

ASSESSMENT REPORT

OF THE

AGROR VALLEY,

HAZARA DISTRICT,

NORTH-WEST FRONTIER PROVINCE

BY

Khan Sahib Fazal Haq Khan, B. A.,

SETTLEMENT OFFICER.

1915.



Peshawar:

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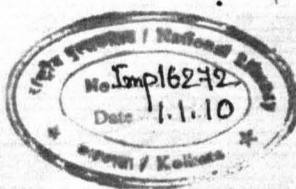
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TABLE OF CONTENTS.

1. Paragraph.	2 Subject.	3 Page.
CHAPTER I.—PHYSICAL CHARACTERISTICS.		
1	Boundaries and area	1
2	Physical features	<i>ib.</i>
3	Climate and Rainfall	<i>ib.</i>
CHAPTER II.—ASSESSMENT CIRCLE AND CLASSIFICATION OF SOILS.		
4	Assessment circle	
5	Classification of soils	<i>ib.</i>
6	Classification of waste land	3
CHAPTER III.—FISCAL HISTORY.		
7	Early history	3
8	Previous assessments of the valley	5
CHAPTER IV.—GENERAL STATISTICS.		
9	Areas	5
10	Population	7
11	Communications and markets	8
12	Trade	<i>ib.</i>
13	Agricultural stock	9
14	Proprietary tenures	<i>ib.</i>
15	Miscellaneous assets	11
16	Alienations	12
17	Debt and interest	<i>ib.</i>
CHAPTER V.—CROPS AND HARVESTS.		
18	Crops	13.
19	Recent harvests	15
20	System of cultivation	16
21	Crop experiments and outturn	<i>ib.</i>
CHAPTER VI.—PRICES.		
22	Prices assumed	17
23	Rise in prices	<i>ib.</i>

1	2	3
Paragraph.	Subject.	Page.
	CHAPTER VII.—TENANTS, RENTS AND OTHER DUES.	
24	Cultivating occupancy	18
25	Cash rents	19
26	Payments to menials	20
27	Batai rents	ib.
28	Halchuri and Ara	21
	CHAPTER VIII.—THE PRODUCE ESTIMATE AND THE HALF NET ASSETS RATE.	
29	The Produce Estimate	ib.
	CHAPTER IX.—ASSESSMENT PROPOSALS.	
30	Presumptive assessment	22
31	Grain consumption and cash available for the payment of revenue	24
32	Mills	25
	CHAPTER X.—FINANCIAL RESULTS AND MISCELLANEOUS MATTERS.	
33	Land Revenue and cesses (Financial results)	ib.
34	Introduction and term of assessment and dates of instalment	26
35	Points requiring orders	ib.

INDEX RELATING TO APPENDICES AND STATEMENTS.

1	2	3
Number.	Subject.	Page.
APPENDICES.		
A (1)	Statement of rainfall of raingauge at Oghi	ii
A (2)	" " " at Mansehra	iii
A (3)	" " " at Abbottabad	iv
B	Statement showing the results of crop experiments made in Kharif 1914 and Rabi 1915, the rates of yield per acre assumed in the First and Second Settlements.	v
C	Calculation of average rents and the percentages of the gross produce received by land-lords.	vii
D	Produce estimate, (area, in acres, yield in maunds)	viii
E	Statement of salient statistics for consultation in determining the assessment ...	x
F	Details of water mills	xi
STATEMENTS.		
I	Milan Raqba or area Statement	xii
II	Jinswar Return of Kharif crops	xiii
Supplement to Statement II	" " Kharif 1915	xiv
III	" " Rabi crops	xv
IV	Jama Wasil Baqi or Revenue account	xvi
V	Yearly totals of transfers of rights of owners	xvii
VI	Abstract of ownership, mortgages, sales and revenue assignments	xviii
VII	Abstract of cultivating occupancy	xix
Supplement to Statement VII	Detail of cash rents	xx
IX	Return of Cattle, Carts and Population	xxi

No. 92-A. G.

FROM

THE HON'BLE LIEUT.-COLONEL D. B. BLAKEWAY, C.I.E.,

Revenue Secretary to the Chief Commissioner,

North-West Frontier Province,

TO

THE DEPUTY COMMISSIONER,

HAZARA DISTRICT,

ABBOTTABAD.

Dated Peshawar, the 17th January 1916.

SIR,

I AM directed to acknowledge the receipt of your letter No. 6755, dated the 27th November 1915, forwarding with your remarks the Assessment Report of the Agror Valley which has been prepared by Khan Sahib Fazl Hak Khan, and reached the Local Administration in print on 24th December 1915. The present letter embodies the review of the Revenue Commissioner and the orders of the Chief Commissioner with regard to two of the points on which instructions have been solicited by the Settlement Officer, namely:—

(1) The assessment on land.

(2) The assessment on mills.

Orders with regard to the date of introduction of the new demand and the term of the Settlement will shortly be communicated.

2. The general aspect of this distant upland valley was described in the last Assessment and Settlement Reports, and the description has been repeated in the present Assessment Report. Though both plain and hilly tracts occur amongst its natural features, one assessment circle was found sufficient at the last Settlement, and in the present Settlement this one circle has been maintained, the differences in soils of the same class owing to situation being small and allowance for variation in the productive value of estates being possible in the light of experience gained during the currency of the existing Settlement. The classification of soils in the cultivated area has also been preserved, but classes have been adopted in uncultivated land yielding grass and timber, with which also the strips of land between fields (known as *banna*) have been included for the sake of greater exactness. The fertility has in no way diminished and the rainfall continues plentiful. The rain-gauge now at Oghi shows that during the last 14 years the rainfall between April and September has varied from 19.55 to 33.53 inches, and between October and March from 20.72 to 61.15 inches. The average rains maturing the autumn crops, however, have contrary to expectation at the last Settlement been shown by the gauge to be less than those at Abbottabad.

3. The past fiscal history of the tract has been distinguished by great leniency of assessment. In 1841 the

Fiscal history.

Sikhs assessed Agror with Rs. 1,575.

This assessment was continued by us until 1853, when it was raised to Rs. 3,315. The first regular Settlement resulted in an assessment of Rs. 4,000, which was much below the revenue paying capacity of the valley at the time. At the last Settlement of 1898-1900 a series of opinions were hazarded by the officers concerned. The then Settlement Officer's estimate was Rs. 20,181; the Deputy Commissioner considered Rs. 14,000 a fair assessment, but reduced this sum to Rs. 10,000 for political reasons: the Commissioner thought that it would not be wrong to take Rs. 12,000, while the Financial Commissioner's view was that a demand of Rs. 20,181 was moderate if political reasons were excluded. Eventually a demand of Rs. 13,300 (including Rs. 300 assessed on mills) was sanctioned by the Punjab Government. But even this did not represent a final expression of opinion with regard to the proper assessment of the valley, as the Chief Commissioner in dealing with the Settlement Report dissented from the views of the Punjab Government, and recorded his belief that a fair assessment would have been Rs. 22,000. The Settlement Officer has not referred to the subsequent working of the Settlement, but the peace and security secured to the valley by the deportation of the Khan in 1888 and the cessation of the intrigues of himself and his followers have been matched by the ease and regularity of the recovery of the Government demand during the last 15 years.

4. After allowing for alterations due to correction of measurements, an

Cultivated area and population.

increase of 6 per cent. has accrued in the cultivated area, which now stands

at 22,500 acres (including *banna*) as against 21,281 acres at the last Settlement. The important point is that the increase has entirely occurred in the two highest classes of soils.

There is an expansion of 166 acres in the *hotar* (irrigated) area and of 708 acres in the *bari* (manured unirrigated) area combined with an appreciable decrease in the inferior grades of soils. The quality of lands may be taken as improving therefore.

On the other hand, since the first regular Settlement of 1869 the population has more than doubled, and the density per square mile of cultivation has also more than doubled. During the last 10 years the population has increased by 11 per cent., and has outstripped the increase in cultivation. But it is to be noticed that the figures given by the Settlement Officer show that the density is still less, reckoned on the cultivated area, than in any of the tahsils of the Hazara District.

5. Communications may be dismissed with the remark that there has

Communications and markets.

been no change of importance since the last Settlement with the exception that

the Railway by the extension of the branch trunk from Sarai Kala on the main North-Western line to Havelian has now been brought 35 miles nearer by road. A stimulus to export may be expected when a further extension takes place. A certain amount of business is transacted locally at Shamdhara: otherwise the principal markets in the neighbourhood are at Mansehra, Baffa and Shinkiani in the Mansehra Tahsil.

6. The number of cattle per head of population has decreased, though

Cattle and miscellaneous income.

the number of ploughs shows the considerable increase from 1,916 at the last

Settlement to 2,358 in 1914. No reason is given by the Settlement Officer for this increase which has outdistanced the expansion in cultivated area. The increase in holdings, which has certainly occurred, would probably only lead to the peasantry borrowing ploughs from each other. The increase in the number of ploughs may be ascribed, therefore, to better husbandry, which is now possible owing to the quieter conditions prevailing. The miscellaneous income of the villagers is estimated to have trebled, having risen from Rs. 24,000 to Rs. 73,000. Of the latter about half a lakh is set down to the sale of *ghi*. But this

considerable figure has been reached on the assumption that only one-third of the *ghi* produced is consumed and that the balance is sold. This halves the home consumption estimated by the last Settlement Officer (paragraph 34 of his Report). An independent opinion supports the higher proportion of home consumption, as the Sayads and Swathis, the predominant tribes in the valley, are described by Captain Beadon, Assistant Settlement Officer, Hazara, in his Assessment Report on Mansehra as being specially large consumers of *ghi*, and there can be little doubt that the profits on this article have been considerably exaggerated. In the case of income derived from Government service we have more definite data. The Settlement Officer puts this at Rs. 19,000 in place of Rs. 12,000 estimated at the last Settlement, or nearly half as much again as the revenue payable.

7. In paragraph 3 (a) of your letter forwarding the report you remark that the size of holdings has decreased to an alarming extent, the average holding being now only 4 as against 22 acres in 1899. The Settlement Officer in the table included in paragraph 14 of the Report gives the total number of proprietary holdings as 2,569 with an area of 9,830 acres, from which he deduces the above average per holding. On the other hand, in column No. 5 of Statement No. VI appended to the Report he gives the total number of *jamabandi* holdings (in other words proprietary holdings) as 1,118. There is a large difference between the two sets of figures for holdings, but even the latter total may exceed the correct number of holdings on which an average should be struck for the sake of comparison. A reference to paragraph 38 of the Assessment Report, 1899, shows that for the purpose of arriving at an estimate of the average size of holdings, those of the Khan and occupancy tenants and mortgaged lands were excluded from the calculation. In the present report the heading of the statement in paragraph 14 shows that the holdings of occupancy tenants only have thus been excluded. If the other exceptions are also made, as at last Settlement, the total number of holdings on which an average should be struck will presumably be less than 1,118. The correctness of the deduction regarding the average size of holdings is thus very doubtful.

8. The sales of cultivated land since last Settlement have been 1.3 per cent. at an average price of Rs. 157 per acre as against Rs. 58 (Rs. 58 are given in paragraph 13 of last Settlement Report and Rs. 64 quoted by the Settlement Officer in paragraph 41 of last Assessment Report). The mortgages of cultivated land have amounted to 2.4 per cent., the average debt being Rs. 126 per acre mortgaged as against Rs. 67. Except for a very small fraction, the sales and mortgages have been entirely to agriculturists. There has been a great rise in land values, therefore, as judged by the alienation statistics, approaching in the case of sales treble, and in that of mortgages double, the former values. The small area transferred by sale and mortgage indicates the prosperity of the proprietary body, and, even though the area now under mortgage stands at 5.2 per cent. as compared with 2.8 per cent. at the last Settlement (this is the percentage given in paragraph 13 of last Settlement Report, but 2.97 are the figures in paragraph 40 of last Assessment Report), the figures for redemption are satisfactory. On the other hand, the unsecured debt is said to have risen to 14,930 as compared with a few hundred rupees at the last Settlement. Since fresh alienations have their starting point in floating debt, this must be taken into consideration, though in the nature of things accuracy of figures in the case of such debt cannot be expected. But, on the whole, economic stability is certainly presumable from the facts tabulated.

9. The Kharif sown area in the last five years has been remarkably constant, and in the Rabi area the greatest fluctuation was in 1911, when 6,495 acres were sown as compared with the average of 7,512. Taking the two crops together, an average of 90 per cent. has matured in the proportion of 67 per cent. in the Kharif and 33 per cent. in the Rabi harvest. The extension of the Rabi at the expense of the Kharif crops, a common phenomenon in the

Punjab, has not appeared here, as the above proportions almost exactly correspond to the proportions of 68 per cent. and 32 per cent. in the cycle of five years before the last Settlement. A point worthy of notice, though not discussed in the report, is that maize, the staple food-grain of the valley, and occupying by far the largest area, is gradually being replaced by minor crops. Its percentages of the matured area have been 70 in 1870, 58 in 1899 and 51·7 in 1913-14.

10. Only 23 per cent. of the cultivated area is cultivated by owners.

Tenants and rents.

Tenants-at-will pay lump cash rents on 14 per cent. (2,916 acres) and rents in kind with or without an addition of cash on 11 per cent. (2,328 acres). But, as pointed out by the Settlement Officer, it is only by a few recent tenants that fair competition cash rents are paid. Moreover, these rents relate to several classes of soil, and no data based on rents paid solely for one class have been collected. The rents deduced by the Settlement Officer for classes of soil from the cash rents paid are in consequence theoretical and not actual rents. In the case of rents in kind, varying shares of the produce are paid by tenants-at-will according to the quality of the land under their cultivation. This differs from the custom prevailing before the last Settlement, when *batai* was paid to the Khan at the general rate of one-fourth, with the addition of certain customary dues. Both cash and kind rents are low. For this reason, and also on account of the small area on which they are paid, it would be unwise to rely too much on them as a guide to net assets.

11. The commutation prices sanctioned show as a whole a rise of about 32 per cent. since last Settlement.

Prices.

This advance appears to be large at first sight, but in reality represents the enhancement which has taken place since 1892, as the prices sanctioned at last Settlement were those given by Mr. Cunningham in his preliminary report of that year, and no allowance was made when the assessment proposals were framed in 1899 for the further rise which had occurred in the interval. A comparison of these prices with the prices of the chief staple crops sanctioned for the Settlement of the rest of the Hazara District in 1901, two years after the Agror Settlement, shows that the latter were nearly 32 per cent. higher than the Agror prices. The rise in prices now estimated, therefore, cannot be considered other than very moderate. In estimating their advantage to the agriculturists, we must set off his increased expenditure on plough cattle, of which the prices have trebled. The small size of the holdings also implies that he cannot benefit to the same extent as in a tract where holdings are large, and where the excess produce beyond household consumption goes as a matter of course to the neighbouring market. The higher prices obtainable for produce, therefore, must be considered subject to these reservations.

12. Of the four elements of a produce estimate, namely, area, yield,

Produce estimate.

prices and landlords' shares, reference has already been made to the two latter in the foregoing paragraphs. As regards yield, the unreliability of the crop experiments made in Kharif 1914 and Rabi 1915, owing to the unusual character of these two harvests, has made it safer to adopt the rates of yield assumed at the last Settlement, which were considered at the time to have been fully justified. In the case of the acreage of crops on the several classes of soil, for which rates have to be framed, the Settlement Officer has been faced with the drawback that separate acreage results have not been available in the Revenue records. A distinction has only been drawn between irrigated and unirrigated land, and the Settlement Officer consequently has based his acreage figures only on the Rabi and Kharif harvests of 1915. This has permitted him to utilize the new measurements. But the figures, if they could have been deduced from a series of harvests, might have reflected more closely cultivating conditions. The difference between the soil rates brought out by the produce estimate and those based on the cash rent estimate is noticeable, as in the better classes of land the former are about double the latter.

13. The general considerations which justify an enhancement of the present revenue may be summarized as follows :—

Considerations affecting assessment.

- (1) The last Settlement was lenient, the Chief Commissioner being of opinion that a fair assessment would have been Rs. 22,000 in place of Rs. 13,300 fixed by the Punjab Government.
- (2) The increase in cultivation amounts to 6 per. cent.; agriculture has improved, and the tract has a good and certain rainfall averaging 48 inches.
- (3) The miscellaneous resources of the people from pasturage and forest are large, and Government service alone brings in Rs. 19,000 as against Rs. 12,000 at last Settlement.
- (4) The sale value of land is now 260 times the land revenue. It is $2\frac{1}{2}$ times what it was, and land can be pledged for twice its previous loan value.
- (5) Prices have increased 32 per cent. at a moderate estimate as compared with those accepted at the last Settlement.

On the other side of the balance must be placed the facts that population has increased faster than the cultivated area; cattle per head of population have decreased; holdings have increased in number and decreased in size, but probably not to the extent assumed; the cost of plough cattle has risen. Further, in a frontier tract weight has to be allowed to the political considerations which make it necessary or expedient that the revenue demand should not be assessed at a figure to arouse discontent whether justified or not. Though the previous acceptance of revenue very far below the half net assets standard does not imply the permanent abandonment by Government of a reasonable share in the produce, the pitch of the last assessment is a fact of importance which cannot be left out of consideration in deciding the next demand.

Assessment.

14. The new demand according to the half net assets rate and the other usual tests works out as follows :—

- (1) By the half net assets rate, based on the produce estimate of the present Settlement, including the dues *hatchuri* and *ana*, Rs. 45,718.
- (2) By the half net assets rate, deduced from cash rents and worked out for soils, with an assessment of 6 pies per acre on *banna* and *dhaka rakh*, Rs. 27,243.

The above two estimates must be considered subject to the remarks in paragraphs 12 and 10 above.

- (3) By the soil rates of the last Settlement applied to the present cultivated area plus 32 per cent. on account of the rise in prices, Rs. 17,523.

If, however, field boundaries (*banna*) be included in the cultivated area, as was the case at the last Settlement, a demand of Rs. 20,000 is the result.

- (4) By the all round rate of Re. 1-6-9 per acre of cultivated area deduced from cash rents (paragraph 25 of the Report), with an assessment of 6 pies per acre on *banna* and *dhaka rakh*, Rs. 29,184.
- (5) By the Konsh Bhogarmang (the adjoining assessment circle in the Mansehra Tahsil) soil rates as reduced in 1910 in accordance with the general remission sanctioned by the Government of India, with an assessment of 6 pies per acre on *banna* and *dhaka rakh*, Rs. 16,580.

As pointed out, certain of the lands of Agror are superior to those of the Konsh Bhogarmang circle. The rise in prices since the assessment of Konsh Bhogarmang must also affect this calculation.

The Settlement Officer has proposed a demand of Rs. 20,000. You have suggested a demand of Rs. 16,000 with reference to certain points elicited by the Settlement Officer's enquiry, which have already been discussed—the inadvisability of so large an enhancement as 54 per cent., and a comparison of the Konsh Bhogarmang rates. On revenue grounds alone the Chief Commissioner considers that the assessment of Rs. 20,000 is justified, but having regard to the general considerations referred to in the last paragraph, more especially the leniency of the demand hitherto and the political question involved, he considers it advisable not to exceed an advance of 33 per cent. on the last assessment. He will fix the assessment consequently at Rs. 17,333-5-4. This will give an average rate per acre of cultivated land of Re. 0-13-7. The assessment will include the rate now proposed on the grass yielding portion of the waste known as *banna* and *dhaka rakh*.

15. The Chief Commissioner approves of an assessment of Rs. 350 on mills and rice-pounders, which should be distributed according to their profits. At the last Settlement there were 155 mills and rice-pounders which were assessed to a lump sum of Rs. 300, at an average rate of Rs. 2 each. The Settlement Officer now reports that there are 178 mills and 22 rice-pounders (paragraph 32), but the incidence of Rs. 2-4-0 mentioned by him (paragraph 32 and Appendix F) has been calculated on a total of 178 only. On the assumption that the latter is the correct total, the assessment of Rs. 350 will give an average rate of Rs. 2 as before.

With the addition of Rs. 13-5-4 per cent. on account of cesses, the total assessment therefore will be Rs. 19,684-6-4 as against Rs. 16,182 at the last Settlement and Rs. 15,081 now paid.

16. The assessment operations have taken longer than was anticipated, partly owing to the entire remeasurement of the valley, which was undertaken without reference and was not required, and partly owing to the ill-health of the Settlement Officer, Khan Sahib Fazl Hak Khan. His report, however, is clear and careful, and exhibits its facts in a manner readily comprehensible: the Chief Commissioner regrets that immediately after its submission Khan Sahib Fazl Hak Khan was obliged to proceed on combined leave, and has thus been prevented from completing the Settlement.

I have the honour to be,

SIR,

Your most obedient Servant,

D. B. BLAKEWAY,

*Revenue Secretary to the Chief Commissioner,
North-West Frontier Province.*

No. 300-Ag.

FROM

THE HON'BLE LIEUT.-COLONEL D. B. BLAKEWAY, C.B.E.,

Revenue Commissioner, North-West Frontier Province,

TO

THE DEPUTY COMMISSIONER,

HAZARA.

Dated Peshawar, the 28th February 1916.

SIR,

I AM directed to refer to my letter No. 92-Ag., dated 17th January 1916, conveying the Chief Commissioner's orders on the assessment proposals of yourself and the Settlement Officer, Agror, but reserving for subsequent decision the date of introduction of the new demand and the term of the new Settlement.

2. In accordance with the usual practice the new Settlement would have been introduced from Kharif 1915 but in view of the present frontier situation and the political considerations involved in the taxation of a remote border tract like Agror—considerations which have also been allowed considerable weight in the determination of the new demand—the Chief Commissioner has considered it advisable that the introduction of the new Settlement shall be postponed until after the war. With the approval of the Government of India, it is now directed that the Settlement shall be introduced from Kharif 1918.

3. The practical measures to give effect to this order are simple. It will be best for the Settlement Officer to proceed with the distribution of the new demand by holdings according to the new records, and to show below the new assessment in the case of each holding (1) the amount payable up to Kharif 1918, and (2) the increase of one-third payable from that harvest, the latter entry being made in red ink. The increase in the case of mills should similarly be entered.

4. As regards the term of the Settlement, it was originally the intention of the Punjab Government when the last Assessment Report came under consideration that the term of Settlement should extend up to the latest year sanctioned for the Settlement of the rest of the Hazara District, then about to commence. The separation of this Province having in the meantime taken place, the Chief Commissioner (Colonel H. A. Deane) considered that, in view of the extreme lightness of the demand, the term should be only 15 years from Kharif 1899. This proposal was sanctioned by the Government of India in their letter No. 64-F., dated 14th January 1903. The term of Settlement in the Abbottabad Tahsil of the Hazara District concludes with Rabi 1935 and in the Mansehra and Haripur tahsils with Rabi 1934. At the present revision the term of the Agror Settlement is fixed for 16 years, with the approval of Government of India, so as to expire with that of the Mansehra Tahsil after Rabi 1934.

5. The date of introduction and term of the Settlement may now be announced.

I have the honour to be,

SIR,

Your most obedient Servant,

D. B. BLAKEWAY,

Revenue Commissioner,

North-West Frontier Province.

FROM

J. H. R. FRASER, ESQUIRE, I. C. S.,

*Deputy Commissioner,**Hazara District,*

TO

THE REVENUE COMMISSIONER,

*North-West Frontier Province,**Peshawar.**Dated 27th November 1915.*

SIR,

I HAVE the honour to forward in original Khan Sahib Fazal Haq Khan's report on the re-assessment of the Agror valley.

2. The physical features of the country and its political development have been described fully in previous reports and are set forth at length by the Settlement Officer.

Its fiscal history in the matter of land revenue is :—

<u>Year.</u>				<u>Land revenue assessed.</u>
				Rs.
1841	...	...	...	1,575.
1853	...	...	...	3,315.
1870	...	...	...	4,000.
1899	...	...	...	13,000.

Now proposed by Settlement Officer :—

Rs. 20,000.

In short the Settlement Officer proposes an increase of 54 per cent on a land revenue imposed only 15 years ago.

The reasons for the proposal are set forth lucidly and are based principally on the calculation of the half net assets standard. In 1899 M. Sarfaraz Khan estimated these at Rs. 39,904 on which he proposed an assessment of Rs. 20,181 (reduced by Punjab Government to Rs. 13,000). They have now been calculated at Rs. 45,718 out of which it is proposed to take Rs. 20,000. Such an assessment doubtless can be justified on the recognised theories of land assessment applied in the plains of the Punjab. It cannot, however, be accepted as the only test in a remote hilly region such as that of the Agror valley.

3. My reasons for favouring a reduction in the proposed assessment are set forth below :—

(a) Although there has been a large rise of prices since 1899, yet communications in the valley have not improved. Population has increased by about 11 per cent, while there is only a rise of 6 per cent. in the area under cultivation. The size of holdings has decreased to an alarming extent, the average holding being now only 4 as against 22 acres in 1899. It is proposed to assess each of these acres under cultivation at Re. 0-15-8 per annum instead of Re. 0-9-9 as in the previous settlement.

(b) Economically and politically it is unwise for Government to raise its demand by such a large figure as 54 per cent. which is 13 per cent. more than the revised figure of enhancement taken for the District in the last Settlement (41 per cent.)

The question is to some extent connected with the lightness or otherwise of the existing assessment. On this subject several divergent views have been expressed. Mr. Sarfraz Khan proposed Rs. 20,181. This was reduced by the Punjab Government to Rs. 13,000 (letter No. 1933, dated 14th December 1899, from Revenue Secretary to Punjab Government to Senior Secretary to Financial Commissioner). Sir Mackworth Young considered that an estimate based on the cash rents paid by the Khan's tenants would provide a fairer assessment than one calculated on any system of assumed half net profits. He therefore fixed Rs. 13,000 as a fair Government demand. In 1902 when reviewing the previous proceedings Mr. (now Sir Michael) O'Dwyer (letter No. 1389-G., dated 13th August 1902, from Revenue Secretary to the Chief Commissioner, North-West Frontier Province to the Settlement Commissioner, Punjab), wrote that a fair assessment on revenue paying lands would have been about Rs. 22,000. He took this view, because in his opinion the commutation prices had been pitched too low and the cash rents had been miscalculated. The latter is the theory adopted by the present Settlement Officer, who, however, does not suggest so high a figure as that mentioned by Mr. O'Dwyer. The consensus of opinion therefore seems to favour the theory that from a purely revenue point of view the valley was under assessed in 1899.

There are, however, other considerations which can not be left out of account and each assessment must be treated in relation to the actual amount of that which preceded it. In the present case we are confronted with an enhancement of as much as 54 per cent.

(c) During his recent tour in Agror a large gathering collected to petition the Chief Commissioner that the present assessment might be allowed to remain unchanged till the expiry of the term of Settlement fixed for the remainder of the district. They were able to advance cogent pleas. In 1899 Sir Mackworth Young in his letter quoted above decided that the term of Settlement should extend up to the latest year of that of the district. (This was fixed later as Kharif 1925, subsequently extended to 1935). This decision doubtless was made known to the people. However in 1902 Mr. O'Dwyer recommended and the Government of India (Foreign Department letter No. 64-F., dated 14th January 1903) agreed that the term should be fixed for 15 years from 1899 in view of the extremely light assessment imposed.

It is not for me to criticize these decisions, but it would seem equitable to fix a fair assessment and allow it to run for a reasonable period rather than to harass the people by raising the demand by slow stages at very short intervals. Further, in the present instance the people can raise the grievance that they were allowed to suppose that the 1899 Settlement was to continue till at least 1925.

4. For the above reasons, I consider that the new assessment cannot be pitched as high as Rs. 20,000. It remains to suggest a new demand.

(a) The valley is very similar to the neighbouring Konsh Glen both in physical characteristics, classes of soil and means of communication. Settlement Officer in Chapter IX of his report has himself used this as a basis of comparison. He appears, however, to have overlooked the very large remission granted by Government in 1910, when the demand for Konsh was reduced from Rs. 23,045 to Rs. 16,993, giving the following soil rates:—

Soil	Rate proposed in 1899.	Rate as reduced in 1910.	Rate now proposed for Agror.
Hotar ...	2 12 0	2 0 0	2 4 0
Bari ...	2 8 0	1 12 0	1 14 0
Bela ...	0 12 0	0 8 0	1 6 0
Maira ...	0 12 0	0 8 0	0 12 0
Kalsi ...	0 7 0	0 4 0	0 4 0

The reduced Konsh rates, if applied to Agror, give a resultant demand of Rs. 15,884. However, as the Settlement Officer remarks, the Agror Bela is much superior to that of Konsh and should be assessed at higher rates compared with Maira. Further, there has been some rise of prices since the Konsh rates were fixed, so that perhaps some increase over Rs. 15,884 is justified.

(b) Another method of estimating a fair demand gives even a smaller figure. In 1899 the assessment was fixed at about one-third of the assumed half net assets (Rs. 13,000 out of Rs. 39,000 or Rs. 35,000).

At this rate the present demand should be Rs. 15,000 ($\frac{1}{3}$ of Rs. 45,718).

5. I consider that the people have some justification for their plea that the present assessment should remain unchanged till at least 1925, and that, if it is to be enhanced, it should not be pitched higher than Rs. 16,000. This represents an increase of 23 per cent. over the previous assessment with an incidence of Re. 0-12-6 as against Re. 0-9-9 per acre of cultivation.

6. The Settlement Officer proposes a small increase on mills from Rs. 320 to Rs. 400. The sum is so insignificant and the mills so poor that I would recommend no change in the present demand.

7. The Settlement operations lasted 16 months (14th July 1914 to 18th November 1915) during which period the whole of the valley, both plain and hills, was remeasured. The total cost was Rs. 10,410 which has been paid from the Agror Accumulation Fund.

8. I agree with the Settlement Officer as regards the date from which the new settlement is to be introduced and the term for which it is to be fixed.

I have the honour to be,

SIR,

Your most obedient servant,

H. FRASER,

Deputy Commissioner,

Hazara.

ASSESSMENT REPORT

OF THE

AGROR VALLEY.

CHAPTER I.

PHYSICAL CHARACTERISTICS.

The valley of Agror is a part of the Mansehra Tahsil, lying in the west of it at the foot of the Black Mountain and separated from the Pakhli plain by the thickly pineclad ridge of Tinglai. Its northern boundary marches with Tikri, the Independent Territory of the Swathis and with Paryari the Independent Territory of the Saiyads, where it turns to the west and follows the Independent Territory of Isazais (Akazais-Hassanzais) and a part of Tanaul, the feudal territory of the Nawab of Amb. On the south the boundary again runs with the Tanaul and joins the Pakhli plain and Konsh on the east. Its extreme length from south-east to north-west is about 13 miles and its greatest breadth from east to west is about 11 miles. The total area of the valley is 64 square miles or nearly 22nd part of the area of the rest of the Mansehra Tahsil. The latitude and longitude of the valley is 70° east and $34^{\circ} 30'$ north, respectively. The population according to the last census (1911) is 18,671 souls i.e. 583 souls per square mile of cultivation and 339 souls per square mile of total area exclusive of Government forests.

Boundaries and Area.

2. The valley is enclosed on all sides by mountain ranges varying in height from 9,000 to 5,000 feet from the sea-level except at Khari Gali on the Tanaul border, west of Oghi, which separates the Black Mountain from the Gorya. The Black Mountain lies on the west, Khabbal Hills on the north, Tinglai on the east and the Gorya on the south. A large and level-plain tract stretches in the east-westernly direction through the middle of the valley.

Physical features.

Agror is an irregular valley broken here and there by hill streams. From the central plain at Oghi it has three horn-like projections, viz., Albora glen to the south, Kathai glen to the east and the Dilbori glen to the north. There are besides three other minor valleys, the Chulundrian, the Khabbal and the Shadaur lying in the north-east and south-east of the valley. The chief sources of irrigation are the Sarori with all of its tributaries from the Arbora, Kathai and Khabbal glens, and the Unhar with its tributaries from the Chulundrian glens and ravines from the Black Mountain, viz., Kaltora and Belian streams, etc. The Sarori with its tributaries joins the Unhar in the west of Oghi just on the Tanaul border near Khari Gali at a place known as Dogahi.

3. Agror as described by Colonel Wace is a "cold mountain tract." The climate is generally cool and temperate. Its winters on account of fall of snow are bitterly cold. In Lower Agror, however, the winters are made colder by the cold northerly wind which blows for about 3 days in a week. In the summer the nights are generally cool and days are not comparatively very warm even in plains unlike the rest of the plain portion of the district.

Climate and Rainfall (Appendix A).

The rain-gauge was first established at Oghi in April, 1901. Appendix A (1) gives the statistics of the rainfall as recorded at Oghi since the erection of the rain-gauge there. For purposes of comparison the rainfall at

Mansehra for the same period has been shown in Appendix A (2) and that for Abbottabad in Appendix A (3). It will be seen from these appendices that the average rainfall for the last fourteen years ending 1914-15 is 48·61 inches in Agror as compared with 40·35 inches at Mansehra and 49·65 inches at Abbottabad for the same period. Of the Agror rain-fall 27·51 inches occur in the hot-weather months, April to September and 21·10 in the cold weather months, October to March.

With a view to comparing the differences in the summer and winter rains I give below an extract of figures from appendices A (1), A (2) and A (3).

Seasons.	MANSEHRA RAIN GAUGE.	OGHI RAIN GAUGE.	ABBOTTABAD RAIN GAUGE.
	Average for 14 years ending 1914-15.	Average for 14 years ending 1914-15.	Average for 14 years ending 1914-15.
1st April to 30th September ...	26·19	27·51	32·0
1st October to 31st March ...	14·16	21·10	17·65
Full year ...	40·35	48·61	49·65

July and August are the rainiest months in the hot weather. In the winter there is not much to choose between January, February and March which have an average of between 4·66 and 5·92 inches.

The rainy season commences from about the middle of June and lasts till about the middle of September.

The winter rains commence towards the end of December and last till about the beginning of March. The rainfall of Agror is considerably more than that of Mansehra and little less than that of Abbottabad. The heavy snow which falls during the winter months in Agror makes the hill streams full in summer and the water supply for the irrigated lands is consequently abundant. The crops of Agror, for these reasons, seldom fail for want of water.

CHAPTER II.

ASSESSMENT CIRCLE AND CLASSIFICATION OF SOILS.

4. The valley was divided into three assessment circles at the First Assessment circle and classification of soils. Regular settlement by Captain Wace, but at the last Settlement (1898-1900) the whole tract was regrouped into one assessment circle called "Agror" and the same constitution has been maintained at the present settlement under the orders contained in the Revenue Commissioner's letter No. 51-C. dated 7th July 1915, to the Deputy Commissioner, Hazara.

5. Under the same authority the lands of Agror have been classified as below :—

Hotar (1,310 acres)—lands on the banks of hill streams invariably sown with rice. As soon as the soil shows signs of exhaustion, manure is applied and Shaftal, the common three-leaved clover, is sown.

Bari (4,516 acres)—land lying immediately round the village sites or homesteads and regularly manured, bearing maize and barley, wheat and mustard; wheat has the drawback of ripening too late and delaying the maize sowings. This soil is the back-bone of the cultivated area.

Bela (842 acres)—good loamy soil situated at the base of a hill stream or torrent or on the banks of a stream with exceptional facilities for receiving and retaining moisture. It gives two crops of wheat and maize a year. If the rainfall is at all excessive, it is water-logged and the crop rot.

Maira (8,252 acres)—Maira is the common light loamy soil situated on the level tops of ridges and mounds generally producing only one crop of either maize or wheat a year and remaining fallow for the rest of the time; when it is manured the soil is termed Bari.

Kalsi (5,512 acres)—is the very sloping terraced land on the sides of the hills which is usually the poorest soil of all, giving crop only once a year or every second year.

6. The classification of uncultivated area, exclusive of Government forests, is as below:—

Classification of waste land.

Banna (2,068 acres)—is the strips of uncultivated lands between cultivated fields.

Dhaka Charagah (2,710 acres)—uncultivated hill land suitable for grazing.

Dhaka Rakh (2,142 acres)—is the hill land on which the grass is preserved and cut for fodder.

Dhaka Darakhtan (4,723 acres)—is the hill land thickly covered with trees.

Ghairmumkin (2518 acres).

Banjar Jadid (28 acres).

Banjar Kadim (317 acres).

From this it will appear that the classification of soils, as far as cultivated area is concerned, is the same as at last settlement. The exclusion of Banna from the cultivated area and its classification with the uncultivated lands is an improvement on the last settlement and so is the classification of the other uncultivated area into Dhaka Charagah, Dhaka Rakh and Dhaka Darakhtan in addition to the ordinary classes of Banjar Jadid, Banjar-Kadim and Ghairmumkin. This classification of the uncultivated area has been considered essential owing to the fact that in the hilly tracts especially the waste is such an important asset in supplying timber for building of wood for fuel and grass for grazing and feeding of the cattle as it could hardly be ignored.

CHAPTER III.

FISCAL HISTORY.

7. It appears from page 121 of the Hazara Gazetteer, 1907, that the first mention of Agror was made in the *Kalhana* Chronicle about the middle of the 12th century when King Jayasimha is said to have defeated Dvitiya, the Lord of Urasha, and taken Atyugrapura "strong in fighting men." The latter tract has been identified with Agror by Dr. Stein and with loayovpos which Ptolemy states as being one of the cities in the Kingdom of Apoa, the country between the Jhelum and the Indus (Hazara district). Agror, along with the present Tanaul, Pakhli and the Rash plains, thereafter known as "Pakhli Sarkar," remained under the Hindu rulers till the end of the 14th century when the Great Timarlane, on returning from his invasion of India, in A. D. 1399, made over the Hazara district including Agror to a number of Karlugh Turks. In the time of the earlier Moghal Emperor the Pakhli Sarkar was inhabited by the Turks above referred to. During the decline of Moghal Dynasty changes of great importance took place in the political constitution of the tract now included in the Hazara district. The increasing

aggressions of the Pathans and their allied races trans-Indus drove the Swathis from Swat, the country on the Swat river, north-east of Peshawar. The Swathis invaded Pakhli in a succession of inroads during the 17th century. Shortly before their eviction from Swat their Sovereign was one Sultan Pakhal of the dynasty of the Jahangiri Sultans from whom the name of Pakhli is derived.

The latest inroad was probably early in the 18th century and was led by a Saiyad named Jalal Baba whose tomb is in the Bhogarmang valley.

The Turks were dispossessed and the Swathis established themselves in the northern portion of the district and in the hilly country adjoining to the west.

The Swathis partitioned the conquered country among themselves on the principles that prevailed among the Pathan tribes adjoining, that is to say, the invaders divided into so many companies or shares and the cultivated land was divided into a corresponding number of shares and then all the companies drew lots for the several shares. Their leader's share (Saiyad Jalal) was rated at one-quarter and assigned to him once for all; but the lot drawing for all other shares was only of a temporary character, that is to say, every 2, 4 or 5 years (as might be agreed at the lot drawing) new lots were drawn and the sharer's possession and residence changed accordingly. It appears, however, that the first Swathi *Wesh* held good for 40 years. At the second *Wesh* made in A. D. 1744, Agror and the Pakhli plain fell to the share of the Mutrawee tribe, of which there were two sections, the Begal and the Allasheree and their holdings were mixed.

Among the Begals, at this time, was one Akhund Abdulghani, distinguished both by his learning and by the marriage of his son Akhund Saad-ud Din to the daughter of Suba Khan, a powerful chief of the Pallal Tanaulis.

About 1763, twenty years after the second *Wesh*, a riot took place at Khwajgan, in the Pakhli plain, where Akhund Saad-ud Din was residing and from which he had a narrow escape through the bravery of his son, Inayatullah Khan. The family of Akhund Saad-ud Din and other Begals residing in the Pakhli resorted to Agror and the other Swathis, except the Begals, left the Agror valley.

Thus the Begals were cut off from the Swathi community and hence forward they had no aid but their own arms to rely upon in holding themselves against the outside invaders.

Having strengthened himself by marriage to the daughter of Suba Khan, a powerful Tanauli chief, as stated above, Akhund Saad-ud Din established his position as Khan of Agror. On his death, in 1783, his son Inayatullah Khan succeeded him. He dispossessed most of the Swathis and gave their lands to his retainers. Those of the Begals, who would fight for him, were allowed to retain so much land as they could cultivate.

Inayatullah Khan died in 1819 and his son Ghafur Khan succeeded him. He was Khan for 15 years. In 1834, Painsa Khan, the Amb Chief, took possession of Agror and Ghafur Khan had to flee. He was, however, assassinated in 1835 at Painsa Khan's instigation. The latter held Agror till 1841 when it was restored to Ata Mohammed Khan, son of Ghafur Khan, by the Sikhs who gave him 17 villages assessed at Rs. 875 in jagir and the lease of the rest of the valley for Rs. 700. Major Abbott confirmed the jagir but gave the lease of the remaining villages to Allahdad Khan and the zamindars, naming a head man in each village. At the First Regular Settlement Ata Mohammed Khan was recorded proprietor of the whole of Agror. All the sub-proprietors (*Warises* or *Malik qabzas*) with the exception of Seri-khors had only limited rights over their actual cultivations and were also subject to other services and disabilities. Ata Mohammed Khan was deported in 1868 for instigating an attack by trans-border tribes on the Police post at Oghi; but in 1870 he was allowed to return to his country on the recommendation of Captain Wace. On his death which took place in 1875, his son Ali Gauhar Khan succeeded him.

He being the son of Hasham Ali Khan's (Hassanzai Khan Khel) aunt and husband of his sister could hardly keep himself aloof from the intrigues of the trans-border tribes. He was suspected of abetment in several different raids on British territory in which several British subjects were killed. The Khan was in consequence arrested in 1888 and deported to Kangra whence he was transferred to Lahore where he now resides with his real brothers and family. In 1891, the Agror Valley Regulations (IV of 1891) was passed declaring "all rights recognized as existing in the Khan of Agror as conferred by or in" the records-of-rights of the Agror Settlement made and sanctioned in 1870 as forfeited to Government and empowering the Local Government to appoint a Settlement Officer to deal with these rights. Under this Regulation the Second Regular Settlement was carried out in the years 1898—1900. By it the proprietary-rights of the Khan, now forfeit to Government, were established over about half of the valley and the rest was apportioned among his relatives, Seri-khors and others.

A large number of tenants were also given occupancy rights under the Agror Regulation.

8. The Sikhs for the first time assessed Agror in 1841 at Rs. 1,515. At annexation the assessment was continued the same by Major Abbott till 1853 when it was raised to Rs. 3,315.

Captain Wace assessed the valley at the First Regular Settlement at Rs. 4,000 which was raised to Rs. 13,300 at the last settlement. The revenue has been regularly paid since the last settlement.

CHAPTER IV.

9. The following table gives in whole and in percentages of the total area, particulars of the cultivated and uncultivated area of the Agror valley:—

1	2	3	4	5	6	7	8	9
Class of land.	AREA IN ACRES.		Increase in acres.	Decrease in acres.	PERCENTAGE OF			REMARKS.
	Last Settlement.	Present.			Area of the present settlement.	Increase since last settlement.	Decrease since last settlement.	
Government Forests	5,998	5,894	...	104	15	...	2	
Other wastes ...	14,713	12,438*	...	2,275	30	...	15	*Excluding Banna 2,068 acres.
Cultivated area including Banna.	21,281	22,500	1,219	...	55	6	...	
Total ...	41,992	40,832	1,219	2,379	100	...	3	

The measurements of the hilly portion of the valley at the last settlement, as pointed out in paragraph 17 of the forecast report, were found incorrect. The figures both for the cultivated and uncultivated area were exaggerated. The decrease of 2 and 15 per cent. in the area under Government forests and other wastes respectively is mainly due to the correct measurements at the present settlement. My impression is that cultivation has expanded during the currency of the last settlement, especially in the hilly tracts as well as in the plain portion of the valley on the banks of hill streams, but after allowance has been made for the incorrect and swollen figures of the last settlement the correct area figures give an all round increase of 6 per cent. in the cultivated area including the intervening waste (Banna) which had been measured with the adjoining fields at the last settlement.

These facts also account for the decrease of 3 per cent. in the total area.

	Acres.	
*Maira	24	In the course of demarcation with the
Kalsi	10	Tanau about 64* acres, as per detail in
Government forests	17	the margin were excluded from the
Other waste	13	Agror valley in 1906 under the orders
		of the Revenue Commissioner and

partly to this fact the above decrease is due.

From the details of cultivated area, which are tabulated below, may be seen the changes in soil classification since the last settlement :—

1	2	3	4	5	6	7
Serial No.	Class of soil.	Last settlement.	New settlement	Increase or decrease since last settlement.	Percentage of increase or decrease since last settlement.	REMARKS.
1	Hotar (Irrigated)	1,144	1,310	+166	+14	
2	Bari	3,808	4,516	+708	+19	
3	Bela	995	842	-153	-15	
4	Maira	9,473	8,252	-1,221	-13	
5	Kalsi	5,861	5,512	-349	-6	
6	Banna	...	2,068	...	...
	Total	21,281	22,500	+1,219	+6	

Owing to the security of life and property which has prevailed in the valley since the last settlement the attention of the people was directed mainly to the improvement of their lands. Without fear of danger they could erect cattle sheds in their lands situated at a distance of their villages and thus provide manure for their lands of the Maira and Bela classes at the spot and improve their quality. The irrigation has, moreover, for similar reasons expanded during the currency of the last settlement and the population as well as the number of ploughs has also since increased and to these reasons is due the increase in superior soils—Hotar and Bari and corresponding decrease in Maira and Bela. The recent exclusion of Banna from the cultivated area and of 24 acres of Maira and 10 acres of Kalsi from Agror in 1906, as stated above, as well as careful classification of soils by personal inspection and correct measurements also, to some extent, account for the decrease in all the classes of cultivated area.

In connection with the increase of 19 per cent. of Bari the figures given in the following table will show the result of calculation of manured area per head of cattle. In estimating the number of cattle with reference to the amount of manure they provide, on the analogy of Mr. Watson in Tahsil Abbottabad, I have counted each buffalo as two, every two heads of young stock and every five goats or sheep and all other animals as one each :—

	Area of Bari in kanals.	Number of cattle.	Average of manured area per head of cattle in kanals.
Last settlement	30,464	15,722	1'94
New settlement	36,128	15,844	2'28

In Agror, unlike the rest of the district, nearly half the quantity of manure compared with Bari is put in Hotar area and if half the area under this class is added the average area of manured land per head of cattle comes to 2'6 kanals as compared with 2'2 kanals at the last settlement. Taking into consideration the special circumstances of Agror the average of 2'6 kanals per head of cattle including Hotar and of 2'28 kanals per head of cattle in

case of Bari alone is not at all excessive. This comparatively high average is due to the increase of 1,340 in the number of small holdings, the industry of the population and to the fact that owing to the abundant supply of wood for fuel, manure is exclusively used for agricultural purposes. The larger number of habitations which supply dirty rain water to the surrounding fields have reduced the amount of manure to be used. The natural fertility of Agror lands is exemplary and on account of constant rainfall fields with comparatively less manure produce very good crops and these facts also account for the above high average.

Population.

10. The population of Agror, according to the various censuses, is given below :—

Year.					No. of persons.
1869	...	...	...	...	8,721
1881	...	...	...	...	11,243
1891	...	...	...	...	13,717
1901	...	...	...	...	16,809
1911	...	...	...	...	18,671

It will be seen that the population has increased by 114 per cent. since 1869 and 11 per cent. since 1901. It has more than doubled since 1869 and has been gradually increasing since then.

The following table illustrates the density of population since the first regular settlement :—

	Total population.	Per cent. increase since 1st Regular Settlement.	Per cent. increase since 2nd Regular Settlement.	Average population per square mile of total area (exclusive of Government forests.)	Average population per square mile of cultivation.
First Regular Settlement (1869) ...	8,721	...	...	134	281
Second Regular Settlement (1891) ...	13,717	57	...	245	416
New settlement (1911) ...	18,671	114	36	339	583

• • The density of population compares with the Mansehra, Abbottabad, Haripur and with the whole district as below :—

1	2	3	4	5.	6	7
	Tahsil Mansehra.	Tahsil Haripur.	Tahsil Abbottabad.	District Hazara.	Agror.	REMARKS.
Average population per square mile of total area excluding Government Forests.	134	219	303	190	339	
Average population per square mile of cultivation.	831	631	903	787	583	

The density of population per square mile of cultivation in the Punjab is 492 and Agror figures do not fall below it.

It will appear from Statement VI that the main tribes are Swathis, Sayads, Qureshis and others.

The Swathis own 84 per cent., Sayads 9 per cent., Qureshis 3 per cent. and others 4 per cent. of the cultivated area of the valley.

The Khan of Agror owns nearly half of Agror. The Sayads own four whole hamlets and the greater part of a fifth. The Qureshis own two whole hamlets, the Awan own one whole hamlet and part of a second and the other tribes which include Kaka Khels, Jadons and Madda Khels do not own much land.

The proprietary body of the valley are not, with the exception of a few Swathis and Sayads, good cultivators. They generally get their lands cultivated through their tenants and pay little or no attention to agricultural pursuits.

- 11. There has been no change in means of communication since the last settlement. The following roads connect the valley with other trade

Communications and markets.

markets in the district :—

- (1) A road from Oghi through Tanaul to Darband and thence to Haripur.
- (2) A road from Oghi to Manshera *via* Susal Gali.
- (3) A road from Oghi to Baffa *via* Hava Gali.
- (4) A road from Oghi through Kathai Gali to Ahl in Konsh and thence to Shinkiari.

In addition to the above the following roads intersect the valley :—

- (1) A road from Oghi to Tikri and Paryari, Independent territory through Jal Gali.
- (2) A road to the hamlet of Barchhar on the Black Mountain.
- (3) A road to the hamlet of Sambalboot on the Black Mountain.

All of these roads are in charge of the Military Works Department and are properly maintained.

There are besides a few other roads which are repaired whenever it is necessary :—

- (1) A road from Jal Gali to Panjagalli passing on the crest of the Black Mountain by the boundary line with the Paryari Sayads, Akazai and Hassanazai, Independent territory.
- (2) A road to Shabtoot hamlet on the Black Mountain *via* Ghanian.
- (3) A road to Khabbal which branches off from the Jal Gali road within the limits of Tarawara estate.

12. The agriculturists have, therefore, no difficulty now in disposing of

Trade.

their surplus produce at Shamdhara, the only big market in the valley, and at Mansehra, Baffa, Shinkiari and, if possible, at Haripur. All of the above roads are unmetalled suitable only for bullock, camel and mule transport. The improvements of the Mansehra road, as far as Khaki, a distance of 9 miles, is in hand. The bridges are being put up over the Siran and other streams and the road is being made fit for wheeled traffic. This improvement in communication may, to some extent, afford impetus to trade of the Agror valley. The opening of the Sarai-Kala-Havelian Railway has not, so far, stimulated trade of the valley to an appreciable extent but with the extension of the line, as far as Mansehra, the trade of Agror will develop to a great extent.

The local market for trade is at Shamdhara with a population of 3,419 souls. Some of the surplus grain of the valley is exported by grain-dealers of this place but generally the grain-dealers of Mansehra and Baffa markets make purchases from the zamindars and the village *baniyas* direct. The chief grain exported is maize. Another article of trade exported from the valley is *ghi* which is also sent to these markets. Very little of this grain and *ghi* finds its way to Haripur because Tanaul grain and *ghi* overbids that of Agror in the Haripur market.

The chief imports in the valley are cloth, salt, *gur* and tobacco, and the animals of transport bringing these articles take away wheat, maize and *ghi* on their return.

13. The following table shows the number of agricultural stock since 1899 (last settlement) at the different cattle censuses up to the present, the increase or decrease under different heads and their percentages :—

1	2	3	4	5	6
Serial No.	Year of cattle census.	Horned cattle.	Sheep and goats.	Horses, mules and donkeys.	Ploughs.
1	1899 (last settlement) ...	12,532	7,238	167	1,916
2	1904 ...	12,549	5,446	216	1,808
3	1909 ...	10,903	4,812	211	2,287
4	1914 ...	12,168	5,260	269	2,358
5	Increase or decrease since 1899 with percentages.	-364 - 3 p. c.	-1,978 - 27 p. c.	+ 102 + 61 p. c.	+ 442 + 23 p. c.
6	Increase or decrease since 1904 with percentages.	-381 - 3 p. c.	-186 - 3 p. c.	+ 53 + 25 p. c.	+ 550 + 30 p. c.
7	Increase or decrease since 1909 with percentages.	+ 1,265 + 12 p. c.	+ 448 + 9 p. c.	+ 58 + 27 p. c.	+ 71 + 3 p. c.

The number of horned cattle has decreased by 3 per cent. and sheep and goats by 27 and 3 per cent. since 1899 and 1904, respectively. The number of horses and ploughs shows marked increase.

The agricultural stock shows increase all through since 1909. The exceptional mortality from epidemic disease among the horned cattle and sheep and goats in 1907-08 accounts for the abrupt and heavy fall in their number during the census of 1909.

I give below the average number of cattle per head of population and the acreage of waste per head of cattle. Waste has been taken to mean Banna, Dhaka Rakh, Dhaka Charagah, Dhaka Darakhtan, Banjar Jadid and Banjar Kadim, all other unculturable as well as Government forests being excluded, and each head of cattle is calculated as described in paragraph 9 :—

	Last settlement.	New settlement.
No. of cattle per head of population ...	1.1	.85
Average of waste per head of cattle ...	.92	.94

The increase of 36 per cent. in population without equivalent increase in the number of cattle accounts for the low average of number of cattle per head of population and the decrease in the area of waste due to reasons given above in paragraph 9 explains the slight increase in average of waste per head of cattle.

The fine grass and the maize stalks, both of which are abundant in Agror, are sufficient to support more cattle than the stony and drier portions of the district.

14. The whole of Agror valley consists of 14 estates held under the Bhaichara system of proprietary tenure, a system under which the revenue is paid on possession.

Proprietary tenures—(Statement No. VI).

The following table gives the size of proprietary holdings :—

Circles.	Area cultivated.	Number of owners.	Average per owner.	OWNERS' HOLDINGS (EXCLUDING OCCUPANCY TENANTS).																			Size of holdings at last Settlement.	27		
				Less than 1 acre.			5 acres and under.			10 acres and under.			20 acres and under.			Over 20 acres.			Over 50 acres.			Total.				
				Holdings.	Area.	Average per holding.	Holdings.	Area.	Average per holding.	Holdings.	Area.	Average per holding.	Holdings.	Area.	Average per holding.	Holdings.	Area.	Average per holding.	Holdings.	Area.	Average per holding.	Holdings.			Area.	Average per holding.
Agroor ...	9,820	1,102	9	945	569	6	906	3,264	3	439	3,158	7	154	2,079	14	24	674	28	1	66	66	2,569	9,430	4	23	

From the above table it will be seen that there are 1,951 holdings of 5 acres and less, and 439 of 10 acres and less, and 154 of 20 acres and less, and 24 under 50 acres, and the number of holdings over 50 acres is only one. In the last column the size of a holding in the last settlement is given. The small holdings, it will appear, are rather large.

The figures for Málík Qabzàs will also be found in Statement VI. Málík Qabzàs are those proprietors who are liable for the revenue in their own holdings but have no share in the common land of the valley. They have, in the main, acquired their title by purchase and the vendors reserving to themselves rights in the *skamilat*. They consist of 69 per cent. of total number of proprietors in the valley.

15. The miscellaneous assets of the valley consist mainly of the income from Government and other service and of profits from cattle and from the sale of grass, wood and honey.

The total income derived by the agricultural classes of Agror from Government and other services is about Rs. 19,134 a year, including Rs. 660 on account of pensions, *i.e.* 44 per cent. more than the whole revenue payable. Of this nearly half goes to Shamdhara and Oghi villages. The service is chiefly in the Frontier Constabulary and in the Army, Railway Department and in the Police. The valley being on the extreme frontier and far removed from cantonments, hill stations and big towns no domestic service or daily labour by the villagers is possible to an appreciable extent.

The main profits from cattle are derived from their milk which is made into butter and sold by the *zamindars* to the local traders after being converted into *ghi*.

The following is the rough calculation of the income from this source :—

A cow-buffalo is in milk for 6 months in the year and its average yield of milk may be estimated at 3 seers a day. Each seer of milk produces about one chhatak of butter and the result of the calculation shows that each buffalo provides about 34 seers of butter in the year. In the same way a cow is in milk for 5 months in the year. Its average yield of milk may be put at $1\frac{1}{2}$ seers a day and each seer of milk produces half chhatak of butter. The total amount of butter provided by a cow in a year is, therefore, about 7 seers. Taking the total number of cow-buffaloes (3,337) and cows (2,325), the total quantity of butter produced in the valley during the year comes to 129,733 seers which when converted into *ghi* gives 97,300 seers of it. One-third of this is consumed at home and the rest 64,866 seers is available for sale. The market price of *ghi* in Agror is $1\frac{1}{2}$ seers per rupee and the price realized for the surplus *ghi* comes to Rs. 51,893.

The goats' milk has been excluded from the calculation partly as a set off against the number of cows and buffaloes that may be barren and partly because the milk is largely consumed by the *zamindars* themselves and not made into butter.

Sheep wool and goats' hairs are manufactured, the former into clothings and blankets and the latter into ropes, and goats-skins are used for the conveyance of grain and flour to and from the water mills. Headloads of wood are sold to the members of the Frontier Constabulary, other Government officials and also to some of the villagers who cannot bring them from the hills.

Some money is also made by the sale of honey and walnuts. The total amount of miscellaneous assets of the valley may thus be reckoned as follows:—

					Rs.
Government service	...	...	...	=	19,134
Ghi	...	...	...	=	51,893
Wood, honey, etc.	...	...	...	=	2,000
					<hr/>
TOTAL					... 73,027
					<hr/>

The total miscellaneous profits per head of population, accordingly, comes to Rs. 3-14-7.

16. The area at present under mortgage will be found in Statement VI. It will be seen that the percentage of area mortgaged to agriculturists is 5'1 and that to non-agriculturists '1, total 5'2, at an average mortgaged price per acre of Rs. 126 as compared with 2'97 acres with 67 rupees as average price per acre at the last settlement. At the first Regular Settlement, Captain Wace gives '4 as the percentage of cultivated area under mortgage and Rs. 14 as the average price per acre. From these figures it will be seen that there is a steady rise both in area and price since the first Regular Settlement. Statement V also shows a notable increase in the proportion of redemptions, the cultivated area redeemed in the period between 1899-00 and 1903-04 being 65 percentage of the cultivated area mortgaged, in that between 1904-05 and 1914-15 83 per cent. The average redemptions of 16 years from 1899-00 to 1914-15 works out at 74 per cent. The figures of the total area under mortgage and the increase in the area redeemed point to a healthy state of affairs.

Statement VI also shows that 1'3 per cent. of the cultivated area has been sold to the agricultural classes since the last settlement at an average price per acre of 157 rupees. At the last settlement '49 per cent. of the cultivated area was shown as sold ('4 to agriculturists and '09 to non-agriculturists) at an average price of 64 rupees per acre. The increasing value of land may be accounted for partly by the rise in prices and partly by comparatively larger income from Government and other services as well as by the growing pressure of the population on the soil.

17. The total unsecured debt owed by proprietors, so far as could be ascertained, is 14,930 with an average of 14 rupees per proprietor. Interest is commonly taken in grain and general rate is one *odi* in the rupee per annum. An *odi* is nearly 5 seers of grain and roughly speaking this rate is equivalent to 25 per cent. The cash rate of interest is generally one pice in the rupee per mensem or Rs. 18-12-0 per cent per annum. In very rare cases, however, the two pices in the rupee per mensem is also given. If we take 20 per cent. interest-rate per annum the total amount of interest due comes to about Rs. 2,986 nearly one-fourth of the present revenue of the valley. The people of Agror are addicted to litigation and generally expend lavishly on funeral feasts. This debt is more due to litigation and lavish expenditure than to severity of the revenue which has all along been paid punctually and without any difficulty whatever.

CHAPTER V.

CROPS AND HARVESTS.

18. The following are the percentages of the total matured area of the last five years covered by each crop in Agror:—

1				2	3
CROPS.				Percentage of matured area of 5 years ending 1913-14.	REMARKS.
				<i>Acres.</i>	
<i>Rabi.</i>	Wheat	...	...	19.8	
	Barley	...	...	8.7	
	Sarshaf	...	...	2.0	
	Masar	...	...	1.3	
	Other pulses	...	...	.1	
	Miscellaneous	...	...	1.3	
Total <i>Rabi</i>				33.2	
<i>Kharif.</i>	Rice	...	...	5.4	
	Maize	...	...	51.7	
	Kangni	...	...	.6	
	Other cereals	...	...	.1	
	Mash	...	...	1.8	
	Other pulses	...	...	6.6	
	Cotton	...	...	.5	
Total <i>Kharif</i>				66.8	
Total <i>Rabi and Kharif</i>				100.0	

Maize, the chief crop of Agror, occupies the first place in the valley.

Maize.

It is 51.7 per cent. of the matured area or more than half of the total crops.

In a cool climate as that of Agror it thrives best in Hotei (*abi*), Bari and Bela. It can also be grown on good Maira and Kalsi but does not flourish much. The maize of Agror is famous throughout the Hazara district for being exceptionally good. There are two varieties of maize generally grown in the valley.

(1) The imported kind (white American) and (2) ordinary country kind. The former has larger cob and stalk as well as grain than the latter but it gives more husk and less flour. It is much popular in Agror and occupies about 50 per cent. of the total area under maize. The sowing takes place in April and May and harvesting in September and October. The hilly lands are sown earlier.

The land is ploughed from 3 to 5 times, and the clods are broken at the last ploughing after the land is manured. The grain is sown broadcast, and after the first shower, a further ploughing is given in order to cover the grain. When the seed has begun to sprout, *godī* (weeding) is done, and thereafter when the crop is some 18 inches high, an operation known as *sīl* (a light ploughing) is performed, partly to thin out the young shoots and partly to facilitate the absorption of the rainfall. At the harvest time the stalks are cut about 8 inches from the ground and are left to dry in the sun for about a week when the cobs are separated from the stalks. The threshing is done by beating the cobs with curved sticks. Before the grain is put for sale or to be taken to the mill for grinding it is thoroughly dried in the sun.

Next in importance in the *kharif* crops after maize is rice. It is 5·4 per cent. of the matured area. Three varieties of rice are known in the valley, locally called *garra*, *kamod* and *kalar*. The last named, from the black colour of its ears, is no longer sown now. *Garra* which is considered the best, both on account of its deliciousness and large outturn, is largely cultivated. It is of two kinds, red and white. The grains of *kamod* are thinner and larger than *garra* but none of these varieties is of fine quality. Rice is planted in May or June and cut in October. It is sown early in Hotar soil. The process of cultivation is as follows:—

Water is let into the fields and the number of ploughings is indefinite and depends mostly on the quality of the land. The seeds are in the meantime prepared for sowing by being placed in soft almost liquid manure which is covered with leaves and exposed to the sun. The seeds begin to germinate in a week's time. As soon as the seedlings (*bakhai*) are ready for planting in a month's time and when the rice shoots are six inches high, transplanting (*taropi*) begins, and the remaining Hotar being again ploughed and watered in the meantime, and the embankments which hold up the water repaired, the nursery, growing in 3 marlas, being spread over one acre. Each handful of plants when pulled up is well shaken so as to get rid of the mud and to give the roots room to eventually expand and finally 3 or 4 plants are pushed forcibly into the soft earth. Afterwards constant waterings and weeding are necessary. The harvest begins about the middle of October. The sheaves are allowed to lie a few days in the sun until they are taken to the threshing floor when the grain is trod out by oxen in the usual way. It is husked in pounding mills, called *Peko*, before it is used for consumption or taken to market for sale.

In the *kharif* pulses are included *mothi*, *kulath*, *mung* and *mash*. They are mostly grown in Maira and Kalsi lands; but they are also sown as mixed crop with maize in Bari and Bela lands and cover 8·4 per cent. of the matured area. Nearly all of these pulses are sown in April and May and ripen in October or November. The stalks and leaves are used as fodder and the grain is generally eaten.

Excluding maize and rice the cereals are unimportant covering only 7 per cent. of the matured area. *Dag* Kangni or Italian millet is grown in Kalsi by the sides of hills and poor Maira lands.

Cotton is 5 per cent. of the matured area and is mostly sown in Maira lands.

Wheat covers 19·8 per cent. of the matured area. It consists of 3 kinds, *dag*, ordinary kind and *moni*.

Wheat,

The ears of *dag* are large and bearded and its grains are also larger than those of the other two kinds but they yield less flour. It is generally cultivated in the plains because it does not grow well in cold places. The ordinary variety is also bearded and considered the best, although its grains are smaller

than those of the *dag*, they yield less husk and more flour. It is most cultivated in Agror. The third variety *moni* is beardless. It is inferior to the other two, varies in outturn and is, therefore, cultivated less. It has the advantage of ripening rather earlier. The wheat crop is usually sown in September and October and ripens in April and May in the plains and in June on the hills. It is not much sown in irrigated and Bari lands as it does not ripen in time for the *khari* crops being sown in them.

Barley is 8.7 per cent. of the matured area. It can be sown a little later and ripens 3 weeks or so earlier than wheat. Hence it is more popular in *do-fasli* lands to succeed the maize. It is very little cultivated in irrigated lands and being a hardy grain it does well even on poor soils.

Of the other *rabi* crops Sarshaf is the most important. It covers 2 per cent. of the matured area. It is frequently sown in succession to maize and thrives especially in the best Bari land. It is sown in September or October and cut in April. Its leaves are used as vegetable all through the winter. The only *rabi* pulse of any importance is *masar* or *masuri* which covers 1.3 per cent. of the matured area. A little *shafal* or clover is grown as fodder on the warmer rice lands in the plains. The miscellaneous *rabi* crops are chiefly vegetables grown in *abi* lands in Kulakka, Oghi and a few other estates in the plains.

19

Recent harvests.

1	2	3	4	5	6	7	8
Year.	Harvest.	Rainfall in inches at Oghi.	Cultivated.	Sown.	Matured.	Failed.	Remarks as to character of harvest recorded in the circle note book.
1910	Khari	46.68	...	15,252	13,698	1,554	No remarks.
1911	Rabi	23.34	...	6,495	5,337	1,158	Average.
	Total	50.02	21,582	21,747	19,035	2,712	
1911	Khari	28.23	...	15,894	14,713	1,181	<i>Agetra</i> bad <i>pachhetra</i> average.
1912	Rabi	20.89	...	7,790	7,503	287	Good.
	Total	49.12	21,576	23,684	22,216	1,468	
1912	Khari	31.07	...	15,226	13,670	1,556	No remarks.
1913	Rabi	14.62	...	7,991	6,985	1,006	Do.
	Total	45.69	21,580	23,217	20,655	2,562	
1913	Khari	29.02	...	15,097	13,113	1,984	Good.
1914	Rabi	20.45	...	8,121	7,443	678	Above average.
	Total	49.47	21,580	23,218	20,556	2,662	
1914	Khari	33.53	...	14,682	13,179	1,503	Crop suffered from excessive rainfall, average on the whole.
1915	Rabi	27.40	...	7,162	6,714	448	Above average.
	Total	60.93	20,432*	21,844	19,893	1,951	
Average of 5 years.	Khari	29.70	...	15,230	13,674	1,556	
	Rabi	21.34	...	7,512	6,797	715	
	Total	51.04	21,350	22,742	20,471	2,271	

* Indicates the new measurement figures.

NOTE.—On the five years' average the percentage of crops sown on total cultivated area is 107, and of crops matured 111 and the percentage of matured on total cultivated area is 96 and of failed 11.

The above table which gives figures for rainfall, as well as for area sown, matured and failed in the different harvests during the last five years clearly explains itself. The remarks recorded in the circle note book as to the character of different harvests, as far as available, are also given in the last column of the table. These remarks have not been recorded for 3 out of 10 harvests, but the figures of rainfall, as well as, of area sown and failed can give some idea as to the character of the different harvests. After personally seeing the crops of the last two harvests *vis.* Kharif 1914, and Rabi 1915, I can safely observe that these remarks as to the character of the harvests are sometime misleading. They are made in view of the condition of the crops at the time of crop inspection. Any damage which may be done to the crops thereafter is not taken into consideration. Both of these crops began well and showed signs of good growth. The *kharif* crops just after their inspection had very heavy rain (11.56 inches) in October which coupled with high wind damaged the crops to a great extent. The *rabi* crop had suffered a little from drought in January but rains during the subsequent months ameliorated its condition to some extent. The heavy rains (8.45 inches), as well as high wind, which accompanied it during April after *girdawari* did great damage to the crops. The heavy rain made the earth very soft and the wind succeeded in shaking the stalks from their roots and thereby retarding their subsequent nourishment and growth. The result was that the grain became dry and decreased in weight. From these facts I may justly infer that the remarks as to character of the harvests recorded at the time of crop inspection are not always accurate and that both of these harvests were actually below average.

System of cultivation.

20. The system of cultivation is different as regards the different kinds of lands,

In Bari lands nearly always two crops are sown, maize in Kharif and barley and *sarshaf* and sometimes wheat in the Rabi and this is repeated from year to year. It is very seldom that Bari lands are not sown with two crops every year. Once in several years, the Rabi may not be sown in them. In irrigated lands mostly rice is sown in the Kharif and *shaftal* in the Rabi (on the plains only), but some Hotar lands are sown with wheat also in the Rabi. In Bela lands maize is invariably sown in the Kharif and they are left uncultivated in the Rabi but in some Belas wheat is sown in the Rabi and, therefore, they have two crops.

The Maira lands have only one crop mostly Rabi which is generally wheat, but maize and barley are also sown in them and some Maira lands also produce two crops a year. All Kalsi lands produce one crop a year, sometime Rabi and sometime Kharif and in rare cases they give crop every second year. They are mostly sown with barley, wheat and maize but other crops are also sown in them.

21. During the present settlement operations crop experiments have been made in Kharif 1914, and Rabi 1915, in accordance with the instructions laid down in the Douie's Settlement Manual. 71 experiments were made in Kharif 1914, and the area observed was 61 acres. In *rabi* 1915, the number of experiments made was 56 and the total area observed was 48 acres.

Crop experiments and outturn.

As observed in paragraph 19 the successive and untimely rainfall and also high winds damaged the crops in both of these harvests and vitiated the results of the crop experiments.

The Revenue Commissioner in his letter No. 1663-G., dated 23rd October 1915, to the address of the Deputy Commissioner of Hazara sanctioned the proposals to assume now the same rates of yield as those determined for the last settlement. Appendix B shows the results of all the experiments as well as of the selected ones which have been conducted during the operations of the present settlement along with the rates of yield per acre assumed at the first and the second Regular Settlements.

At the last Settlement the Revenue Commissioner approved of S. Sarfraz Khan's results without reservation. Owing to the abnormal seasons, however, during which experiments have been conducted the best and the safest course was considered to take the last Settlement rates of outturn since the condition of agriculture, climate and soil had undergone no change.

As the last Settlement rates of outturn have been assumed no further comments on them are called for.

CHAPTER VI.

PRICES.

22. The prices sanctioned by the Revenue Commissioner in his letter No. 1044-Ag., dated 14th October 1915, to the Deputy Commissioner, Hazara, are compared with those assumed at the last Settlement in the following table:—

1	2	3	4	5
Name of harvest.	Name of crop.	Prices assumed at last settlement in seers per rupee.	Prices now sanctioned in seers per rupee.	Rise per cent. in assumed prices.
Kharif	Rice ...	18	13	28
	Maize ...	45	30	33
	Mung ...	18	13	28
	Mash ...	20	15	25
	Cotton ...	10	7	30
Rabi	Kangni ...	30	21	30
	Wheat ...	27	18	33
	Balei ...	45	31	31
	Sarshaf ...	18	14	22
	Masur ...	23	16	30

Both the Kharif and Rabi crops have increased in value by 29 per cent.

Rise in prices.

23. The general rise in prices of grains has been calculated as below:—

Serial No.	Name of crop.	Percentage of total crops.	Rise of price per cent.	Multiple of column 2 and column 3.	REMARKS.
1	Rice ...	5.4	28	151.2	
2	Maize ...	51.7	33	1706.1	
3	Mash ...	1.8	25	45.0	
4	Cotton ...	.5	30	15	
5	Kangni ...	.6	30	18	
6	Wheat ...	19.8	33	653.4	
7	Barley ...	8.7	31	269.7	
8	Sarshaf ...	2	22	44	
9	Masur ...	1.3	30	39	
10	Others ...	8.2	30	246.0	
	Total ...	100	...	3187.4	

The all round rise in prices since settlement comes, therefore, to about 32 per cent.

Prices of other things also have largely risen since last settlement. The average prices of cattle then and now may be compared as follows:—

1	2	3	4	5	6	7
	Bullock.	Cow.	Buffalo.	Sheep.	Goat.	REMARKS.
	Rs.	Rs.	Rs.	Rs.	Rs.	
At last settlement	10 to 25	10 to 20	40 to 60	2 to 2-8	2 to 4	
Average ...	17-8	15	50	2-4	3	
Now ...	38 to 60	25 to 35	60 to 120	3 to 5	3 to 7	
Average ...	45	30	90	4	5	

The *ghi* sells now at an average of $1\frac{1}{4}$ seers a rupee as against 2 seers at the last settlement.

CHAPTER VII.

TENANTS, RENTS AND OTHER DUES.

24. The following table shows the percentage of cultivation held by proprietors and the various classes of tenants in the valley :—

					Percentage of cultivated areas.
Cultivated by owners	...	...	...	...	23
Cultivated by tenants free of rent	...	...	...	...	4
By occupancy tenants.	Paying at revenue rates with or without <i>Malikana</i>	...	...	...	46
	Paying other cash rents	...	...	...	3
	Paying in kind with or without an addition in cash	...	...	...	13
By tenants at will	Paying lump cash rents	...	...	...	14
	Paying in kind with or without addition in cash	...	...	...	11-4
Total held by tenants paying rents					73

At the last settlement the Khan Khels, relatives of the Khan, Swathi varises, Seri-Khor-i-ulas and *Seri khore Khairat* were given full proprietary rights and most of the tenants of the Khan and the Khan Khels were conferred occupancy rights. Till then there were no occupancy rights in Agror. The tenants as a whole used to pay $\frac{1}{2}$ *batai* in addition to Rs. $\frac{4}{8}$ as *halchuri* and 21 *odis* (12 *odis* of maize in the Kharif; $4\frac{1}{2}$ *odis* of each of wheat and barley in Rabi) as *aru* per plough. The occupancy tenants of the Khan all now pay cash at revenue rates with *malikana* and the non-occupancy tenants

at lump cash rents. The area under both classes of rents is respectively 46 and 14 per cent. of the cultivated area. The other tenants paying rent in kind in addition to cash in the form of *halchuri* consist mostly of those who hold lands belonging to other proprietors. Tenants free-of-rent, 4 per cent. are composed of mostly of occupancy tenants who have broken up land in the village waste adjoining their holdings but pay no additional rent therein.

25. Throughout the valley 14 per cent. of the total cultivated area is in the hands of tenants-at-will paying rent in cash. These rents (chakotas) are lump rents on holdings containing different classes of soils so that it is difficult to arrive at any satisfactory conclusion as to what figures represent the rents in each soil. The best plan which can be adopted under the circumstances is to take the figures of the total cash rents paid in Agror and to spread them over the soils according to the proportion which may be assumed to represent the relative production value of the soils. The result of these proceedings varies according to the proportions assumed and the resultant rents are not actual cash rents but only assumed cash rents.

The following table explains the relative value of soils which have been assumed and also the resultant assumed cash rents by soils :—

1	2	3	4	5
Soils.	AGROR.			
	Total cash rents Rs. 7,467.			
	Area under cash rents.	Relative value of soils assumed.	Product of the two previous columns showing units.	Assumed rates of cash rent realizable by landlord.
Hotar ...	165	10	1,650	6 6 4
Bari ...	625	8	5,000	5 1 11
Bela ...	110	6	660	3 13 5
Maira ...	1,173	3	3,519	1 14 9
Kalsi ...	843	1	843	0 10 3
Total No. of units	...	...	11,672	...

In considering these figures it must be remembered that the relative productive values have been assumed in proportion to the soil rates of the last settlement and are not altogether arbitrary.

The assumed cash rents appear rather low but it is not a matter for surprise as some of the old tenants-at-will pay arbitrary low rents. It is only in case of a few holdings since transferred to new tenants that competitive cash rents are paid. The total cash rent payable by tenants-at-will and the total area held by them as well as the rate of cash rent per acre is given below:—

Hotar.	Bari.	Bela.	Maira.	Kalsi.	Total.
165	625	110	1,173	843	2,916
Cash rents.			Rate per acre.		
Rs. 7,467	...	...	Rs. 2	13	5

The area held by occupancy tenants, paying cash rent, as given in Statement VII (supplement) is 9,416 acres but most of the area belongs to the Khan of Agror and his tenants pay rent at revenue rates with *Malikana* and the area paying purely cash rent is 62 acres only and to subject this area, small as it is, to similar examination will be quite useless and will serve no useful purpose in assessment. The all round rate of cash rent per acre payable by the occupancy tenants including the area belonging to the Khan comes to Rs. 1-4-1 per acre.

26. The menials, who are paid from the common heap for services connected with cultivation, are the carpenter and blacksmith who make and repair ploughs and other implements for cultivation. The standard payment to either of these beneficiaries is one *odi* of grain per *chhat* of the total outturn. The *chhat* being equal to 60 *odis*, the two together receive $\frac{1}{30}$ th or about $3\frac{1}{2}$ per cent. In addition to this they receive one *gadi* or bundle of maize, barley or wheat per harvest or 6 bundles in all. These bundles vary in weight and the area under one plough is also not constant, it is, therefore, difficult to make any accurate estimate of the value of this bundle. From enquiries made, however, it appears that the value of these bundles is nearly half of the dues in grain actually measured. The total receipts of the carpenter and blacksmith from the above calculation come to 5 per cent. of the gross produce. There are other menials also who receive grain from the common heap, for instance, *mochi*, barber, dum, khadim, &c., but they have no connection with agriculture.

27. Statistics of the kind rents paid by tenants-at-will on the various soils are given in Statement VII.

Batai rents—the landlord's share of the gross produce.

The sole object of examining the details of rents is to find out the correct share of the total produce of grain in each soil, the landlord may be presumed to receive. In a tract like Agror where rent in kind is paid by tenants-at-will on only 12 per cent. of the cultivated area, the average rents paid by the tenants-at-will cannot be reliable guides to the full fair rents. As pointed out above the cash rents paid by all tenants are lump rents on holdings containing various classes of soils and there are no cash rents to holdings according to soils, there is, under the circumstances, no other way but to extract some information from the produce rents paid by the tenants-at-will with this object the statement at Appendix C has been prepared which shows the rents under examination. The last but one line of the statement shows the average share of the gross produce which landlords would receive in each soil if they received their true arithmetical share which is, of course, not possible. The line referred to, however, gives a clear indication that rents on good soils are higher than rents on bad soils. The last line of the statement gives the shares of the gross produce which have been assumed, the landlords receive, for purposes of the produce estimate; and reasons for doing so are given below:—

As stated above 12 per cent. of the cultivated area is held by tenants-at-will paying *batai*. Of this area more than half (54 per cent.) pay rent at less than one-third and 29.7 per cent. pay one-third and less than two-fifth and the remaining 16.3 pay at higher rates. The rents, as it would appear, are comparatively low. Before the last settlement when Khan was the sole proprietor of Agror and there were no occupancy tenants, the grain rents were paid at the rate of one-fourth in addition to *halchuri* and *ara* dues per plough. The present low rates of rents are relics of the past days. The total amount of *halchuri* and value of *ara* dues realized from the tenants-at-will in addition to *batai* are at present only Rs. 963. The percentages of Government share assumed are not, for the above reasons, so much below the mark.

The old method of arriving at the landlord's share of the gross produce is to deduct the menial's share first and then to apply the prevalent *batai* rates to the balance divisible produce. As noted above, the rents are not fixed by soils but by holdings containing different soils, it is not, therefore, possible to fix the prevalent rent rates without upsetting the calculations.

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At the last settlement landlord's share at 24 per cent. was arrived at according to the old method. There was hardly any difficulty in doing so, because there was a single prevalent rate of *batai* at $\frac{1}{2}$, under the present circumstances, however, when there are different rates for different soils it is not possible to do so.

28. *Halchuri* is a cash rent paid in addition to produce rents. It is a sort of rent on waste land and is sometime taken by the landlord in lieu of the share of straw. The custom is utilized as a lever by which to raise low produce rates to a reasonable figure.

The amount of *Halchuri* and the value of grain realized on account of *ara* are given below :—

		Paid by occupancy tenants.	Paid by non-occu- pancy tenants.	Total.
<i>Halchuri</i>	...	97	374	671
<i>Ara</i>	...	58	389	447
Total	...	155	963	1,118

In addition to the above dues the landlords obtain other dues, for instance, a few seers of *ghi* per house, so many bundles of grass or wood per annum and so forth, out of their tenants, but it is not possible to reckon those in calculating the rate of rents but the above facts show that a reasonable allowance for extra profits has been made.

CHAPTER VIII.

THE PRODUCE ESTIMATE AND THE HALF NET ASSETS RATE.

29. The prices of the various grains and average yields per acre having been decided, it only remains to apply those figures to average cropped areas for the harvests described in Chapter V. From the Jinswar Statements II and III it will appear that averages of 4 years 1910-11 to 1913-14 were struck but the details of soil classification for these years were not forthcoming from the village and circle note-books, the only distinction drawn having been between the irrigated and unirrigated soils.

After the re-measurements were finished on 5th February 1915, I had only one Rabi harvest of 1915 for which crop figures with details of soil classification could be obtained. I had, therefore, to obtain similar details for the Kharif harvest of 1915 and to base the produce estimate on the result of crop inspection of these two harvests. The Rabi of 1915, as pointed out before, was below average and the Kharif 1915 was a good harvest being above the average. The combination of these harvests for purposes of produce estimate would give normal results.

To attempt at distributing of the average cropped area of 4 years over soils by utilizing proportions would have been misleading and the results also had not been as satisfactory as in the case of the above arrangement. With the above data available the produce estimate has been prepared and attached

to the report as Appendix D. The Government share at half net assets at the last Settlement worked out at Rs. 35,072 (including the amount of *halchuri* and money value of grain paid as *ara*) as compared with Rs. 45,718* at the present settlement. The general rise of prices at 32 per cent. as well as increase in the area of superior soils accounts for the comparative increase

*Government share according to produce estimate	Rs. 44,600
Halchuri	671
Value of Ara	447
Total	45,718

in the above figures. The figures nearly tally and point out to the correctness of the data and the results of the produce half net estimate framed.

With a view to facilitate comparison I combine the resultant soil and crop rates for each soil in the following table :—

SOILS.	SOIL RATES.		Crop rate by produce estimate.
	By produce estimate.	By cash rent estimate.	
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Hotar	6 14 0	3 3 2	6 6 7
Bari	4 0 10	2 9 0	2 10 3
Bela	3 11 5	1 14 9	2 9 6
Maira	1 6 11	0 15 5	1 9 3
Kalsi	0 6 7	0 5 2	0 10 6

The reasons given for the comparatively low cash rents assumed are given in paragraph 25 and the same apply to account for the difference in the above rates.

CHAPTER IX.

ASSESSMENT PROPOSALS.

30. Before I proceed to fix the assessment, it is a good plan to ascertain what amount would represent an assessment which is at the same pitch as the existing assessment was as originally imposed. The usual way of making this calculation is to apply the soil rates of the last settlement to the present area and increase the amount in proportion to the general rise in prices. The result of such a procedure works out is follows :—

	Rs.
Assessment by the last Settlement soil rates to the present area	13,275
Increase on account of rise in prices (para. 23)	4,248
TOTAL	17,523

At the last settlement no allowance was made for field boundaries and what we now call *banna* was included in the cultivated area. If old soil rates and general rise per cent. are applied to this area the total amount will come to Rs. 20,000 which should be regarded as the presumptive assessment of the Agror valley.

The statement of salient statistics is appended as Appendix E. With this table before one the more important features of the tract can be ascertained at a glance. The climatic conditions of Agror cause the hilly and the plain tracts to vary considerably; still it is possible to carry out the distribution with only one set of rates.

The rates proposed are tabulated with other rates for comparison:—

1	2	3	4	5	6	7	8	9	10
Soil.	SOIL RATES AT LAST SETTLEMENT.		HALF NET ASSETS RATES BY		Half net assets crop rates by produce estimate.	Soil rates proposed for Konsh Bhogarmang Circle.	Soil rates proposed.	Resultant crop rates.	REMARKS.
	As proposed by the officer.	As sanctioned.	Produce estimate.	Cash rent estimate.					
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.					
Hotar	2 8 0	1 8 0	6 14 0	3 3 2	6 6 7	2 12 0	2 4 0	2 1 4	
Bari	2 0 0	1 3 0	4 0 10	2 9 0	2 10 3	2 8 0	1 14 0	1 3 6	
Bela	1 8 0	0 15 0	3 11 5	1 14 9	2 9 6	0 12 0	1 6 0	0 15 4	
Maira	0 12 0	0 8 0	1 6 11	0 15 5	1 9 3	0 12 0	0 12 0	0 13 3	
Kalsi	0 6 0	0 3 0	0 6 7	0 5 2	0 10 6	0 7 0	0 4 0	0 6 4	

The soil rates originally proposed by the Settlement Officer, column 2 which gave an assessment of Rs. 20,181, were based on correct data assumed and the demand was also well within the half net assets standard. Owing to very lenient old assessment, however, the proposed demand was considered too high at that time on grounds not altogether convincing and the assessment was reduced to Rs. 13,000 and the resultant revised soil rates are given in column 3 in the above table. Columns 4, 5 and 6 give, the half net assets rates by produce estimate, cash rent estimate and the half net assets crop rates by produce estimate which are everywhere much higher and in most cases double of the rates originally proposed by S. Sarfaraz Khan 15 years ago. The rates proposed for the adjoining Konsh Bhogarmang circle of the Mansehra Tahsil at the recent settlement, to which ten years have elapsed during which prices have greatly risen, are given in column 7 and if the same rates are applied to the present cultivated area of Agror, the assessment comes to Rs. 24,124. If an allowance is made for the reduction allowed by the Settlement Officer when making proposals, and for the general reduction sanctioned by the Government of India for the Hazara District, although counterbalanced, to some extent, by the rise of prices since the assessment had been proposed, the assessment cannot fall short of Rs. 20,000.

Bela and Maira have been assessed at the same uniform rate of Re. 0-12-0 in Konsh Bhogarmang circle; but the Bela of Agror differs greatly in productive value from the Bela in Konsh Bhogarmang circle. Here it is much superior to Maira and some time equal to Bari.

The rates proposed now are lower than those originally proposed by the Settlement Officer and when applied to the existing areas bring out an assessment of Rs. 20,141. As explained above, a large income is derived from cattle on account of *ghi* it will not, therefore, be out of place to propose a rate of Re. 0-0-6 per acre for *banna* (2,068) and *dhaka-rakh* (2,142) which extensively supply pasture and fodder for cattle to graze. The total assessment proposed will thus come to Rs. 20,273 but I propose an assessment of Rs. 20,000 as some reduction will have to be given to the hilly tracts for the comparatively poor qualities of lands there.

The proposed assessment represents an immediate rise of 54 per cent. and the incidence of cultivation is Re. 0-15-8 per acre.

The rainfall is constant in Agror and crops seldom fail there. The quality of agriculture has much improved. The security of life and property has been established. There is usually a surplus of maize which finds its way down to Baffa and Mansehra. In view of all these facts the rates and assessment proposed with an incidence of Re. 0-15-8 per acre of cultivation is quite justified.

The high figures of the half net assets deduced from the produce and cash rent estimates lead one to think that the assessment proposed are unduly low but in this connection I would point out that the stereotyped standard of the assessment of the Punjab plains cannot justly be extended to Agror, a tract far removed from the Railway and the centres of trade where prices of all imports, such as cloth, salt, iron and similar necessities of life are much enhanced by the cost of carriage. This standard is treated with great elasticity even in the Punjab and there is every reason to assess the valley below this standard.

31. There is no official record from which the export of grain could be ascertained. The *bahis* of the *Shahukars* of Shamdhara are not sufficient to satisfy one on this point because, as stated above, the grain-dealers from Baffa and Mansehra make direct purchases from the zamindars and village *banias*. The table below gives some idea of the amount of grain, especially maize, which is exported every year from Agror :—

	Maunds.
Total produce of the staple crops, maize, husked rice, wheat and barley	= 264,436
Seed at the rate of $\frac{1}{2}$ maunds per acre cropped	= 11,555
Consumed by cattle	= 52,000
Human consumption at a very liberal rate of nearly 9 maunds per head of population	= 160,003
Total	<u>223,558</u>

Leaving a balance of 40,878 maunds for export. If an allowance is made for the swollen figures of the half net assets estimate, the amount of maize available for export every year cannot, in any case, fall short of 20,000 maunds. The next point to consider is where the money to pay the revenue is to come from. The following figures show the amount of income from miscellaneous assets :—

	Rs.
Government service	19,134
Ghi	51,893
Wood, honey, &c.	2,000
Sale of grain exported	26,666
Total	<u>99,693</u>

After paying the Government demand the people will be left some Rs. 79,000 for supplying themselves with clothings and other necessities of life. From these figures it will appear that the money for the payment of revenue will always be forthcoming.

32. In the Agror Valley there are two kinds of mills on account of which revenue is taken, the one is the flour mills or *Jandar*, the other is the rice-pounder or *Peko*. There are also a couple of small cotton gining mills, called *belna*, but they have not been assessed in the rest of the Hazara district. In Agror too these *belnas* are used for ginning cotton required for personal household use only and it is unnecessary to assess them. Appendix F gives details of mills from which it will appear that there are 178 *Jandars* and 22 *Pekos* assessed at Rs. 318.

Flour mills are found where there is a demand and the water is sufficient to work them. The amount of grain which a mill can grind varies with the quantity of water, length of watershoot, the size of the mill stones and the state of repairs in which it is kept. The custom is for a blacksmith or a carpenter to be the tenant of the mill and the landlord is the person who owns the land in which it is built. Of the grain which passes through the mill one-twentieth is taken as the charge for the grinding; of this amount the tenant retains $\frac{3}{4}$ th and the landlord receives $\frac{1}{4}$ th. In some cases as in the case of mills belonging to the Khan of Agror, the tenants pay fixed cash rents, in others they pay revenue only. The prevailing rent rate is the $\frac{3}{10}$ th of the grain passing through the mill and for purposes of assessment, it will be sufficient to adopt this rate. The Government share at half net asset rates according to the above data works out as follows:—

$\frac{3}{10} \times \frac{3}{4} \times \frac{1}{2} = \frac{1}{10}$ of the grain passing through the mill accepting the half net asset standard for assessment, the Government demand should be $\frac{1}{10}$ of the value of the grain consumed in the Agror Valley.

The system of ownership tenancy rents is exactly the same in the case of rice-pounders as in that of flour-mills but the rate of pounding instead of being $\frac{3}{10}$ is $\frac{1}{30}$. Consequently the Government share at half net asset rates instead of being $\frac{1}{10}$ is a $\frac{1}{180}$ share of the value of the rice husked.

The cash value of 160,003 maunds of grain shown in paragraph 31 for human consumption as well as the amount of Government at the above rates comes as below:—

	Rs.	Rate of Government share.	Amount of Government share.
Maize, wheat and barley ...	1,92,629	$\frac{1}{10}$	1,926
Rice ...	55,159	$\frac{1}{180}$	368
Total			2,294

The mills in Agror, with few exceptions working on the Unhar, are of poor class. Most of them work for a few months in a year and there are some in the hilly tracts which work for a few days after every rain. They are not adequate to grind the whole grain consumed in Agror and consequently more than $\frac{2}{3}$ rd of the grain is taken to mills in Tanaul and Pakhli for grinding. If I take one-third of the Government share, as calculated above it will overestimate the demand. The correct demand which I would like to propose for assessment is Rs. 400 giving an incidence of Rs. 2-4-0 per mill.

CHAPTER X.

FINANCIAL RESULTS AND MISCELLANEOUS MATTERS.

Land revenue and cesses. Financial Results.

33. The cesses as sanctioned for Agror at the last settlement were as below:—

				Rs. a. p.
Local rate ...	...	...	...	10 6 8 per cent.
Patwari cess ...	...	...	...	6 4 0 "
Lambardari cess ...	...	...	...	5 0 0 "
Total	...	...	...	21 10 8

In 1906, however, Rs. 2-1-4 per cent. out of the local rate and whole of the Patwari cess were abolished under the orders of the Government of India and the present cesses, which should be continued, are as follows:—

				Rs. a. p.
Local rate	...	...	...	8 5 4
Lambardari cess	...	...	...	5 0 0
			Total	13 5 4

The financial result of the proposals submitted are tabulated below:—

Period.	Land revenue and assessment on mills.	CESSES.		Total revenues and cesses.	REMARKS.
		Rate per cent.	Amount.		
		Rs. A. P.	Rs.	Rs.	
At last settlement 1899-00	13,300	21 10 8	2,882*	16,182	
Now 1914-15	13,307	13 5 4	1,774*	15,081	
Proposed demand 1915-16	20,400	13 5 4	2,720	23,120	

* These figures do not agree with Wasil Baqi Statement No. IV.

Introduction and term of assessment and dates of instalment.

34. The new assessment can be introduced with effect from the Kharif of 1915.

The term of settlement should run for the next 20 years and conclude with the rest of the Hazara in Kabi 1935. The dates of payment of instalments and the proportions in which they are paid at present may continue the same as at present, viz:—

Kharif 15th January	...	...	...	3
Rabi 15th July	...	...	...	3

Points requiring orders.

35. Orders are solicited on the following points:—

- (1) The assessment proposals on land.
- (2) The assessment proposals on mills.
- (3) The harvest from which the settlement is to be introduced.
- (4) The term for which the settlement is to run.

FAZAL HAQ,
Settlement Officer, Agror.

APPENDICES AND STATEMENTS.

APPENDIX A (1).

Statement of rainfall of raingauge at Oghi.

Serial No.	Months of year.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	Average.	REMARKS.
1	April ...	0.72	7.37	2.29	1.63	2.15	2.29	4.98	10.64	2.72	9.43	2.94	4.64	2.39	8.45	4.47	
2	May ...	8.63	2.66	5.31	1.10	1.90	1.67	1.10	1.11	1.75	0.38	1.13	0.96	2.45	1.89	2.36	
3	June ...	2.63	5.07	0.70	0.84	10.09	4.30	3.12	...	2.45	2.85	4.13	0.75	5.02	4.38	3.31	
4	July ...	2.95	3.40	5.24	9.37	2.00	7.69	1.13	4.52	7.48	3.75	1.25	14.67	6.34	11.48	5.95	
5	August ...	8.54	6.51	4.25	9.43	8.02	12.18	7.49	7.05	10.40	9.44	11.53	8.73	10.42	5.25	8.52	
6	September ...	5.33	1.81	3.76	1.69	5.50	1.70	1.73	5.15	1.05	0.83	7.25	1.32	1.40	2.08	2.90	
	Total ...	28.80	28.82	21.55	24.06	29.66	29.83	19.55	28.47	25.85	26.68	28.23	31.07	29.02	33.53	27.51	
7	October ...	2.06	5.31	0.72	2.86	0.10	0.58	0.96	2.79	1.55	...	2.18	0.90	0.59	11.56	2.29	
8	November ...	...	0.84	0.48	0.75	0.13	...	...	...	...	...	4.06	...	1.14	2.23	0.69	
9	December ...	...	0.10	1.26	2.31	5.97	1.92	...	4.12	2.60	5.08	1.85	1.52	3.28	3.07	2.36	
10	January ...	...	3.74	7.41	8.73	2.99	10.36	6.88	3.34	9.37	4.88	9.20	2.71	2.43	0.50	5.18	
11	February ...	0.07	0.21	0.77	3.14	16.06	7.76	2.00	5.28	6.07	0.96	2.38	5.43	7.90	7.25	4.66	
12	March ...	7.69	9.19	6.27	10.38	5.31	10.70	1.18	2.72	2.88	12.42	1.22	4.06	5.11	2.79	5.92	
	Total ...	9.82	19.39	16.91	28.17	23.56	31.32	11.03	18.25	22.47	23.34	20.89	14.62	20.45	27.40	21.10	
	TOTAL OF YEAR ...	38.62	48.21	38.46	25.23	60.22	61.15	30.57	20.72	48.32	50.02	49.12	45.69	49.47	60.93	48.61	

APPENDIX A (2).

Statement of rainfall of rain gauge at Manschra.

Serial No.	Name of month.	1901-02.	1902-03	1903-04.	1904-05	1905-06.	1906-07.	1907-08	1908-09.	1909-10.	1910-11.	1911-12	1912-13	1913-14.	1914-15.	Average.	REMARKS.
1	April ...	2'92	4'27	2'23	0'98	1'35	1'93	7'36	6'05	1'55	5'11	2'34	3'46	1'61	5'47	3'33	
2	May ...	5'21	1'46	4'63	1'29	2'41	0'88	1'77	0'71	2'25	1'01	1'57	1'71	3'55	2'96	2'24	
3	June ...	1'30	4'42	0'17	1'07	...	2'48	3'36	0'09	3'60	6'08	4'40	0'42	3'91	5'57	2'63	
4	July ...	1'84	5'20	6'40	6'22	3'93	5'10	2'79	8'63	7'95	9'93	1'83	14'54	7'86	19'36	7'26	
5	August ...	6'95	6'35	7'05	7'33	3'41	9'78	5'38	14'04	7'84	8'21	8'12	10'78	7'55	6'80	7'83	
6	September ...	3'89	1'40	3'71	1'92	5'34	1'72	1'99	4'05	2'84	0'65	6'86	0'70	1'22	4'09	2'90	
	Total	22'11	23'10	24'10	18'81	16'64	21'89	22'65	33'57	26'03	30'99	25'12	31'61	25'70	44'25	26'10	
7	October ...	0'73	3'65	0'94	1'89	0'27	0'58	0'17	4'72	0'29	...	1'01	0'87	...	8'42	1'68	
8	November ...	...	0'42	0'40	0'90	0'19	...	...	...	0'10	...	2'04	...	1'72	0'94	0'48	
9	December ...	...	0'27	0'96	1'69	4'68	1'35	...	2'37	2'15	3'69	1'99	1'10	2'28	2'27	1'76	
10	January ...	...	2'54	3'82	4'94	2'02	4'64	4'74	1'58	4'73	9'80	4'98	1'11	1'88	0'40	3'37	
11	February ...	0'06	...	0'55	2'46	8'08	5'46	1'75	3'65	3'78	0'37	2'12	4'70	4'49	4'76	3'02	
12	March ...	3'82	6'73	3'81	5'56	5'70	5'01	1'00	2'77	1'64	7'81	0'78	2'04	4'79	2'53	3'85	
	Total	4'61	13'61	10'28	17'44	20'94	17'04	7'66	15'09	12'69	21'67	12'92	9'82	15'16	19'32	14'16	
	GRAND TOTAL	26'72	36'71	34'47	36'25	37'58	38'93	30'31	48'66	38'72	52'66	38'04	41'43	40'86	63'57	40'35	

APPENDIX A (3).

Statement of rainfall of raingauge at Abbottabad.

Serial No.	Name of month.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	1907-08.	1908-09.	1909-10.	1910-11.	1911-12.	1912-13.	1913-14.	1914-15.	Average.	REMARKS.
1	April ...	3.29	5.27	1.52	1.07	1.21	1.73	7.54	5.88	2.38	5.62	2.37	4.73	2.48	6.17	3.66	
2	May ...	6.40	2.31	5.70	1.99	1.77	1.93	1.32	1.35	2.57	0.60	0.55	1.31	1.36	2.75	2.28	
3	June ...	1.59	3.94	0.60	0.06	0.43	4.28	3.16	1.66	2.86	6.70	4.87	0.47	7.85	5.49	3.14	
4	July ...	3.94	5.37	5.00	9.21	13.60	6.42	5.16	15.91	14.99	7.22	2.60	16.05	10.31	14.35	9.29	
5	August ...	10.07	7.57	6.27	10.49	9.97	8.04	4.67	11.85	17.47	16.77	9.32	12.34	8.61	6.30	9.98	
6	September ...	4.22	2.81	5.11	10.70	7.57	2.66	3.39	5.62	2.19	0.28	7.83	1.12	1.83	4.57	3.65	
	Total	29.51	26.97	24.20	24.52	34.55	25.00	25.74	42.27	42.46	37.19	27.54	36.02	32.44	39.63	32.00	
7	October ...	1.47	2.27	0.35	2.97	1.38	1.30	0.19	2.17	0.38	...	1.60	1.90	0.13	8.56	1.71	
8	November ...	...	0.51	0.36	1.66	0.12	...	0.04	...	0.11	...	2.63	...	1.01	2.11	0.61	
9	December ...	...	0.03	1.12	2.35	6.25	2.04	...	2.16	2.69	3.71	2.11	0.71	2.69	2.52	2.03	
10	January ...	0.02	3.83	6.78	9.65	3.45	6.26	4.25	2.23	5.13	9.63	3.82	1.60	2.08	0.27	4.21	
11	February ...	0.09	0.67	0.72	4.11	10.76	6.59	2.97	4.82	3.97	1.31	3.76	5.32	8.37	6.87	4.31	
12	March ...	4.11	7.85	5.50	7.52	8.53	5.93	0.80	2.18	1.93	11.28	1.40	2.75	4.96	2.20	4.78	
	Total	5.69	15.16	14.83	28.26	30.49	22.12	8.25	13.56	14.21	25.93	15.32	11.58	19.24	22.53	17.65	
	GRAND TOTAL	35.20	42.13	39.03	52.78	65.04	47.12	33.99	55.83	56.67	63.12	42.86	47.60	51.68	62.16	49.65	

APPENDIX B.

Statement showing the results of crop experiments made in Kharif 1914 and Rabi 1915, the rates of yield per acre assumed in the First and Second Settlements.

1	2	3	4	5	6	7
SOILS.	Rates assumed by Colonel Wace in Settlement 1869-70 for Maidan.	Rates assumed by Sardar Sarfaraz Khan in last settlement.	Average rate of outturn per acre of all the experiments made.	Average rate of outturn per acre of the selected experiments made.	Rates proposed for assumption.	REMARKS.
		<i>Maise.</i>				
Hotar	
Bari	...	670	900	889	1,033	900
Bela	...	400	406	782	...	
Maira	...	220	500	177	296	500
Kalsi	...	80	180	138	207	180
		<i>Rice.</i>				
Hotar	...	900	1,044	1,030	1,196	1,044
		<i>Khangni.</i>				
Hotar	
Bari	
Bela	...	110	120	...	...	120
Maira	
Kalsi	
		<i>Cotton.</i>				
Hotar	
Bari	120	24	24	120
Bela	...	120	...	...	...
Maira	...	90	...	...	...
Kalsi	...	40	50	...	...	50
		<i>Pulses.</i>				
Hotar	
Bari	...	210	160	...	...	160
Bela	...	210	...	...	...
Maira	...	210	80	...	...	80
Kalsi	...	160	152	152	...	

APPENDIX B—CONCLUDED.

1	2	3	4	5	6	7
SOILS.	Rates assumed by Colonel Wace in Settlement of 1869-70 for Maidan.	Rates assumed by Sardar Sarfaraz Khan in last settlement.	Average rate of outturn per acre of all the experiments made.	Average rate of outturn per acre of the selected experiments made.	Rates proposed for assumption.	REMARKS.
Wheat.						
Hotar	...	500	700	700	500	
Bari	...	250	500	391	500	
Bela	...	250	480	212	400	
Maira	...	200	360	207	310	
Kalsi	...	110	160	146	146	
Barley.						
Hotar	...	450	...	...	450	
Bari	...	480	500	344	516	
Bela	...	240	450	298	298	
Maira	...	160	350	...	350	
Kalsi	...	50	100	...	100	
Maasgar.						
Hotar	250	...	250	
Bari				
Bela				
Maira	...	150				
Kalsi	...	150				
Oilseeds.						
Hotar	...	300	...	...	300	
Pari	...						120
Bela	...	200	...	...	200	
Maira	...						50
Kalsi	...	50	...	...	50	

APPENDIX C.

Calculation of average rents and the percentages of the gross produce received by land-lords.

1	2					
	AREA PAYING RENT IN KIND AT EACH RATE.					
	<i>Agror.</i>					
	Hotar.	Bari.	Bela.	Maira.	Kalsi.	REMARKS.
Scale of rent and detail.						
$\frac{1}{2}$ and over = $\frac{1}{2}$	40	109	23	154	36	
$\frac{2}{3}$ and less than $\frac{1}{2}$ = $\frac{2}{3}$	2	3	2	1	...	
$\frac{1}{3}$ and less than $\frac{2}{3}$ = $\frac{1}{3}$	13	98	10	324	252	
Less than $\frac{1}{3}$ = $\frac{1}{4}$	25	221	47	341	627	
Total area paying rent in kind	80	431	82	820	915	
Average share taken per cent. of divisible produce ...	39	33	33	33	28	
To be deducted for common expenses	one twentieth	one twentieth	one twentieth	one twentieth	one twentieth	
Net percentage of total produce received by the land-lords as rent.	37	31	31	31	27	
Average percentage assumed for purposes of the produce estimate.	30	20	20	20	20	

Appendix D.

Produce estimate, Agror Valley area, in acres, yield in maunds.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Assessment circle.	Class of soil and area in acres.	DETAIL.	Kharif							Rabi.						Total cropped area of each soil and total value of produce.	Percentage of gross produce realized by landlords and cash value of rent.	Government share at half net assets.	Half net asset soil rate.	Half net asset crop rate.
			Maize.	Rice	Pulses.	Cotton.	Kagani.	Others.	Total.	Wheat.	Barley.	Masur and other pulses.	Sarhuf.	Others.	Total.					
	Commutation ...	30	Husked. 13	14	7	21	...	...	...	18	31	16	14	...	...	...	..	...	...	...
	Prices in seers per rupee	...	Unhusked. 23																	
Hetai, 1,310	Average area ...	45	1,245	5	...	...	3	1,298	56	56	5	...	...	...	117	1,415	30	...	...	...
	Average yield ...	900	1,044	160	...	...	50/-	...	500	450	160	...	...	...	...	...	...	...	...	...
	Gross produce ...	40,500	1,299,780	800	...	...	...	...	28,000	25,200	800	...	...	...	...	...	...	...	...	...
	Value of gross produce...	1,350	56,512	57	...	...	150/-	58,069	1,536	813	50	...	...	...	2,419	60,488	18,145	9,073	6-14-10	6-6-7
Bari, 4,516	Average area ...	4,216	...	48	39	...	5	4,308	976	1,325	26	297	3	2,627	6,935	20	...	...	...	...
	Average yield ...	900	...	160	120	...	30/-	...	500	500	160	300	50/-	...	...	...	...	...	...	...
	Gross produce ...	3,794,400	...	7,380	4,680	...	...	...	488,000	662,500	4,160	89,100	...	...	...	...	...	...	...	...
	Value of gross produce...	126,480	...	549	669	...	150/-	127,848	27,111	21,371	260	6,364	150/-	55,256	183,104	36,621	18,310	4-0-10	2-10-2	

Aenos.

Bila, 842	Average area	...	692	...	167	...	...	8	807	284	61	12	42	...	399	1,206	20	...	...	...
	Average yield	...	900	...	160	...	...	15/	...	480	450	160	200	...	...	...	...	...	...	...
	Gross produce	...	622,808	...	17,120	...	...	...	...	136,320	27,450	1,920	8,400	...	...	...	...	...	...	...
	Value of gross produce...	...	20,760	...	1,223	...	...	120/	22,103	7,573	885	120	600	...	9,178	31,281	6,256	3,128	3-11.5	2-9-6
Maira, 8,253	Average area	...	4,295	...	720	1	28	12	5,056	1,838	311	239	48	...	2,436	7,492	20	...	...	...
	Average yield	...	500	...	80	120	120	15	...	360	350	80	200	...	...	...	...	...	...	...
	Gross produce	...	2,147,500	...	57,600	120	3,360	...	...	661,680	108,850	19,120	9,600	...	...	...	...	...	...	...
	Value of gross produce...	...	71,583	...	4,114	17	160	180/	76,054	36,760	3,511	1,195	686	...	42,152	118,206	23,641	11,820	1-6-11	1-9-3
Kali, 5,512	Average area	...	2,255	...	266	...	63	10	2,594	754	79	32	2	...	867	3,461	20	...	...	...
	Average yield	...	180	...	80	...	120	15	...	160	100	80	50	...	...	...	...	...	...	...
	Gross produce	...	405,900	...	21,280	...	7,560	...	...	120,640	7,900	2,560	1,000	...	...	...	...	...	...	...
	Value of gross produce...	...	13,530	...	1,520	...	360	150	15,560	6,702	255	160	7	...	7,124	22,684	4,537	2,269	0-6-7	0-10-6
Total area, 20,432	Average area	...	11,503	1,245	1,146	40	91	38	14,063	3,908	1,832	314	389	3	6,446	20,509	...	...	...	...
	Gross produce	...	7,011,100	1,299,780	104,480	4,800	10,920	...	...	1,434,640	831,900	28,560	107,200	...	...	...	...	...	...	...
	Value of gross produce..	...	233,703	56,512	7,463	686	520	750	299,634	79,702	26,835	1,785	7,657	150	116,129	415,763	89,200	44,600	2-2-11	2-2-10

APPENDIX E.

Statement of salient statistics for consultation in determining the assessment of Agror.

Serial No.	2	3
	DETAIL.	
	<i>Cultivation.</i>	
1	Total area cultivated in acres	20,432
2	Percentage of cultivated area (1) Irrigated (2) Unirrigated ...	6'4 93'6
3	" " (1) matured area (2) Kharaba in the Kharif harvest 1910-13	67 74
4	" " " " " " " " Rabi harvest 1911-14	33 4
5	" " area sown (1) Matured (2) Failed, 1910-12 to 1913-14 ...	90 10
6	Increase percentage in ploughs since last Settlement ...	23
7	Average cultivated area in acres per plough	9
	<i>Population, holdings and transfers, &c.</i>	
8	Population per square mile of cultivation	583
9	Percentage of increase in population since last Settlement ...	36
10	" " cultivated area held (1) Owners (2) Occupancy tenants (3) Tenants-at-will in acres.	23 47 26
11	Average cultivated area (1) per proprietary holding (2) per proprietor ...	3'4 4'2
12	Percentage of cultivated area mortgaged ... { (1) To Agriculturists ... 5'1 (2) To non-agriculturists ... 0'1 (3) Total ... 5'2	
13	" " " " sold since last Settlement { (1) To Agriculturists ... 1'3 (2) To non-agriculturists ... (3) Total ... 1'3	
14	Average price per cultivated acre mortgaged, 1899-00 to 1913-14 in rupees	109
15	" " " " " " sold " " " " "	157
16	Average amount of (1) unsecured debt (2) revenue due from each proprietor in rupees.	14 12
17	Percentage of increase in cash value of cattle as existing and in price in 1900-01 and now.	100
18	Cash value of cattle in rupees	6,26,612
19	Profit of landlord and tenants combined from export of milk produce in rupees.	51,893
20	Interest on debts due by landlords only (assumed) in rupees	2,986
	<i>Land Revenue in rupees.</i>	
21	Assessment in 1841 by Sikhs	1,515
22	" of Summary Settlement in 1853 by Major Abbott ...	3,315
23	" of first Regular Settlement in 1869-70 by Captain Wace ...	4,000
24	" of second " " in 1898-00 by S. Sarfaraz Khan	13,000
25	Incidence of the same per acre cultivated, 1898-00	0-9-9
26	" " " " " " " 1903-04	0-9-8
27	Half net asset estimate (produce)	44,600
28	" " " based on cash rent estimate	27,111
29	Proposed assessment	20,000
30	Incidence per acre cultivated	0-15-8

APPENDIX F.

Details of water mills, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Assessment circle.	No. of villages containing mills.	Worked by Proprietors themselves.		WORKED BY OCCUPANCY TENANTS.								WORKED BY TENANTS-AT-WILL.												GRAND TOTAL OF ALL MILLS.			REMARKS.			
				Paying revenue and cesses only.		Paying cash rents.		Paying $\frac{1}{2}$ batai.		Total worked by occupancy tenants.		Paying revenue and cesses only.		Paying cash rents.		Paying $\frac{1}{2}$ or more batai.		Paying $\frac{1}{2}$ batai.		Paying less than $\frac{1}{2}$ batai.		Total worked by tenants-at-will.		Assessment.		Number.		Assessment.		Average per mill.
		Number.	Assessment.	Number.	Assessment.	Number of mills.	Rent.	Assessment.	Number.	Assessment.	Assessment.	Number.	Assessment.	Number of mills.	Rent.	Assessment.	Number.	Assessment.	Number.	Assessment.	Number.	Assessment.	Number.	Assessment.	Number.	Assessment.		Number.	Assessment.	Average per mill.
Agror	13	13	18/12	6	6/-	...	...	...	...	...	6	6/-	...	...	112	469/12	188/8	46	104/6	1	76/-	...	...	159	293/4	178	318	1/12/6	

STATEMENT No. I.

Milan Raqba or area statement, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Assessment circle.	Year.	Area exclusive of Gov- ernment forests.	Government forests.	Total area.	UNCULTIVATED OTHER THAN GOVERNMENT FORESTS.			CULTIVATION.					REMARKS.		
					Not available for cultivation.	Available for cultivation.		Detail.	Total cultivated area.	Total area har- vested.	Total area failed.	Total area sown.			
Unappro- priated Govt. waste.	Others.														
Aasoa.	Last Settlement	...	Acres. 35,994	Acres. 5,998	Acres. 41,992	Acres. 13,076	...	Acres. 1,637	Irrigated— Hotar	...	...	...	Detail of uncultivated land according to new measurements :— Class. Area. Banna ... 2,068 Dhaka Charagah ... 2,710 Do. Rakh ... 2,142 Do. Darakhtan ... 4,723 Other unculturable ... 2,518 Banjar jadid ... 28 Do. kadim ... 317 TOTAL ... 14,506	
								Total	...	1,144	...	...		...
								Unirrigated	{ Bari ... 3,808 Bela ... 995 Maira ... 9,473 Kalsi ... 5,861	...	...	...		...
								Total	...	20,137	...	...		...
								Total irrigated and unirrigated	...	21,281	...	...		...
	1913-14	...	35,952	5,983	41,935	13,103	...	1,269	Irrigated	...	1,241
								Unirrigated	...	20,340	...	...		...
								Total	...	21,581	...	...		...
	New Settlement	...	34,938	5,894	40,832	14,161	...	345	Irrigated—Hotar	...	1,310	1,637		17	1,654
								Total	...	1,310	1,637	17		1,654	
								Unirrigated—Bari	...	4,516	...	...		...
								Bela	...	842	...	...		...
								Maira	...	8,252	...	...		...
							Kalsi	...	5,512	...	...	...
							Total	...	19,122	18,256	1,934	20,190			
							Total irrigated and unirrigated	...	20,432	19,893	1,951	21,844			

STATEMENT No. II.

Jinswar Return of Kharif crops, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Assessment circle.	Year.	Description of cultivation.	Turnerie.	Sugarcane.	Rice.	Maize.	Kangri.	Other cereals.	Mung, maah.	Molh.	Kolath.	Other pulses.	Cotton.	Potatoes.	Fodder.	Others.	Area under superior crops (viz. maize, rice, cotton, potatoes, sugarcane, turnerie).	Area under inferior crops (viz. the rest).	Total superior and inferior crops (viz. total crops harvested).	Area of crops failed.	Total area sown.	REMARKS.
Agror.	Average of 4 years from 1910 to 1913.	Irrigated ...	...	...	1,101	82	...	...	8	...	...	2	1	...	...	11	1,183	21	1,204	20	1,224	
		Unirrigated ...	...	...	...	10,740	124	36	350	17	150	1,074	97	...	...	21	10,837	1,758	12,595	1,548	14,143	
		Total ...	...	...	1,101	10,822	124	36	344	17	150	1,076	98	...	...	32	12,020	1,779	13,799	1,568	15,367	
		Percentage of matured area (columns 4 to 20) and of sown area (column 22).	...	...	8	78	1	...	3	...	1	8	1	...	...	...	87	13	100	12	...	
	1914.	Irrigated—Hotar ...	...	1	1,158	78	...	...	6	1	...	4	1	...	...	6	1,237	18	1,255	9	1,264	
		Total ...	...	1	1,158	78	...	...	6	1	...	4	1	...	...	6	1,237	18	1,255	9	1,264	
		Unirrigated ...	...	...	...	9,405	121	7	464	27	258	1,524	73	1	...	44	9,479	2,445	11,924	1,494	13,418	
		Total ...	...	...	...	9,405	121	7	464	27	258	1,524	73	1	...	44	9,479	2,445	11,924	1,494	13,418	
		Total cultivated area ...	...	1	1,158	9,483	121	7	470	28	258	1,528	74	1	...	50	10,716	2,463	13,179	1,503	14,682	
		Percentage of matured area (cols. 4 to 20) and of sown area (column 22)	...	...	9	72	1	...	4	...	2	12	...	...	...	...	81	19	100	14	...	

SUPPLEMENT TO STATEMENT No. II.

Jinswar Return of Kharif 1915, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Assessment circle.	Description of cultivation.	Sugarcane.	Rice.	Maize.	Kangri.	Others.	Moth.	Mung, Mash.	Kulath.	Others.	Cotton.	Potatoes.	Fodder.	Others.	Area under superior crops (via maize, rice, cotton, potatoes, sugarcane, etc.)	Area under inferior crops.	Total superior and inferior crops harvested.	Area of crops failed.	Total area sown.	REMARKS.
Agror.	Hotar	1	1,245	45	...	...	...	5	...	...	...	...	...	2	1,291	7	1,298	...	1,298	
	Total Irrigated	1	1,245	45	...	...	...	5	...	...	...	...	...	2	1,291	7	1,298	...	1,298	
	Bari	...	...	4,216	...	...	...	32	...	16	39	...	...	5	4,255	53	4,308	...	4,308	
	Bela	...	...	692	...	...	...	7	...	102	...	...	...	6	692	115	807	14	821	
	Maira	...	...	4,295	28	...	7	147	37	529	1	...	...	12	4,296	760	5,056	378	5,434	
	Kalsi	...	...	2,255	63	...	...	10	133	123	...	...	...	10	2,255	339	2,594	132	2,726	
	Total unirrigated	...	...	11,458	91	...	7	196	170	770	40	...	...	33	11,498	1,267	12,765	524	13,289	
	GRAND TOTAL	1	1,245	11,503	91	...	7	201	170	770	40	...	...	35	12,789	1,274	14,063	524	14,587	

STATEMENT No. III.

Jinswar Return of Rabi crops, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Assessment circle.	Year.	Description of cultivation.	Wheat.	Barley.	Sarshaf.	Other pulses.	Fodder.	Others.	Total area harvested.	Area of crops failed.	Total area sown.	Total average matured area of both harvests.	Percentage of cultivated area (1914-15) matured.	Incidence of land revenue on total average matured area.	REMARKS.
AGROR.	AVERAGE OF 4 YEARS FROM 1911 TO 1914.	Irrigated	18	35	7	...	269	10	339	23	362	20,600	95	0 10 2	
		Unirrigated	4,070	1,735	401	261	7	2	6,476	759	7,235	...	...	...
		Total	4,088	1,770	408	261	276	12	6,815	782	7,597	...	...	...
		Percentage of matured area (columns 4 to 10) and of sown (column 12).	59	26	6	4	4	1	100	12	...	...	...	...
1915.	Irrigated.	Hotar	56	56	...	...	265	5	382	8	390	19,893	97	0 10 5	
		Total	56	56	...	...	265	5	382	8	390	...	...	...
	Unirrigated.	Bari	976	1,325	297	26	3	3	2,630	114	2,744				
		Bela	284	61	42	12	...	...	399	14	413				
		Maira	1,838	311	48	239	...	...	2,436	199	2,635				
		Kalsi	754	79	2	32	...	...	867	113	980				
		Total	3,852	1,776	389	309	3	3	6,332	440	6,772	...	...	...
		Total cultivated area	3,908	1,832	389	309	268	8	6,714	448	7,162				
		Percentage of matured area (columns 4 to 10) and of sown (column 12).	58	27	6	4	4	1	100	12	...				

STATEMENT NO. IV. €

Jama Wasil Baqi or Revenue account, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Assessment circle.	YEAR.	TOTAL ASSESSMENT.			Deduct Revenue not collected being assessed on land must to the owner.	BALANCE TO BE COLLECTED.			CESSES.				REMARKS.
		Land Revenue.	Mills.	Total.		Khalasa.	Payable to Jagirdars.	Total.	Local rate.	Patwar.	Lambardari.	Total.	
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Agror.	Second Summary Settlement of Major Abbott 1853.	3,326	...	3,326	...	3,326	...	3,326	277	...	166	443	
	First Regular Settlement 1869-78.	4,000	...	4,000	...	4,000	...	4,000	333	...	200	533	
	Regular Settlement of 1898-1900.	13,000	300	13,300	442	12,247	611	12,858	1,333	...	655	1,988	
	1914-15 ...	12,989	318	13,307	421	12,219	667	12,886	1,111	...	648	1,759	

STATEMENT No. V.

Yearly totals of transfers of Rights of owners, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Assessment circle.	YEAR.	MORTGAGES WITH POSSESSION, INCLUDING TEMPORARY TRANSFERS FOR DEBT BY ORDER OF COURT.					REDEMPTION OF MORTGAGES.				SALES AND PERMANENT TRANSFERS OF VALUE.					REMARKS.
		Area transferred.		Revenue.	Average price per acre of cultivated area.	Year's purchase of the land revenue.	Area redeemed.		Revenue.	Average price per acre of cultivated area.	Area transferred.		Revenue.	Average price per acre of cultivated area.	Year's purchase of the land revenue.	
		Total.	Of which cultivated.				Total.	Of which cultivated.			Total.	Of which cultivated.				
		Acres.	Acres.	Rs.	Rs.	Acres.	Acres.	Rs.	Rs.	Acres.	Acres.	Rs.	Rs.			
AGROR.	Average of five years from 1899-00 to 1903-04.	219	208	6	73	...	140	136	10	58	33	18	5	69		
	Average of eleven years from 1904-05 to 1914-15.	167	152	11	119	...	141	126	8	108	20	18	9	147		
	Average of 16 years from 1899-00 to 1914-15.	184	171	9	101	...	141	126	5	94	26	19	11	116		

STATEMENT NO. VI.

Abstract of ownership, Mortgages, Sales and Revenue assignments, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Assessment circle.	Year.	PART I.—TENURES AND OWNERSHIPS.									PART II.—SALES SINCE LAST SETTLEMENT AND AREA NOW UNDER MORTGAGE.									PART III.—REVENUE ASSIGNMENTS.						
		Description of tenures.	Detail of main tribes.	No. of Jamabandi holdings.	No. of full proprietors and shareholders.	No. of malik qabzas.	Total No. of proprietors.	AREA.		Revenue.	To whom transferred.	SALES SINCE LAST SETTLEMENT.				AREA UNDER MORTGAGE.				Detail.	No. of assignees and Jagirdars.	Area of which the revenue is assigned in whole or in part.	JAMA.		Amount of land revenue assigned, not by apportionate of land but by cash allotment of the total assessment excluding nazrana.	Nazrana annually paid by assignees.
								Total.	Of which cultivated.			Total.	Of which cultivated.	Percentage of total cultivated area.	Average price per cultivated acre.	Total.	Of which cultivated.	Percentage of total cultivated area.	Average price per cultivated acre.				Total assessment of land assigned.	Amount thereof assigned.		
Zamindari	Swathis...	704	667	51	718	Acres.	Acres.	Rs.	To agriculturists.	Acres.	Acres.	Acres.	Rs.	Acres.	Acres.	Acres.	Rs.	In perpetuity with conditions.	8	62	5	5	...	...
Pattidari	Sayads ...	246	224	10	234	3,334	1,862	884																		
Bhaichara	Qureshis	9	5	...	5	1,284	586	368	To non-agriculturists.	...	...	...	...	49	32	0'1	143	For life ...	6	88	509	509	...	...
Miscellaneous.		159	130	15	145	7,128	812	484										At pleasure of Government upto the time of Settlement.	46	87	574	574	...	...
TOTAL...		1,118	1,026	76	1,102	40,832	20,432	12,989	...	349	271	1'3	157	1,230	1,082	5'2	126	...	60	237	1,088	1,088	...	...

STATEMENT No. VII.

Abstract of Cultivating Occupancy, Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Assessment circle.	Year.	Detail.	Total cultivated area.	Total cultivated by owners.	Area cultivated by tenants free of rent or at nominal rent.	AREA CULTIVATED BY TENANTS PAYING RENT.						Total held by tenants paying rents.	DETAIL OF BATAI PAYING TENANTS WITHOUT RIGHT OF OCCUPANCY.									
						With right of occupancy.			Without right of occupancy.				Rent in kind.									
						Paying at revenue rates with or without malik-ana.	Paying other cash rents.	Paying in kind with or without an addition in cash.	Paying at revenue rates with or without malik-ana.	Paying other cash rents.	Paying in kind with or without an addition in cash.		Detail by soils.	Zabti rents.	Half produce or more.	Two fifths and less than half.	One-third and less than two-fifths.	Less than one-third.	By fixed amount of produce.	Total area under rents in kind.	REMARKS.	
Agroa.	Last Settlement.	Holdings	...	3,618	853	114	1,268	86	30	...	691	576	2,651									
		Area	...	21,281	3,988	261	10,868	67	298	...	3,340	2,459	17,032									
	New measurement.	Holdings	...	4,958	1,371	416	1,730	23	40	1	728	649	3,171	Hetar	...	40	2	13	25	...	80	
														Total irrigated	...	40	2	13	25	...	80	
		Area	...	20,432	4,674	834	9,354	62	264	...	2,916	2,328	14,924	Bari	...	109	3	98	221	...	431	
														Bela	...	23	2	10	47	...	82	
														Maira	...	154	1	324	341	...	820	
														Kalsi.	...	36	...	252	627	...	915	
														Total unirrigated	...	322	6	684	1,236	...	2,248	
														GRAND TOTAL	...	362	8	697	1,261	...	2,328	

SUPPLEMENT TO STATEMENT No. VII.

Detail of cash rents.

1	2	3	4	5	6	7	8	9
Assessment circle.	YEAR.	WITH RIGHT OF OCCUPANCY.			WITHOUT RIGHT OF OCCUPANCY.			REMARKS.
		Area.	Revenue.	Rate per acre.	Area.	Revenue.	Rate per acre.	
AGRO.		Acres.	Rs.	Rs. A. P.	Acres.	Rs.	Rs. A. P.	
	Last settlement ...	10,917	12,543	1 2 5	3,164	6,469	2 0 9	
	New measurements ...	9,416	11,815	1 4 1	2,916	7,467	2 13 5	

STATEMENT No. IX.

Showing cattle enumeration and population, etc., of Agror Valley.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Assessment circle.	DETAIL.	Bull and Bullocks.	Cows.	Male buffaloes.	Cow buffaloes.	Young stock calves and buffalo calves.	Sheep.	Goats.	Horses and ponies.	Mules.	Donkeys.	Camels.	Ploughs.	Carts.	POPULATION.		
															YEAR.	Total Inhabitants.	
Agror.	1904	12,549				5446		216				1,808	...	1891	...	...	13,717
		4,112	2,790	114	2,929	2,604	3,280	2,166	108	61	47			...	1901	...	...	16,809
	1909	10,903				4,812		211				2,287	...	1911	...	...	18,671
		3,841	1,907	93	2,928	2,134	2,477	2,335	102	23	86			...			
	1914	12,168				5,260		269				2,358	...				
		4,132	2,325	137	3,337	2,237	2,885	2,375	138	32	99			...			

GLOSSARY OF VERNACULAR TERMS.

—O—

Abi	... Irrigated land.
Agetra	... Crops sown earlier.
Ara	... A due paid by a tenant to his landlord.
Bahi	... Account book.
Bakhai	... Seedlings.
Bania	... Village shopkeeper.
Banjar Jadi	... Land which has grown no crops for four harvests.
Banjar Kadim	... Land which has grown no crops for four years or more.
Banna	... The banks of fields or the strips of waste that separate one cultivated terrace from another.
Bari	... Manured Land.
Batai	... Rent taken by division of crop.
Bela	... Land situated in the base or on the banks of streams.
Belna	... Mill for cleaning cotton.
Bhaichara	... A form of tenure where possession is the measure of right.
Chakota	... Lump cash rent.
Chhat	... A measure equivalent to 60 Odis.
Chhatank	... A weight of one sixteenth of a seer.
Dag Kangni	... A grain.
Dhaka Charagah	... Hill land used for grazing purposes.
Dhaka Darakhtan	... Hill land thickly covered with trees or brush wood.
Dhaka Rakh	... Hill land on which the grass is preserved as hay.
Dofasli	... Land which grows more than one crop during the year.
Dum	... A menial of singing and dancing class.
Gaddi	... Sheaf or bundle.
Garra	... A kind of rice.
Ghair Mumkin	... Unculturable land.
Ghi	... Clarified butter.
Girdawri	... Harvest inspection.
Godi	... Weeding.
Gur	... Consolidated sugarcane juice.
Halchuri	... A cash fee levied per plough by landlords from their tenants.
Hotar	... Irrigated land.
Jagir	... An assignment of land revenue.
Jandar	... A watermill.
Jinswar	... Crops return.
Kalar	... A kind of rice.

Kalsi	... Inferior cultivated land (terraced or otherwise) on steep hill sides.
Kamed	... A kind of rice.
Kanal	... $\frac{1}{16}$ th of an acre.
Kangni	... A grain.
Khadir	... A servant of a mosque.
Khan	... Chief.
Khan Khel	... Descendants of a khan.
Kharif	... Autumn harvest.
Kulath	... A pulse.
Lan/bardar	... Village headman.
Lambardari	... Village headmanship.
Maira	... An unirrigated soil containing a mixture of clay and sand in varying qualities.
Malikana	... Fee paid in recognition of proprietary title.
Malik-i-Qabza	... A proprietor who has no share in the village common land and owns only the land in his own possession.
Marla	... A pole or $\frac{1}{16}$ th part of an acre.
Mash	... A pulse.
Massar	... A pulse.
Massuri	... A pulse.
Milan Rakba	... Area Statement.
Mochi	... Shoe maker.
Moni	... A kind of wheat.
Mothi	... A pulse.
Mung	... A pulse.
Odi	... A measure of capacity weighing between 4 and 5 seers.
Pachhetra	... Crops sown later.
Patwari	... Village accountant.
Pekoh	... Water mill for pounding rice.
Rabi	... Spring harvest.
Sabukar	... A money lender.
Sarshaf	... Oil seed.
Seer	... A measure of weight, equal to $\frac{1}{40}$ th of a maund.
Seri Khor	... One who holds grant of land for religious or charitable purposes.
Shaftal	... Common three leaved clover.
Shamilat	... Common land.
Sil	... A light ploughing.
Tahsil	... A sub-division of a district.
Taropi	... Transplanting.
Waris	... Heir.
Wasil Baqi	... Revenue account.
Wesh	... Partition.
Zamindar	... Land holder.

