

ASSESSMENT REPORT  
OF THE  
KURRAM VALLEY,  
1905.

BY

LALA GANGA SAHAI, M.A.,  
EXTRA ASSISTANT COMMISSIONER.



PESHAWAR:

NORTH-WEST FRONTIER PROVINCE GOVERNMENT PRESS  
1905.

No. 114-F.

FROM

E. H. S. CLARKE, ESQUIRE, C.I.E.,

*Deputy Secretary to the Government of India*

*in the Foreign Department,*

TO

THE HON'BLE LIEUT.-COL. SIR HAROLD DEANE, K C S.I.,

*Chief Commissioner and Agent to the Governor-General*

*in the North-West Frontier Province.*

*Dated Fort William, the 3rd February 1906.*

SIR,

I AM directed to acknowledge the receipt of your letter No. 5711, dated the 9th December 1905, submitting, with your remarks and proposals, the Assessment Report of the Kurram Valley.

2. Your proposals are approved. The supplementary chapter referred to in paragraph 24 of your letter under reply, as well as your proposals for the revision of the establishment necessitated by the new system, will be awaited. It would also be well to report whether the waste in Kurram is to be regarded as the property of Government or to what extent the villagers have a claim to it or rights over it.

3. I am to add that the Government of India concur in your commendation of the services rendered by Mr. Waterfield, Political Agent, Kurram, and Lala Ganga Sabai, Settlement Officer, Kurram, in connection with the assessment of the Kurram Valley.

I have the honour to be

SIR,

Your most obedient Servant,

E. H. S. CLARKE,

*Deputy Secretary to the Government of India.*

Endorsement by the Revenue Commissioner's Office, North-West Frontier Province.  
No. 654, dated 18th February 1906.

COPY of Government of India No. 414-F., dated 3rd February 1906, forwarded to the Political Agent, Kurram, for necessary action and report as regards paragraph 2 of above, with reference to the correspondence ending with his No. 34, dated 22nd January 1906.

2. The proposals regarding the revision of establishment have been submitted to the Government of India.

No. 5711.

FROM

THE HON'BLE LIEUT.-COLONEL H. A. DEANE, C.S.I., I. A.,  
*Chief Commissioner and Agent to the Governor-General,*  
*North-West Frontier Province,*

THE SECRETARY TO THE GOVERNMENT OF INDIA,  
FOREIGN DEPARTMENT.

*Dated Peshawar, the 9th December 1905.*

SIR,

My proposals for the re-settlement of the cultivated area in the Kurram Valley were sanctioned in your office letter No. 2639-F. A., dated 9th September 1903, and the work was started in April 1904. Lala Ganga Sahai, M.A., who had been Extra Assistant Settlement Officer in the Kohat Settlement, was put in immediate charge under the Political Agent; and the operations were supervised by the Revenue Commissioner, in consultation with whom the assessment circles, soil classification, scale of commutation prices, and rates of yield were fixed and the assessment estimates framed. I have now the honour to submit Lala Ganga Sahai's Assessment Report with the Political Agent's covering letter, and to solicit the favour of early orders on the proposals. The ten years' term of the Summary Settlement expired in Rabi 1904, and it is very desirable that the new assessment be introduced from the present kharif and the operations (which have already been rather protracted owing to the exceptional severity of the last winter and an epidemic of fever in the previous autumn) brought to a close as speedily as possible.

2. The Assessment Report is unusually full and detailed. This in the circumstances of the case is not undesirable, for the Summary Settlement was necessarily a very rough one, based on the principle of adjusting the old Durani demand to the agricultural and political conditions existing in 1894. The valley had then been only one-and-a-half years under Government administration, and the knowledge of its conditions and resources was consequently meagre. The materials that have since accumulated and that have now been collected have been admirably handled by the Settlement Officer, and his report gives a complete and striking picture of this fertile and interesting valley in its physical, social, economic and even political aspects.

3. The revenue history under Afghan rule down to 1880 and under the period of anarchy which followed the attempt to establish Turi Self-Government in 1880, and which finally led to the re-occupation of the valley by Government in 1892, has been fully described in Chapter II of the Report. The Afghan standard of assessment, in so far as it followed any principle at all, was based on the assumption that the State was entitled to one-third (sehkoti) of the gross produce. That share was actually taken on the Crown (khalsa)



lands, and it is the share still claimed by the Amir in the districts of Khost and Hariob adjoining the Kurram. In practice, however, cash leases were often given for short periods on *tawani* lands, *i.e.* lands in which individual proprietary rights were recognized; and in such cases Rs. 2 Kabuli per jarib (the jarib here as elsewhere was half an acre, though Mr. Merk assumed it to be  $\frac{1}{2}$ ) was the traditional rate for irrigated land, though it no doubt varied according to the strength of the Hakim to enforce or of the people to resist. The land tax was, however, supplemented by numerous and irritating miscellaneous dues (paragraph 11 of the Report); and as all sources of revenue were often farmed to the local Governor for a lump sum of one lakh of rupees, the Settlement Officer's conclusion may safely be accepted that "though in theory the rates to be realized from the people were fixed, the amount actually realized was limited only by the power and devices of exaction."

4. From the information now available it may be concluded that the attempt made at the Summary Settlement to adjust to the then existing conditions of soil and irrigation the theoretical and probably unreliable Durani rent-roll of 15 years before was a mistake, and that an assessment—however low the standard—calculated independently according to the ordinary methods would have been more regular and equitable. Such an assessment would doubtless have fixed the demand in British rupees, and the loss to Government owing to the steady depreciation of the Kabuli rupee, which was worth  $12\frac{1}{2}$  annas in 1894, and is now worth barely 8 annas, would have been avoided. The incidence of Mr. Merk's actual assessment as compared with the assumed Durani demand on which he was working has, however, been discussed at length in my letter (No. 1261-G, dated 23rd July 1903) proposing the present Settlement, and the point need not be further discussed at this stage. His assessment was undoubtedly very lenient whether compared with the revenue actually realized by the Duranis or with the rates in force in adjoining British districts. The leniency was, however, justified by the exceptional circumstances of the valley at the time, and especially by the fact that it was only beginning to emerge from a period of anarchy and bloodshed, which had left the people as a whole impoverished and exhausted.

5. The development of the valley within the last 11 years has been very rapid. The advent of a settled administration, the repression of disorder, and the improvement of communications which has brought the railway system to the mouth of the valley, have enabled the people to turn to account the great natural advantages of soil, climate and irrigation. Five new Crown villages have been settled; the cultivated area has expanded from 28,907 to 37,498 acres—an increase of 8,591 acres or 29 per cent.; and even deducting the area—637 acres—of the twelve villages which were not measured or assessed at last Settlement, and of the three villages—189 acres—which were assessed but not measured, the increase amounts to 27.5 per cent. The increase is probably even greater than this, as the rough survey of last Settlement tended to exaggerate the area.

6. Owing to improved methods of agriculture there has been a more than proportionate increase in the double-cropped area, which occupies over 58 per cent. of the total cultivation. The water-supply from springs and snow-fed streams in the Daman and from the Kurram River in the Rodghara (river bank) Circle is abundant except in the rare years of exceptional drought or unusually little snowfall, and no less than 93 per cent. of the cultivated area and 96 per cent. of the crops raised are secured by irrigation. The efficiency of cultivation—even with the careless methods pursued in the case of all crops except rice—is extremely high. Taking the mean of the last two years—which were not above the average—100 acres of cultivation were sown with 120 acres of crops, of which only 2 acres failed and 118 came to maturity, *viz.*,—

Daman	...	...	... 107	} per 100 acres cultivated.
Sahra	...	...	... 68	
Rodghara	...	...	... 136	

The proportion of valuable crops is also very high; rice (30 per cent.), maize (11 per cent.) and wheat (33 per cent.) accounting for three-fourths of the total, and the outturn of rice, on the cultivation of which the people spend much labour, is exceptionally good.

7. When to those favourable conditions of husbandry are superadded an abundance of pasture for flocks and herds and a valuable source of income from the dwarf-palm (mazri) in the Lower Valley and from timber and fruit gardens in the Upper, it is not surprising to find that the valley is very densely populated. The incidence of the rural population is 900 per square mile of cultivation, which is almost exactly the same as in the Tochi Valley, and considerably higher than that of the adjoining Hangu Tahsil—778 per square mile.

But here, as in all similar Pathan communities which have developed naturally on the lines of their own democratic organization, practically every adult male is a landowner, except in the outlying buffer hamlets, where Sunni hamsayas from the adjoining clans have been settled by the Shiah owners as a bulwark against aggression. Large holdings are the exception; the average area of cultivation—excluding Crown lands and estates held by a single owner or single family—is only 2 acres per owner and 3 acres per holding. There is consequently no place for a separate body of tenants, and—again excluding Crown lands—no less than 80 per cent. of the cultivation is carried on by owners themselves, often aided, it is true, by a farm labourer as ploughman, who performs nearly all of the manual labour and receives in return one-fifth share of the crop. Hence also it follows that where cultivation is carried on by tenants the rent-rates are very high, usually one-half of the crop, the tenant receiving the straw but supplying the seed.

8. The result of this high rent-rate is that the Government share, if calculated on the half assets principle, works out to  $\frac{3}{8}$ ths of the produce. The value of the produce according to the moderate rates of yield and commutation prices assumed, and excluding fodder crops (*shaftal* and *kurkha*, which come to 10 per cent. of the whole), is Rs. 7,61,565. If the value of the fodder crops and of the straw be included, the estimate would be raised to about 8½ lakhs. The following table shows for each circle (a) the summary assessment of 1894 in Kabuli rupees; (b) its equivalent in British rupees at the 1894 rate of exchange (Rs. 4 British = Rs. 5 Kabuli); (c) the incidence in British rupees on the area cultivated in 1894; (d) the present demand in British rupees at the present rate of exchange (Rs. 1 British = Rs. 2 Kabuli); (e) the incidence of the present demand on the present cultivated area; (f) the demand now arrived at by the half assets estimate; (g) the demand proposed by the Settlement Officer; and (h) the final demand which I propose for reasons given below:—

CIRCLE.	a	b	c	d	e	f	g	h
	Kabuli		British					
	Rs	Rs	Rs. A. P	Rs	Rs. A. P.	Rs.	Rs.	Rs.
Daman	23,760	19,008	1 7 0	11,805	0 11 9	62,240	38,081	33,000
Sakra	589	471	0 3 0	294	0 1 5	3,985	1,864	1,280
Redghara	35,502	28,402	2 2 6	19,336	1 1 0	1,10,188	60,075	53,120
Total	59,851	47,881	1 10 6	31,435	0 13 5	1,76,417	1,00,000	88,000

9. It will be seen that (1) owing to the depreciation of the Kabuli rupee, which has fallen in value from 12½ to 8 annas, i.e. 37½ per cent., and (2) the increase in cultivation—amounting to nearly 30 per cent.—the incidence of the demand per cultivated acre (13½ annas) is now only half of what it was (26½ annas) when fixed by Mr. Merk.

The present incidence per acre of crops matured is even lighter, *viz.*—

				Rs. A. P.
Daman	...	...	...	0 11 0.
Sahra	...	...	...	0 2 1
Rodghara	...	...	...	0 12 6.
Total				0 11 5

As 96 per cent. of the crops are irrigated, and 75 per cent. of the whole consist of rice, maize and wheat, the extreme leniency of the present land revenue is self-evident. It also follows that if we double the demand, *i.e.* substitute British for Kabuli rupees, and fix Rs. 62,870, we shall be only raising it to Mr. Merk's standard of incidence. The half net assets standard—from which fodder crops and straw are excluded—would give Rs. 1,76,417. The new demand should therefore be something between those two figures, and should be fixed with regard to the past revenue history of the valley, to its present and probable future circumstances, and to the policy to be pursued towards inhabitants.

10. To begin with, I may state that in the recent re-assessments of even the settled frontier districts it has invariably been found necessary to keep the demand very considerably below the half assets estimate, which, owing to the smallness of the holdings and the consequent high rent-rate, works out very high. The standard of recent assessments in Peshawar, Hazara, and (excluding frontier remissions) in Kohat, the Hangu Tahsil of which adjoins the Kurram Valley, is brought out in the following table:—

District.	Tahsil.		Year of reassessment.	Half assets demand.	Sanctioned assessment	Percentage of half assets.
				Rs. .	Rs.	
Peshawar	...	Whole district ..	1894 to 1896	23,61,000	11,20,000	47
Hazara	{	Mansehra ...	1901	2,35,000	1,40,000	60
		Haripur ...	1904	3,70,000	2,18,000	59
Kohat	{	Kohat ... ..	1903	1,42,000	1,02,000	72
		Hangu ... ..	1903	82,000	51,200	62
		Teri ... ..	1904	1,50,000	1,08,800	72
		Total district ...	...	3,74,000	2,62,000	70

In no single case did the new assessment represent three-fourths of the half net assets, and in Peshawar it fell short of even half that standard. Those assessments were applied to districts which at the time had been half a century or more under British rule.

The Daur or Tochi Valley presents many points of similarity to the Kurram. It was occupied about the same time as a result of the Durand Agreement, and is administered under the same system. The assessment of the Daur Valley, as sanctioned in the Foreign Department letter No. 2834-F.A., dated 26th September 1903, was fixed at Rs. 36,000, representing the one-tenth share of the gross produce which the Dauris has contracted to pay when their country was taken over.

11. In the Kurram we are not restricted by any such limitation, but the circumstances of our occupation and the history and character of the people give them strong claims on our consideration.

Three-fourths of the land is held by Shiah tribes—Turis, Bangashes and Sayads—whose attitude towards Government and its officers presents an agreeable contrast to the sullen aloofness, suspicion, or even hostility, that characterise so many of the tribes on our border. Though a prey to internal factions, and in their hereditary feuds, their violent partisanships, and their frequent revolutions, recalling one of the petty republics of ancient Greece or mediæval Italy, they have never faltered in their loyalty to Government. That loyalty may be based on self-interest and on the desire to secure protection against the hostile Sunni tribes that encompass them; but it represents a solid and valuable asset which is well worth preserving. One tangible form in which it manifests itself is that the valley supplies 1,000 men to the Kurram Militia, to which the defence of the valley is now entrusted, and thereby aids in the general scheme of frontier defence, while securing an income of  $1\frac{1}{2}$  lakhs per annum for the service rendered.

12 From a consideration of the political interests involved owing to the shortest road to Kabul lying through the valley, the willingness and the ability of the inhabitants to facilitate protection of military communications when occasion may arise, and of the two important economic facts that the pressure of population on the soil is very great and that there is practically no room for expansion, the conclusion I arrive at is that Government should certainly not take more than 50 per cent. of the half assets estimate.

I would therefore fix the total land revenue at Rs. 88,000 (British), which is practically the amount proposed by the Political Agent, an officer who has had three years' experience of the valley. As the demand proposed involves an enhancement of 150 per cent. on the present assessment—Rs. 31,435—I would defer a portion of it, equivalent to 3 annas per rupee for five years. The assessment would then be Rs. 71,500 initial, rising after five years to Rs. 88,000.

13. If those proposals are sanctioned, the initial and final demand for each circle and the average incidence of the final demand on crops and cultivation would be as follows:—

CIRCLE.	Present demand.	NEW DEMAND.		INCIDENCE OF FINAL DEMAND.	
		Initial.	Final.	On cultivation.	On crops.
	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.
Daman ..	11,805	27,300	33,600	2 1 6	1 15 0
Sa'ira ...	294	1,040	1,280	0 6 3	0 9 3
Rodghara ...	19,336	43,160	53,120	2 14 9	2 2 3
Total ..	31,435	71,500	88,000	2 5 6	2 0 0

By a coincidence, which is as curious as it is fortuitous, the incidence per acre of cultivation—Rs. 2-5-6—and per acre of crops—Rs. 2—works out exactly the same as in the Daur Valley. The final assessment proposed represents something between one-ninth and one-tenth of the total value of the produce.



14. In consultation with the Settlement Officer the soil and crop rates to bring out the final demand of Rs. 88,000 have been worked out and are shown below :—

	DAMAN.		SAHRA.		RODGHARA.	
	Soil rate.	Crop rate.	Soil rate.	Crop rate.	Soil rate.	Crop rate.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Chashmai dofasli	2 13 0	2 8 0	...	...	2 13 0	2 0 0
„ ekfasli...	1 4 0	2 2 0	0 8 0	0 12 0	1 6 0	1 7 0
Abi dofasli ..	...	...	...	...	3 10 0	2 8 0
„ ekfasli .	...	...	..	...	1 13 0	2 1 0
Barani ..	0 9 0	0 12 0	0 4 0	0 6 0	0 8 0	0 6 0

15. The assessment proposed includes not only the revenue demand on proprietary (tawani), but also on Crown (khalsa) lands. The history of these lands, which amount to 5,330 acres or 15 per cent. of the cultivated area, and comprise 13 whole estates and shares or plots in 75 others, has been clearly explained in paragraphs 11, 44 and 57 of the Report. They were originally leased out by the Duranis for a rent in kind—generally one-third of the produce. Mr. Merk continued the leases to the lessees, who, except in the case of newly settled estates, are generally the descendants of the original owners, but altered the rent to revenue rates generally with an addition of 25 per cent. as malikana. In some cases a lump sum was fixed; in others only the revenue rates were taken. In the absence of a proper Revenue staff to work the Settlement the subject has fallen into much confusion, and, though the area has considerably increased, the rent now realized is much less than that imposed by Mr. Merk. All the cases are now being overhauled. Plots which are not likely to be required by Government can be utilized to compensate owners whose land it may be necessary to take up for the railway, and such land as is retained by Government will be leased at a rent equal to the revenue rates plus a suitable malikana—generally 25 per cent. The land revenue of these lands has been included in but the malikana will be an addition to the total assessment proposed.

16. Another addition to the land revenue will be the assessment on water mills. The subject has been discussed in paragraph 51 of the Report.

At last Settlement 195 such mills were assessed at a uniform rate of Rs. 3½ Kabuli per mill. A uniform rate is peculiarly unsuitable for water mills, as is shown by the fact that the estimates of income range from Rs. 2 to Rs. 281. The present demand is equal to Rs. 409 British.

There are now 301 water mills at work, of which the annual net profits are estimated at Rs. 17,000. The Settlement Officer proposes a new assessment of Rs. 2,000. I would limit the total demand to Rs. 1,440, and here too, as the enhancement is very great, I would defer 3 annas per rupee for 5 years and fix the initial demand at Rs. 1,170.

17. Following past practice and the system recently sanctioned in the Tachi, it is not proposed to levy any cess on the land in addition to the fixed land revenue. Any such addition would be likely to be misunderstood, and no further addition is desirable to the enhancement of land revenue proposed.

At the same time no frontier remissions are required. None were given at last Settlement,—except the insignificant sum of Rs. 44 to the villages of Kharlachi and Burki,—and their responsibility for assisting in the protection of the valley is clearly recognized by the people. Necessary allowance can be made for villages which are peculiarly exposed to raids in the detailed village assessments.

18. The Settlement Officer will be directed to draw up a set of rules for the assessment of land subject to alluvial action and to give effect to his suggestion (paragraph 13) that newly formed land shall remain free from assessment for three years. This is in accordance with local custom, and has been accepted in the Tochi Settlement.

19. In accordance with the principle of fixed assessment, all land—other than alluvial—brought under cultivation will remain unassessed for the term of Settlement. With this safeguard there seems to be no necessity for the grant of special protective leases recommended in paragraph 54, but if any such cases do arise they can be dealt with on their merits.

20. Damage to crops from hail in the Upper Kurram and mortality among cattle in Lower Kurram are the chief agricultural calamities with which the people have to contend. All that can be done to mitigate the first visitation is to give prompt relief by remitting all or part of the land revenue in accordance with the general rules on the subject and to assist the people with *takari* loans. Those loans should also be freely given—and indeed are at present—for the purchase of seed and bullocks, and it is hoped that the arrangements now made to extend veterinary relief by posting a Veterinary Assistant to the Agency and opening a Veterinary Hospital at Parachinar may do something to reduce the losses of cattle. Rinderpest, which is often imported by the immigrant herds of the Ghilzais, is a frequent scourge of the riverain villages, and it is a satisfactory evidence of their freedom from prejudice and of their confidence in our methods that the Veterinary Inspector deputed to the valley in October last inoculated several thousand cattle against the disease in a few weeks.

21. To complete the question of taxation, it is only necessary to refer to the cesses on non-agriculturists (paragraph 58). The rates imposed at last Settlement with the approval of the Government of India were (1) Rs. 3 Kabuli per artisan and (2) Rs. 2-8-0 Kabuli per shop. The average income from the former in recent years has been about Rs. 700 Kabuli, and from the latter—which is paid by Hindus—about Rs. 1,000 Kabuli. I propose that in future the rates should be respectively Rs. 3 and Rs. 2-8-0 British, which will yield an income of Rs. 1,500 to Rs. 2,000. The Tochi Hindus pay a shop tax of Rs. 1,500 per annum.

The question of grazing dues payable by immigrant Ghilzais for grazing their cattle in Kurram limits during the winter months will be separately considered.

22. Assignments of cash or of land revenue—known as *munjibs*, *inams*, *mafis*—are a very important feature in the Kurram Administration. The nature and amount of the present grants, which amount to Rs. 20,284 Kabuli or one-third of the present land revenue, have been discussed in paragraph 14 of the Report. A general revision of all those grants, which number over 1,000, has now been completed by the Political Agent, and as they are nearly all held for the term of Settlement, the principles which will regulate their future treatment may now be conveniently laid down. In consideration of the loyalty and good service which the inhabitants of the Valley have displayed since last Settlement, and especially in the trying crisis of 1897-98, and also of the great enhancement of land revenue that is now being taken, it is needless to argue that the policy to be followed should be liberal and generous.

Nearly all of the existing grants should be maintained as a matter of course, except in case of proved unworthiness or unfitness, but it is also advisable to add to them in the case of some incumbents, and to supplement them by new grants to men who have come to the front since last Settlement.

It is not proposed, as was done in the Tochi, to appoint any separate Lambardars in addition to the existing Maliks or to grant 5 per cent. out of the revenue as a Lambardari allowance. The duties of Lambardars will be discharged by the existing Maliks, selections being resorted to where the number is excessive. As those duties will be considerably increased by the introduction of a regular revenue system and the larger amount of revenue to be collected, those grounds alone justify a substantial enhancement of the revenue assignments.

I therefore recommend that from the new assessment a total sum of Rs. 18,000 be sanctioned for distribution as *mafis*, *inams* and *muajibs*. This will be about one-fifth of the new revenue demand against nearly one-third at present, and is not in my opinion excessive. The grants should be, as at present, for the term of Settlement, subject to conditions of loyalty and good service, and the distribution, which when worked out in detail, will be reported for the information of Government, would be roughly as follows

	Rs.
(1) <i>Muajibs</i> (monthly cash allowance to some 25 of the most influential Maliks) . . . . .	6,000
(2) <i>Inams</i> (cash allowances paid at each harvest to village Maliks, including those who discharge the duties of Lambardars) . . . . .	10,000
(3) <i>Mafis</i> (assignments of land revenue to mosques, shrines, temples, Sayads, &c.) . . . . .	2,000

23. The new assessment should be introduced from the kharif of 1901-05, and the term of Settlement might be fixed at 20 years. Having regard to the large enhancement of the demand,—some of which will not accrue till after 5 years,—to the improbability of any large extension of cultivation, and to the fact that the term in the adjoining Kohat District is 20 years, I do not consider that any shorter term is advisable. The demand for each harvest should be collected in one instalment between the following dates:—

Kharif—15th December to 31st January.

Rabi—1st July to 31st August.

24. The present report deals only with the assessment. After this has been sanctioned and announced a supplementary chapter will be added explaining in detail the results arrived at and the action taken to prepare a complete and correct record of rights, and to ensure its being kept up to date. Proposals for the revision of establishment necessitated by the new system will be submitted separately. The operations from the start have been conducted with tact, judgment and ability. Lala Ganga Sahai, the Settlement Officer, by his impartiality, integrity and thoroughness succeeded in winning the confidence of the people to a remarkable extent, and it affords me great pleasure to bring his services to the favourable notice of the Government of India. The fact that the Settlement now approaching completion, in regard to which there was at the outset great apprehension and considerable opposition, has been carried out without any friction is most creditable to the Political Agent,—Mr. Waterfield,—who has directly supervised the record and assessment work at all stages, and has passed orders personally on the thousands of disputes that were brought to light.

I have the honour to be,

SIR,

Your most obedient Servant,

M. F. O'DWYER, REV. & FINL. SECT.,

for Chief Commissioner, N.-W. F. Province.

No. 419.

FROM

STUART WATERFIELD, ESQUIRE,  
*Political Agent in Kurram,*

TO

MAJOR C. B. RAWLINSON, C.I.E., I. A.,  
*Offg. Revenue Commissioner, North-West Frontier Province.*

*Dated Parachinar, the 5th October 1905.*

SIR,

: I HAVE the honour to submit the Assessment Report of the Kurram Valley, and to remark that, owing chiefly to sickness among the staff, it was found impossible to comply with the Revenue Commissioner's wishes as to completing and submitting the report by the 20th September.

2. In submitting this report I would venture to bring to the notice of the Revenue Commissioner the most excellent services rendered by Assistant Settlement Officer Lala Ganga Sahai, and in fact of all officers serving in Kurram, who one and all have done good service.

3. As to the report itself, I would note that, though longer than originally intended, it contains nothing but facts regarding Kurram, which are, and will be, most useful to the Political Agent in Kurram. Personally I do not consider that it could be condensed with any advantage.

4. As to Assistant Settlement Officer's proposals with regard to fixing the revenue demand upon a progressive scale after every five years, commencing at a sum of Rs. 70,000 and raising to Rs. 1,00,000 after ten years, I would note that personally I am in favour of fixing the demand definitely for the full term of the Settlement, which should be for 20 years, and the revenue demand should be Rs. 88,750, which is the yearly average calculating upon the figures contained in Assistant Settlement Officer's proposals:—

Thus for 5 years at Rs. 70,000	total equals Rs.	3,50,000.
„ 5 „ „ 85,000	„ „	4,25,000.
„ 10 „ „ 1,00,000	„ „	10,00,000.
Total Rs.		17,75,000

In 20 years Rs. 17,75,000 would be realized as revenue, the yearly average of which comes to Rs. 88,750. This amount, after taking into consideration the normal conditions of the life in Kurram, is not in any opinion



( 2 )

excessive, and yet will after a term of 20 years give the same result as if the progressive scale put forward by the Assistant Settlement Officer were to be accepted.

5. In conclusion I beg to express my regret at the delay which has occurred in submitting this report, but would urge that the delay was unavoidable and was not caused by any slackness upon the part of any of the officials concerned.

I have the honour to be,

SIR,

Your most obedient Servant,

STUART WATERFIELD,

*Political Agent in Kurram.*

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# ERRATA.

Page.	Para.	Line.
6	4	19.—For "a of Highland winter" read "of a Highland winter".
13	9	10.—For "an attachment" read "and attachment".
17	12	6-7.—For "field work" read "field book".
18	12 (3) c	5-6.—For "per Kabuli jarib" read "Kabuli per jarib".
23	14	Last line.—For "Rs. 1,001" read "1,001 acres".
25	15	Among number of villages on the margin —For No 6 "Kankai" read "Kunekai," and for No. 3 "Srighurga" read "Sreghurga".
26	16	43.—Against Sayads, for "21 per cent" read "12 per cent."
31	20	Last but one —For "Tanda-China" read "Tauda-China".
53	30	Statement of barley outturn— Omit dots against Abi dofash, and in their place read "outturn for Rabi 1904-05."
65	37	39.—For "per annum" read "per acre".
81	48	5.—For "Ghurdiwar" read "Chardiwar".
89	52*	3.—Omit comma after failure, and read "which resulted" for "and would result".

## APPENDICES.

Statement I, page xiii, column 8.—Against year 1894-95, Rodghara Circle, figures relating to Crown lands should be read as under :—

Abi dofash	439
" ekfash	1,519
Barani	172
Total	2 159

Statement I, page xiii, column 15.—Total in use. Against year 1894-95, total Kurram Valley, read "230" for "2".

Statement I, page xiii.—Add as footnote :—"Figures in italics appertain to Crown lands".

Statement V (b), page xxviii, column 4, Koh-i-Daman Circle.—Against total, for "4,463" read "44,463".

Statement VI, page xxix, column 7, Koh-i-Daman Circle.—Against total, for "7,960" read "7,690".

Statement VIII, page xxxiii.—Above grand total, for "Ghilgi" read "Ghilzai".

ASSESSMENT REPORT  
OF THE  
KURRAM VALLEY  
1905.

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PART I.  
PHYSICAL CHARACTERISTICS.

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1. The Kurram Valley—principal home of the Turis—is a long and narrow strip of country, with a large oval undulating plain at the north-western end. It lies outside the limits of British India between  $33^{\circ} 19'$  and  $34^{\circ} 3'$  north latitude and  $69^{\circ} 54'$  and  $70^{\circ} 35'$  east longitude. With the exception of eight miles on the south-eastern limit where it touches the British territory, the remaining boundary is surrounded by independent tribes in the extreme south, south-east and east, and by the territory of His Highness the Amir of Kabul on the north, west and south-west. Though irregular in shape, the valley stretches roughly like a long bow in a south-easterly and north-westerly direction, with the central curve resting at Sadda and one end touching Thal—the meeting point of the valleys of the Wazirs, the Miranzai Bangashes and the Turis and the terminus of the Khushalgarh-Kohat-Thal Railway—and the other end extending up to the Peiwar Kotal Pass, which marks the shortest route to Kabul.

To the north the lofty range of Sufed Koh from Karerah and Badina Sur to Sika Ram—the highest peak 15,620 feet above the sea level—constitutes a natural boundary wall between Kurram and Ningrahar, a province of Afghanistan. From Sika Ram to Larumi Sar on the west and south-west the boundary fixed in 1894 between this valley and the provinces of Hariob and Khost lying in the Amir's territory marches along the watersheds of Mandher, Khwaja Khurram, Charmagh and Inzar Ghar ranges, with two exceptions opposite Kharlachi and Lakka Tigga posts, where for a short distance it descends to the plain.

The boundary with the Hassan Khel Wazirs to the south, demarcated in 1898, pursues a zigzag line over the hills and dales. On the south-east the Kurram River divides the Kohat District from this valley for a distance of eight miles, and then higher from the masonry bridge at Chapri up to Satin—a village above Sadda and opposite Khurmana-darra—for about 25 miles the boundary with the Zaimushts, Alisherzai and Massuzai Orakzais has not been defined, and runs along an undemarcated waste, which stretches at the foot of Ding Sar and deflects sharply to the north round its western extremity as far as Khurmana-darra, a defile in the second parallel range called Kargu Ghar. From Khurmana-darra, which is the dividing line between the Massuzais and the Para Chamkahnis, the boundary again follows the watershed of the Kargu Range up to its western limit, where it takes a northerly direction a second time until, after trending over low spurs, it joins Karerah Sar on the Sufed Koh.

Thus, whether by mutual arbitration or established custom, the watershed has been the recognized boundary all round the valley, except with the Zaimushts and Orakzais mentioned above.

The extreme length of the country from Spin Tal to Peiwar Kotal is 72 miles and its greatest breadth from Daradar to Ghazgarhi about 24 miles. The total area of the valley is estimated at 1,278 square miles, which is divided into 169 estates against 153 of the last Settlement. During the present Settlement nine villages above Bughakki on the border of Para Chamkannis, but within the Kurram side of the watershed, which for political considerations had been left out at the last Settlement, have been measured and included in the area to be assessed. Five new villages were colonised since the last Settlement, and three new estates have been formed in this Settlement and two estates have been clubbed into one. These changes serve to explain the net increase of 16 villages since last Settlement.

2. This valley consists of a continuous stretch of open country gradually ascending in a zigzag line from Thal to Peiwar Kotal. The landscape generally lies extended, and is only shut in from the view, for a time here and there, at sharp turns by short spurs or mounds near the road; otherwise the effect is not marred by any cross ranges of low hills. The valley is surrounded by six mountain ranges with two openings on the north-west and south-east by which the Kurram River enters and flows out from the country.

Of the three mountains to the north and the south-east, Sufed Koh or *Spin Ghar* (lit. White Mountain or Mont Blanc) is the highest and the principal range, which, traversing Tirah Maidan, runs as far as Janirud in Peshawar and further. The other two outworks, almost parallel to each other, rise opposite Dangila and Arawali respectively,—the former, called Kargu Ghar, extending as far as Samana and beyond, and the latter, known as Ding Sar, terminating at Torwari in the Kohat District. The Sufed Koh is usually covered with snow from November to June. Its Alpine heights are clothed with beautiful dark pine forests, and lower down on the slopes and in the glens are nestled the Mangal, Kharoti, Lasani and Bada Khel hamlets that serve as buffer clans. All along the foot of the range runs a belt of richly cultivated tract two or three miles broad, with abundant irrigation supplied by local springs and glaciers of periodical snow lying in heaps in mountain recesses. The drainage of the range passes down by means of six principal ravines, along the banks of which, as soon as they debouch from the hills, are to be found on either side the settlements of four villages—Peiwar, Shalozan, Malana and Zeran—and a group of closely clustered hamlets constituting the Kirman and Shiban Tappas. These ravines, fed from springs and snow, form the main source of irrigation of this tract, which with its rich cultivation, fine gardens and picturesque situation—with snow-line, primeval forests, and rich variety of flora and fauna of the Sufed Koh in the background—has rightly been considered the pleasantest part of the country.

The water-supply of only five of these ravines is more or less perennial. After leaving this belt of cultivation, these ravines with their numerous ramifications run over a vast expanse of stony soil, which, though open and flat, slopes sharply from north to south, until they fall into the river to the west and south-west.

This inclined plane of shingle and gravel is one continuous stretch of barren waste, with a few oases of cultivation dotted here and there, which is carried on with the help of such scanty surplus water-supply as can be caught in these ravines on their way to the river.

The mountain range to the west is known as Mandher, but as the wooded part has in the demarcation been mostly allotted to the Amir, it is not of much importance to require further description.



At the north-western extremity, through a gap between the Mandher and Khwaja Khurram ranges, enters the Kurram River, which continues to flow for the greater part of its course at the foot of the two south-western ranges running almost in a line, and gives its name to the valley, of which it forms a fruitful source of irrigation.

The river flows due east as far as Ahmadzai and then turns to the south-east up to Sadda, where it takes a southern course, until a little below Chapri it passes to the south-west out of the gorge called Tanga Khula, and then a few miles further eventually leaves the valley and enters the Wazir Hills. The origin of the name of the river Kurram remains still unexplained. Its head-waters rise in the valley of Rukhian in Afghanistan, and are joined lower down by the tributaries of the Hariob Valley. After traversing the country of the Gabar Mangals and Chamkannis, where it goes by the names of Rukhian and Kareya streams respectively, it enters this valley near village Kharlachi, where it is called for the first time by its present name by which it is known throughout its remaining course in the country of the Turis, Wazirs and Bannuchis up to its junction with the Indus.

Many dry torrents, too numerous to detail, from west, south-west and south-east fall into the Kurram River and convey the drainage of the neighbouring hills on rainfall. Of the perennial ravines only two—Kirman Toi and Khurmana torrent—flow as far as the river in a continuous stream, and the rest being confined to the tract at the foot of the Sufed Koh are either spent up in irrigation of villages at the head or are absorbed on the way, and pour their floods into the river only on occasions of rainfall.

The cultivated area supported by this river lies close to the banks on either side in almost one continuous sheet, the breadth of which nowhere exceeds one-half to one mile from the river line.

From Thal to Sultan, a distance of 46 miles, the valley is very narrow, the hills on either side approaching rather close, with the exception of a few miles from Alizai to Ahmed Shah Killi, where it bulges out considerably. Cultivation in this tract is nothing but a narrow strip confined to the basin of the river which lies below the main road. Between this road and the eastern and south-eastern ranges the country is so desolate that isolated patches of cultivation are to be found round four villages far apart from each other. The southern slope of Ding Sar is covered here and there with the hamlets of independent tribes, and the country between them and Sre-Ghurga, the furthest Kurram village, is very much broken.

From Khurmana Valley to Sultan the hills shelve to the plain in a rapid slope, leaving the two villages Jullundhar and Shakardarra perched at their base visible from a long distance. Above Sultan the hills to the north recede from the river, and the valley widens apart until the circuit is completed at Peiwar Kotal. From any of the heights of Sufed Koh the plateau between Sultan and Peiwar Kotal would present the appearance of an ellipse, surrounded on all sides by hills with a green belt of cultivation all round the border and bleak inhospitable waste in the middle scarred by courses of ravines. From the river to the foot of the Sufed Koh there is an average gradient of 1 in 22, and still higher in the interior of the range there are three principal fan-shaped glens above Bughakki, Shalozan and Peiwar respectively, which run up to the foot of the snow-line and are peopled by the buffer clans.

Thus cultivation in the Kurram Valley will be found to extend in all directions, excepting the central plateau and the eastern and south-eastern border, which touches the independent territory of the Para Chamkannis, the Alisherzai and Massuzai Orakzais and the Zaimushts.

3. A rain-gauge was established at Parachinar in May 1896 and the Meteorological station a year after. Hence the rainfall statistics, which are

available only for the last nine years, have been embodied in Appendix B. The average rainfall of the year resulting from these figures has been compared below with that calculated by the Meteorological Reporter to the Government of India and published by the Director of Land Records, Punjab :—

	ACTUAL AVERAGE.		METEOROLOGICAL AVERAGE.	
	Rainfall.	Number of rainy days.	Rainfall.	Number of rainy days.
	Inches.		Inches.	
July, August and September. { "Wasa" or rainy season. }	7 7	17 4	9·01	19·5
October and November . { "Mane" or autumn. }	1·68	4·2	1·42	3·0
December, January and February. { "Zame" or winter. }	2·17	5 1	3 35	2 3
March, April and May { "Sparle" or spring. }	9 55	22·6	9·97	24·0
June ... { "Jauza" or hot weather }	1·34	3·3	1·43	3·4
Total	22·44	52 9	25·19	58·2

Thus the rainy season of the valley divides itself into two well marked periods,—the summer rains, lasting from July to September, and the spring rains, continuing from March to May. The latter are more copious and more certain of the two, the month of March on the whole being the period of heaviest rainfall during the year.

Owing to its distance from the Himalayan Range, and therefore from the zone of the regular monsoon, this valley, notwithstanding its elevation and proximity of forest-clad hills, does not enjoy a full and an established rainy season in summer. Showers of rain commence here, when the monsoon currents carried up the North-Western Himalayan Range are thrown back in weakened condition by the heights of the Hindu Kush Mountain. The "Wasa" or the period of summer rains begins in July and lasts till the end of September. The rainfall of the month of August is considered most beneficial for the standing kharif crop as illustrated by the Pashtu proverb "Wasa Gup de Pasa," which literally means that rain after "Gup" star, which corresponds to the month of August, is good. The month of September, which amongst the Turis is known as the month of "Suhel" star, brings summer rains to a close and ushers in the autumn season.

Rain in the months of October and November, though small, is useful in providing moisture to the soil to enable preparations for the spring crops. In the latter fortnight of December it begins to snow in the submontane tract of Sufed Koh. From 20th December to end of January—called "Spin-Chilla" or white 40 days—is the period of the greatest cold, when snow falls oftener and keeps lying on the ground. The next 40 days up to 15th March known as "Tor-Chilla"—or dark 40 days—is the time when the snow as it falls, or that lying already, clears away from the ground. During these 2½ months the standing crops on account of excessive cold do not make much progress. Rains descend again in the month of March and continue in smart showers up to the end of May. The rainfall of the month of March is considered most useful like that in August, as it develops the spring crop and



dislodges glaciers of snow, which from the tops slide into the recesses and fissures below, and eventually feed the perennial streams in summer. Experience has shown that but for this rain these glaciers of snow get hardened into one mass by the action of the wind and keep lying on the heights of mountains, causing considerable loss of irrigation to the crops of the valley below. The rainfall of the months of April and May brings the spring crop to maturity, but at the same time swells the river into floods, which endanger the irrigation dams and embankments. The people living along the river are very busy in this period in strengthening and repairing their weirs (locally called "boris").

The spring crop is never known to fail in this valley, as there is always plenty of moisture in the land at the sowing time, and the rains in spring are sure to occur about the time the crop is growing and ripening.

As regards the kharif crops, rice is the principal staple amongst them, and is sown with the irrigation available from rainfall in the spring and from melting snow which feeds the river and the ravines. The nursery sowings are completed by the end of April or beginning of May. In June—called by Turis "Jauza"—the rains diminish, and the crop is sustained chiefly by the supply in the river and the ravines fed from the melting snow. The summer rains of July and August bring it to maturity. In years of deficient rainfall, when the supply from the melting snow is exhausted, the rainfall of the months of July and August becomes of the utmost importance, as on its failure the whole rice crop of the valley is seriously injured. Hence four months in the year are rather critical, and determine the fate of the agriculturists. If it snows heavily in January and February, and a fair amount of rain follows in July and August, the Turi feels secure of his rice harvest from beginning to end. The snow water and rainfall in the months of April and May facilitate nursery sowings, but snow water alone in June nourishes and the rains in summer in the months of July and August develop the kharif crop. The snow and the rains combine to produce a successful harvest, hence failure of one or both must mean more or less disaster to the people. As snow on the hills falls more or less every year, July and August are therefore the months of greatest anxiety in the whole year, and in case of scarcity, of bitter quarrels—sometimes accompanied with bloodshed—over the turns of distribution of water-supply.

For a favourable agricultural year there must be 7 to 9 inches of rain from July to September in summer, about one and a half inch in November and December, and between 9 to 10 inches in March to May. The snowfall on the hills must not be less than 12 to 15 feet in the months of January and February, as without it off-shoots of the south-west monsoon alone are not sufficient to ensure good crops. Of the past nine years, the conditions of the first three years were good. Then followed an unfavourable year in 1899-1900. After an interval of one year there occurred two other years of drought in 1901-02 and 1902-03 in succession, there having been no snowfall in the former year. Since then the rainfall has been fairly good, and, it is hoped, marks the commencement of a favourable cycle. During the Settlement the year 1904 was known for its good rainfall, though frequently accompanied by hailstorms. The year 1905 has been distinguished by extreme cold and unusually heavy snow in winter and comparatively greater heat and deficient rainfall in summer. The average total rainfall of the year according to data available comes to 22.44 inches against the meteorological average of 25.18 inches. The average annual rainfall of the neighbouring tracts is 18.05 inches at Kohat, 26.29 inches at Hangu, and 16.31 inches each at Thal and Tochi.

The rain storms usually come from the north and north-west, and sometimes from the south-west. The rainfall is heaviest in the upper part of the valley, and gradually decreases as one goes down the river. From Peiwar to Sultan is the tract of most favourable rainfall. From Sultan to Sadda, Sadda to Alizai, and Alizai to Thal are the three stages of decreasing rainfall, there being a falling-off of 10 per cent. at each stage. Hence a second rain gauge has been established at Alizai during the progress of this Settlement. With the exception of these local variations in a gradient of about 5,000 feet from Thal to Peiwar, the distribution of rainfall is otherwise fair.

The average snowfall in different years amounts to 21.41 inches in the year, but the variations from year to year are so marked that there seems to be some radical mistake in the past calculations, and therefore much faith cannot be placed in the accuracy of these figures, specially when it is remembered that the last year was the period of heaviest snowfall in the memory of grey-beards, but according to figures on record there seem to have been five periods of still heavier snowfall during the last eight years, which is against facts. On the Sufed Koh it begins to snow from October and continues till the end of May. On the Mandher, Khwajai Khurram and Kargu Ghar ranges snow falls only in the months of January and February.

Rain in March to May, and again in September and October, is often accompanied with hailstones which damage the crops. There was no record kept before of the flood level in the Kurram River. But the Public Works Department, at the request of the Railway Survey Party, made some arrangements in the year 1904-05, which it is expected will be continued in future.

4. As might be expected in a country of such varying altitudes, the climate of this valley presents striking contrasts from the sultry oppressive heat of an Indian summer to the bitter cold of Highland winter. Within a few hours' journey one passes from regions where snow does not last longer than a day to recesses where it never melts at all.

The hamlets on its slopes and the irrigated tract at the foot of the Sufed Koh enjoy from April to October a genial summer, very much resembling weather in Scotland. The leafy boughs, limpid streams and the cool breeze from the hills attemper the heat of the sun. And local showers in the afternoon from Peiwar to Sultan from the direction of the Sufed Koh during the months that snow is lying over them is an established phenomenon, as there is hardly a day when gentle rain does not enliven the atmosphere at Parachinar. Usually in the summer season the thermometer in the shade ranges between 85° and 100°. But the winter is so severe that for a month or two the lanes are closed with snow and the people with the cattle remain shut in, sleeping by their stoves. A piercing northern gale blows in the months of January to March, throwing up powdery snow into flakes on the heights of Sufed Koh Range and sweeping down into the valley below. The thermometer in these months often goes down as low as 16.8°.

The central unirrigated plain is mild in all seasons, the only difficulty being that there is no good water to drink. All along the river the spring is the only pleasant part of the year, and there is good shooting to be had in tanks and swamps between Dandar and Ahmadzai. The months of July and August are the most unhealthy, as the water in the river gets affected by the drainage of rice fields, and malarial fever almost in epidemic form prevails in the whole tract. Shortly after this in winter follows a strong south-easterly wind, which blows from the direction of the river-head all along its course from November to February, and on account of its chill blasts not only prevents men from turning out to work till 10 or 11 in the morning, but makes an easy prey of constitutions weakened by malarial attacks. Bowel complaints, enlarged spleen, and pneumonia are the common diseases of the people living along the river, whereas in the tract at the foot of Sufed Koh more sickness is caused by the use of raw fruits than by the effects of malaria.

The heights of different stations from Thal to Peiwar give an idea of the gradations by which climatic differences merge into one another—

Thal	..	2,820	feet above sea level.
Chapri	.	3,000	ditto.
Manduri	.	3,200	ditto.
Alizai	...	3,400	ditto.
Sadda	...	4,000	ditto.
Sultan	..	4,500	ditto.
Parachinar	.	5,600	ditto.
Peiwar Kotal	..	7,830	ditto.

The summer in the tract up to Manduri, which is shut in between narrow hills, is intolerable, and specially owing to heat radiating from these

heights the nights are very uncomfortable. But the winter is bracing. At Alizai a light breeze mitigates the discomforts of the summer nights, but unpleasant winds of the cold weather have acquired a notoriety. From Alizai to Sadda and beyond the summer loses and the winter gains in strength, until at Sultan the change becomes markedly perceptible.

Parachinar, the head-quarters of the valley, is situated in the centre of the oval plateau on the border line that separates the irrigated submontane tract of Sufed Koh from the unirrigated central plain, and on account of good arrangements of water-supply and a health-giving climate provides a good sanitarium.

With the exception of the year 1900-01, when a serious outbreak of cholera occurred, the valley has been singularly free from any disease in an epidemic form.

5. The Durani Government had divided this country into 29 *misqals* or agrarian divisions. Mr. Merk, for purposes of distribution of assessment made as many as 39 tappas of the cultivated area owned by the people (excluding Crown lands). The revenue rates for various tappas differed from each other, but all villages contained within one and the same tappa were assessed uniformly at the rate adopted for that tappa.

The arrangement of assessment circles during the present Settlement was sanctioned by the Revenue Commissioner on his visit in April 1904, and follows the physical features of the valley.

The submontane tract of Sufed Koh, including the settlements on the slopes and in the glens, have been formed into one circle called Koh-i-Daman. It extends from Haqdarra in the Mandher Range to Shakardarra on the Kargu Ghar Range. The main characteristics of this circle are that the soil has been formed by the disintegration of rocks owing to the action of rain and frost, and that irrigation entirely depends on spring and snow water. The buffer hamlets on account of excessive cold generally produce one crop in the year. Lower down, at the foot of the range, the soil is no doubt very rich, the greater part of which yields two crops in the year, but requires considerable manuring, as snow water is too cold in its effects and brings no silt with it. This is a well-wooded tract, but the fruit trees—walnuts, grapes, apples, pomegranates, peaches, apricot, cherries, &c.—abound chiefly in Shalozan and the hamlets above it, and to a less extent in Peiwar, Malana and Zeran. The amlok is the principal tree in the Bughakki Valley. The Kirman Tappa on the right bank of Kirman Toi and the Shiblian Tappa on its left contain a large number of shady chinara (plane), shalil and quince trees. The slopes of the Sufed Koh heights are covered with valuable timber.

This part of the country owing to luxuriant growth of vegetation, continuous stream of snow water, and cool mountain air is more damp than others. The best and the greater part of this circle lies above the main road. Some part of it below the road jutting out towards the river between two ravines south of villages Maru Khel and Feroz Khel is waterlogged, and hence is called "Dal."

The central stony plateau, with a long stretch of waste, few trees, and sparse cultivation, constitutes another circle by itself, and is called Sahra. The soil has been formed out of the hard stony stratum, and by treatment of long years is in fairly good condition now. But the water-supply is limited, and irrigation on about two-thirds of the area is done with the help of surplus water-supply borrowed free from other villages or from Shalozan on payment. The remaining one-third area is unirrigated, and receives rainfall drainage from the hills.

The cultivated tract from Kharlachi to Thal along the river on either side of it, extending up to Ghazgarhi and Wali China in the south-west and Satin and Sre-Ghurgha on the south-east, is mostly irrigated by river and ravine water, and to some extent by springs on the banks and in the hills. The soil is of alluvial formation, which is enriched by deposits of silt. This is a very fertile tract, and gives generally two crops in the year. There are a few fruit gardens to be found here and there, and the clumps of chinara trees towering



above fortified hamlets extend as far down as Sadda. Thereafter the trees become scarcer and scarcer, until below Hazir Pir grove they dwindle into shrubs, and leave the long line of bare Bilyamin hamlets on the right bank of the river visible from a distance on the main road. This part of the country contains two important pasture grounds,—Shabak and Zaraki Kamar,—where the nomadic Turis pitch their *kezdies* and *puzis* (tents made of blanket or dwarf palm) for winter quarters. This circle has been named Rodghara on account of its situation along the banks of the river.

It consists of three parts—first, the actual river bed, in which cultivation is carried on in scattered patches. Next, higher up comes another terrace containing the bulk of the cultivation, and must at one time have been the old bed of the river. Last of all, some of the cultivation lies in the plain above the high bank. This threefold character of riverain cultivation is with some variations here and there a distinguishing feature of this circle. The swamp between Dandar and Ahmadzai seems to have been caused by the drainage of Sufed Koh in the Bughakki Valley, which filtering below the strata of the rocks makes its appearance here. The cultivation in the glens of Sufed Koh consists of highly terraced banks and glades. But lower down at the base the fields, though small sized, irregular and sloping, are not so steep.

In the Sahra Circle cultivation is open and flat, but on the river it consists of three parallel belts, each belt being fairly level.

The people from the differences in the system of rice cultivation make another division of the country into Upper and Lower Kurram. From Peiwar up to Shashi below Sadda rice is sown by transplanting from nurseries, and hence this tract is known as Upper Kurram. The remaining valley down to Thal is called Lower Kurram, as rice is sown there broadcast.

According to administrative divisions, the whole of the narrow valley as far up as Sultan has been recognized within the limits of Lower Kurram, and the open plateau within those of Upper Kurram. These divisions also agree with the prominent features of climate as well as physical aspect of the country.

6. The Duranis took no account of unirrigated area, and assessed the irrigated land at a uniform rate all over the country. Differences in irrigation and quality of area were adjusted by alterations in the length of the measuring chain, but not in the revenue rate.

Mr. Merk, while adopting the revenue demand of the Duranis as his standard, improved upon their method so far that he recognized unirrigated area as a separate class, and further sub-divided irrigated area into soils bearing single crop and double crop in the year and lands under fruit gardens. And although no distinction was made in soil classification between spring, snow or river irrigation, in actual distribution of revenue the rates of the tract now constituting Daman Circle were kept a good deal lower than those of the area now called Rodghara. Subsequent experience has shown that this discrimination was justifiable. Rich silt of the river has been known to add more to the fertility of the soil than siltless crystal water of the spring or snow irrigation.

Hence irrigated area depending on snow or spring irrigation has been called in this Settlement "chashmai," and that on the river irrigation "abi." Within each of these classes further distinction between areas bearing one and two crops in the year has been made by a well defined test noted below. Garden lands will go with the class of irrigation on which they depend, and, though classed as "ekfali," the most important amongst them will be put on their proper share of assessment corresponding to the value of their produce in the actual distribution of revenue by villages.

Hence the definitions of various classes of soils recognized for purposes of measurement and assessment are as follows :—

CULTIVATED.

*A.—Irrigated lands.*

- |                     |   |   |   |  |
|---------------------|---|---|---|--|
| 1. Chashmai dofasli | } | Land irrigated from perennial spring<br>and snow water, | { | and producing 6 or more<br>crops out of 8.   |
| 2. „ ekfasli        |   |   |   | and producing less than 6<br>crops out of 8. |
| 3. Abi dofasli ...  | } | Land irrigated from Kurram River,                       | { | and producing 6 or more<br>crops out of 8.   |
| 4. „ ekfasli ..     |   |   |   | and producing less than 6<br>crops out of 8. |

*B.—Unirrigated lands.*

5. Barani.—All land dependent on rainfall and drainage of higher ground.

UNCULTIVATED.

- |                 |   |                                  |
|-----------------|---|----------------------------------|
| 6. Banjar Jadid | } | As defined in the Patwari rules. |
| 7. „ Kadim      |   |                                  |
| 8. Ghair Mumkin |   |                                  |
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## PART II.

### FISCAL HISTORY.

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7. Nothing is known about the aboriginies beyond the vague legend

Early history.

that the valley was occupied in old times by certain sects of unbelievers called Shudni Budni. No relics of any kind pertaining to them have been handed down to posterity. The early history of the country until its occupation by the Bangashes is enveloped in mystery. The Bangashes, whose descent has been traced to the "Koreshi" tribe of Arabia, driven from Persia by the tyranny of the Moghal Emperor Yenghis Khan at the commencement of the thirteenth century, wandered as far as Mooltan in the Punjab, where their Chief is said to have been appointed as Governor. But owing to some imbroglio with the surrounding tribes they had to retire to the Suleiman Mountains, and eventually to Gardez, whence the whole tribe immigrated into this valley and settled here in the beginning of the fifteenth century subsequent to the invasion of Timur in 1398 A. D. About this time the Valley and the River Kurram were known as the valley and river of Bangash. Later on in the fifteenth century a large number of them moved down to the Miranzai Valley in the Kohat District, and early in the sixteenth century some 60 families of a Hindki race (eventually known in History as the Turis), nomadic in habits, moved up from their native seats opposite Nilab on the Indus in the Attock District and settled in this valley, becoming the hamsayahs (dependents) of its inhabitants. This Turi tribe is referred to in the memoirs of Babar for its predatory habits. Weakened by mutual dissensions and migration to Kohat the Bangashes lost in strength, whereas attracted by the fertile country fresh arrivals from home added to the number of Turis. At last the latter by their overwhelming majority prevailed over the former, and snatched from them first the village Burki, next Malana, and then Peiwar. The first village was taken by the Duperzai, the second by the Saragalla, and the third by the Chardai section of the Turis. The Bangashes kept losing ground, and were gradually turned out of their possessions until, excepting individual blocks in scattered villages, only the two important villages of Shalozan and Zeran in the Daman Circle and a few in the Rodghara Circle were left in their hands. The Turis with the country adopted also the religion of the Bangashes, who were Shiah.

As regards the early form of government amongst the Bangashes and their successors the Turis very little information is forthcoming on the subject, but there can be no doubt that it forms part of the political history of Afghanistan.

During internecine quarrels, first amongst the rulers of the Saddozai family, and then between the Saddozai rulers and their Barakzai minister Payandah Khan, no sway seems to have been exercised over the people of this valley. Even after the expulsion of Shah Shuja and the ascendancy of the Barakzai family—descendants of Payandah Khan—in 1818, which has ruled over Afghanistan ever since, the control over the Turis was nominal, as there was no system of administration, and every 5 or 6 years a military expedition used to be sent out to collect the revenue, the soldiers living meanwhile at free quarters on the people. It was not until about 1848 that the Turis were brought directly under the control of Kabul, when a Governor was appointed, who established himself in Kurram.

8. At the conclusion of the Second Sikh War Sardar Muhammad Azam

Barakzai administration.

Khan, brother of Amir Sher Ali Khan, was appointed the first Governor in 1848. His mother was a Bakar Khel Bangash of Shalozan in Upper Kurram, married to Amir Dost Muhammad Khan, and the Sardar himself married a

Bangash woman of Ghamkot in Lower Kurram. He built a fort at Ahmadzai, where he lived and ruled this valley with great sympathy and tact up to 1864, when on a quarrel with his brother he fled to British territory. This is the longest period of Governorship in the annals of Kurram. During the following four years six Governors were appointed for short terms:—

- (1) Sardar Yahya Khan, 1864-65.
- (2) „ Ibrahim Khan, Barakzai, son of Amir Sher Ali Khan, 1865-66.
- (3) „ Rahmatullah Khan, Barakzai, 1866-67.
- (4) „ Atta Muhammad Khan, Ghilzai, 1867.
- (5) „ Muhammad Ayub Khan, Barakzai, 1867.
- (6) „ Rahmatullah Khan, Barakzai, 1868, a second time.

Then followed Sardar Wali Muhammad Khan, Barakzai, half-brother of Amir Sher Ali Khan, who stayed in the valley from 1868 to 1876, the longest term of office next to that of Sardar Muhammad Azam Khan. Like the same Governor he had connections in this valley through his mother, who belonged to the Duperzai family of Alamsher. But his rule proved so oppressive on account of women forcibly taken from various tribes that he had to be removed on the unanimous complaint of the Turis. Sardar Shahbaz Khan,—the stammerer,—nephew of Amir Sher Ali Khan, was appointed the next Governor. But he was a violent partisan of his predecessor, and instigated the cruel murder of some of the Turi leaders who had led the jirga to Kabul to complain against Sardar Wali Muhammad Khan. He was also removed after one year (July 1876 to December 1877) on the complaint of the Turis, and his administration is remembered even now as particularly tyrannical and characterised by religious prejudices.

Sardar Muhammad Zaman Khan, Barakzai, proved a temperate ruler, who preserved a good balance amongst the different factions and administered the valley from 1877 till the outbreak of the Second Kabul War in 1878.

Thus of all the Governors who were appointed from time to time in the course of 30 years, only the first and the last made some attempt to introduce peace and order in the valley, whereas the rest—Sardars Wali Muhammad Khan and Shah Baz Khan particularly amongst them—by their oppressive measures made the Barakzai Government of Kabul intolerable and hated by all classes of people. But at no period of the Barakzai administration can the affairs of the Kurram Valley be said to have run smooth, and in the last years towards 1877 the Government seems to have been in the greatest disorder, as people refused to obey authority and openly razed the Afghan post at Ghamkot to the ground.

9. The Turis on the first annexation of the Kohat District had given much trouble. They had repeatedly leagued with other tribes to harass the Miranzai Valley, harbouring fugitives, encouraging all to resist, and frequently attacking Bangash and Khattak villages in the Kohat District. In 1853 Captain Coke with the help of a small force seized a large armed Turi caravan. The tribe then petitioned and came to terms. They said they had always raided on Khattak and Bangash villages, but now that there was a British Officer to protect them, they agreed to desist in future. According to this agreement, dating from 1854, five Turis were kept as hostages and the rest were released. But within one month of the agreement a serious attack was made on a Miranzai village and other raids followed. On this the hostages were incarcerated in the Lahore Jail, and it was proposed that as the Turis were subjects of the Amir, instead of chastising them directly, matters might be arranged through the Kabul Government. During the negotiations at Peshawar in 1854 it was decided to give the Turis another chance before further measures were taken, and the Kabul Government promised to control them. In 1855 the Turis having seen the display of force in the Miranzai expedition desired peace, and a settlement being effected at Thal, the hostages taken in 1854 were released. But the raids continued as before, and in 1856 no less than 13 were recorded against them involving plunder of property and cattle and bloodshed. It

Relations of Turis with the British Government.



was therefore determined to punish the Turis. A force of about 5,000 men crossed to Kurram Valley under the command of Brigadier N. B. Chamberlain early in November 1856, and progressed *via* Hazar Pir and Darwazai Pass as far as Ahmadzai Fort, where the claims against the Turis were amicably settled and the country up to Peiwar Kotal was reconnoitred.

After the expedition of 1856 the Turis, who had formerly been so turbulent, did not give any trouble. On the other hand their attitude became most friendly. In 1859 in the Kabul Khel expedition they joined most heartily against the Wazirs, and gave very useful and active assistance. Thereafter their liking for an attachment to the British Government increased so much that in March 1860 their Maliks submitted a petition to the Deputy Commissioner, Kohat, inviting British Officers to occupy the valley and rid them of Barakzai rule, to which they do not appear to have taken at all from the beginning. During the period of nearly 20 years from 1859 to 1878 till the outbreak of the Second Kabul War the relations with the Turis continued satisfactory; and when in 1877 the Amir called on the Turis to pay Rs. 50,000 Kabulī into his Treasury and to furnish 6,000 recruits to wage war with the British Government, the Turis fled into their most inaccessible hills. A force was sent from Kabul to coerce them, and a threat was held out that in case of continued resistance all lands of the Turis would be confiscated and other tribes located therein. But the Turis did not yield, and the Amir had to forego his demand for the levies and had to be content with a lump sum payment of Rs. 25,000 Kabulī. On the other hand, during the progress of Major-General Roberts through the valley on the declaration of the Second Kabul War in 1878, the Turis gave ready and willing assistance in every way possible by furnishing supplies, escorting convoys, and in assisting generally the operations of the troops. In 1879 they co-operated with the British force in an expedition against the Zaimushts. At last on the conclusion of the Kabul War, before the evacuation of the valley, the Turis and Bangash tribes presented a petition to the effect that as strong enmity and hatred existed between them and the Duranis owing to their tyranny, "so that if our flesh and bones and their flesh and bones were boiled together in one pot the water would not unite," they prayed to be freed from the Durani rule, and requested the British Government to grant them a Governor, and pending his appointment to leave them to manage their affairs themselves.

Accordingly on 7th October 1880 Major-General Watson in response to this petition proclaimed in an open Durbar the independence of the Turis with no connection with the Kabul Government.

10. Soon after the proclamation the executive Government of Kurram

Independence of the Kurram Valley and self-Government by Turis.

was entrusted to two delegates chosen by the tribe, namely Sayad Badshah Gul and Muhammad Nur Khan, *alias* Dur Khan, the heads of two factions (Drewandi and Mian Murid) into which the tribe was divided, who were to carry on the administration with the assistance of the tribal jirga. Their authority was to be supported by tribal levies, and a light tax was to be imposed on cultivated area to meet the necessary expenditure. But like people accustomed to be governed for generations suddenly put upon their legs, the arrangement owing to internal feuds broke down after one year. Old hostilities between families and clans, which the Durani Governors had exploited for their own purposes on the principle of divide and conquer, broke out with great violence in 1882-83, and soon all rule and Government were at an end. Dur Khan with his following went to Kabul solicitous of the rule of the Amir, but Sayad Badshah Gul with his party held aloof, and hence nothing came of the visit.

In the beginning of 1883 both parties being tired out suspended active prosecution of the feuds, but a few months after they started fighting again, sometimes amongst themselves and sometimes with the Jajis and Zaimushts. The Jajis raided on them and they retaliated on the Jajis. The Amir complained to the Government of India of the high-handedness of the Turis on his subjects, and the Turis represented that the Amir's subjects were the first to take the aggressive against them. Now, the alternative presented was either to annex the valley or to hand it over to the Amir. However, the Turis were warned of the



conditional character of the British protection, and information of this was sent to the Amir, who was requested to see that his own tribes also were kept within restraint. But in 1884 further complications arose between the Turis and the Amir's subjects, and Shahzada Sultan Jan, Extra Assistant Commissioner, was appointed to inquire into the cases. The disputes were satisfactorily settled in 1885, and, pending the deputation of an European Officer, the Shahzada was stationed at Thal to advise the Turis, who repeatedly had asked for a British Governor. Accordingly after five years of Turi self-Government and misrule Captain F. W. Egerton was sent to Ahmadzai Fort in December 1885. He soon proceeded on furlough, and was succeeded by Captain H. P. P. Leigh in June 1886. But owing to factions in the Turi jirga and the failure of the people to pay revenue into the Treasury, he was withdrawn from the valley in April 1887. In September 1888 Mr. Udny was appointed British Commissioner to settle other disputes jointly with Sherindil Khan, the Hakim of Khost, but owing to the insincere motives of the latter nothing was effected. Again in 1891 the Government of India was in correspondence with the Government of Kabul about settling disputes by appointing a commission. But the Amir meanwhile instigated a Sunni coalition of all tribes surrounding Kurram with a view to raid the valley from all sides. The principal actor selected for the execution of this design was a freebooter named Sarwar Khan, *alias* Chikkai, who merely by dint of his energy and shrewdness had risen from the position of a miller's watchman to that of a Rob Roy in the Zaimusht country. Letters actually written by the Amir to his address were brought to light. And Chikkai in compliance with the Amir's epistles, partly by his tricks, but mainly owing to the defection of the Mian Murids, did harry the country in the Lower Kurram and gained mastery over it up to Sadda, where his further advance to Upper Kurram was resolutely arrested by a strong Turi encampment at Sangina.

The Turis in view of the annihilation of their existence as a tribe, owing to disunion amongst themselves and the combination of the surrounding Sunni tribes with the direct support of the Amir of Kabul, became persistent in their petitions to the British Government for interference. At last the Government of India addressed the Amir of Kabul on the subject in April 1892, which put an end to all secret intrigues; and in September 1892 Mr. Merk was appointed the first British Governor of the Turis, on whose arrival *status quo* was restored and Chikkai withdrew himself from the valley. Since then the valley has been continuously administered by a British Officer according to local law and with the help of the Tribal Councils.

11. The unit of assessment, corresponding to an assessment circle of the British revenue system, was under the Durani Government a division of the country measuring 1,440 jaribs, or nearly 900 acres, called "misqal" or agrarian division (lit. minute portion). The district of Kurram as then constituted was divided into 29 such "misqals." The unit of measurement was a standard Durani jarib of 25 fathoms square—a fathom representing space to which a man can extend his arms, which in Pashtu is known as "kulach." This jarib was not of uniform size in the whole valley, but was occasionally varied in different villages and tappas. For instance, a village of high class land was measured with a jarib of 22 fathoms; in other villages, owing to inferior land, insufficient water-supply, difficult cultivation on hills or distance from chief centres of population or trade, the jarib was enlarged to 30, 32 or even 40 fathoms square. That is to say according to the Durani system of assessment, the revenue rate was kept unchanged and the unit of measurement was regulated to suit the nature of cultivation and the capacity of the village. In addition to this recognized principle of adjusting the length of the jarib according to local circumstances, some corrupt ways were also in vogue, for which similar alterations were made in secret. For instance, a village to which favour was to be shown was measured with a lightly stretched rope, while villages in disfavour were measured with loose ropes. Another way of committing frauds in assessment was to prepare two sets of records, one showing correct measurements, which was kept confidential, and the other

showing fictitious area with higher assessment, which was given to the proprietors, the unlawful gain being shared between the Maliks and the officials. However, the bulk of the valley was measured on a jarib of 25 "kulach" (fathoms) square, and as one "kulach" of a full-grown Turi is six feet six inches long, and there are 55 feet in one British chain, the standard Durani jarib may be taken as equal to about  $\frac{4}{5}$ ths of an acre. The unit of revenue paying area with a separate rent-roll was fixed arbitrarily according to the limits of the charges of individual Maliks, who were separately held responsible for the collection and payment of revenue into the Afghan Treasury. No regard whatever was paid to the homogeneity of social or agricultural affinities with surrounding tracts, as is done in the formation of estates in Northern India, where all the land-owners forming a compact community by itself are grouped together in one record of rights under a number of Maliks jointly responsible in matters of revenue liabilities and village administration. Thus there was a separate estate or mahal for each Malik, which in Durani terminology was called his "jam," and was measured separately. Lands belonging to Government were shown as "Khalsa" and those to private individuals as "Tawani."

No field maps were prepared, and the results of rope measurements were entered in a rent-roll, which was handed over to the Malik concerned. Thus all Durani measurements were by Maliks, and the number of mahals or estates measured in this way was altogether 251.

The system of revenue collection in the early days of Afghan rule was very irregular, as, instead of recovering the demand harvest by harvest or year by year, an armed expedition used to be sent out for purposes of realization every 5 or 6 years. Since the appointment of a Governor in 1848 the district was farmed to him, to whom the Maliks in their turn were bound to render accounts on the day of "Nauroz" every year.

As to actual assessment, when Kurram first came under Barakzai control in 1818, the land tax was fixed at Rs.  $1\frac{1}{2}$  Kabuli (a Kabuli rupee at that period being equal to 13 annas British coin) per jarib. The total area and revenue was at that time estimated at 41,760 jaribs and Rs. 69,600 Kabuli or Rs. 56,550 in British coin. In a register drawn up by order of the Amir Dost Muhammad Khan the revenue-paying area of Kurram was computed at 50,000 jaribs assessed at Rs.  $1\frac{1}{2}$  Kabuli per jarib, the total land tax thus amounting to Rs. 75,000 Kabuli or Rs. 62,500 British (the Kabuli rupee having been valued at  $13\frac{1}{2}$  annas in British coin). In 1867-68, during Sardar Azim Khan's time as Amir of Kabul, the land tax was raised to Rs. 2 Kabuli per jarib, and a hearth tax (*lugai*) of Re. 1 Kabuli per house was imposed in addition. During Amir Sher Ali Khan's time the land tax fluctuated between Re. 1-12-0 and Re. 1-14-0 Kabuli per jarib, this temporary reduction having been granted to humour the Turis in view of the strained position of the Amir with the Government. "But his attempts to raise the land tax in 1877 gave rise to much discontent, and, accompanied by other oppressive demands, had the effect of forcing the Turis to flee to the neighbouring hills."

The Crown lands were managed directly and, with the exception of a few villages, leased for a lump sum in cash: payment in kind  $\frac{1}{3}$ rd of the gross produce was realized from the tenants as Government revenue. Hence Crown lands were known as "Sehkoti."

It is not known at what intervals measurements were made, but the last was carried out in 1877.

The following miscellaneous taxes were levied besides the land tax:—

Re. 1	Kabuli hearth tax per house.
" 1	" on each camel, horse, buffalo or mule sold.
" $\frac{1}{2}$	" on every head of ox or cow sold.
" $\frac{1}{2}$	" on each donkey sold.
" $\frac{1}{2}$	" on each goat sold.
" $\frac{1}{2}$	" on each flour mill.
" $\frac{1}{2}$	" poll tax on each adult male Hindu.

Transit duties were also levied on Kohat salt at the Afghan posts.

There was some tax also upon the silkworm industry and grazing dues were levied from the Ghilzais; ootroi duty and tolls were also charged, though exact information about the rates taken is not forthcoming.

Taxes on marriages (Rs. 10 Kabuli for a virgin and Rs. 5 Kabuli for a widow) and on succession to inheritance (generally  $\frac{1}{10}$ th) were realized in the past and are still common enough in Afghanistan.

Other important features of Durani assessment are summarised below :—

- (a) Inferior irrigated land and unirrigated land was neither measured nor assessed.
- (b) If a village owned only inferior irrigated land, then the area was arbitrarily assumed to be equal to a certain quantity of better land and assessed accordingly.
- (c) Since direct management and realization of kind rent afforded opportunities of great perquisites to the Governor and his staff it was the constant aim of the Durani officials to increase the Crown lands at the expense of the Tawani lands. This was accomplished by putting heavy assessment on inferior Tawani lands which the people were obliged to abandon as an unprofitable bargain, and the people of neighbouring tracts were compelled to plough and sow Crown lands not in possession of any tenant free of wages and the produce thereof was distributed amongst the officers of the State.
- (d) Lands belonging to influential men were excluded from measurement and assessment.
- (e) And though in theory the district was farmed to the Governor for one lakh of rupees and the rates to be realized from the people were fixed, the amount actually realized was limited only by the power and devices of exaction. Every transaction of their daily life was made to yield an advantage, and every Government proceeding had for its object the recovery of more money out of the residents of Kurram. At last in 1877, a year before the Kabul War, universal discontent was prevailing in the valley owing to the common belief that their lands had been measured with chains representing half the avowed length so as to double the land area and consequently the total land tax.

The system of assignments granted by the Duranis will be noticed later on in a separate section.

12. The following brief resumé explains the circumstances which inaugurated the Summary Settlement and the lines on which it was conducted.

#### Summary Settlement.

For the first year of the occupation of the valley it was decided to levy an all-round rate of Rs. 2 British per acre for irrigated and Re. 1 British per acre for unirrigated lands (Proceedings, September 1893, No. 23 A., File No. 28). But in the absence of records to show the amount due by each revenue payer this measure could not be carried out, and the Turis asked for a Summary Settlement, which was sanctioned by the Punjab Government in their telegram No. 136-F., dated 8th August 1893. Work was started on 1st September 1893 under the control and direction of W. R. H. Merk, Esquire, C.S.I., Officer on Special Duty, who reported on the assessment of the valley in his letter No. 303, dated 14th April 1894, to the Commissioner and Superintendent, Peshawar Division. The aim of the operations was to provide correct data for the assessment and collection of land revenue alone. The amount to be collected was fixed as the old Durani revenue redistributed according to qualities of soil and facilities of irrigation. It was settled beforehand that this assessment was to last for 10 years with effect from Rabi 1894 (Proceedings, February 1894, No. 3 A., File No. 8—Commissioner's letter No. 546, dated 19th October 1893). Mr. Merk started ascertaining the correct area of each estate in acres and drawing up a list of owners and occupiers liable for assessment. First of all he reduced the number of mahals from 251 to 153 without reducing the corresponding number of Maliks, with the result that Malika



residing in one village were left to do duty in others far apart, and misunderstandings often arose about areas excluded from the "jam" of one Malik and included in that of another.

His maps were drawn by eye and were not accurate to scale, and for 51 villages they showed the dimensions of fields, but in the rest fields were represented by circular enclosures irrespective of actual shape on the spot. In the field-work area was obtained by multiplying middle length into middle breadth, which always gives a larger area by about 1 to 5 per cent. than that obtained by dividing the fields into triangles. The crops on the fields for the two harvests, Kharif 1893 and Rabi 1894, were noted against those fields in the Field Book for 13 villages completely and for 140 villages incompletely. The quality of the soil was determined in a rough-and-ready method, with the result that the ekfasi area slightly exceeded the dofasi area in the whole valley. Khataunis were prepared and copies given to zamindars, but tenants and mortgagees were shown sparingly, and the status of the cultivators was not defined anywhere. The Bachh statement was prepared as usual and copies were given to the headmen. Another register corresponding to register Malguzari was prepared showing estate, tappa, malik, area tawani and khalsa, mafi and recoverable revenue, &c., but it was called Jamabandi, which was a misnomer. No Shajra Nasab was written up, but only the names of the heads of each tribe were entered in a book. Nor were irrigation customs inquired into, but only a general account of the resources of 37 villages, including brief notes on irrigation, was recorded in vernacular in the same book.

The relations of tributary hamlets in the glens of the Sufed Koh to parent villages lying at the foot, such as Peiwar, Shalozan, Malana, Zeran and Bughakki, were not defined anywhere. In fact nine villages above Bughakki were left out of measurement altogether. As remarked by Mr. Merk and higher authorities in their reviews, these records were not conclusive of rights, as they had been prepared "with a view to collection of revenue rather than to registration of rights."

Having got the area surveyed, Mr. Merk proceeded to settle khalsa lands which had long gone out of cultivation. He reported that he had conferred occupancy rights on tenants of Government lands whom he found in 1892 in possession of over 12 years' standing, but no such entry was made in the records, for in another place Mr. Merk stated that as British law was not in force in Kurram, further records relating to rights were found unnecessary, and that there was no such thing as occupancy tenants in Kurram, as all rents were paid in kind.

After this Mr. Merk proceeded to ascertain the Durani revenue by tappas and then to make reductions where the Durani measurements were ostensibly wrong or heavy diluvion after the Durani measurements had not been allowed for or where land had gone out of cultivation during the interregnum between 1880 and 1892. An examination of Statement B attached to the Summary Settlement Report will show that the Durani revenue was increased by Rs. 414-2-9 Kabuli on account of increase in area or to make up for undue favour shown in assessment by the Duranis. Half of this increase fell on Peiwar alone. But on the other hand a decrease of Rs. 7,018-4-9 Kabuli was allowed from the Durani revenue for the following reasons :—

- (1) Diluvion.
- (2) Unproductive nature of the land.
- (3) Over assessment owing to ill-feeling of Durani Governors or otherwise.
- (4) False Durani Siyahas (Revenue Account book) and false measurements.
- (5) Want of water-supply.
- (6) Depressed condition of the villagers.
- (7) Confusion of Khalsa and Tawani lands.
- (8) Cultivated area fallen waste.
- (9) Closure of Kharlachi Canal.

The resulting revenue was redistributed according to quality of area and facility of irrigation. Excluding the villages on lease, the remaining Tawani villages were grouped into 39 tappas detailed in the Appendix against 29 misqals of the Duranis, and although rates of one tappa differed from those of another, but within each tappa the same rates were applied throughout in fixing the village assessment without further differentiation in view of variations in the capacities of component villages.

The results of the Summary Settlement have been compared below with those of the Durani assessment:—

<i>Durani Assessment.</i>	<i>Summary Settlement.</i>
Total Tawani cultivated area according to measurements of 1894 was 24,869 acres, of which—	
(1) 1,022 acres were left out of assessment by the Duranis.	Mr. Merk did the same, although the Punjab Government in their review did not consider this exemption justifiable.
(2) 5,542 acres were leased for Rs. 6,733 Kabuli.	Mr. Merk kept the same assessment.
(3) (a) Of the remaining 18,305 acres, exclude 802 acres barani not assessed by the Duranis.	The barani Tawani area according to the totals of Settlement records is not 802 acres but 3,564 acres, which was assessed by Mr. Merk to Rs. 1,496 Kabuli, at 6½ annas per acre. This assessment is included in the item (c) below.
(b) Again, exclude 1,081 acres "abi" area not measured by the Duranis, as it was not cultivated at the time of the last Durani measurement.	Mr. Merk assessed Rs. 400-10-0 Kabuli on 878 acres at 7½ annas per acre, leaving 203 acres unassessed for special considerations.
(c) The remaining 16,422 acres according to Mr. Merk, but according to false Durani measurements 26,849 jaribs or 18,677 acres, assessed at Rs. 53,698 Kabuli at Rs. 2 per Kabuli jarib.	Mr. Merk assessed Rs. 46,693-4-0 Kabuli on 16,422 acres, reducing the Durani rent-roll by 2,255 acres in area and by Rs. 7,004-12-0 Kabuli in revenue. This gives an incidence of Re. 1-11-0 per jarib. But if barani revenue not taken into account by the Duranis be excluded from this amount, the incidence per jarib comes out still lower against Rs. 2 per jarib of the Duranis.

As regards khalsa lands, assessment in cash was substituted for that in kind with the addition of 25 per cent. as Malikana. In the cases of a few estates leased by the Duranis for a lump sum in cash the old arrangement was continued. Some of the Crown estates abandoned by tenants during the anarchy in Kurram were colonised again and assessed at progressive rates, which were to be realized in full during a period of one to four years. Taxes on water mills and artisans' shops were maintained as before.

Thus the total assessment of the valley as reported by Mr. Merk amounted to—

	Rs.	A.	P.	
Tawani revenue assessed at differential rates ...	47,098	14	0	Kabuli.
" " leased in lump sum ...	6,733	0	0	Do.
Khalsa land, including Malikana ...	7,672	0	0	Do.
Miscellaneous taxes on mills and shops ...	2,099	0	0	Do.
Total ...	63,597	14	0	Do.
Khalsa revenue assessed at progressive rates, including Malikana ...	3,699	0	0	Do.
GRAND TOTAL ...	67,296	14	0	Do.

Grants of assignments based mainly on the principles of Durani assignments have been discussed later on in a separate section.

The Settlement operations closed in July 1894. Measurements and records were finished by April 1894, and the announcement of village revenue and distribution of assessment were carried on under Mr. J. S. Donald, C.I.E., from May to July 1894.

Objections against the assessment were filed only by two villages—Shalozan and Zeran. The objection of the former was rejected, although the officers were of opinion that there was some truth in the complaint that the Afghan Governor had put an extra burden on the people out of spite. In the latter village the assessment by differential rates was converted into that by “bakhra” or shares, causing a reduction of Rs. 163-5-3 Kabuli in the total demand. Further, Mr. Donald in announcing Mr. Merk’s assessment found that with regard to actual area under assessment a reduction of Rs. 405 Kabuli was called for, and accordingly he reduced the total demand by that amount. Next year on the application of the Government tenants in Shalozan the revenue was redistributed over good and bad land, but no reduction was made in the assessment.

This Settlement was sanctioned for ten years. Some of the principle features of the Summary Settlement not noticed before are summarised below :—

- (1) The principle that no area should be assessed to land revenue which had not paid any revenue in the Durani times was not uniformly observed. For, as shown before, 3,564 acres of barani and 878 acres of abi land belonging to ordinary agriculturists were brought under assessment, whereas 1,022 acres of land the property of influential men were given the benefit of old exemption.
- (2) The principle that the Durani demand was to be the standard of assessment was departed from by lowering the assessment proposed considerably below the assessment of the Duranis. If the sum of Rs. 1,896-10-0 Kabuli imposed on area not assessed by the Duranis be excluded from the assessment proposed, then against the Durani revenue on Tawani land Mr. Merk’s assessment on the same area would show a falling-off of Rs. 8,501 Kabuli, thereby reducing the incidence still lower than Re. 1-11-0 Kabuli per jarib against the Durani rate of Rs. 2 Kabuli per jarib.
- (3) Newly colonised Crown lands with progressive rates were assessed more heavily than those assessed at full rates at the very commencement. The proportion of the incidence per acre of the former to the latter was 5 : 3, notwithstanding the fact that the former laboured under the disadvantages of expense of reclamation, rebuilding of villages, re-opening of old cuts, and attracting cultivators from a distance.
- (4) Progressive assessment expected to yield a revenue of Rs. 3,699 Kabuli, including Malikana, in four years up to 1897-98 did not result in an enhancement of more than Rs. 1,566 Kabuli in the total demand. The balance of Rs. 2,183 Kabuli has contrary to expectations been so far a loss to the Government.
- (5) Water mills were assessed at a uniform rate of Rs. 3-8-0 Kabuli each, shops for sale of supplies were taxed at Rs. 2-8-0 Kabuli each, and the artisans’ shops at Rs. 3 Kabuli each. No regard whatever was paid to differences in the capacities of the mills or the income of the shops.
- (6) The whole revenue demand was divided over two instalments— $\frac{2}{3}$  for kharif and  $\frac{1}{3}$  for rabi.
- (7) The revenue rates fixed by Mr. Merk were :—
 

12 annas	to Rs. 4-0-0 Kabuli per acre for	dofasli area.
3 . .	to „ 3-4-0 do. do. do.	ekfasli „
Re. 1, Kabuli	to „ 6-0-0 do. do. do.	garden land.
2 annas	to „ 3-0-0 do. do. do.	barani . .



Thus taken on the whole this Summary Settlement was lenient to the Turis, not only in the fact that they were relieved of many miscellaneous exactions of the Duranis, but also because of Mr. Merk's demand being much lower in incidence and amount as compared with the Duranis.

### 13. The Summary Settlement with its light demand and liberal assign-

Working of the Summary Settlement.

ments amounting to nearly one-third of the total assessment which was introduced with effect from Rabi 1894 had an auspicious beginning. The Lieutenant-Governor of the Punjab visited the valley in the spring of 1894, and as a mark of his appreciation of the good conduct of the Turis since the appointment of a British Governor in 1892 granted them a remission of 4 annas in the rupee from the demand of the spring harvest. The construction of the Fort at Parachinar gave the people an idea of the stability of the British possession, and they thought that this time the British Officer had not occupied the valley to leave it again as in 1887. Consequently the country soon showed signs of active development following a settled administration. Houses at head-quarters and a decent bazar soon sprung into existence. The people in Lower Kurram who had fled from the villages, leaving them as charred ruins, returned to change them into peaceful habitations. Bridle roads connecting villages and posts on the border were constructed, and the Kurram-Afghan boundary was demarcated in November 1894. The scheme of the Parachinar water-works was carried out in 1896. New hamlets were built up and disused canals were improved. In fact, on reading through the Annual Administration Reports one finds, with two or three exceptions, accounts of growing trade and continued peace and prosperity. There was hardly a year in which new hamlets were not built or water channels not constructed. Large areas belonging to Government were reclaimed and irrigation cuts extended to them, especially in the time of Mr. Hastings. Seasonable years resulted in good crops, and brisk export trade of grain, which was a prominent feature of the years 1896-97 to 1901-02, brought in large returns of income from sale of surplus produce. The loyal services of the Turis in the Tirah Expedition were further acknowledged by another remission of 4 annas in the rupee in the year 1898-99, and the establishment of order and peace in the valley was favourably noticed by the Secretary of State for India in Council in his review of the report for 1897-98. The grazing rights in some submontane villages were amicably settled in 1895-96 and 1896-97, and arrangements for timber conservancy were made in 1897-98 and 1899-1900. Proposals to reclaim the Shabak plain, the wastes at Kakrai Mela, Shaikh Mulla Ragha below Sadda and Sharkhai close to Wali China, and the central waste plateau in Upper Kurram were broached, but laid aside for the time. Tolls were abolished in 1902-03 and grazing dues on Ghilzai cattle were substituted instead. The system of investing the property of minors on interest on the lines of the Court of Wards was introduced, and schools were established in which instruction to Turi youths was imparted not only free of tuition fees, but even books were supplied at Government expense. A census of the whole valley was taken, and questions of developing fruit trade and general improvement in arboriculture were considered. The valley was opened to wheeled traffic in 1893, and recently a survey has been made for the railway. Thus with the diminution of lawlessness and the adaptation of the Pathan mind to the British ways of Government, the standard of living and comfort has improved, and everywhere a distinct advance in civilization is noticeable.

But while the valley has gradually emerged from misrule into a settled administration and has increased in prosperity, the value of the Kabuli rupee, in which the revenue of Kurram following the precedent of the Duranis had been assessed, has gone on falling in its exchange value. This has adversely affected the interests of the Government, although to the Turis it has made the light assessment of Mr. Merk still more light in its incidence. At the time of the Summary Settlement the Kabuli rupee was valued at 12½ annas in British coin, but from 1896 to 1898 it went down to 12 annas, and again from 1898 to 1903 lower still to 10 annas. For the past two years two Kabuli rupees are taken as equivalent to one British rupee. Thus the depreciation in value during the last ten years amounts to 37 per cent. Hence it is not to be

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wondered at that the revenue demand as stated in the various Administration Reports was collected with considerable facility.

Since the Summary Settlement the revenue records have not been properly kept, as neither crops were periodically inspected nor were changes in rights at any time brought up to date.

The only revenue operations carried on from year to year consisted of diluvion in riverain estates, annual assessment of Crown lands according to existing cultivation, and preparation of suspension and remission statements for damage done by calamities of the season. The Bachh statement given to zamindars at Settlement was, excepting for Crown and diluvion area, never revised thereafter, and many of the statements prescribed in paragraph 20 of Mr. Merk's Settlement Report were neither prepared nor submitted for years. Hence it is almost a hopeless task to start with the figures of the Summary Settlement and follow the changes in the 'Tauzi, chiefly with reference to collections and balances in subsequent years both in the vernacular records and the English files. After noticing discrepancies for which plausible explanations were forthcoming, which on closer scrutiny had to be rejected later on, I have given up the attempt as futile, and have contented myself with noting the leading features of the rent-roll and repeating both sets of figures in a few cases in the Appendix :—

- (1) The total assessment given in Mr. Merk's report does not agree with that quoted in the first rent-roll and in the Tahsildar's abstract respectively.
- (2) The figures relating to the Tawani demand of a couple of years after the Settlement do not agree in the rent-roll and the Tahsildar's abstract. Similarly in respect of the Khalsa demand the anomaly is that the Malikana for some years has been increasing while the total revenue has been steadily falling off.
- (3) The Malikana, which should have been 25 per cent. of the revenue on Crown villages, is much below that standard, and considerably below the amount noted in Mr. Merk's report.
- (4) More than half of the progressive assessment stated in paragraph 15 of Mr. Merk's report as likely to accrue in full up to 1897-98 is not accounted for in any subsequent record.
- (5) Mafis amounting to Rs. 305 Kabuli seem to have been struck off the rent-roll out of assessment on Crown lands without reference to Government.

The figures for suspension and remission and alluvion and diluvion pretty nearly agree in all statements, and it appears from them that both classes of inspection entail heavy work upon the Revenue Officers of the valley. With the exception of two years in the first quinquennium of the administration the increase by alluvion has always exceeded the decrease by diluvion by a considerable amount, which discloses a tendency to assess every bit of area immediately it is thrown out of the bed and scratched up by the plough before it has had time to form into a remunerative soil. Under such conditions of reclaimed area the landlords themselves absolve their tenants from all responsibilities of rent for three years, and it would be only fair to them to defer the assessment for the same period, to allow their profits to rise above the margin of cultivation.

The diluvion work lies all along the river line, and but very little of it in the Daman or Sahra circles.

The damage by hailstones, which occurs more or less every year, is chiefly confined to the cultivated belt running all round the oval undulating plain from Sultan to Peiwar. One month before and one month after the snow season, it does not hail, and only showers of congealed vapours equal to small grains in size (called brinj-i-koh—lit. rice of the hill) are often received, but do not do any harm. The hailstorms are generally apprehended in the months of April, May, August and September, but the greatest damage is done in the months of May



and September, when the crops are about to be harvested and the fruits are either in flower or ripening. The waves of hailstones pass in narrow belts over all the three circles in the open plateau from the Sufed Koh down to the Kurram River, but do more damage in the Daman than elsewhere, though statistics lead to the contrary inference that destruction of crops is greater in the Rodghara Circle. On examination by villages one finds that in parts the whole of the valley has been exposed to damage one time or other.

Remission due to damage from drought has since last Settlement amounted only to Rs. 92 British.

As regards the closure of the Kharlachi Canal referred to as one of the Turi grievances in paragraph 10 of Mr. Merk's note on Kurram administration, the Governor of Khost had made promises in 1895-96 to let on the water-supply for the irrigation of Kurram lands, but in pursuance of some dog-in-the-manger policy he retracted his promises again in 1898-99. A reduction of Rs. 776 Kabuli had to be given under this head.

The demand in the rent-roll of 1904-05 is Rs. 31,435 British, exclusive of Malikana and Jezia, or 34.3 per cent. less than that of 1893-94, chiefly owing to the fall in the exchange value of the Kabuli rupee. The outstanding balances of past years, which have never been heavy, have all been cleared off.

Proper arrangements in accordance with the Revenue Commissioner's instructions will now be made for the maintenance of records and submission of returns which will ensure accuracy in the statements of account of demand and collection of revenue, and will enable controlling authorities to exercise efficient check upon them.

14. Under the Durani Government grants of assignments and other marks of distinction were made not on any principle but depended to a greater measure on the caprice or discretion of individual Governors. Each Governor, or Hakim of the valley as he was called, to carry out the administration according to his views, selected his own party and bestowed on them favours in proportion to the degree of their usefulness to his interests. Besides, the local officers to serve their own ends took advantage of the factious spirit which was running very high amongst the Turis and Bangashes, and fomented it by playing one influential man against the other. Thus, owing to want of continuity in the system of grants, with the change of different Governors different families in turns rose and fell in importance, so that by the time Captains Egerton and Leigh in succession visited the valley in 1885 there was hardly any man of position or influence amongst the different parties or factions who in the time of some Governor or other had not succeeded in obtaining a document in support of his pretensions. The British Officer on his arrival was surrounded by a host of claimants from whom it was very perplexing to distinguish the meritorious from the impostors. Captains Egerton and Leigh, considering the times, avoided a general inquiry on merits which might have had a disturbing effect on an already disunited community, and, in order to make a start, adopted the plainest course of settling existing claims by recognizing the last recipients of Durani grants and promised further consideration some time after to the rest. But some of the firebrands discontented by their exclusion from the list of assignments or meagre recognition disproportionate to their supposed importance again stirred up the elements of discord and mutual jealousy, so that owing to local opposition the efforts of the British Officers towards organizing a system of administration collapsed and the people had to be left to themselves in 1887. Five years after, when Mr. Merk joined his appointment with the powers of the first Turi Governor, he had to contend with similar difficulties in deciding conflicting claims to grants of assignments. At last, finding that a prior decision left in writing with the impress of time upon it prevailed over the Turis much more than any brand new settlement, he declared to the people that he could not go against the notes and entries left by his British predecessors, which must form the ground-work of the lists of assignments of his time and suggested to the numerous claimants upon the strength of Durani

sanads to ask for redress of their grievances, at the revision of the next Settlement. Consequently the office of the Political Agent has been flooded with applications, which are being inquired into.

The main principles and the nature of assignments granted in Mr. Merk's time are summarised below :—

Amongst the four kinds of assignments sanctioned the inams may be mentioned first. These annual grants in cash were the official marks of the respectability and position of families, and therefore considered more or less hereditary. The recipients themselves or their ancestors or collateral relatives had enjoyed such inams under the Durani rule. With the change in the policy of different Governors the amount and the tenure of these grants was uncertain and varied arbitrarily, but some member or other of the inam-holding family was always selected for the grant, and the principle of family heredity was never lost sight of. For these reasons, and for the political consideration of keeping "weight, power and influence of Kurram" on the side of the Government in a narrow strip of country, with Yaghistan on one side and Afghanistan on the other, Mr. Merk recommended that these grants should not be resumed but continued even after the life of the present holders to relations not removed further than four degrees from the common ancestors. Owing to greater certainty of tenure and payment under British than under Durani Governors these inams were fixed on a lower scale than the average Durani inams, and sanads were given conferring the grants for life. Thus it will be seen that, notwithstanding the hereditary nature of these grants, none of the recipients was given an interest longer than his lifetime.

Mr. Merk did not recommend any inam on the strength of Durani chits alone. First of all he adopted in a body the amounts entered in the register by Captain Egerton in 1885. Next written sanads granted by Captains Egerton and Leigh, which by oversight had been left out of the register, were also accepted. Lastly, Mr. Merk proposed additions for services rendered to his predecessors, which had remained unacknowledged, for certain important families inadvertently omitted in 1885, and for conspicuous services done since the occupation of the valley in 1892.

The total amount sanctioned under this head was Rs. 12,585-8-0 Kabuli. After the Settlement two inams more of Rs. 22 Kabuli were allowed, and another of Rs. 60 Kabuli was converted into a mafi. The total amount of inam to individuals at present stands at Rs. 12,547-8-0 Kabuli.

A sum of Rs. 740 Kabuli was allotted to temples, shrines, mosques of the Sunnis, and mourning houses of the Shiahhs. One grant of Rs. 5 was sanctioned after the Settlement, bringing the total amount to Rs. 745 Kabuli.

The next important grant is muajibs, which are paid month by month to almost a dozen influential men, who have hitherto had some share in the loaves and fishes of Kurram, and whom it is now desirable to conciliate. These allowances were personal, granted as a matter of favour for life, subject to good service and loyalty. They represent concessions to persons who used to take a share in the administration of the valley, but under the British management were no longer called upon to assume as much responsibility of actual work, nor to expose themselves to as much risk and expense as they did in Durani times. Considering this, as well as the fact that all these muajib holders also held inams and some of their relatives held posts in the Militia, these allowances, like inams, were awarded on a reduced scale. The total grant under this head amounts to Rs. 5,160 Kabuli.

Thirdly, revenue-free grants of land were given to—

	<i>Acres.</i>	<i>Revenue.</i>
(a) leading men for assistance during the Settlement and elsewhere ..	325	Rs. 1,081 Kabuli.
(b) and at the instance of the people in petty sums to Sayads, shrines and sacred tombs ... ..	67	„ 178
Total ..	392	„ 1,259

Wrongly mentioned as Rs. 1,001 in Mr. Merk's Settlement Report.

It was reported that the second item of Rs. 178 Kabuli had with the consent of the people been spread over other revenue paying lands, thus causing no loss of revenue, but as a matter of fact this amount was deducted from the revenue, as was pointed out by the Commissioner in his review.

Like the cash inams, Mr. Merk recommended the observance of succession on hereditary principle in the case of revenue-free grants also.

After the Settlement one inam was converted into mafi as mentioned before, and the Crown village of Maidani colonised in 1898 was left unassessed till the present Settlement.

Another remission of Rs. 59 Kabuli not mentioned in the last Settlement Report was granted to certain water mills. And lastly, owing to their exposed position on the border, a frontier remission to the extent of Rs. 44 Kabuli was given to the two villages of Burki and Kharlachi.

Thus assignments of all kinds in the Summary Settlement amounted to Rs. 19,847-8-0 Kabuli and represented about 30 per cent. of the total assessment, Rs. 67,296-14-0 Kabuli (including progressive assessment and Malikana).

The total grants under the same heads ten years after amounted to Rs. 20,284 Kabuli, including Rs. 27 Kabuli additional assignments sanctioned by the Government, and the rest bestowed by Political Agents from time to time without reference to Government.

The assignments under different heads sanctioned up to the term of the Settlement as well as those enjoyed so far without such sanction are all at present undergoing revision, and will be reported with the result and reasons for change in the form of a separate register.

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## PART III.

### GENERAL STATISTICS.

15. Under the orders of the Government of India sanctioning the re-assessment of this valley, conveyed in their letter No. 2639-F. A., dated 9th September 1903, from the Deputy Secretary in the Foreign Department, to the Chief Commissioner, North-West Frontier Province, the scope of the present Settlement has been confined to the cultivated area only, which has been held to include culturable waste lying about or in the midst of cultivated fields.

According to re-measurements the total cultivated area of the valley amounts to 37,498 acres or 58·6 square miles, of which 92·7 per cent. is irrigated and 7·3 per cent. unirrigated. The distribution of cultivated area by classes of soils in various circles has been shown below :—

	<i>Daman.</i>	<i>Sakra.</i>	<i>Rodghara.</i>	<i>Total.</i>	
Total in acres	16,022	3,279	18,197	37,498	
Chashmai dofasli	56·6	...	13·8	30·8	} 92·7
"    ekfasli	38·2	58·5	6·0	24·4	
Abi dofasli	...	...	57·5	27·9	
"    ekfasli	...	...	19·8	9·6	
Barani	5·2	41·5	2·9	7·3	
	100	100	100	100	

Of the total irrigated area forming 92·7 per cent. of the total cultivated area, 55·2 per cent. is supported by springs and snow water and the rest by the river, and is divided between the different circles as follows :—

<i>Daman.</i>	<i>Sakra.</i>	<i>Rodghara.</i>
40·5	5·1	47·1

That is to say a little more than half of the irrigated area lies along the river, and about two-thirds of it is supported by springs and snow water.

On comparison with the figures of the last Settlement the area now

1. Nawi Koh Mangal.	measured, including culturable waste,
2. Raju Mela	is found to be 39·5 per cent. in excess.
3. Shah Nasir Mela.	The increase under cultivated area alone
4. Dhanl	is 29·7 per cent. This accords with actual
5. Bulladuk.	facts as twelve* villages at the last
6. Kanku	Settlement were neither measured nor
7. Daralar	assessed, and three† more, though
8. Tamber.	assessed, had not been measured at all.
9. Uchdara	Besides scattered blocks reclaimed here
10. Khusida	and there five‡ Crown villages not in-
11. Karahinat.	cluded in the above account have been
12. Satin.	colonised since the last Settlement. In
1. Mata Sangar.	fact the increase in cultivated area is
2. Ghoghra.	much higher than 29·7, as rough mea-
3. Srigurga	surements at the last Settlement worked
1. Wali China.	
2. Maidani.	
3. Ahmadi Shama.	
4. Chapra	
5. Khapianga.	

out by multiplying the mean of the opposite sides of the fields gave a much larger area than that obtained by the triangulation system.

Moreover, real improvement is not to be looked for in increase in area, but in the quality of the soil. At the last Settlement dofasli area was slightly



less than the ekfasli area, but now it is about twice as much. The following table explains the development that has occurred in each circle since the last Settlement :—

Circle.	Year.	Chash-mai dofasli.	Chash-mai ekfasli.	Abi dofasli.	Abi ekfasli.	Barani.	Total cultivat- ed.	Cultur- able waste.	Grand Total.
Daman	1893-94	...	...	4,438	6,745	2,021	13,204	1,150	14,354
	1904-05	9,062	6,119	...	...	841	16,022	2,806	18,828
Sahra	1893-94	...	...	...	540	1,983	2,523	54	2,577
	1904-05	...	1,919	...	...	1,360	3,279	830	4,148
Rodghara	1893-94	...	...	6,677	5,974	529	13,180	1,226	14,406
	1904-05	2,509	1,097	10,469	8,599	523	18,197	2,552	20,749

The irrigated area in the Sahra Circle has almost quadrupled, and the dofasli cultivation in the Rodghara and Daman Circles is almost double and more than double the area at last Settlement respectively. Culturable waste includes irrigated area thrown out of cultivation by the closure of the Lewanai Canal as well as that lying on the outer fringe of the Daman villages of Malana, Zeran and Shalozan, which, being at the tail end of the water-supply, is cultivated once in 3 or 4 years.

16. In old times the fighting strength of Kurram, half of which was contributed by the Turis, was popularly known as "Dwalas Zar" or 12,000 men. The first census of the valley was carried out in 1901, according to which the total population amounted to 54,257 souls, including 220 Ghilzais, 801 men of the regular force, and 1,019 of the Kurram Militia. But this result does not agree with the detail by tribes given in Table XIII, page CXVI, Part II, of the Census Report, and shows an excess of 2,287 persons over the latter figures. Nor is the arrangement into sections of the various tribes very correct. Excluding the nomadic Ghilzais and the urban population from the figures of Table I, which have been adopted in Political records for distribution by villages, there remain 52,217 persons who constitute the rural population, and are almost entirely devoted to agricultural pursuits.

As regards the urban population, there is no town in the Kurram Valley, and over two-thirds of the local Militia sepoys are drawn from the agriculturists, with whom they must be counted, as they live upon the produce of the land and use their income from service as a miscellaneous profit. This gives a pressure of 900 agriculturists per square mile of cultivated area against 883 in Tochi, 514 in Kohat Tahsil, 778 in Hangu Tahsil, and 453·4 average for the Province. Thus the density of agricultural population in this valley is the heaviest in the Province.

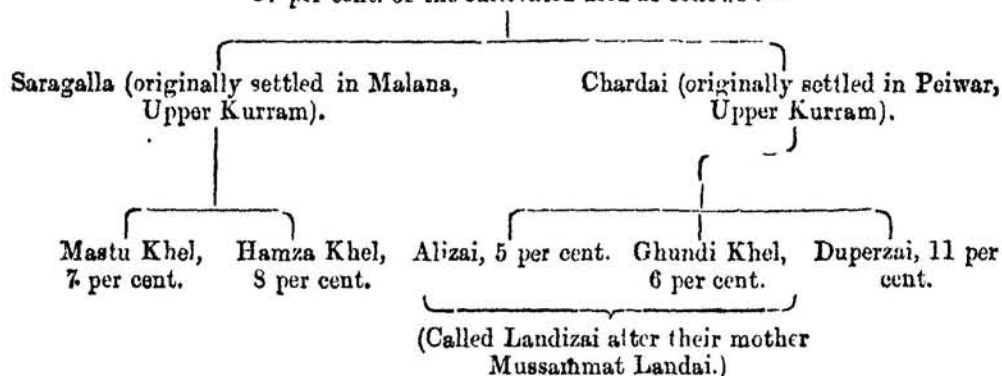
The principal land-holding tribes and the extent of their possessions have been shown below :—

Turis	...	...	13,745	acres cultivated or 87 per cent.
Bangashes	...	...	6,920	ditto 19 "
Sayads	...	...	4,529	ditto 21 "
Afghan tribes domiciled in Kurram	...	...	798	ditto 2 "
Orakzais	...	...	1,165	ditto 3 "
Zaimushts	...	...	1,235	ditto 3 "
Para Chamkannis	...	...	990	ditto 3 "
Hindus	...	...	530	ditto 2 "
Others	...	...	2,288	ditto 6 "

The remaining 5,330 acres or 14 per cent. of the total cultivation is held by the Crown.

It is interesting to note how the distribution of land amongst the various sections of Turis accords with their numerical strength and shares by inheritance. The following genealogical tree explains the division of the tribe into five main groups :—

Turis are called Panj Plara, and are divided into five clans, which hold 37 per cent. of the cultivated area as follows :—



Mr. Plowden's notes of 1878 show that the fighting strength of the Saragalla and Chardai sections was estimated in the proportion of 5 to 7, which is also the proportion governing their respective possessions at present. The division of the country between the Chardai section was evidently done by Chunda Wand on according to the number of wives. The Duperzai section by one mother took half and the Landizai by another mother appropriated the remaining half of the area. The partition amongst the respective clans of Saragalla and Landizai seems to have been in almost equal shares. Not only in their possessions, but also in numerical strength, the Alzai Turis are the smallest of all brothers, as a majority of them are said to have been surprised and killed in a night attack at Koshar in Safdar Sahra Killa. The Turis are all Shiah. The Sayads, who are also Shiah, are divided into four branches—Fakhr-i-alam Kaul of Kirman, Mir Ibrahim Kaul of Ahmadzai, Sayad Ishaq family of Mahura, and Lala Gul Kaul of Kharlachi. The first two are the Sayads of the Saragalla branch and the remaining two of the Chardai branch. One branch of the Fakhr-i-alam section living in Shakardarra is headed by Mir Akbar Mian, Tirahi, whose followers are designated Mian Murids or the "Ting" Gundi or firm faction. The other three families of Sayads, together with the remaining sections of Fakhr-i-alam, constitute what is called the "triad" or Drewandi group, whose followers are known by the same name, and on account of disunion amongst them are called "Sust" Gundi or loose faction. These later schisms, based on differences amongst and kept up by the teachings of respective religious heads, exist in an acute stage, and have eclipsed the old factions of Gar and Samil and Spin or Tor Gund.

The Bangashes are mainly Shiah, but the parties on the river in Tappas Bushahra and Bilayamin are Sunnis.

The valley is mainly owned by the Turis, Bangashes, Government and the Sayads. The Afghan tribes domiciled in Kurram, such as Mangal, Muqbil and Kharoti, &c., hold the slopes of the hills, and the same is the case with the Para Chamkannis. All of them are Sunnis, serve as buffer clans, and were settled long ago for purposes of defence against foreign aggression. The Orakzais and Zaimushts, also Sunnis, own equal area, and seem to have taken possession of the country in Lower Kurram, first as tenants, and latterly, during internecine wars amongst the Turis, by force. The Hindus form a very small minority, and, unlike those in Northern India, can hardly hold their own against other races.

17. Cut off from the neighbouring tribes by lofty hills, but much more by difference in religion and with a natural horror for the hot weather of the

Character of the people.

down country, the Turis had come to acquire an insular character. Always thrown on their own resources and under the constant necessity of defending themselves against foreign attacks, they had developed in them a martial instinct, and when not fighting amongst themselves, which was unfortunately too often the case, they would successfully keep up a guerrilla warfare with the surrounding clans. The Turis have always been a hardy race, strong and courageous. They make very superior horsemen, and used to do a great deal of 'moss-trooping' in old times. Dressed in their striped blanket garments and mounted on small enduring horses with wallets containing food for man and beast and an iron peg and rope to picket the horse in a moment anywhere chance or accident might carry their raids, like those of the Mahrattas, they were the terror of their neighbours far and near. In the beginning they led a nomadic and pastoral life, and, notwithstanding the settled administration of the past ten years, some of the clans (mostly the Saragalla section and a few Duperzais) still maintain their old habits. Those who live in tents made of blanket or matting and spend the summer in Upper Kurram, but move down in winter to the pastures of the Shabak and Zaraki Kamar plains in Lower Kurram, are called "Kuchis," whereas the rest, who have settled in hamlets built of mud, are known as "Kothis." Each hamlet, with a tower in the middle and chinara trees all round, goes by the name of its possessor at the time and not by that of the founder. The sense of individuality is so strong that they take offence if the hamlet is called after some ancestor and not after its present occupant. And the democratic feeling is so intense that in the community there is no class recognized as "Khani Khels" or aristocratic, although in old times each clan had some family or other as its Chief or "Sarrishta," in whom was vested the power of collecting levies for war and other executive management. This chieftainship passed from one family to another according to its influence and importance at the time.

The following families are generally accepted to have acted as "Sarrishta" in the past :—

<i>Clan.</i>	<i>Sarrishta family.</i>
Ghundi Khel	.. Alam Khel.
Alizai ...	.. Khoedad Khel.
Duperzai	.. Jaffir Khel.
Hamza Khel	.. Janak Khel.
Mastu Khel.	... Feroz Khel.

Their pride of belonging to a warrior caste prevents them from taking to an industrial or commercial line, and hence they sneer at the Bangashes of Zeran for selling milk in the Parachinar Bazar.

A bountiful nature has stocked the valley with plenty of gardens, and the lands made fertile by the river and the springs yield an easy living. Hence the Turis—rightly called the spoilt children of the frontier—partly by their training and partly by the richness of their resources are not fitted to make good agriculturists, and always prefer the sword to the sickle. They would not work the soil into fine condition, but would impatiently leave it into coarse globules, letting the snow or water break or soften it. The Turi is seldom seen ploughing in the sun, although he never misses his afternoon siesta. Content with the produce obtained without much ado, he shirks the labour of making improvements by trying new varieties for which the soil is eminently fitted, and follows the system of agriculture which has been handed down to him by his forefathers. By nature he is very hospitable, and the fidelity of the Turi badragga (escort for safety) is proverbial.

The Turis have not got servile manners about them, and meet the British Officers with a cordial frankness, as they regard them the Governors of their choice. And the fact of some Byzantine Christians having fallen on their side in the battle of Kerbela gives a religious touch to their devotion to the British Government. They make very pleasant companions in society or at a hunting-party, and always appreciate good treatment.

In business matters they display uncommon shrewdness and are generally intelligent above the average. They readily obey authority, and are



contented so long as the balance of power is maintained amongst the different parties. Any undue leaning to one side or the other is resented by open hostile criticism. They are very fond of waiting upon officers, and always like to be associated in judicial inquiries.

Their failings are that they are the greatest "Banias," with a constant longing to get something out of officers on each interview. They are eaten up to the core by bitter party feeling, and consequently when questioned in Court in any case they utter the most unblushing lies. It is very difficult to get to the bottom of the truth in any case, as every dispute is made a party question in the village, and two versions are always forthcoming to each story. The leaders of factions of one village combine with those of the neighbouring village according to their interests, and the system extends from place to place, until strong coalitions for purposes offensive and defensive are formed. Such bands of mutual alliance, one working against the other, are commonly met with in official dealings, and are at the bottom of all intrigue in the valley.

They are lavish of expenditure on marriages and in bribing the jirgas. They are very vindictive in feuds, always keeping an account of the number of killed men on each side.

The aim in life of every Turi is to marry the woman he loves, to murder the enemy he hates, to play the swell as a Malik, collect money by corruption, and then to wash off his sins by a pilgrimage to Kerbela.

So far they have proved devoted adherents of the Government, and have given a good account of themselves in the Tirah Expedition.

The Bangashes are fairer than the Turis, whose dark complexion is said to mark their Eastern origin. But enervated by a damp climate they are somewhat lazy, and, though fairly good soldiers, do not make equally good agriculturists. The Bakar Khels amongst them are superior in status to the rest, and have had relationship with the Amir of Afghanistan. The Sayads, it is noted with regret, instead of proving a blessing, have, with some honourable exceptions, turned out a curse to this valley. With a view to increase the importance of their respective followings they take improper advantage of the blind adherence of their disciples, and always keep fomenting the hatred of one sect to the other. Instead of looking after their spiritual welfare they try to secure temporal benefits to them by making recommendations with the ultimate object of extending their influence to wider circles. The Turis are all Shiahs, and the difference between the Mian Murids and the DREWANDIS is not due to any divergence of beliefs and tenets, but is virtually the difference between their religious leaders, who for selfish ends have kept the whole valley enslaved in the bondage of ignorant superstition and bitter antagonism. They make the worst agriculturists, as they leave their lands to their tenants and engage themselves in persuading their disciples on a sick bed or at war with their relations to secure peace and blessing in heaven by offering some plot of land to their spiritual benefactors. Thus the Sayads, instead of keeping an eye on the souls of their followers, keep an eye on their lands, and this has been the source of endless litigation between these spiritual advisers and the reversioners of land-owners. The Afghan settlers on the slopes of the hills in this valley—Mangals, Muqbils, Kharotis, &c.—make the best agriculturists, and inured to the privations of an extremely cold climate they constitute a sturdy race of hill men. The Orakzais and Zaimushts are average cultivators, but the Para Chamkanis come last of all.

18. Service in the Kurram Militia is the only employment under the Government which has been available so far to the people of this valley, who form 8 out of 12 companies, or two-thirds of the strength of that force. The figures supplied by the Kurram Militia Office show that, counting Native Officers together with the rank and file, a sum of about Rs. 1,22,988 is distributed every year over 985 men of this valley, which is almost four times the existing land revenue. The income from this source has been arranged below by circles, from which it will appear that the bulk of this profit enriches the people



of the Daman Circle, and within it of four villages—Zeran, Malana, Shalozan and, Peiwar—principally. The mounted sowars mostly come from Malana.

	<i>Number of men.</i>	<i>Pay in British money.</i>	
			<i>Rs.</i>
Daman Circle ...	692	7,456	} Total number of men 935, and total pay Rs. 10,249 per mensem.
Sahra „ ...	77	767	
Rodghara „ ...	166	2,026	

The local members of the Militia get their provisions from home and save their emoluments to serve as ready cash for emergencies.

During this Settlement some of the Turi school boys were put through a course of Settlement training as paid apprentices, and after testing their qualifications in a Patwari's examination, it is intended to provide them with appointments in cases of proved fitness.

19. Although this Agency cannot boast of any metalled communication, a fairly broad unmetalled road of fine gravel runs right through the middle of the valley from Thal to Peiwar for a distance of 71 miles. It is open to wheeled traffic and tonga service as far as Parachinar, and has been bridged over the Khurmana stream near Sadda. A second bridge over the Kirman stream is nearing completion. Excepting the three ravines between Parachinar and Peiwar there are no other big torrents to block the passage of the traffic throughout the entire length of the road, which was further improved in 1904 at a cost of Rs. 12,500. Proposals to convert it into a metalled road are under consideration.

During its course through the Lower Kurram as far up as Sultan this unmetalled road skirts along cultivation, and villages on either side of it are within easy reach. In Upper Kurram the following off-shoots from this road connect the outlying villages and the border posts :—

- |   |               |
|---|---------------|
| (1) Parachinar to Kharlachi <i>via</i> Nasti Kot ...    | .. 11½ miles. |
| (2) Parachinar to Lakka Tiga <i>via</i> Ahmadzai ...    | .. 23 „       |
| (3) Peiwar to Kharlachi ...                             | .. 7½ „       |
| (4) Parachinar to Uchdarra Post <i>via</i> Alamsher ... | .. 11 „       |

All these and a few others (Arawali to Lakka Tiga, Mirjamal to Uchdarra, and Hassan Ali Killi to Shakardarra) are maintained by the Public Works Department.

Of the village roads, the one that starts from Nasti Kot and branches off at Ahmadzai into two—one running to Firoz Khel and the other to Sultan—brings into connection all the river villages in Upper Kurram in one line. Another old road from Ahmadzai to Peiwar traverses through the heart of the Sahra tract.

Other important village roads deserving of mention are :—

- (1) Parachinar to Dandar.
- (2) Kunj Alizai to Taida.
- (3) Parachinar to Bughakki.
- (4) Shalozan to Yardeb.
- (5) Ghamkot to Shabak.

Many bridle paths besides run over the hills and through the defiles to the Amir's and independent territories. There are no important markets nor established commercial centres in the valley. The bazar at the headquarters supplies the requirements of the Civil and the Militia employees, but does not serve as an emporium for the sale of agricultural produce. Extensive dealings, however, take place among the villagers themselves and with the

people of independent tribes and a few villages of the Kohat District; and for such rural trade which is carried on on pack animals abundant facilities exist in the way of communications. As a rule trade is very brisk in winter, as caravans of Ghilzais from Afghanistan come down in the valley in large numbers in the months of November and December and make considerable purchases of grain. Amongst the people of this valley those who have got enough and to spare generally look forward to this period for the disposal of their stores.

There is a British post at Thal where trade with Kabul and Kurram is registered.

The statistics for the last five years taken from the reports of the Kohat District are shown below :—

EXPORTS IN RUPEES.				IMPORTS IN RUPEES.						
Year.	Rice.	Raw mazri.	Hides and skins.	Piece-goods, European.	Piece-goods, Indian.	Salt.	Sugar refined.	Sugar unrefined.	Soap.	Tea, Indian.
1900-01 ..	1,931	...	17,807	59,950	32,256	6,114	3,528	5,687	2,119	..
1901-02 ...	6,192	.	19,092	87,200	40,760	10,866	4,914	6,135	1,620	..
1902-03 ...	756	...	11,632	51,689	29,980	3,468	1,897	3,509	1,008	..
1903-04 ...	14,362	850	55,756	2,86,880	1,33,360	31,512	19,395	15,2-2	9,431	3,755
1904-05 .	13,552	10,703	32,604	3,74,740	2,11,185	22,531	19,090	16,877	14,478	3,720

Separate figures for the valley are not available, but of the articles of local produce rice, hides and skins, and mazri are chiefly exported. Amongst imports from down country consumed here may be mentioned piece-goods, both European and Indian, lungis, tea, salt, sugar refined and unrefined. Traders from Ghazni, Herat and Afghanistan enter this valley by three principal routes,—Peiwar Kotal, Kharlachi and Wali China,—and import horses, goats and sheep, carpets, fruits, ghi and asafetida, most of which are conveyed to the markets of Northern India. On their way back in the month of March the Ghilzais carry home piece-goods, both European and Indian, soap and refined sugar, but very little of Kurram produce is imported into Afghanistan.

There exists an ootroi post at Parachinar, and the Amir has got a post on the border above Burki, where custom duty is levied.

The valley is self-supporting and can always spare more or less rice for export. It is only in years of scarcity that maize has to be imported, as was done in 1903-04.

The extravagance of the people of this valley may be judged from the fact that almost all of them have taken to imported European and Indian cloth and have begun to use refined sugar in tea extensively.

The Railway survey has been completed, and it is hoped that on the construction of the line sooner or later a great impetus will be given to the local trade, especially of fruits, mazri and timber as can be judged from the commercial development which followed the extension of the Railway to Thal in 1903-04.

20. A fresh census of the cattle of the valley was not taken during the Settlement as they had been enumerated a year ago. \*

Agricultural stock.

In Statement VIII, which shows the result of the enumeration of January 1904, the local cattle have been kept separate from those of the Ghilzais. The latter though not belonging to the valley have been noticed under this head as they are quartered here during the winter at a time when fodder is generally scarce. Their favourite squatting grounds are in the Lower Kurram in Sangina, Wali China, Khardhand near Bagzai, Sre Ghurga, Tanda China and in the Shabak plain where they stay the whole grazing season under the

protection of respective Turi Naiks to whom customary presents are given. Since 1902-03 grazing dues called *tirni* have been levied upon these cattle and realized through Ghilzai Malikis.

The indigenuous breed, as in other hilly tracts, is a miserable species of stunted growth, and the stock has to be frequently replaced by imported cattle. Cows and bullocks are purchased from Khost and cow-buffaloes are either imported from Bar Miranzai or Amritsar. Goats and sheep are supplied from the flocks of the Ghilzais, who also used to bring down large droves of horses for sale. Mules are bred in the valley, and most of them belong to the Kuchis and Turis of Peiwar who make considerable profits by carrying trade. Next to hailstones the mortality amongst the plough cattle is a standing calamity of the valley. In marshy tracts they cannot bear the strain and do not last long, and a good many die in the cold weather with the result that people have to bear considerable losses in replenishing the old stock. Within the valley itself the cattle belonging to the Kuchi Turis who are scattered about Parachinar, Kirman, Dal and Ahmadzai Tappas, are considered the best. Next, on account of the plentiful supply of natural fodder, the cattle of Rodghara Circle are regarded better than those of the Daman, where grazing for other cattle is limited, and none but numerous flocks of goats kept by Mangals in the glens can thrive best on the "ocheri" shrubs which abound on the hill sides. The number of sheep in the Sahra predominate over other heads of cattle.

Profits from agricultural stock from the very nature of the factors that enter into calculations are more or less not free from speculation, but the following estimates have been framed after full discussion with the Malikis and the Tahsildar :—

Milk is sold in the Parachinar bazar only by the people of Zeran, who reserve half the number of cows and buffaloes for this purpose and use the remaining half for producing ghi. An average cow yields one seer milk per day and an average cow-buffalo two seers a day. About one-third of the total number of cows and cow-buffaloes in each circle are supposed to be in milk for six and eight months respectively in the year. If  $\frac{7}{8}$  chittak ghi be taken as the daily outturn from a cow and  $1\frac{3}{4}$  chittaks as the yield from a cow-buffalo, then at the rate of  $1\frac{1}{2}$  seers ghi per rupee, the average profit from one cow amounts to Rs. 5-4-0 and from one cow-buffalo to Rs. 20 per year. One-half of the total outturn of ghi is brought to the market and the other half is spent by the people in hospitality, on births, betrothals, weddings, funerals and mourning in Muharrum and in feasting labourers engaged in reclamation of waste or on repairs of embankments or water channels. Also their daily food consisting of rice and mung requires some ghi to make it palatable. Most of the ghi is sold by the Kuchis and hill people, but not so much by the "Kothis." Sheep are shorn only once in the year in the month of "Baisakh" (May) and young lambs in the month of August, no lamb being left unshorn after attaining the age of six months. The proportion of the sheep and their lambs is considered about equal, and the average outturn of wool from both is estimated at  $\frac{3}{8}$  lbs of a seer per head. This at the rate of 4 seers per rupee gives an income of  $1\frac{1}{2}$  annas for wool per sheep during the year.

Goats, and not their young ones, are shorn once a year in the spring. The outturn of hair per goat is stated as  $\frac{1}{4}$  seer; and if goats and their young ones be taken as about equal in number, then at the rate of 6 seers per rupee the average income from hair per goat comes to 9 pies in the year.

As regards young lambs and kids, the average price is reported as Rs. 2 per lamb and Re. 1-8-0 per kid six months old. They only sell the males and not the females. It is estimated that in a flock the proportion of male to female young ones is about equal. Considering that half of the male young ones are disposed of by sale, the number sold in this way amounts to one-eighth of the total number of sheep and goats respectively.

As regards hides, it has been estimated that 10 per cent. of the cattle in each circle die in the year; and the hide of cows and bullocks is said to sell at Re. 1-8-0 per piece and that of buffaloes at Rs. 4 per piece.





21. On its occupation by the Turis the valley was divided amongst the five clans (Panj Plar), and the country allotted to each clan was called his "Plarina." Within the limits of each clan's "Plarina," which are distinctly remembered even to this day, the Turis constituted themselves as the feudal lords or "Naiks," and all the other races under them were considered as their dependents or hamsayas. The latter were divided into four groups. First the political hamsayas, like the conquered tribe of Bangashes, who (with the exception of the villages Zeran and Shalozan that had held out against the Turis to the last) were required to pay certain dues in token of allegiance to their liege lords. Similar engagements were made with the Mangals and other hill men who were colonised on the slopes of the mountains for purposes of defence. These political hamsayas were also bound to sell or mortgage their lands to their "Naiks" and to no body else. Next come social hamsayas belonging to the mercantile class, who paid customary dues called "kaba" on births, betrothals, marriages, &c., to their over-lords. Thirdly, the pastoral hamsayas, like the Ghilzai nomads, who in consideration of the grazing allowed gave to their Turi Naiks kurut, ghi or sheep, or sometimes repaired their hamlets or folded their flocks on their fields. Lastly, the common agricultural hamsayas who paid a certain proportion of the produce to their landlords.

Gradually the feudal connections between the over-lord and his political vassals got worn off with time, and have now almost fallen into disuse. At present the Bangashes, Mangals and other races who hold proprietary rights rank equally with the Turis, and the only instances in which feudal rights have been asserted of late are the pre-emption suits by old Naiks, in which they have objected to alienations to other tribes within the territorial limits of their clans. The other three classes of hamsayas with their old liabilities continue to exist as before.

In this Settlement the villages in measurement records have been classified as follows:—

Class of tenure.		Daman.	Sahra.	Rod-ghara.	Total.
Proprietary villages or Tawani.	Zamindari ...	12	.	1	13
	Pattidari	19	..	.	19
	Bhaiyachara	24	4	21	49
	Total ...	55	4	22	81
Crown lands or Khalsa	Solely owned by Government.	1	1	11	13
	Owned jointly by Government and proprietors.	24	4	47	75
	Total ...	25	5	58	88
GRAND TOTAL ...		80	9	80	169

Two of the villages held jointly by the Government and the zamindars are Pattidari and the rest are Bhaiyachara. Thus there are—

26 Zamindari villages, or 15.4 per cent. of the total number of villages.		
21 Pattidari villages, or 12.4	ditto	ditto.
122 Bhaiyachara villages, or 72.2	ditto	ditto.

Even the Pattidari villages are gravitating to Bhaiyachara tenure, as actual possession has long ceased to correspond to alleged shares, and although in many cases irrigation is still carried on according to old bakhras, in the new distribution of revenue, however, all these villages have expressed their desire to go by possession rather than shares.

Excepting in a few places the old Pathan custom of "Vesh" or periodical redistribution of land, which aimed at democratic equality and was opposed to all ideas of progress and improvements, has disappeared.

Four villages—Durani, Sadda, Ahmed Shah Killa and Balish Khel—have adjusted their possessions permanently in this Settlement. In the villages of Shakardarra and Sangina it has been arranged that existing possession will not be disturbed till next Settlement. The Wattizai villages of Bagan and Manduri are being settled with. One backward village—Jullandhar—has resolutely adhered to extreme socialism of the past, whereby land is divided every four years, and men, women and children are all allotted equal shares at the time of the distribution.

22. As has been mentioned before, the whole valley was not taken by the Turis in one engagement. Burki, Peiwar and Malana were seized first, and then as the Chardai forces from Peiwar and the Saragalla forces from Malana sallied forth now and again to extend their conquests still further, place after place began to fall at each inroad, till the whole country was reduced. New acquisitions each time they were made were divided amongst the different clans. Thus it was that possessions of one and the same clan got scattered about in different groups of divisions, which would not have been the case had the whole country been carried at one stroke and then divided over various sections of the tribe in shares of compact blocks. Even to this day distinction is maintained between pioneer families who took part in opening up the country and those who followed after them and joined in delivering subsequent attacks. No Turi is considered as "asil" or of blue blood who cannot point out or trace his possessions in the first Turi colonies of Malana and Peiwar.

The state of things following from this hypothesis was further modified by exchanges or transfers that took place since the primary divisions. Making allowance for these and the changes that occurred in social cataclysms, in which tribes other than Turis also had had their part, it has been ascertained that the following proportion of owners in each clan has still got its holdings both in the original as well as the later Settlements:—

- 10 per cent. Ghundi Khel hold possession in Tappas Peiwar, Nasti Kote and Samir.
- 8 per cent. Alizai hold possession in Tappas Peiwar, Kunj Alizai, Agra and Alizai.
- 12 per cent. Duperzai hold possession in Tappas Peiwar, Kharlachi, Shakh, Shiblan, Sultan and Makhizai.
- 15 per cent. Mastu Khel hold possession in Tappas Ahmadzai, Malana, Kirman and Bilyamin.
- 20 per cent. Hamza Khel hold possession in Tappas Malana, Kirman, Dal, Shiblan, Taïda, Ahmadzai and Bilyamin.

The multiple holdings of the Bangashes and Bada Khel Para Chamkannis lie only in the glens. Among the Sayads only a few families have acquired interests in more than one village. The Zaimushits and Orakzais do not present any striking variety to require mention under this head.

Besides these plurality of holdings owned by one and the same man, the number of mortgagees with possession is another disturbing factor in determining the average size of a proprietary holding. Their interest in the land is temporary, and howsoever small may be the area transferred, the possessions of transferees count as separate holdings, which, when added to the number of holdings of original owners, considerably reduce the average and give a misleading idea of the extent of proprietary possession.

Hence, excluding the Crown villages, the zamindari villages, the abadi and the number of mortgagees, the average size of proprietary holding works out as follows:—

		<i>Average area in acres per holding.</i>	<i>Average area in acres per owner.</i>
Daman	...	2.42	1.44
Sahra	...	3.94	2.58
Rodghara	...	2.81	2.0
Total	..	2.69	1.74

It is clear from the above that the largest holdings are in the Sahra Circle, and that average possession in the Rodghara Circle slightly exceeds that in the Daman Circle. The average size of a holding for the whole valley is 2.69 acres.

Enumeration of the same owners holding land in different villages would have been a complicated task, but the extent to which multiplicity of holdings prevails has been indicated, and if some margin—say 10 per cent.—be left for it, the average cultivated area per holding for the valley would thereby increase to 3 acres and per owner to 2 acres.

Average cultivation per owner is less than that per holding owing to multifarious joint ownership. It has been calculated that every plot of 4 acres has to support 4.6 persons besides the owner, which is much higher than the corresponding pressure in Kohat and Hangu tahsils, though equal to that in Tochi.

23. Only 10.6 per cent. of the total cultivated area is under mortgage and 4.1 per cent. has been sold since last Settlement. Both classes of trans-

Alienations and indebtedness.

ferees show considerable increase during the second quinquennium as compared with the first. The cultivated area sold has more than doubled, but the area mortgaged has gone up  $5\frac{1}{2}$  times. The abnormal increase in the latter may partly be accounted for by the effects of two lean years 1899-1900 and 1902-03, but mostly by the litigious habits of the people, who rushed to Court with all sorts of claims as soon as they had recovered during the first five years of the British occupation from the paralysing effects of the Turi misgovernment that had immediately preceded it. The following comparison shows that in the second quinquennium the institution of civil suits rose by 75 per cent, whereas the number of criminal complaints and murders increased  $2\frac{1}{3}$  times and 4 times respectively, which is no doubt appalling:—

	<i>Civil suits.</i>	<i>Criminal complaints.</i>	<i>Murders.</i>
1894-95 to 1898-99	...	2,049	1,707
1899-1900 to 1904-05	...	3,488	4,171

The evil consequences of excessive litigation have been further aggravated by the corruption of the Turi jirga, which sits for inquiry in almost every important case. This crying scandal of the day has come to the notice of the authorities in more ways than one.

Among other causes at the bottom of these alienations may be mentioned extravagance on marriages and expensive living. The price of the bride has been raised from Rs. 300 to Rs. 1,000 Kabuli, and the tendency to better equipment both in matters of dress and house furniture has received corresponding stimulus. On a casual visit to a house or a kezdi one is struck with the pile of rugs, metallic vessels, and some articles of European manufacture. Decidedly the people of this valley are a better dressed class, and on an officer's inspection a more decent crowd turns out of the village than is generally the case elsewhere. Another unfortunate explanation of the indebtedness of the valley lies in the unending troubles with the border tribes. The latter never hesitate to raid upon and kidnap the people whenever they get an opportunity. And, in spite of distinct orders to the contrary, the relations of the kidnapped persons

offer heavy ransom money in secret. Besides this levying of blackmail by the Para Chamkannis and Massuzais upon villages from Agra to Alizai, the life and property of the remaining people in the Rodghara Circle touching the border of Khost in Afghanistan has never been very secure, as can be judged from the fact that during the 12 years of British occupation of the valley two Commissions had to be appointed to settle cases with the officials of the Amir. The entertainment of tribal jirgas is also a drain upon the resources of the people, of which the heavily encumbered estate of Muhammed Ali Khan of Satin is an instance in point.

One more unusually depressing cause of indebtedness during the second quinquennium was the heavy stake which the Wattizai owners of this country lost in 1903 when they purchased Chinarak in independent territory from Chikkai for Rs. 60,000 Kabuli by mortgaging their property here. But they could not hold it against their enemies the Khoedad Khels and the Wazirs, and their newly acquired possession passed away from them with the life of Chikkai, which came to an abrupt end in an irregular fight on a hill.

These three causes—"shadi" (marriage), "bâdê" (bribery) and "badi" (feuds among themselves or with the border tribes)—account between them for about 80 per cent. of the total transfers. The reasons for the remaining alienations are that some people going on a pilgrimage to Kerbela have to raise expenses, or some owners find their possessions in outlying villages too distant for them to manage themselves. Indebtedness owing to agricultural distress purely will not be found to exceed more than 10 per cent. of the total number of transactions, and even that is due to either damage by hailstones or mortality of cattle. Still alienations by the agricultural class have not in any way assumed alarming dimensions, nor do they constitute any political danger. The transfers are mostly confined within the agriculturist class, and the mortgaged area in possession of the money-lenders does not exceed 10 per cent. Nor have other tribes domiciled in Kurram gained an upper hand over the Turis and Bangashes. Out of every four agriculturist mortgagees three belong to the village and one is an outsider

Further statistics relating to mortgages and sales have been conveniently arranged below :—

## I.

No.	Circle.	Mortgages.			Sales.			REMARKS.
		Percentage of total cultivated area.	Percentage of total mortgaged area (cultivated).	Average consideration money per acre cultivated in British rupees.	Percentage of total cultivated area.	Percentage of total sold area (cultivated).	Average sale price per acre cultivated in British rupees.	
1	Daman ..	8.3	33.5	119	4.4	45.4	101	
2	Sakra ..	7.5	6.2	85	2.6	5.5	39	
3	Rodghara ..	13.2	60.3	139	4.2	49.0	141	
				126½			117	

## II.

No.	Circle.	Cultivated area mortgaged to				Cultivated area sold to			
		Agriculturists of the village.	Agriculturists of other villages.	Money-lenders.	Kamins.	Agriculturists of the village.	Agriculturists of other villages.	Money-lenders.	Kamins.
1	Daman ..	64.6	17.2	11.4	6.8	71.9	15.7	7.4	5.1
2	Sakra ..	69.9	8.6	20.7	8	79.1	11.6	9.3	...
3	Rodghara ..	57.2	29.0	7.2	7.6	73.1	19.2	5.1	2.6



The average sale price is less than the average mortgage money per acre, as it is said that the land-owner with a view to raise the highest amount on a comparatively small area mortgages his best plots, but when parting permanently he gets rid of his worst land only.

There are three principal money-lenders in the valley,—Sardar Kishen Singh of Kohat, Sirkai of Shalozan, and Mansa Ram of Peiwar. They generally charge as interest one tatti wheat in the spring and one tatti rice in the autumn per rupee every harvest (Tatti, which is a local wooden measure, being equal to  $2\frac{1}{2}$  seers British). In special cases the rate of interest is reduced to half a tatti. The usual charge on advances in cash is one rupee for every sum of Rs. 20 per month. Collateral mortgages are, however, rare, and will not exceed 10 per cent. of the total mortgages with possession.

The agriculturists as a rule take land in mortgage with possession. In case of collateral mortgage they charge the same rate of kind interest as the Hindus, but for the hill people the rate is specially lowered to one-half tatti rice per rupee once a year.

The different kind of rates of interest have been compared below :—

Kind interest at 20 seers wheat and 16 seers rice per rupee.	Re 0-4-6 per rupee per year or 28 1 per cent
Kind interest at above rates from hill people.	Re 0-1-3 per rupee per year or 7 8 per cent.
Cash interest at one rupee on a sum of Rs. 20 per month.	Re 0-9-7 per rupee per year or 59 9 or 60 per cent.

## PART IV.

### SYSTEM OF AGRICULTURE AND CROPS.

24. The area successfully cropped in the Koh-i-Daman Circle during the last two years has been shown below :—

SOIL.	AREA OF MATURED CROPS.					
	1903-04.	1904-05.	Average of two years.			Average per cent.
			Kharif.	Rabi.	Total.	
Chashmai dofasli ...	12,269	12,848	7,249	5,809	12,558	73.1
Do. ekfasli ...	3,946	3,801	1,508	2,308	3,874	22.5
Barani ...	720	775	533	214	747	4.4
Total crops matured ..	16,935	17,424	9,290	7,889	17,179	100.0
Kharaba ...	112	1,152	424	208	632	3.7
Dofasli ...	...	...	...	...	...	...

There are 80 villages in this circle. The distribution of the cultivated and the cropped area over different classes of soils will appear from the following figures :—

Soil.	Percentage of cultivated area.	Percentage of cropped area.
Chashmai dofasli ...	57	73.1
Do. ekfasli ...	38	23
Barani ...	5	4

That is to say every 100 acres of chashmai dofasli area produces an average of 138.6 acres of crops in each year.

Similar percentages of cropping on chashmai ekfasli and barani soils are 63.3 and 88.9 respectively.

It is true that in villages like Peiwar and Malana, where the soil is not superior, or in Shiblan villages, where the water-supply is inadequate, 3 out of 4 crops are not taken from the whole of the dofasli land, but from one part in one season and from another part in the other. Still there can be no doubt that the percentage of dofasli cropping is much higher than 138.6 shown above, as can be judged from the system of cultivation described later on. Evidently the people where crops were recorded by enquiry and not by observation have understated their harvests.

Nine-tenths of the unirrigated area on account of frequent rainfall in the glens produces a crop every year, but of the ekfasli area, which lies on the border of the Sahra Circle or on the slopes of the Sufed Koh, only three-fifths of the cultivated area is under crop in the year.

The rabi crop has never failed, and even the kharif crop during the last 12 years has suffered from drought only twice. The percentage of

kharaba during the last two years does not exceed 4 per cent. of the harvested area, hence the average cropping may be considered as fairly secure. In ordinary years the water-supply for irrigation is abundant, but in years of deficient snowfall and defective summer rains it has badly failed in the months of July and August, causing extensive damage to the maize and rice crops. Hail, which is unfortunately of frequent occurrence, more or less injures the crop, especially the kharif. With the exception of these calamities, which sometimes reduce the percentage of cropped area much more than was apparent in these two years, cultivation is otherwise constant. Dofasli area prevails in Shalozan, Zeran, Peiwar, Bughakki and Kirman Tappa on the right bank of the Kirman Toi. Ekfasli area is mostly confined to the hamlets in the glens, to the tail end of cultivation in Peiwar, Shalozan, Malana, Zeran, and to the Shiblan and Dal villages. Barani cultivation is carried on either on the slopes of the Sufed Koh above the usual level of irrigation or in the stony plain to the north-west of the Kirman Tappa, which is too high for irrigation from the Kirman Toi, and too far for proper irrigation from the Zeran Toi.

The soil of the circle, though formed from rocks, has by long course of treatment attained to marked excellence, especially within the zone which runs for a considerable distance all round the different abadis. It is distinguished amongst the people by different names according to its quality. For instance, the best land near the village is called "jawas." In the glens waste reclaimed by burning the forest shrubs is known as "soke" (burnt). Land under or about the ruins of a village brought under cultivation goes by the name of "kandwale." Other soils are:—

Mat.—Land with a preponderance of hard clay.

Mela.—Land on which Kuchis settle with their cattle.

Takhta or Wand.—Fairly level tract of cultivation with well defined limits.

Arkhi.—Land with terraced cultivation.

Jabba.—Containing excessive moisture.

Lohra.—Uneven cultivation on land cut up by fissures.

Kasa.—Cultivation in a cuplike hollow of the land.

Kadi.—A narrow strip of lowlying land.

Yawara.—Cultivation in a tract of greater depression.

In the glens the system of cultivation is "dofasli dosala." Either half the area is reserved for kharif and the other half for rabi crop, or maize is followed by wheat and then land is allowed to lie fallow for one year. The maize crop cannot be raised after wheat, as it has to be sown while the latter is standing. In steep terraces the fields have to be embanked with wooden trunks to prevent land getting washed away by torrents.

Lower down, at the foot of the Sufed Koh, there are three distinct systems in vogue about cultivation on dofasli lands. First, at Peiwar 7 out of 8 crops are taken in the course of four years, viz. 2 crops of rice, 2 of wheat, 2 of shaftal, and 1 of mung or kurkha. The order of rotation is: rice or jowar (maize); shaftal, rice or jowar (maize); wheat, fallow; wheat, mung or kurkha and shaftal. That is to say land is allowed to lie fallow only one winter in four years.

In Shalozan and Zeran the best lands are not given any rest, and continuously two crops are taken off them every year. The rotation of crops is rice, wheat, mung and shaftal. On other dofasli areas, after three crops of rice, wheat and mung the land is left fallow in the fourth harvest.

In the Kirman Tappa custom has prescribed four courses of rotations of crops. On the greater and best part of the land four crops—rice, wheat, mung and shaftal—are taken in succession in two years and no rest is allowed. On other lands rice and barley or rice and shaftal follow each other from year to year without intermission. On a very small part only one crop—rice—is raised, as in winter the land is kept under water, and this system is known as "yakhab." The object is to make up for the deficiency of manure which the Kuchi Turis unwisely leave behind in heaps at their winter quarters in Shabak. This method of nourishing the soil by treatment with water is confined to lowlying lands in the Kirman Tappa and to a limited extent to Tappa Ahmadai in the Bodghara Circle. This is a typical example of how the prodigal Turi wastes his

manure and water-supply when by transporting the former and economizing the latter he could have raised more and a better class of crops.

The ekfasi cultivation is not of sufficient importance to require a detailed account here.

The kharif and the rabi are both important harvests in this circle.

Rice occupies 27 per cent. of the total cropped area of the circle, and 92 per cent. of it is grown on the dofasi area. "Spin shali" is the chief variety in use, and sowings are done by transplanting the nursery, with the exception of a little broadcast sowing carried on in Peiwar. For "bozghala" or nursery a good field with shaftal crop is selected, and three or four dry ploughings are done up to 8th Baisakh (22nd April). Then the land is watered, and a few days after two to four wet ploughings are given in the softened mud and levelling is done as often. Next the seed is prepared for germination as described in the Rodghara Circle and sown broadcast about 15th Baisakh (1st May) in the nursery beds. Dry sticks are pushed into the mud as marks to avoid unequal sowings. The nursery becomes ready for transplanting in 40 days. In fallow fields green shaftal or "spanda" or "ghujara" (a kind of plant with fertilizing effects) is trampled into the mud during wet ploughings.

Land for sowing rice is prepared about 15th Jauza (1st June) and is ploughed three or four times at intervals of two days to dry it up in the sun. Next it is watered and two ploughings are given in the softened mud (khare) and four levellings are done (khaore). This goes on up to the end of Jauza (15th June) and on 1st Har (16th June) the rooting up of the nurseries is commenced, and the seedlings are conveyed to fields already made ready and planted from 8th Har (23rd June) up to 23rd Har (8th July). Weeding is done only once a fortnight, or 20 days after transplanting. Labourers, such as the Muqbil, Jajis and Chamkannis, &c., have to be engaged both for rooting up the nursery and planting it. Some villages like Shalozan and Zeran sell bundles of bozghala, as Rodghara cultivation begins a few days later than in Daman. Owing to the stony nature of the soil boundaries are not scraped off here. Water-supply is constantly required from 15th Jauza (1st June) to end of Bhadon (15th September). Ten days before harvesting the fields are dried up and the crop is reaped in the month of Assu (October). Six maunds seed are required per acre of nursery beds, which suffices for sewing 12 acres of Sholgira lands. In this circle also rice is not manured, and is cropped alternately by turns from the blocks into which the village lands are divided.

Wheat is the next important crop which constitutes 32·8 per cent. of the cropped area of the circle and two-thirds of it is grown on dofasi lands. The red variety is commonly in use and is sown in Katik and Maghar (November and December) and reaped in the month of Har (July). On dofasi lands the crop is always manured and three ploughings are done,—once before the application of manure, next when manure is applied, and lastly, when the seed is sown, after which the furrows are levelled. 32 seers to 80 seers seed are required per acre, and the crop is watered five times at least.

Maize constitutes 16·7 per cent. of the cropped area of the circle, and  $\frac{2}{3}$ ths of the crop is grown on dofasi area. In the glens manure is applied, as it suffices both for the maize as well as the succeeding wheat crop. But on dofasi lands manure is applied only when the crop is to be sown on land from which rice has been taken. Sowings are started from the beginning of Jeth (15th May) and continue up to 15th Har (1st July) and the crop is harvested in the months of Assu and Katik (October and November). 25 seers seed are required per acre, and the crop is watered five times.

Two important points to be borne in mind are:—

- (1) Wheat and barley in Daman are sown 20 days earlier and harvested about 20 days later than in the upper part of the Rodghara Circle.
- (2) Maize is both sown and cut a fortnight earlier. Rice in the Daman is sown about the same time, but harvested a fortnight before the crop in Upper Rodghara. Similarly mung or kurkha is sown a fortnight earlier, but is cut about the same time.



Shaftal is the important fodder crop in rabi and is sown in the midst of maize, rice, mung or kurkha, while the latter crops are standing. Kurkha is another useful fodder crop in kharif. Mung and barley are grown more in the Rodghara than in the Daman Circle. Other staples are too limited in area to require any mention.

The gardens in this circle contribute most of the fruits produced in this valley, and have been described in detail in paragraph 30.

Cultivation in Sahra Circle

25. The area of matured crops during the last two years has been :—

SOIL.	AREA OF MATURED CROPS.					Average per cent.
	1903-04	1904-05	Average of two years.			
			Kharif.	Rabi.	Total.	
Chashmai ekfasli	1,253	1,628	386	1,051	1,410	64.7
Barani	809	760	178	607	785	35.3
Total crops matured	2,062	2,388	564	1,661	2,225	100.0
Kharaba		138		69	69	3.1
Dofasli						

This is the smallest circle of all, in which 65 per cent. of the crops is irrigated from surplus water-supply borrowed from the neighbouring Daman villages, and the remaining 35 per cent. is unirrigated.

There are altogether nine villages in this circle, of which Bughdi and Safdar Sahra get their water-supply from Peiwar free of payment, as both the parties are Turis.

Kara Khel and Kachkina, both Turi villages, have to pay Rs. 22 Kabuli for their water-supply to the Bangashes of Shalozan. Complaints as to unfair treatment, whether in respect of irrigation or wood cutting, often arise between these two classes of people and have to be settled authoritatively. The owners of Totaki have also got their lands in Malana, and consequently have no difficulty in applying their share of the water-supply to their crops in any of the two villages as necessary. Besides, the escape water from fields in Malana is also allowed to run down to lands in Totaki, as the proprietors of both the villages belong to the same section. The Turis of Shinai have no right to irrigation from Zeran water, but more or less they are always allowed by the Bangashes to utilize their surplus water-supply as a matter of grace without payment.

Cultivation within the limits of the Parachinar Cantonment mostly belongs to officials and the Militia, and has been excluded from assessment. Water-supply for purposes of drinking and irrigation within the limits of the cantonment has been acquired by purchase from Malana and on payment of annual rent (Rs. 250) from Zeran.

With the exception of a little irrigated area in Burki dependent on local springs, land in both the villages of Lalmi and Burki is unirrigated, and is dependent on the local rainfall as well as on the drainage of higher ground, for conveying which channels from ravines up to cultivated blocks have been made here and there. This unirrigated land corresponds to jagaha of the Kohat District.

The chashmai ekfasi area of 1,919 acres produces 1,440 acres of crops or 75 per cent. of the whole. Similar percentage of cropping for unirrigated area is 57.7. The crops were damaged on 2 per cent. of the total cultivated area by hail in Rabi 1905. The soil is reddish loam mixed with stones and gravel, and requires labour to reclaim it from waste, and time for mud washed down from the Daman hill sides by torrent floods to settle on it. Areas thus brought under plough are, according to the nature of the soil, known as vedana (lit. newly reclaimed along the banks of a ravine), raghzai (lit. soil with admixture of stones), ragha (flat barren waste) or kaske (soil with kasa or cuplike depression). Blocks of cultivated area divided by well defined limits are known as "wands."

The rabi is by far the more important harvest of the two, as it occupies 75 per cent. of the total cropped area. Wheat, kangni and kurkha are the staple crops, and to a less extent maize, mung and barley are also sown.

There are three recognized systems of cultivation. First, in some villages only rabi crop is taken off the land every year. Next, in others wheat is followed by kangni, mung or kurkha, and then land is allowed to lie fallow for one year. In a few others maize crop is raised on fallow land in one year, and then wheat in the next year.

Wheat forms about 70 per cent. of the total cropped area, two-thirds of which is sown on ekfasi and one-third on barani area. Both red and white varieties are in use. The crop is sown in Katik (November) and reaped in Har (July). Ploughings are commenced in Baisakh after Nauroz and land is ploughed as many as six times. Then manure is applied in Bhaddon (September) and ploughed in twice, after which land is watered and ploughed once more before sowings. After the crop has been sown broadcast furrows are levelled by the plough. On irrigated land the crop requires four or five waterings in the year. On an average 60 seers seed are sown per acre. The wheat crop in the Sahra Circle is generally good.

Kangni, which constitutes 10 per cent. of the total cropping, is sown about two-thirds on irrigated and one-third on unirrigated area. It is sown in the month of Har (July) generally after the wheat crop, and hence not more than two or three ploughings are required. On ekfasi land the crop is irrigated two or three times and is not manured, as manure applied to the wheat crops suffices for this crop also. The quantity of seed sown in one acre does not exceed 5 seers and the crop is harvested about 15th Assu (1st October).

Kurkha is the principal fodder crop. The system of sowing this crop as well as mung is much the same as that for kangni. The only difference is that 20 seers seed per acre are required for kurkha and 12 seers per acre for mung. Kurkha is sown more on irrigated land and a little less than one-third on barani, but mung is sown equally on both classes of soils.

Barley is both sown and cut a fortnight earlier than wheat. It is grown one-fourth on irrigated and three-fourths on barani land. The seed required per acre is 72 seers. The crop is not manured, but is generally sown on better land. The number of ploughings given is one-third less than that for wheat.

Maize is sown three-fourths on irrigated and one-fourth on unirrigated land. There is only one variety in use, which is called "garma." It is sown either on fallow or on land from which barley has been cropped. The sowings take place in Har (July) and the crop is harvested in Assu (October). Twenty seers seed are required per acre, and land is prepared by ploughing four or five times and is watered as often.

There are a few scattered gardens in Kara Khel, Kachkina, Bughdi and Saffar Saffra Killa and Burki. Their income does not exceed Rs. 80 in the year.

Cultivation in Rodghara Circle.

26. The cropping in the Rodghara Circle in the last two years has been as follows :—

SOIL.	AVERAGE OF MATURED CROPS.					
	1903-04.	1904-05	Average of two years.			Average per cent.
			Kharif.	Rabi.	Total.	
Chashmai dofalsi ...	3,727	4,237	2,419	1,563	3,982	16.1
„ ekfalsi ...	923	1,023	678	295	973	3.9
Abi dofalsi ...	15,048	17,577	9,978	6,335	16,313	66.1
„ ekfalsi ...	3,115	3,258	2,269	917	3,186	12.9
Barani ...	191	303	40	207	247	1.0
Total crops matured ...	23,004	26,398	15,384	9,317	24,701	100.0
Kharaba ...	69	259	62	102	164	.7
Dofalsi ...	..	..	...	...	..	...

Like the Daman Circle, there are 80 villages in this circle also. The distribution of the cultivated and the cropped area over different classes of soils has been shown below :—

Soil.	Percentage on cultivated area.	Percentage on cropped area.
Chashmai dofalsi ...	13.8	16.1
„ ekfalsi ...	6.0	3.9
Abi dofalsi ...	57.5	66.1
„ ekfalsi ...	19.8	12.9
Barani ...	2.9	1.0

That is to say 100 acres of—

Chashmai dofalsi land produce	158.7	acres of crops in the year.
„ ekfalsi ditto	84.7	ditto.
Abi dofalsi ditto	155.8	ditto.
„ ekfalsi ditto	88.5	ditto.
Barani ditto	47.2	ditto.

These percentages are not high enough, as they include the cropped area of Kharif 1903 and Rabi 1904, which had to be recorded by enquiry and not by observation. But the system of cropping is shown more clearly by the results of Kharif 1904 and Rabi 1905, both of which were inspected on the spot during measurements. The percentages of matured crop on each class of cultivation in these two harvests are :—

59.9	per cent. on chashmai dofalsi land.
93.3	„ „ „ ekfalsi
67.9	„ „ „ abi dofalsi land.
80.3	„ „ „ ekfalsi
57.5	„ „ „ Barani land.

The chashmai area is confined either to villages within the hills or to those along the river bank, but chiefly to the tracts between Dandar and Amalkot in Upper Kurram, and in and about Sadda in Lower Kurram. In fact the overflow of swamps in Tappa Bushahra keeps the river stream well fed, so that villages below Shakh, such as Samir and others lower down have never felt the pinch of irrigation to the extent the Daman people have done in seasons of drought. For this reason the outturn of crops in Lower Kurram, *i.e.* below Agra, is considered somewhat superior to that in villages above Shakh in Upper Kurram. The chashmai lands of Rodghara are only limited in extent, forming 20 per cent. of the total cultivation; otherwise, with the exception of fruits largely grown in the Daman Circle, they are about equal to chashmai lands of the latter circle both in respect of sufficiency of irrigation and productive capacity of the soil. The abi dofasli land in the Rodghara Circle is the richest and is the central of the three belts of cultivation. The abi ekfasli land is mostly to be found either in the river bed or above the high bank. The proportion of the crop which failed to germinate is not even 1 per cent. of the harvested area, which shows that cultivation is pretty secure and constant.

The barani area in this circle is situated either in Kharlachi, where it consists of the formerly irrigated tract now deprived of its irrigation by the closure of the Lewanai Canal or in Tappas Ahmadzai and Bushahra north of the line of irrigated cultivation, where it has been reclaimed from waste forming part of the central Sahra. The latter part of unirrigated cultivation entirely belongs to the Government, and, with the exception of a few plots, is of an indifferent nature. The soil, as remarked before, is of alluvial formation, and consisting of rich black loam, as it does, it is renewed every year by fertilising silts. This part of the country has got its own names to represent the qualities of different soils. Vedana, regi, sanger, rowaz and lewan are designations peculiar to riverain lands only. Area newly thrown up is called vedana, and if it contains a greater admixture of sand it is known as regi. When any alluvial tract by repeated cultivation and silting up is formed into superior soil and bears excellent crops it goes by the name of sanger. Rowaz and lewan are long stretches of cultivation running along the river. Shigga (stony land), jabba (water-logged area), dag (cultivation above the high bank), dhand (lowlying tracts) and mishrai (land given as "mashrana") are other common names that may be referred to here.

The systems of cultivation on dofasli lands are very clear and well defined, and one might say almost scientific. In the swamps of Tappa Bushahra the rice crop is first taken off the fields full of moisture. For the next rabi crop deep trenches (called khatangs) are dug along the field boundaries, whereby water in excess is drained off and the land is left dry. Then after applying manure the wheat crop is sown, which is followed by mung in the next kharif, after which the land is allowed to lie fallow for one harvest before rice is sown again. In case manure is not sufficient for the whole holding, then some of the fields are kept "yakhab" or under water.

In the rest of the Rodghara Circle the invariable rotation of crops on dofasli lands in a two years' course is rice, wheat, mung or kurkha and fallow. Loss of nitrogen in the soil which occurs by drainage is well known to the people whom long experience has taught that constant watering necessary for the rice crop leaves the land so weak that no other crop can possibly be taken off it without the application of manure. Accordingly rice is followed by cereals such as wheat, which is the only manured crop on dofasli lands. After wheat leguminous crops, such as mung and mash, are sown. The manure applied to wheat suffices for them also, and besides they themselves have the power of absorbing nitrogen from the atmosphere. This system of scientific rotation and fallow is well grounded in the minds of the people of this valley.

Some lands close to the village are so good that they are always under crop every harvest, and cases have come to notice in which a rice crop has been raised on the land which had borne a wheat crop immediately before it, though such rice, it may be noted, is not as good as that grown on a fallow land.



The system of cultivation on ekfalsi lands is simple and does not require detailed discussion.

The kharif is the principal harvest in this circle.

As regards individual crops, "sholgira" or rice lands are divided into parts which are sown in alternate years by turns. This is particularly the case in villages served by a joint water channel. Both the spin and the tor varieties are in use, but the latter is chiefly limited to the tract below Sadda. 22 per cent. of the rice is grown on chashmai land and the rest on abi land. Again, only one-fourth of the total crop is taken from ekfalsi lands. Sowings are done either broadcast generally in Lower Kurram or by transplanting the nursery chiefly in Upper Kurram. In the former system land is ploughed three times at different intervals from Chetar (April) to 20th Baisakh (5th May), and then boundaries are scraped off. Then water is let on the land and two ploughings are done in the soft mud or slush (khara). At the first ploughing field ridges are formed, and at the second ploughing levelling (khaore) is done. Sowings take place from end of Baisakh (15th May) to 20th Har (5th July). Dry twigs are stuck up to keep sowings in parallel lines and to leave no part unsown.

For four months the crop is kept under water day and night, which is allowed to dry up only ten days before harvesting. Weeding is done only once 40 days after sowings. Rice is partly sown on fallow land and partly after shaftal or barley crop. It is never treated with farmyard manure, as green manuring by ploughing in shaftal crop is very common. For sowings the best seed is selected at the harvest time and preserved without winnowing. Three or four days before sowings it is cleaned, and then kept under water for 12 hours, after which it is spread on mattresses for two days, and then moistened with hot water twice and covered with blankets to induce germination. 32 seers seed are required per acre, and the crop is harvested from 1st Bhaddon (15th August) up to end of Assu (15th October).

\* In the system of transplanting by nursery the following points of difference deserve notice :—

- (1) Both sowing and harvesting operations take place one month after the time by broadcast system.
- (2) Two levellings (khaore) are done instead of one mentioned above.
- (3) It is more expensive, inasmuch as labourers have to be engaged both on the occasion of rooting up the nursery and planting it again.
- (4) One-fourth seed less is required in sowings.

As regards culture of nursery, the description given under the Daman Circle applies to this circle also, the only difference being that it is started here 10 days later.

Rice forms 85.3 per cent. of the total harvested area of this circle.

The systems of cultivation prevailing in the Upper and the Lower Kurram differ from each other in the following two important points :—

- (1) The rabi crops—wheat and barley—are sown a month earlier in the Upper Kurram, but harvested a month later.
- (2) The kharif crops—maize, mung and kurkha—are both sown and harvested a fortnight later.

The next principal crop is wheat, which occupies 20.2 per cent. of the matured area. The system of cultivation on dofalsi lands is that after the rice crop has been harvested manure is stored in heaps and then the land is watered. As soon as the proper stage of moisture has been reached seed is sown broadcast, and then one ploughing is done which is followed by one levelling. It is very seldom that two ploughings are given, and hence the soil does not get well pulverised, but is left in coarse globules, nor is the manure thoroughly mixed up with the soil. This crop is sown from 20th Katik (5th November) to 10th of Poh (26th December), watered four to six times, and harvested from beginning of Jeth (15th May) to end of Har (15th July). 37 seers seed are sown in an acre.

A little more than four-fifths of the wheat is raised on dofasli land, and 77 per cent. of it is irrigated by the Kurram River. Maize constitutes 8.2 per cent. of the cropped area of the circle, and 91 per cent. of it is sown on dofasli lands and 18.8 per cent. of it is irrigated by springs. It is generally grown on fallow land, and sometimes on land from which a wheat crop has been taken. This crop is not manured, and is sown from beginning of Har (15th June) to 10th Sawan (28th July) and harvested in Katik (November). 32 seers seed are required per acre and five waterings are considered sufficient.

The two fodder crops—shaftal and kurkha—are not grown to the extent they are in the Daman Circle. Shaftal and another fodder crop “ranjkai” have both been introduced from Afghanistan. Mung and barley are the only other important crops, and are mostly grown on dofasli lands.

The gardens in this circle are few and far between, and are to be found in Bassu, Hakimi Killa, Agra, Mahura and Topakki.

27. Chunje and kajkai are the two principal diseases of the rice crop.

*Diseases of crops.*

The former attacks within the first two months and destroys the ear. The second affects the crop later on and turns the ear white instead of red with no grain in it.

“Surkhai” and “torkai” are the two diseases of the wheat crop, and attack generally during the rainfall of Chetar (April). Pshai is the disease of the cotton crop and affects the bolls.

The mung and the jowar crops also suffer from “chunje” and “kajkai” like the rice crop.

“Shamakh” and “jamdar” are the weeds that grow up in the midst of rice and wheat crops respectively.

28. Since the commencement of the Summary Settlement up to Kharif

*Past and recent harvests.*

1902 no record of the cropped area has been kept from year to year, and the only information we possess about the character of the past harvests is to be found in the references of the Annual Administration Reports of the valley. A special girdawari preparatory to the present Settlement was ordered in 1902-03, but the results beyond showing increase in cultivated area are not of further value. Of the four succeeding harvests, the cropped area of Kharif 1903 was ascertained on the remeasured records by inquiry (see paragraph 38), but that of the other three harvests was actually observed during the progress of the Settlement. The condition of past years has also been discussed with the leading Maliks, who remember their Political Officers very well, and can distinctly refer to previous harvests by the beginning, middle or end of the periods they have been respectively in office. From all these sources it has been demonstrated that the country is fairly secure and that bad harvests are an exception, not the rule. During the last twelve years both by record and report there have been only two periods of acute agricultural distress, viz. 1899-1900 and 1902-03, when the rainfall was much below the normal. In all other years the harvests are said to have been satisfactory, although the year 1901-02 was marked by deficient rainfall and complete absence of snowfall. Of the Settlement harvests, Kharif 1903 to Rabi 1905, which form the basis of the assessment proposals, the crops in all four, with the exception of Kharif 1904, which was somewhat affected by drought, were fairly good. And although rainfall was above the average throughout and snowfall sufficiently heavy in both years, still damage by hail at each harvest time was considerable. Moreover, the floods of May 1905, which followed the close of measurements, were very heavy, so that when the loss of land comes to be ascertained, as it is intended to do in the next month before the final distribution of the new revenue, there can be no doubt that fair deductions in assessable areas will be required. During the summer of 1904 was witnessed a strange phenomenon of massive piles of snow on the mountains attended with very poor water-supply in the streams. The general explanation given was that owing to the prevalence

of extremely cold winds above the snow line the snow got frozen, and even the heavy rains of March could not melt it. The adhesion of snow to the mountain sides considerably curtailed\*the resources of the water-supply of the valley. Hence balancing the advantages of snow and rainfall against the disadvantages of damage by hail, drought and diluvion, the average of two years for which alone the crop statistics are available may be considered as fairly representative of the average agricultural year. The Kharif 1905, though not taken into account, has been nearly harvested in the Lower Kurram, and in a fortnight or 20 days will be harvested in the Upper Kurram also. It is considered the best crop of the last twelve years.

Crop experiments.

29. The agricultural products of the valley have been arranged by circles in the following table:—

ASSESSMENT CIRCLE.	KHARIF.											RABI.														
	Rice.	Maize.	Kangri.	China.	Other cereals.	Mung.	Via h.	Isba.	Cotton.	Kurkha.	Fruits.	Vegetables.	Turnips and carrots.	Other kharif crops.	Total kharif.	Wheat.	Barley.	Tobacco.	Fodder crops.	Fruits.	Melons.	Vegetables.	Others.	Chilies.	Total.	
Koh-i-Daman	27	167	15	03		25	02			55	7	07	01	01	54 04	32 8	1'9	02 10	1 2		04					45 96
Sahra		52	10'3			48				4'8		1			25'2	69'4	2'7	1	1 8	8		...				74'8
Rodghara	35 3	82	07		04	10 5	01		04	3		01	01		62 22	20 2	4 8	02	3 5	2	02	04				37 78
Whole valley ...	30'3	11 4	1'2	01	03	9 9	02		05	4 07	7	04	01		57 33	32'0	3 6	03	5 0	6	01	03				42 67

It will appear from the above that excluding the two fodder crops—shaftal in the spring and kurkha in the autumn—the five principal revenue paying crops are wheat, rice, maize, mung and barley. With a view to ascertain the outturn per acre of each of these crops, experiments were carried out on the lines of Settlement Commissioner Punjab's Circular No. 5—226, dated 4th March 1898. No officer below the rank of Naib Tahsildar was entrusted with the task, and some of the intelligent zamindars were also associated in the work. Observations were limited to three harvests—Rabi 1904, Kharif 1905, and Rabi 1905. The difficulty of the extreme smallness of holdings was overcome by selecting compact blocks of standing crops extending over more than one acre, though falling within many holdings. The tendency to hit upon a crop above rather than below the average was noticed, but the Turis, who are shrewd business men, were not found wanting in tampering with the sheaves on the threshing floor to counteract the high results. Nor did the appointment of the Turi guard over the different centres and the security of Turi Maliks concerned prove as effective checks as they should otherwise have done. The results of Rabi 1904 in tracts where measurements could not be started till the following kharif were not very sound, but the experiments of Rabi 1905 were made with greater care, and then for further satisfaction I reserved for myself a large number of observations in all the three seasons. No assistance could be had from money lenders' books or the records of Civil Courts, nor had any official experiments been conducted since the Summary Settlement. It may be noted here that although damage by hail, mostly in Upper Kurram, was caused in all the three harvests under observation (see figures in Appendix C and remarks in paragraphs 3 and 28) only a few experiments, where the crop had been severely injured or gross dishonesty detected, have been excluded in striking the average. The detail of experiments made has been given in the appendix, and the outturn assumed in each case has been discussed below.

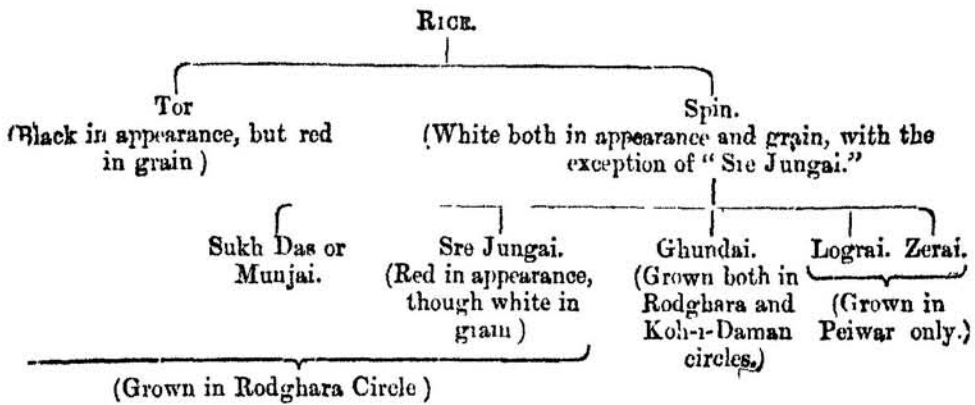
30. *Rice*.—Rice forms the most important crop and the staple food of the valley. It constitutes 30 per cent. of the total cropped area, but 27 per cent. of the matured area in the Daman and 35 per cent. of that in the Rodghara Circle.

Kharif and rabi crops.



The rice lands called "sholgira" are divided into blocks which are sown by turn in alternate years. Hence, though a second year crop on dofasli lands, rice appears in the crop statistics of every year.

The following varieties are to be found in this valley :—



Average cropped area under rice is 13,361 acres, half of which is irrigated by the Kurram River and the other half by springs and snow water. Four-fifths of it is grown on dofasli land and the remaining on ekfasli land. One novelty worth mentioning is that an acre of this crop was harvested with the help of rainfall in the Sahra Circle. Owing to fertilising silt in the Rodghara Circle the outturn in that circle is higher than that in the Koh-i-Daman, and experiments made have brought out the same result. The unhusked rice or paddy is known as *shali*, and rice when husked is called "warize." In the calculations of produce estimate reference has been made to the former. The following discussion will show how average outturn per acre on each class of soil has been worked out and assumed in different circles :—

#### *Rodghara abi dofasli.*

The results obtained by circle officers are :—

The Tahsildar on 3·7 acres found yield per acre from 11 to 39 maunds.

The Naib Hakim, Lower Kurram, on 3·1 acres found yield per acre from 13 to 38 maunds.

My own results on 8·3 acres varied from 22 to 28 maunds. Average outturn of all these experiments on an area of 15·1 acres amounts to 24 maunds per acre. I have assumed 22 maunds per acre, which was approved by the Revenue Commissioner.

#### *Rodghara abi ekfasli.*

Only one experiment was made by me on this class of crop, which forms 17 per cent. of the matured rice in this circle, and I got 19 maunds yield per acre on an area of 1·2 acres. I have assumed 18 maunds, which has also been approved by the Revenue Commissioner.

#### *Rodghara chashmai dofasli and ekfasli.*

As regards chashmai dofasli and ekfasli rice, it amounts to 20 per cent. of the total harvested area of the circle, and no separate experiments were arranged for. But I propose to adopt the same outturn in this case as in the Daman Circle for the reason that spring irrigation in both the circles is pretty much alike both in its duration, volume and effects.

#### *Sahra barani.*

In this case an outturn of 8 maunds per acre will be considered sufficient for one acre of crop.



*Daman chashmai dofasli.*

Experiments in the Daman Circle have given the following results :—

The Tahsildar on an area of 1·4 acres got an average of  $30\frac{1}{2}$  maunds per acre.

The Naib Tahsildar on an area of 1·7 acres got an average of  $20\frac{1}{2}$  maunds per acre.

My own experiments on 3·1 acres gave an average of 19 maunds per acre.

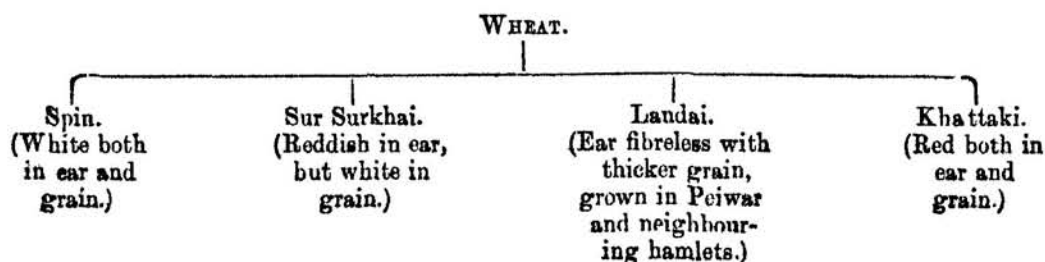
Average outturn of all these experiments on an area of 6·2 acres amounts to  $21\frac{1}{2}$  maunds per acre. I have assumed 18 maunds per acre, or one maund below my own results, which were obtained from a larger area than experimented on by other officers.

*Koh-i-Daman chashmai ekfasli.*

No experiments were made on chashmai ekfasli crop, which forms 7·7 per cent. of the total harvested area of the circle, but I think considering the comparatively poorer nature of the ekfasli soil an outturn of 14 maunds per acre would be quite fair.

*Wheat.*—The next important crop is wheat, which forms 32·6 per cent. of the total matured area of the valley. It exceeds rice in area owing to the fact that a lot of it is grown in the glens and the Sahra, where rice is impossible. Otherwise in the Rodghara Circle, which is entirely irrigated, the wheat crop is one-seventh less than the rice crop. The average cropped area under wheat is 14,374 acres, of which 54·6 per cent. is irrigated from springs and snow water and 38·8 per cent. from the Kurram River. 65 per cent. of the crop is raised on dofasli land, 28·4 on ekfasli land, and 6·6 per cent. on unirrigated land.

The chief varieties grown are four—



The irrigated wheat on dofasli lands is principally the manured crop, and fluctuations in the cropped area depend upon the quantity of manure available. It generally follows rice, and in this case again the outturn in the Rodghara Circle is higher than that in the Daman. The results obtained by experiments have given the following averages :—

*Rodghara abi dofasli.*

The Tahsildar on 1·7 acres found  $10\frac{1}{2}$  maunds yield per acre.

The Naib Tahsildar on 10·3 acres found  $7\frac{1}{2}$  to  $16\frac{1}{2}$  maunds yield per acre.

The Naib Hakim, Lower Kurram, on 4·1 acres found  $7\frac{1}{2}$  to  $14\frac{1}{2}$  maunds yield per acre.

My own results on 5 acres gave an average of 10 to 20 maunds per acre.

The average on a total area of 21·1 acres amounts to  $11\frac{1}{2}$  maunds per acre. The experiments of Rabi 1904, about the unreliability of which I have remarked before, resulted in an average of 9 maunds per acre. I have assumed 11 maunds per acre, which was approved by the Revenue Commissioner.