum yielding earth from the mine Kalabagh is also his. The income was, in 1865, estimated at Rs. 1,20,000 now probably not more than half sum. See also para. 79 of Report.
Isakbel ..	The eight Khwans of Isakbel in equal shares. }	6,378	Ditto	See paras. 77 and of Report.
Banru ..	Sardar Khan of Ghorwal...	2,523	Ditto	See para. 75 of Report. Jagir to maintain four sowars and render service.
Ditto	Mir Abas Khan of Basir ..	2,327	Ditto	Do. Do. Do.
Ditto	Deot Muhammad Khan of Jhandukhel. ..	452	Ditto	
Ditto	Jomroo Khan Wasir ..	80	Life ...	
Ditto	Muhammad Nourang ...	600*	Perpetuity	Both these jagirs are for making salt. Sher Khan Isakbel similarly got his in 1865, but in the form of a jagir.
Isakbel ..	Muhammad Sarfaras Khan	1,000	Life ..	
Ditto ..	Muhammad Abdullah Khan..	800	Ditto	
	Total ..	20,960		
	<i>New Maafis.</i>			
Banru ...	24 men and institutions ..	405	Life or term of settlement	See paragraphs 212 and 213 of Report. Some of these petty maafis have now lapsed from the deaths of Maafidars.
Marwat ...	24 ditto ditto ditto	245		
Isakbel ..	8 ditto ditto ditto	85		
Mianwali...	12 ditto ditto ditto	145		
	Total ..	880		
	<i>Old Maafis.</i>			
Isakbel ..	A Sayad family	330	Life.	The value fluctuates according to the action.
Mianwali	The Miāns family	1,300	Life.	The whole case has been lately reported again in the hopes of obtaining a perpetuity sanction for the whole; the larger part of the maafi has not yet come. At present only a partial action the revenue released under Rs. 700. Also see paragraph of Report.
Ditto	Sarfaras Khan of Piplan ..	131	Life	
	Miscellaneous old Maafis in all four tahsils not elsewhere specified. }	430		
	Total Rs. ..	2,091		
	Grand Total Rs. ...	23,931		

* Owing to fluvial action the revenue released in year of measurements was Rs. 5170. It has fallen very low.

APPENDIX VIII.

Marwat Barats (paragraph 216 of Report).

Number.	Names or numbers of the recipients.	Amount.	REMARKS.
1	Khan Mír Khan, son of Abdul Samand Khan.	1,000	For an account of the family, see para. 76 of Report.
2	Arsala Khan, son of Sarwar Khan ...	1,000	Of this sum he receives Rs. 600 as a quasi-cash jagir out of the revenue of the Landiwah village. Also see para. 76 of Report.
3	Hakim Khan	140	} Very peculiar conditions are attached to these six grants. Besides the Rs. 600 to which they amount, an aggregate sum of Rs. 450 is enjoyed in life pensions by Hakim Khan and certain others.
4	Muhammad Khan Minakhel ...	120	
5	Amir Khan Khoedádkhel ...	85	
6	Haibak Khan Saidúkhel	85	
7	Dosti Khan Shahúbkhel	85	
8	Surkamand Khan Saidúkhel ...	85	
9	Shadi Khan, son of Purdil Khan ...	600	} Wali Khan's share has, I think, been confiscated. Sahibdád at present receives Rs. 405 of the Rs. 600. I hope he may be given the remaining Rs. 195 soon after earning it by <i>khidmat</i> .
10	Muhammad Khan, son of Pir Muhammad Khan	600	
11	Sahibdád Khan, son of Nawáz Khan, and Wali Khan, son of Langar Khan.	600	
12	Mahammad War Khan, son of Azmat Khan.	150	} Certain special conditions are attached to these grants.
13	Alam Khan, son of Mukarrab Khan ...	75	
14	Abu Khan, son of Bakhelmal Ahmadzai.	75	
15	Mozaffar Khan, son of Tor Khan ...	100	
16	Mush Khan, son of Kashmir Khan ...	70	
17	Akbar Khan, son of Irák Khan ...	170	
18	Umar Khan, son of Gulbáz	80	}
19	Manzar Khan, deceased's brother Saina Khan, and son Jouhar Khan together.	80	
	Total Rs. ...	5,200	

APPENDIX VII.

Jagirs and large and petty Maafis (paragraph 210 of Report).

Tahsil.	Names or Numbers of Jagirdars and Maafidars.	Amount of revenue released.	Terms of sanction	REMARKS.
	<i>Jagirs.</i>			
Isakhel and Mianwali	Malik Moazzar Khan Chief of Kalabagh }	6,190	Perpetuity	I have only here entered land revenue released to the monopoly of making in Kalabagh and extra alum yielding earth from Kalabagh is also his. The was, in 1866, estimated : now probably not more sum. See also para. 79 e
Isakhel ..	The eight Khwanin of Isakhel in equal shares. }	6,978	Ditto	See paras. 77 and of Rep
Bannu ..	Sardar Khan of Ghorawal...	2,523	Ditto	See para. 75 of Report. maintain four sowars a service.
Ditto	Mir Abbas Khan of Basir ..	2,327	Ditto	Do. Do.
Ditto	Dost Muhammad Khan of Jhandukhel. ..	452	Ditto	
Ditto	Jomros Khan Wasir ..	80	Life ...	
Ditto	Muhammad Nourang ... Khan Gandapur	600*	Perpetuity	Both these jagirs are of Sher Khan Isakhel since a year, but in the form
Isakhel ..	Muhammad Sarfaris Khan	1,000	Life ..	
Ditto ..	Muhammad Abdullah Khan..	800	Ditto	
	Total ..	20,960		
	<i>New Maafis.</i>			
Bannu ...	34 men and institutions ..	405	Life or term of settlement.	See paragraphs 212 a Some of these petty maafis have elapsed from the deaths
Marwat ...	26 ditto ditto ditto	245		
Isakhel ..	8 ditto ditto ditto	85		
Mianwali...	12 ditto ditto ditto	145		
	Total	880		
	<i>Old Maafis.</i>			
Isakhel ..	A Sayad family	330	Life.	The value fluctuates as action.
Mianwali	The Miāns family	1,200	Life.	The whole case has been reported again in the perpetuity sanction the larger part of it have not yet come. A final action there under Rs. 700. Also of Report.
Ditto	Sarfaras Khan of Piplān ..	131	Life	
	Miscellaneous old Maafis in all four tahsils not elsewhere specified. }	430		
	Total Rs. ..	2,091		
	Grand Total Rs. ...	23,931		

* Owing to fluvial action the revenue released in year of measurements was Rs. 5 fallen very low.

1941

EXPENDITURE

Marine Corps (page 12 of 12)

in number of the expenditure

EXPENDITURE

Amount

For Marine Corps (page 12 of 12)

100

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100

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APPENDIX IX.

The Tappas and Tappa Maliks of Bannu proper ; also the 5 per cent enjoyers in the two Nars and in Landidak (paragraph 217 of Report).

Number.	Name of Tappa.	Names and shares (where any) of the Tappa Maliks.	Amount of Inam at 5 per cent out of the revenue of the tappa.	REMARKS.	
1	Bazar Ahmad Khan...	Mir Abas Khan $\frac{3}{4}$ shares ...	446	Mir Abas Khan also enjoys a quarter share of the land revenue of both tappas as a jagir. For an account of the family see para. 75. Mir Akbar Khan also receives Rs. 51 as an inam.	
2	Ismail Khan ...	Mir Akbar Khan $\frac{1}{4}$ share ...			
3	Ghoriwala ...	Sardad Khan ...	1,063	Also receives one-eighth of the land revenue of both tappas as a jagir. For an account of the family see para. 75 of Report.	
4	Ismailkhel ...				
5	Bazid ...	Khidar Khan ...	306	For an account of the family see para. 75 of Report.	
6	Barakzai ...	Tor Khan $\frac{3}{4}$, Zabita Khan two-ninths and Raibat Khan one-ninth shares.	321	Special conditions are attached to the enjoyment of the shares, which will, as death lapses occur, centre in Tor Khan or his successor.	
7	Jhandukhel ...	Dost Muhammad Khan ...	190	Also receives one-eighth of the revenue of his tappa in jagir.	
8	Hasanni ...	Sherdil and Madak Khan in equal shares	192		
9	Khilat ...	Nezam Khan son of Bala Khan ...	156	<i>Memorandum.</i> (1) Generally where the <i>Inam Malkat</i> tappa—as the 5 per cent. allowance is called—is shared, some conditions are attached. It will be advisable as good opportunities occur to reduce the number of shares in any one tappa to not more than two. (2) The total amount formerly enjoyed was Rs. 5,042. The present total exceeds that sum by Rs. 1,662. The increase is due to an enhanced jama, and the granting of the 5 per cent. allowance to village head men in the two Nars and in Landidak.	
10	Dharmakhel ...	Nezam Khan son of Shahind Khan & Rahmatullah Khan in equal shares.	235		
11	Dand Shah ...	Nurai Khan ...	184		
12	Sherza Khan...	Muhammad Akbar Khan ...	52		
13	Mandan ...	Bhai Khan ...	727		
14	Fatmakhel ...	Zabar Khan and Said Khan in equal shares	327		
15	Kakki ...				
16	Mammakhel ...	Mawaz Khan ...	150		
17	Musakhan ...	Mirdal Khan ...	289		
18	Masti Khan ...	Masti Khan ...	173		
19	Mamashkhan ...	Allahdad Khan and Nazar in equal shares.	136		
20	Mitakhel ...	Khansuba Khan ...	180		
21	Nurar ...	Dur Samand and Khidar Khan in equal shares.	206		
22	Hawed ...	Khidar Khan son of Shahwali Khan.	103		
23	Amandi ...	Laik Shah, Asad Khan and Mozaffar Khan in equal shares.	91		
24	Bharth ...	Shahmadat, Raza Khan and Ambar Shah in equal shares	138		
25	Sadat ...	Akbar Shah, Shahjahan Shah and Gul Ahmad Shah in equal shares	104		
26	Shahdeo ...	Mad Akram $\frac{1}{2}$ share	52	}	
27	Kuti Sadat ...	Khalas and Sarfaraz in equal shares $\frac{1}{2}$ share			
		Najam Shah two-fifth shares, Imam Shah $\frac{1}{2}$	84	}	
		Ekam Shah $\frac{1}{2}$ & Abdul Manan Shah $\frac{1}{2}$			
28	Landidak ...	Twenty-nine recipients ...	90		
29	Bannu Nar ...	Twenty-five ditto ...	386		
30	Marwat Nar ...	Fifty-two ditto ...	323		
		Total ...	6,704		

APPENDIX X.

d revised zemindâri inâms sanctioned during Settlement (paragraph 219 of Report).

sl.	Names or Numbers of the recipients	Amount	REMARKS.
<i>Inams.</i>			
...	Mir Akbar Khan, son of Dakas Khan of Bazar Ahmad Khan.	51	Rs. 200 were sanctioned for him subject to a <i>protanto</i> reduction on his obtaining a share in the tappa inam. He has since received a $\frac{1}{4}$ share which gives him Rs. 149 per annum.
	Mozaffar Khan, son of Khidar Khan of Ismailkhel.	150	
	Saleh Khan, son of Usman Khan of Manjan.	100	No special conditions were attached to these, as it was unlikely that any of the men would be appointed tappa maliks. Should any of them be so appointed, I fancy the special condition stated above should be applied.
	Mir Akram Khan, son of Mir Hawas of Mandan.	100	
	Abd Samand, son of Nezam Khan of Dharmakhel.	100	
	Other five @ Rs. 50 each	250	
	Total ...	751	
...	Fourteen recipients @ Rs. 50 each and twelve @ Rs. 25 each	1,000	
...	Four @ Rs. 50 each and sixteen @ Rs. 25 each	600	
...	Sultan Ali, son of Hosain Ali ...	100	
	Seven @ Rs. 50 each, twenty-two @ Rs. 25 each, one @ Rs. 20, and one @ Rs. 10.	930	In this sum is included two old inams aggregating Rs. 30.
	Total of inams ...	3,881	
<i>Lungi.</i>			
...	Nezam Khan Kathikhel Wazir ...	125	The <i>Lungi inam</i> is for the Wazirs, and amounts to Rs. 10 per cent. out of the revenue. It was formerly an arbitrary sum of Rs. 199.
	Two @ Rs. 50 each, one @ Rs. 30, five @ Rs. 25 each, two @ Rs. 20 each, eight @ Rs. 15 each, twenty-five @ Rs. 10 each, and six @ Rs. 5 each; in all forty-nine recipients.	695	
	Total Lungi ...	820	
	GRAND TOTAL Rs. ...	4,201	

APPENDIX XI.

Nominal Statement of original case work.

OFFICERS EXERCISING POWERS.				Time each officer was actually employed.		JUDICIAL AND REVENUE CASES.			
Number.	Name.	Office.	Powers Judicial and Revenue			Ordinary suits for rights.		Rent suits and Paojeb Tenancy Act suits.	Revenue cases.
				Yrs.	M.D.				
1	S.S. Thorburn Esqre	Settlement Officer	Full powers of a Dy. Comr.	5	4 3	250	32	700	
2	Lieut. J. A. L. Montgomery.	Offg. Sett. Offr ...	Do. ...	..	3 ..	5	..	19	
3	M. Ganga Ram ...	Ex. Asst. Set. Offr...	Do. ...	6	1 2	846	46	70	
4	Mumtas Hosain ...	Supdt. Banna ...	Full powers of a Tahsildar	5	6 16	1,471	21	1,338	
5	Sheekh Abdullah ...	Do. Marwat ...	Do. do. ..	6	2 9	1,562	154	1,200	
6	Ghulam Farid ..	Do. Isakhel ...	Do. do. ..	5	8 26	1,659	527	1,323	
7	Harbans Lall ..	Do. Mianwali	Do. do. ..	6	2 ..	1,357	876	1,577	
8	Diwan Chand ...	Naib-Tahsildar Dera Ismail Khan deputed to Settlement	To try suits not exceeding Rs. 150 value.	..	2 12	116	9	..	
9	Hari Ram ..	Deputy Superintendent. ..	Full powers of a Tahsildar. ..	1	10 17	523	15	48	
10	Nanak Chand ..	Do.	To try suits not exceeding Rs. 100 value.	2	1 ..	755	57	..	
11	Maresh Dass ..	Ex. Do.	Do. do. ..	..	6 ..	605	63	..	
12	Alam Shah ..	Deputy Superintendent ..	Do. do. ..	..	3 ..	108	7	..	
Total ...						9,157	1,807	8,197	

APPENDIX XII.

Classified Abstract return of Judicial and Revenue cases (paragraph 226 of Report).

Number.	Reference to class of suits or Revenue proceeding.	NUMBER OF CASES DECIDED.					REMARKS.
		Diana.	Marwat.	Isakhel.	Mianwali.	Total.	
1	Inheritance ..	407	80	37	436	960	I believe more than half of the unclassified mass of suits might be entered as "claims to uncultivated plots on the ground of former possession." Many of the mass too might fall appropriately enough under inheritance, <i>e. g.</i> , all cases in which a man claims a complement of share; and such were very numerous in Marwat and Mianwali.
2	Mortgage ..	520	678	248	296	1,742	
3	Pre-emption ..	166	49	41	44	290	
4	Rights of superior and inferior holders of land other than rent suits.	..	..	61	13	64	
5	Partition of joint rights ..	20	27	10	22	79	
6	Boundaries ..	82	12	82	122	298	
7	Irrigation canal ..	148	21	23	1	193	
8	New alluvion ..	3	..	12	81	96	
9	Not included in the above ..	829	998	1,185	2,428	5,435	
	Total of suits for Rights ..	2,165	1,860	1,689	3,443	9,157	
10	Arrears of rent from occupancy tenants.	..	2	94	..	96	Isakhel and Mianwali alone contain many occupancy tenants, hence tenants cases were only numerous in those two tahsils.
11	Ditto ditto tenants-at-will	2	100	54	464	620	
12	Other rent suits, &c. ..	5	13	46	18	82	
13	Claims for right of occupancy under section 5	1	10	58	38	107	
14	Ditto ditto section 8	3	18	47	197	265	
15	Claims for enhancement of rent under sections 10 and 11.	1	..	35	22	58	
16	Suits under section 20 by landlords for ejectment of tenants-at-will.	3	21	75	171	270	
17	Suits not included in above ..	13	20	127	149	309	
	Total of rent suits & suits under the Punjab Tenancy Act.	28	184	436	1,059	1,807	
18	Zaildars', chief Lumbardars', and Lumbardars' cases.	456	478	298	445	1,677	The number of miscellaneous proceedings was always kept as low as possible, all periodical returns of sorts being lumped together at times to form one file only. Still the number is large.
19	Patwaris' cases ..	19	19	24	19	81	
20	Boundary disputes ..	48	3	1	12	64	
21	Maafi cases of all sorts ..	185	89	7	121	402	
22	Alluvion and diluvion cases ..	238	36	91	194	609	
23	Mutations other than Lumbardars' cases.	437	102	11	64	614	
24	Complete and incomplete partition of estates.	29	41	8	10	88	
25	Inam Zamindari applications ..	11	65	41	8	125	
26	Irrigation cases ..	185	131	13	..	329	
27	Amalgamation of estates ..	165	26	7	53	241	
28	Miscellaneous ..	1,249	912	620	1,186	3,967	
	Total of Revenue cases ..	3,062	1,902	1,121	2,112	8,197	
	GRAND TOTAL ..	5,255	3,946	3,346	6,614	19,161	

APPENDIX XIII.

Classified Abstract of Settlement appellate work (paragraph 226 of Report).

Number.	Name of Judicial and Revenue Officers against whose orders appeals were filed.	JUDICIAL APPEALS.					REVENUE APPEALS.			
		Number of cases decided.					Number of cases decided.			
		Rejected at first hearing, Sec. 7 of Act IX of 1873.	Remanded for re-trial, Sec. 801 of Act VIII of 1900.	Decreed for appellant, do.	Decreed for respondent.	Total.	Rejected at first hearing.	Remanded for re-trial.	Decreed for appellant, do.	Decreed for respondent.
1	Mumtas Hussain, Supdt., Bannu	8	35	75	149	267	4	..	..	..
2	Shekh Abdullah, Supdt., Marwat	11	8	17	67	103	4	..	..	11
3	Ghulam Farid, Supdt. Isakhel and Bannu.	20	7	48	149	224	..	..	..	..
4	Harbans Lall, Supdt., Mianwali	18	3	12	87	121	..	..	..	..
5	Hari Ram, Deputy Supdt. Bannu	3	8	28	47	86	..	..	..	..
6	Alam Shah, Deputy Supdt. Marwat	..	..	..	4	4	..	..	..	..
7	Manak Chand, Deputy Supdt. Mianwali.	6	2	13	84	105	..	..	..	..
8	Diwan Chand, Extra Deputy Superintendent Mianwali.	2	5	6	23	36	..	..	..	..
9	Mahesh Dass, Extra Deputy Superintendent Mianwali.	2	..	23	72	97	..	..	..	..
10	Other officers, Tahsildars, &c.,	12	22	77	121	232	..	..	..	..
	Total	82	90	300	802	1,274	8	..	8	26

The following figures show the distribution of the above appellate business among the courts of appeal:—

1	Cases disposed of by S. S. Thorburn, Esquire, Settlement Officer.	72	55	199	509	835	8	..	3	26
2	Cases disposed of by Lieutenant J. A. L. Montgomery, Officiating Settlement Officer.	2	1	4	4	11	..	..	..	..
3	Cases disposed of by M. Ganga Ram, Extra Assistant Settlement Officer.	8	24	97	289	428	..	..	..	..

APPENDIX XIV.

Abstract showing the cost of the Bannu Settlement and income from Court Fees and Settlement Fees (paragraph 227 of Report).

1	2	3	4	5	6	7	8	9	10
Year.	EXPENDITURE FROM IMPERIAL REVENUE.				Expenditure from Settlement fees.	Total expenditure.	INCOME FROM		
	Salaries.		Contingencies and travelling allowances.	Total.			Court fees and tabana.	Settlement fees.	Total.
	Gazetted Officers.	Establishment.							
1872-73	13,270	32,838	8,634	54,742	..	54,742	3,368	..	3,368
1873-74	15,993	36,011	8,008	60,012	..	60,012	5,360	..	5,360
1874-75	16,877	52,619	12,200	81,696	1,100	82,796	6,543	12,514	19,057
1875-76	24,541	43,729	12,940	81,210	5,600	86,810	6,636	4,894	11,530
1876-77	17,829	43,669	12,348	73,746	15,293	89,039	6,279	12,880	18,659
1877-78	20,307	43,936	14,424	78,667	7,853	86,520	8,168	8,226	16,394
From 1st April to 30th November 1878.	15,697	26,680	6,994	49,371	6,632	56,003	6,134	1,301	7,435
Total	1,24,514	2,79,382	75,548	4,79,444	36,478	5,15,922	42,488	39,315	81,803

APPENDIX XV.

List of the most important Settlement English files of correspondence made over to

Deputy Commissioner.

Subject.	Dates.	REMARKS.
Boundary dispute between the Bhangikhels and Saghris.	March 1871 to March 1878.	Printed.
Introduction of the siage system on Isakhel canals.	April to November 1874	
Tala Sekandarkhel lands and Kannah grants therein to three Marwat chiefs.	Sep. 1874 to Sep. 1875.	
Transfer of eight villages from Miánwáli to Isakhel.	April to Sep. 1874	
Revenue rates and village assessments, Tahsil Bannu.	1876 to 1878	Most of the correspondence has been printed. It had it bound up in volume. But there is also a separate manuscript file for each.
Revenue rates and village assessments, tahsil Marwat.	1876 to 1878	
Revenue rates and village assessments, tahsil Isakhel.	1876	
Revenue rates and village assessments, tahsil Miánwáli.	1877 and 1878	
Cost of Settlement leviable from Jagirdars.	November 1876 to November 1877	Rs. have yet to be paid by Deputy Commissioner. The orders of Government are shortly expected.
Mañfi case of the Miáns of Miánwáli ...	1878	
Zamindári ináms in each tahsil ...	1876 to 1878	There is a separate file for each tahsil partly printed and partly not.
Lungi ináms for Waziri chiefs ...	1878	Printed.
Hereditary jagir of Khwanin Isakhel	1877 and 1878	
One-sixth remission to the "Shaashamkhore" of Bannu proper.	1878 to 1878 ...	Printed.
Trinni in Miánwáli ...	1873 to 1874	
Assessment of water-mills in Bannu proper.	7th Sep. '74 to 5th Sep. '78	
Specially light assessments for border villages in the Bannu and Marwat tahsils.	1876 to 1878 ...	Partly printed.
General report on Bannu Mañfis with recommendations and orders thereon	May 1877 to May 1878	Printed.
Revision of Marwat baráts ...	1875 to 1878 ...	Printed.
Alluvion, diluvion work on Indus ...	1872 to 1878.	
Postponement of the kists ...	May '76 to August 1878.	
Transfer of Mulazai, &c., to Dera Ismail Khan district.	Nov. '74 to Oct. 3rd 1878	
Veshes in Marwat ...	1872 to 1877.	
Kachhi Forest ...	Feb. '73 to August 1878.	
Government rakhs in Miánwáli Thal...	1874 to 1878	
Government land in bed of Indus ...	1875 to 1876	
Long term lease of rakh land to Mián Sultan Ali.	1878	
Hashtam and Chaharam jagirs in Bannu tahsil.	1878	
New and simpler revenue rates for Indus sailáb villages.	June to October 1878.	Printed.

NOTE.—In addition to the above files 46 others have been made over to the Deputy Commr. The Statement Office is being transferred to the Settlement Office Hoshiarpur. Pay bills, periodicals and most files and papers of ephemeral interest have been torn up as directed by Settlement Commr. No. 237, dated 30th April 1878.

APPENDIX XVI.

THE FAUNA OF THE DISTRICT OTHER THAN DOMESTIC.

(1). QUADRUPEDS.

Of large game, tigers and the swamp deer (goin) used to be found in the Indus jungles between Isakhel and Belot, but both are now extinct. Leopards still frequent the hills all over the district. Hyenas and wolves are found wherever there are ravines or hills, but are not numerous. There are no bears in the district, but occasionally a stray one visits the plains from the Waziri hills. Wild pig and hog deer still frequent the Indus jungles south of the town of Isakhel. Their numbers vary with the amount of cover available, which again depends on the action of the Kurram and Indus. In the cold weather of 1866, Major Birch, Deputy Commissioner, and several officers of the 3rd Punjab Cavalry, had a drive of several days' duration, in which over 100 pigs and hog deer were killed. In 1870 I had another, when the number speared, captured, and run down by dogs, was over 80. In August 1876 my dogs caught a young hog on the top of Sakesar.

The *Sulimani markhor* is found on all the higher Trans-Indus hills, and is especially numerous on Shekhubudin.

The *urial* or mountain sheep is common to all the hills in the district except Shekhubudin. Some very fine heads of 28 inches and upwards have been shot in the Salt Range between Sakesar and the Indus. Owing to the amount of game in the Salt Range, and the adjacence of Sakesar as a hot weather residence, Miánwáli ought to be a very popular outstation for a bachelor fond of sport, who can live without society.

The gazelle or ravine deer abounds along the skirts of all the hills.

Of smaller quadrupeds the following are common :—porcupine about the hills, particularly Sakesar; hedge hog; mongoose; field rat; lizard, from the small house lizard to the big *goh sãmp*. Squirrels do not exist. An attempt to introduce them in 1868-69 failed.

(2). BIRDS.

The following list gives some particulars about the commoner game birds :—

Name.	Where found.	When found.	REMARKS.
The large and common sand grouse.	Unirrigated lands and near Indus and Kurram.	Throughout the cold weather.	Most numerous early and late in cold weather.
Chikar partridge ...	Hills ...	Throughout the year.	
Sisi or Suti partridge.	Ravines and low hills.	Ditto.	
Black partridge ...	The Kacha, and wherever there is jungle, water, and cultivation together	Ditto ...	Natives hawk this bird constantly. I have seen them shoot it with blunt arrows, and on hot days, run it down on horse back.
Grey partridge ...	Ditto ...	Ditto ...	Ditto.
Large quail ...	General ...	During ripening and cutting of spring and autumn crops.	This bird is very numerous, and is netted with the help of call birds in large numbers all over the district. The Bannuchis are very fond of this sort of <i>Shikar</i> .
Button quail ...	General ...	Autumn ...	Ditto ditto.
Indian Hanbara Bustard (locally termed <i>lóg</i>).	Miánwáli Thal ...	Cold weather and spring.	In March and April numbers are often seen. But the bird is wary and difficult to approach, and yet I have shot one close to the Miánwáli bungalow. They weigh from 22 to 36 lbs.

Name.	Where found.	When found.	REMARKS.
Small Bustard (<i>karmor, tildar, tsarai-utara</i>).	Unirrigated waste lands [every where, particularly Mianwali Thal	Cold weather and spring.	Is very numerous particularly in spring: is easily approached and shot; the Mianwali Thal is the best shooting ground.
Goose both grey and <i>chetari</i> or bar-headed.	Rivers and marshes...	All the cold weather for the grey goose, but from February to April for the bar-headed goose.	Is shot all over the district by native sportsmen.
Ducks of sorts ...	Ditto ...	All the cold weather. Teal remain until middle of April or later.	Ditto ditto.
Common and jack snipe ...	Marshy ground, particularly about Ghorlwal and near Akra.	From November to end of March or later.	The largest bags are made late in the season.
Kunj or kulan crane.	Most numerous in the Indus Kacha, but found everywhere.	From November to end of March or later.	In February, March, and April the Indus villagers by means of a piece of lead attached to a long string sling down the <i>kunj</i> whilst the bird is flying low in a night flight about the Indus in great numbers. I have seen as many as forty in the bag made by one village in one night.
Blue pigeon ...	General ...	All the year ...	Is very plentiful.

Other birds are numerous, but a list of them seems hardly requisite. Major F. Hammond, 5th Punjab Cavalry, tells me I may add, that neither the woodcock nor the solitary snipe is found, and that only a few true eagles are to be met with in the cold weather—having come down from the higher mountains—also that the bearded vulture is common, but is generally called an eagle.

(3) *FISHES.

Captain Beavan of the Revenue Survey and myself caught the following fishes in the Indus in March 1875:—

Local Name.	Scientific Name.	REMARKS.
Damrah or Rohú ...	<i>Labeo rohita</i> ...	Very good eating. Caught up to 16 lbs.
Machani or kála-bans	<i>Labeo calbasu</i> ...	Up to 5 lbs.
Soni. ...	<i>Labeo cursa</i> ...	Up to 1 lb.
Taila ...	<i>Catla buchanni</i> ...	Good eating: has a very large head: up to 6 lbs.
Mori ...	<i>Cirrhina nurigala</i> ...	Up to 9 lbs: is very common: is usually sold in the bazárs as Rohu.
Singára... ..	<i>Macrones aor</i> ...	Takes the baited hook readily: caught up to 9 lbs: is good eating.
Khaga ...	<i>Callichrous chechra</i> .	Small, ugly mud fish: caught largely in the rains: thought delicious by natives.

We also caught the *saoli* (murrul) and the *parri* (notopterus kapirot). *Mahasir* fishing can be got in the Kurram—best in March—about the mouth of the Kurram Pass, but the fisherman has to be escorted by a guard, which is a drawback. However, fair baskets can be made in the Kurram and Kachkot canal, only two miles above cantonments. The *chilwa* is found everywhere, and makes an excellent substitute for white bait. A sort of Shrimps too is common in the Indus, and though small is very palatable. They can sometimes be got dried and salted in the bazárs.

*. Supplied by Captain Beavan.

APPENDIX XVII.

Glossary of agricultural and other local terms mostly to be found in the Settlement Records. *

Word.	Where or by whom used. †	Meaning.
Adhaliya ...	H ..	A single crop field labourer, who is found in everything by the proprietor and receives as his wage a small share of the produce : a tenant who supplies half the seed and half the plough oxen, and all the labour, and receives about one-half of the produce.
Band ..	General ..	A dam or embankment : a field banked round : is now almost an English word and written bund.
Bārah ..	P ..	A hill torrent : applied in Marwat to <i>Naladder</i> land.
Barghand ..	Marwat ..	The act of increasing the width of two or more <i>pattis</i> or <i>Khulaks</i> or divided strips of land by cutting off from their length and adding to their width. This is often done in <i>wash</i> villages for purposes of convenience.
Batti ..	General ..	Fallow.
Bhaiwal ..	H ..	A partner in cultivation but not in proprietary right.
Bhora ‡	H ..	Good land generally manured close to an <i>abad</i> : is equivalent to <i>dehwas</i> in Marwat and <i>warai</i> in Banna proper.
Būha ..	The Awans of Pakhar.	A door-way or entrance; <i>hakk būha</i> is a <i>kamiana</i> rate levied in Pakhar : see foot note paragraph.
But ..	Isakhel ..	A disused water-course.
Chalweshta ..	P ..	A canal watchman and share distributor : also a tribal messenger amongst Wasirs.
Chatti ..	H ..	A fine ; an arbitrary tax or penalty imposed on a village in Sikh times.
Chilma §	P ..	Surplus or spill water : place whence it escapes.
Dad ..	Isakhel ..	Any aqueduct.
Dadah ..	P ..	A fixed share.
Dag ..	P ..	} Waste land bearing little herbage ; rain drainage catchment area lying above a cultivated plot.
Dagar ..	General ..	
Dand ..	H ..	An ox
Dannah ..	Indus villages ..	A sandy waste.
Darmand ..	P ..	A threshing ground.
Darrah ..	Isakhel ..	An allotment of land to a section inside a <i>tal</i> .
Dehwas ..	Marwat ..	Descriptive of land close to an <i>abad</i> .
Dhand ..	P ..	A marsh or lake.
Dhar ..	Marwat ..	Four <i>Kandaks</i> or twenty-eight <i>Khulaks</i> .

* Did I attempt to do more I should have to write a small dictionary, as the number of agricultural terms, both Pashto and Hindi, in use in the district is very great.

† H. means used by the Hindi or broken Punjabi speakers of the district, and therefore common in the plain portion of Isakhel, and throughout Mianwali. P. means Pashto, and therefore common in the two frontier tahsils and in Bhangikhel.

‡ In this glossary only a very few of the names of the different soils, whether natural or artificial, will be given. For a pretty full list see paragraph 183 of Report.

§ Many of the peculiar irrigation terms in use are given in chapter VI of the Report, hence to save space only a few will be repeated here.

APPENDIX XVII—continued.

Word.	Where or by whom used.	Meaning.
Dilah	.. H ..	The west : <i>umar presentah</i> P.
Dirga	.. P ..	Marshy ground overgrown with reeds : the reeds themselves
Drakkar	.. Indus villages ..	An inferior soil composed of sand and silt mixed, or of a sandy sub-soil and a shallow deposit of pure silt on top.
Dumbir	.. P ..	A <i>Pateari</i>
Gandi	.. P ..	A dam for diverting the flow of water,
Ganr	.. P ..	An enumeration or census.
Ghanam	.. P ..	Wheat.
Ghanamgora	.. P ..	Descriptive of land in which wheat is cultivated and so of land reserved for a spring crop.
Ghasha	.. } P ..	A rent or opening in a canal or water-course.
Ghosha	.. }	
Ghobal	.. P ..	The treading out of the corn by oxen.
Girzand	.. Marwat ..	Descriptive of a share in each block or <i>saad</i> in a <i>vesh</i> village.
Gor	.. } P ..	Hard stony land : is called <i>raghsai</i> by Wazirs.
Gar	.. }	
Gurrah	.. Bannuchis ..	The act of digging and breaking upland or large clods.
Hail	.. Awans of Pakhar	<i>Naladar</i> or first class soil.
Hali	.. H ..	Ploughman : a tenant : a Jat.
Hamar	.. Isakhel ..	A collection of persons : those collected for annual canal clearance work.
Hamsayah	.. P ..	A dependent : any man in a village not descended from the original owners or those who superseded them.
Iska	.. P ..	A lot : the casting of lots : (also <i>uska</i> and <i>hisk</i> .)
Isatubah	.. P ..	Inherited water as opposed to that obtained by <i>khost</i> is also referred to as <i>da dawa ubah</i> .
Jalab *	.. Marwat ..	The right to cultivate.
Juri	.. H ..	A manorial fee sometimes levied in southern Mianwali on the breaking up of new land.
Jwande	.. P ..	"Living," opposed to <i>mure</i> or "dead." Applied to water means that for which <i>tiara</i> has to be performed.
Kach	.. P ..	Low, lying alluvial land.
Kalang	.. P ..	The arbitrary tax or assessment imposed by the Sikhs.
Kallar	.. General ..	Saline efflorescence, known as <i>reh</i> : manure H.
Kam-jwar	.. P ..	Bajra.
Kandak	.. Marwat ..	Seven <i>Kaulahs</i> .
Kannah	.. P ..	A grant of land made by a community to a chief or any one in return for a service.

* In many cases the mortgage-deed reads as if the full usufruct of the land had been conveyed, but in fact the *Jalab* remains with the mortgagor. Unless the mortgagor is ejected for a harvest or two at least, there is no certainty that he understood that he had lost the *Jalab*, the terms of the deed notwithstanding.

APPENDIX XVII—continued.

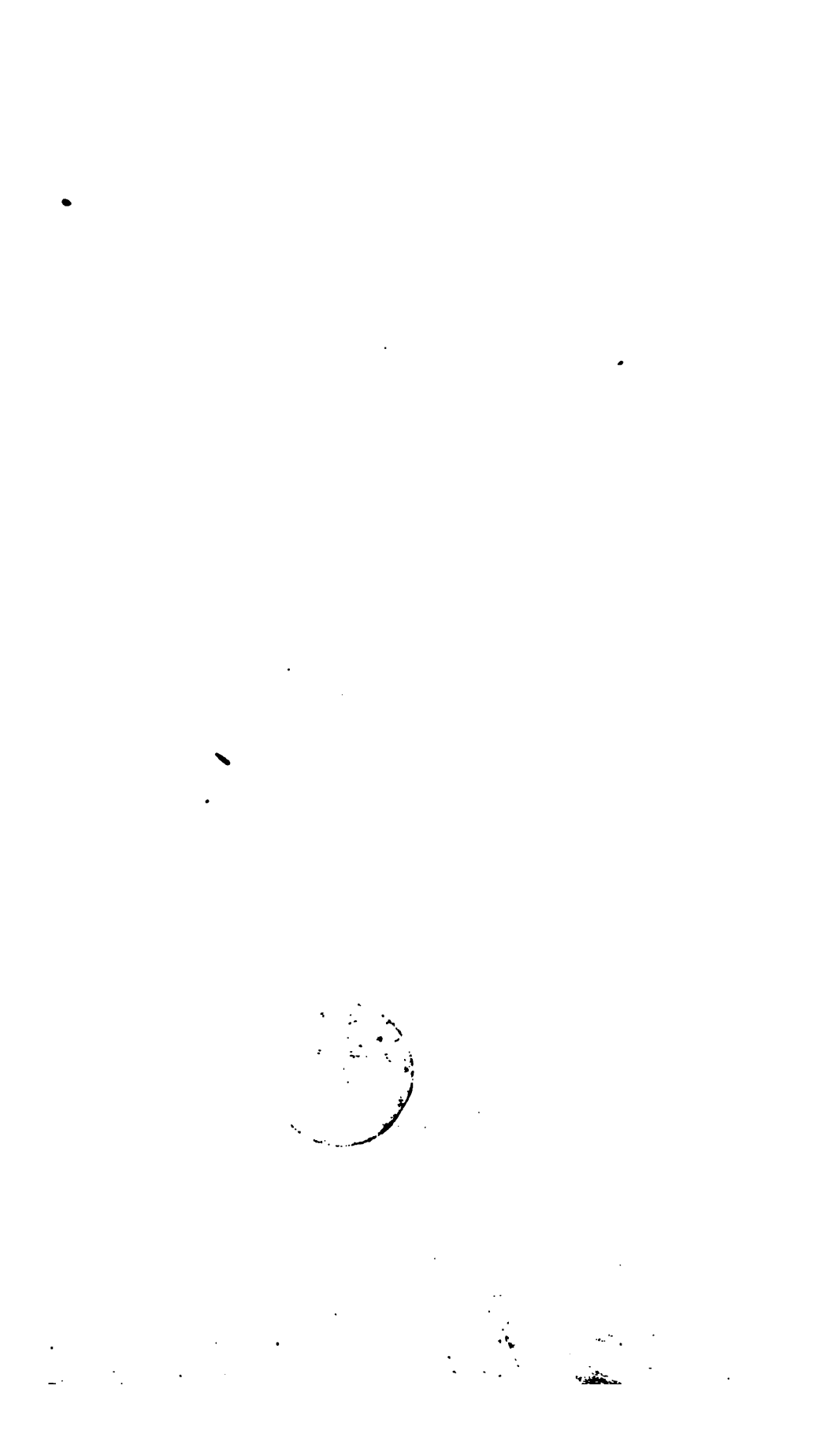
Word.	Where or by whom used.	Meaning.
Karawa ..	H ..	A ripe-crop, watchman and divider of the grain.
Karboski ..	P ..	Cotton: called <i>war</i> by Hindi speakers
Kas ..	H ..	A large canal: the Kas Umar Khan in Isakhel.
Kashah ..	P ..	A crop watchman and applier of canal water as well where the crop is irrigated.
Kaslah ..	H ..	The little earthen dyke and trench which conducts rain drainage from higher lying waste to lower lying cultivation. The Marwats use the word <i>warraur</i> .
Khalwara ..	H ..	A threshing ground.
Khandanai ..	P ..	Poor: sterile; is the word commonest used when a man wishes you to understand his land is unproductive.
Khara ..	P ..	Mud: silt: also muddy. Almost solely applied to the fertilizing silt held in suspension in Kurram water.
Khast or Khost ..	P ..	Entreaty; term used with reference to water obtained otherwise than by right.
Khulak ..	P ..	A mouth: an opening in a canal: an individual share of land.
Khuti ..	Isakhel and Indus villages.	A proprietary due: <i>malikana</i> .
Kungi ..	General ..	Commonest form of blight in wheat; the grain becomes black and the stera yellowish.
Kurri ..	P ..	Broken ground.
Kurwah ..	P ..	A small grain measure, see paragraph 96 of Report.
Lamma ..	H ..	The south: <i>Suhei P.</i>
Lashta or Lashtai ..	P ..	A small distributary which takes water to a few fields only.
Lathmar ..	Mianwali ..	The maker of a <i>lath</i> or bank, <i>i. e.</i> , he who clears land and embanks the cleared space.
Lichh ..	H ..	A fixed share.
Log ..	H ..	People: the baser sort; commonly applied by Pathans to Jats and lower castes.
Lora ..	P ..	A hill stream: the only name of several channels in the Bannu and Marwat tahsils.
Mahsul ..	General ..	The return from land: generally applied to share of produce tenant pays proprietor, in which both rent and revenue are included.
Malik ..	P ..	A chief; a lambardar.
Malkai ..	P ..	The percentage on the revenue enjoyed by a lambardar or tappa malik. The former is generally called <i>kam-malkai</i> or small headship; the latter <i>stir-malkai</i> or large headship.
Mangora ..	P ..	Descriptive of land bearing an autumn (<i>manai</i>) crop.
Manjamar ..	H ..	The same as <i>lathmar</i> in application; but <i>manja</i> means a sort of board used as a shovel.
Maw-tukhmi ..	General ..	A cultivator generally estimates the area of his holding by the number of maunds of seed grain it requires. He knows no other land measure; hence <i>eman tukhmi</i> or <i>man tukhmi</i> means an area requiring one maund of seed.
Mashki ..	Isakhels ..	The owner of a land, whose share of land is a <i>masha</i> .

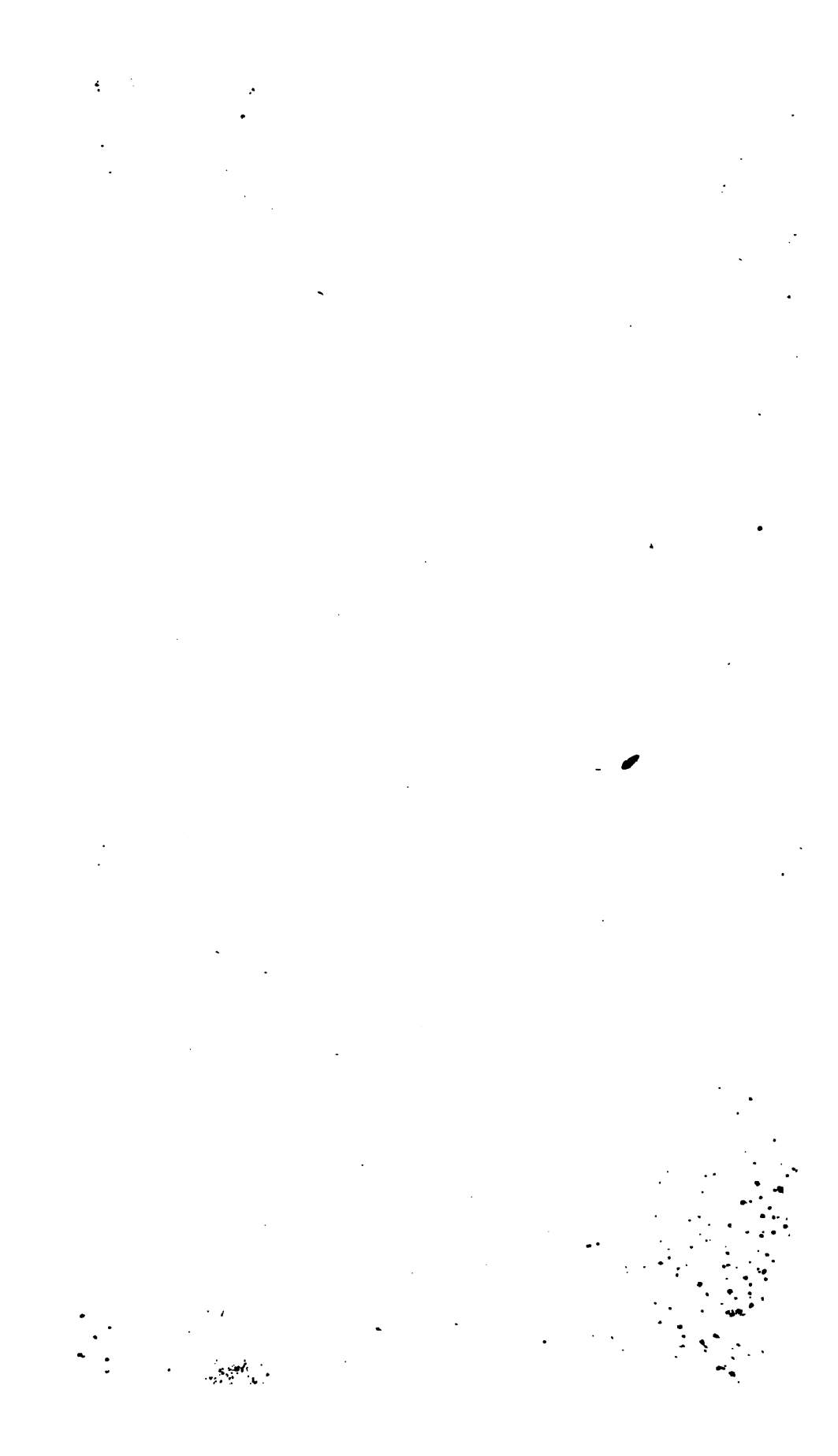
APPENDIX XVII—continued.

Word.	Where or by whom used.	Meaning
Mat .. H ..	..	Silt; finest soil in the Kacha.
Mai .. P ..	..	A village or house site.
Mushakati .. P ..	..	A field labourer or farm servant; a tenant-at-will.
Muttah .. P ..	..	The land revenue; is also referred to as <i>top</i> (P.) and also <i>mushakas</i> (H) and <i>muswila</i> (H).
Nagha .. General ..	..	The fine or commutation charge for absence at a time clearance.
Nou .. P ..	..	Moisture; word always used to signify the amount required in the soil before the seed can be sown and germinate. <i>Nou</i> is used by Hindi speakers.
Nian .. H ..	..	The spring crop: <i>Harit</i> is, I think, the most generally word.
Nikanaal .. P ..	..	Ancestral or inherited.
Nimbal .. Marwat ..	..	Half a sala, i.e. a mortgage.
Niwah .. P ..	..	Seizure; used to imply the right acquired by squating.
Nokh .. P ..	..	Unbroken waste.
Nis .. P ..	..	A freshet or sudden flood in a river.
Ojah .. P ..	..	A small grain measure. See paragraph 96 of I particulars about this and the other grain measures in the district.
Paina .. General ..	..	Lower down with reference to flow of water: is the <i>aroba</i> .
Pakhe-ubah .. P ..	..	Water supplied all the year round.
Panj-guni .. P ..	..	<i>Shamilat</i> : of or belonging to a panchayat.
Pao-ubah .. P ..	..	Water drawn off at bottom above a place of partition.
Path .. General ..	..	A grain measure of about 25 standard maunds.
Sajji .. Isakhel ..	..	The owner of the land under a canal.
Sarobah .. General ..	..	Higher lying with reference to water-supply.
Sarrah .. P ..	..	Manure of all sorts. <i>Kallar</i> is the word used by Hils.
Sarwah .. H ..	..	The autumn crop: <i>Sesani</i> is, perhaps, the widest known.
Shiga-khatina .. P ..	..	Name of the best light <i>barat</i> soil amongst Marwatis.
Sitta .. P ..	..	A plank or board: the whole contrivance in use in tahsil for loosely dividing water.
Soth-satahrwin .. Southern parts of Mianwali ..	..	A cash proprietary due at the rate of one-seventh Rs. 6-4, per cent. on the Government revenue, or the seventeenth share of the produce, I believe.
Stir-jwar .. P ..	..	Indian corn: <i>wakel</i> .
Surgi .. Isakhel ..	..	A branch from a vial.
Tal .. Ditto ..	..	A sectional allotment of land.
Tand-ubah .. P ..	..	Canal irrigated.
Tappa .. P ..	..	A clan or section or corporate body of shareholders.

APPENDIX XVII.—concluded.

Word.	Where or by whom used.		Meaning.
Tarala	...	P ...	Literally "bound together"; hence a bundle of mortgaged plots which must be redeemed together or not at all.
Tarna	...	P ...	A wooden aqueduct : any aqueduct : name of southern Isakhel.
Tinga	...	P ..	Canal clearance work.
Topah	...	H ...	A grain measure.
Trikha	...	P ...	Bitter saline : epithet of <i>reh</i> or <i>kallari</i> land.
Ubha	..	H ..	The north.
Ubhar	..	H ..	The east.
Udhale	..	P ..	The abduction of a girl or woman. See Tribal Code.
Ume-ubah	..	P ..	Canal water granted for the spring crop only. It is also called <i>q'rud</i> .
Vela or Vial	..	P ..	A canal : <i>velgi</i> the diminutive.
Vesh or Wesh	..	P ..	A tribal partition of land ; communal tenure of land in Marwat.
Wagai	..	P ..	A small hill torrent bed.
Wahan or Wahi	..	H ..	A hill torrent.
Wakti	..	Isakhel ..	A canal labourer.
Wand	..	P ..	A share : a territorial block : a <i>chak</i> .
Wandai	..	General ..	A sharing of the crop : same as <i>batal</i> .
War or Wara	..	P ..	A turn or timed share of canal water.
Warboi	..	Bannu proper ..	Descriptive of the best land close to a village.
Warkha	..	P ..	A small distributary from a large channel.
Wingar	..	General ..	Unpaid labour : the act of getting land cultivated by a number of volunteer ploughmen, who, after the work is done, receive a feed and no more.
Wuch-ubah	..	P ..	The same as <i>barani</i> : is the opposite of <i>tandabak</i> .
Yim	..	Bannuchis ..	The heart-shaped spade of the Bannuchis : is pronounced like <i>sia</i> in English.
Ziya-tab	..	P ...	Any additional sums raised by a mortgagor on his mortgage land.







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