

ASSESSMENT REPORT

OF THE

HANSI
HISSAR
BARWALA
FATEHABAD

} TAHSILS,

HISSAR DISTRICT.

BY

ALEX. ANDERSON, Esq.,

Settlement Officer.

1890.



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FROM

R. G. THOMSON, ESQUIRE,

Offg. Revenue Secretary to Government,

Punjab and its Dependencies,

TO

THE SENIOR SECRETARY TO THE FINANCIAL
COMMISSIONER, PUNJAB.

Dated Lahore 6th November 1890.

Revenue and Agriculture.

Revenue.

SIR,

I AM directed to make the following reply to your letter No. 687 of 21st October 1890, with which was forwarded a copy of the Financial Commissioner's orders upon the Assessment Reports of the Hānsi, Hissar, Barwāla and Fatahabad Tahsils in the Hissar District.

2. The Lieutenant-Governor approves of the orders passed by the Financial Commissioner as to the revenue rates to be adopted in the new assessment. But though Sir James Lyall considers that these rates as finally passed by Mr. Ibbetson are framed upon sound principles, yet he thinks that the demand indicated by them should be regarded as a maximum not to be exceeded; and if in making his detailed assessments Mr. Anderson should think it advisable to go below this demand in any or every circle, Sir James Lyall would approve of his doing so to the extent of five per cent. with a view to secure a safe assessment and to avoid excessively large enhancements.

3. The crops in the district are generally uncertain and of an inferior class; and Sir James Lyall cannot but feel that the new assessment—although well below the half assets standard—will nevertheless not be as compared with the assessments in force in many of the districts in the Province. In fact, if it were not for the sure and positive evidence given by the existence and general prevalence of cash rents, and if it were not for the influence for pushing up the rates of such rents which has been exercised by the presence of numerous non-cultivating large owners similar to the zamīndārs of the North-Western Provinces, we should not now be assessing this district so boldly as we are going to do. On the contrary, the extraordinary uncertainty of its harvests, and the liability of the flocks and herds to heavy loss in time of drought, would—as in the past—have made us disposed to be very timid in enhancing the land revenue. Under these circumstances the Lieutenant-Governor thinks that special caution is necessary in assessing up to full rates the estates of peasant proprietors generally, and more especially those estates held by peasant proprietors of the classes (such as Rājputs and Pachādas) who, for reasons connected with hereditary caste customs and habits, get least out of their lands and are least provident.

4. Sir James Lyall also thinks that Mr. Anderson should be allowed to postpone the effect of the new jamas in whole or in part from this kharif to the next in any cases in which he may consider such a postponement advisable. In a large part of the district there has been no harvest to speak of for the last two years, and some of the villages are in some difficulty.

5. Passing now to more particular points, I am to say in the first place that the Lieutenant-Governor agrees with the Financial Commissioner in thinking that a fluctuating assessment should not be forced upon the Sotar villages against their own wishes. The assessment proposed is light. The people have large resources in cattle and large areas of baráni cultivation which can be increased from the cultivable waste. The Lieutenant-Governor therefore sees no prospect of a break-down of the fixed assessment in many, if indeed in any, villages. This being so, the wishes of the people against a fluctuating assessment may decide the point. But power should be taken to cancel the fixed assessment and to introduce the fluctuating system if a village falls into irrecoverable arrears. In the same way the Lieutenant-Governor agrees that the Sotar villages may be granted the power to elect for a fluctuating system at any time as proposed by Mr. Ibbetson. The rates to be used in fluctuating assessments, if hereafter introduced, should if possible be fixed now. But before finally adopting the rates proposed by the Financial Commissioner Sir James Lyall thinks that it will be desirable to ask Mr. Anderson whether he has any suggestions to make in regard to them.

6. The Lieutenant-Governor agrees with the remarks made by the Financial Commissioner as to the necessity for frequent and ready suspensions in these Sotar lands. At the same time such suspensions should not be too freely given. The people in these villages can generally draw on their reserve resources in cattle.

7. In regard to the *cycle* system of assessment, the Lieutenant-Governor does not quite agree with the remarks of Mr. Ibbetson or with Colonel Grey when he says that the cycle system has no advantage over one of free suspensions. Mr. Anderson's reasons for thinking the cycle system to be unnecessary in any part of Hissar under the assessments which he proposes are quite sound, and are accepted by the Lieutenant-Governor. But the weightiest of Mr. Anderson's objections to the cycle system itself is equally weighty against the free use of the system of suspensions. It is a noticeable fact that the honest and sturdy class of Punjab peasant proprietor generally shows a strong dislike of suspension unless combined with the hope of ultimate remission. This instinct is probably right; and the Lieutenant-Governor still thinks that in certain tracts in the Punjab, where the cultivation is mainly baráni, the rainfall very uncertain, and the land held either by peasant proprietors or tenants paying rents in kind, the cycle system would (with our present annual papers) work well and have great advantages over the suspension system.

8. The Lieutenant-Governor thinks it true that we can assess land more boldly when the proprietors' assets are actually of the nature of rents paid by tenants than when the assets are what the proprietors can themselves make out of the land by their own cultivation or cattle-breeding. He therefore agrees generally in the remarks made in the 47th paragraph of Mr. Ibbetson's orders. But this agreement is subject to two provisos. In the first place the assessing officer should accept present rents, and not speculate upon any possible rise. Secondly, if a proprietor be found to be extorting rent from his tenants in a really exorbitant way it would not be right to assess the village fully up to the half of such exorbitant rents. To do so would only countenance the exactions of the landlord and incite him to increase them so as to get as much profit under the new as under the old assessment.

9. In regard to the sub-division of assessment circles, Sir James Lyall thinks that in the present instance the sub-divisions are sufficiently distinct to make it advisable to treat them separately in assessing, and he considers that

in submitting the detailed village assessments for sanction the sub-divisions should be used. If assessment circles are too large and contain villages of too wide divergence in class, the check which superior authorities are supposed to exercise over village assessments becomes difficult. The same reasons do not perhaps apply to the maintenance of statistics after settlement, and the Lieutenant-Governor thinks that the late Colonel Wace in his anxiety to have large assessment circles was perhaps too much swayed by "after settlement" statistical considerations.

10. The Local Rate will be at Rs. 10-6-8 per cent. as supposed by the Financial Commissioner, and the Lambardári Cess at 5 per cent. The report on the Patwári Cess should be expedited. The new assessments may be given out for 20 years and from kharif 1890 subject to the remarks in paragraph 4 of this letter.

I have, &c.,

R. G. THOMSON,

Offg. Revenue Secretary to Government, Punjab.

No. 697, dated 21st October 1890.

From—P. J. FAGAN, Esquire, Senior Secretary to the Financial Commissioner, Punjab,

To—The Revenue Secretary to Government, Punjab.

I AM directed by the Financial Commissioner to submit Mr. Anderson's Assessment Report of the Hānsi, Hissar, Barwāla and Fatahabad Tahsils of the Hissar District, together with the Commissioner's review and a copy of the orders passed by the Financial Commissioner. The Preliminary Report for the whole district was forwarded with Mr. Douie's letter No. 82 C. of 28th June last.

2. The orders of Government are required as to the rates at which the cesses should be levied, and as to the terms of settlement. A separate reference is being made regarding the Patwāris' cess. Mr. Anderson has already been asked to report separately his proposals regarding zaildārs and ināmdārs.

Financial Commissioner's Review of the Assessment Report on the Hānsi, Hissar, Barwāla and Fatahabad Tahsils of the Hissar District.

1. Mr. Anderson has submitted a single Assessment Report for the four tahsils of Hānsi, Hissar, Barwāla and Fatahabad.

General.

Considering the great similarity that exists between the Hariāna circles of all these tahsils, the Bāgar circles of Hissar and Fatahabad, and the Nāli circles of Fatahabad and Barwāla, the procedure adopted is convenient. It unavoidably adds, however, to the length of the present Review.

2. In reviewing the Bhiwāni Report Mr. Young dealt very fully with the agricultural conditions affecting that tahsil.

Previous Reviews.

The same conditions prevail throughout the large tract now under discussion, modified only by the existence of canal irrigation in parts of Hānsi and Hissar and of a small area of stiff low-lying land inundated by the precarious floods of the Ghaggar in Fatahabad and Barwāla. In the present orders the Financial Commissioner will therefore confine his remarks almost entirely to matters having a direct bearing on the assessment. A statement has been appended which collects the leading statistics of the tract and its assessments in a convenient form.

3. Outside the canal villages the population is sparse. If the two towns of Hānsi and Hissar are excluded, the average incidence over the four tahsils is only 173 per

Population.

square mile of cultivation. In Hānsi, which includes nearly the whole of the canal-irrigated villages, it is as high as 201 per square mile. The rise between 1868 and 1881 was only 6 per cent. The slow increase in the population is in marked contrast to the rapid spread of cultivation. In Hānsi the population of the unhealthy canal villages is stationary, but there has been some advance in the dry tract. In Hissar there was actually a falling-off of 10 per cent., the decrease being greatest in the Bāgar circle, where it rose to 13 per cent. But the decrease was probably partly or wholly nominal, being due to the bad seasons of 1880-81, and, in the Bāgar, to the absence of the people with their camels at the time of census. The tide of immigration, however, which flowed strongly into the district after the first establishment of British Rule, has turned, and now sets towards the inundated irrigated tracts to the north and east. In the two northern tahsils, and especially in their irrigated portions, the increase has been considerable, but the cultivated area has risen in a far greater proportion. Irrigation from the Indri-Sirsa Canal will only extend to a small part of the Hissar Tahsil, and it is not improbable that its already scanty population may be reduced by emigration to the tract which the canal will command in Fatahabad and Barwāla.

4. The material of which the proprietary body is composed is fairly good in Hānsi and Barwāla, where half of the land is owned by Jāts. In Hissar there are fewer Jāts and more Rājputs, while Fatahabad is unfortunate in having a large proportion of Pachādas, who are the worst of cultivators. The holdings are very large. The average area tilled by each owner with his own plough is 10 or 11 acres in the Nāli; 13 or 14 in Hariāna; and 16 or 17 in the Bāgar. The large number of zamīndāri estates is a noticeable feature in the rural economy of the district, the bearing of which on the assessment will be considered hereafter. The statistics relating to the alienation of land show that there is at present no great cause for anxiety. Outside the Hissar Bāgar and Fatahabad Nāli, where special causes have been at work, the total amount of transfers is not large, while only in the latter does the area alienated to money-lender amount to as much as 5 per cent. of the cultivation. In connection with the great extension of canal irrigation which will shortly take place, it is satisfactory to find that the alienations have been less extensive in the canal villages of Hānsi than in almost any other part of the district. The value of land is still small, but it is rapidly increasing. Even in the canal tract in Hānsi the average price realized since 1863 has been less than Rs. 20, while in the worst part of the Hissar Bāgar it has been as low as Rs. 3. Nevertheless, the purchase money averages about 40 times the revenue and nowhere falls lower than 28 times.

5. Of the total area 76 per cent. is cultivated, $18\frac{1}{2}$ per cent. consists of culturable waste, and $5\frac{1}{2}$ per cent. is barren. The distribution of the 76 per cent. under tillage is as follows:—

| | | | | |
|-----------------|-----|-----|-----|------------------|
| Dry | ... | ... | ... | 69 $\frac{1}{2}$ |
| Flooded | ... | ... | ... | 3 |
| Canal irrigated | ... | ... | ... | 3 $\frac{1}{2}$ |

The amount of well irrigation is so small that it may be disregarded. The largest areas of waste are to be found in the Nāli villages, where the Pachādas prefer cattle-breeding to cultivation. The insecurity of the crops is shown in a striking way in the tables given by Mr. Anderson in the 44th and 62nd paragraphs of his Report and in the No. V Statement for the different tahsils, which will be found among the Appendices. The subject will be noticed further in considering the assessments proposed for the different circles. It will be convenient, however, to point out here that the increase of cultivation quoted by Mr. Anderson is based upon cultivated area as recorded at the previous and present settlements, and excludes fallow, which is now recorded as only 6,585 acres, against 57,977 acres in 1863. It is probable from many passages in Mr. Anderson's reports (*cf.* paragraph 33, Preliminary, and paragraph 25, Bhiwāni Report) that the contrast is due more to difference of classification than to any real change in the husbandry of the tract. And the inclusion of the fallow reduces the increase in cultivation very considerably in some instances, as will appear from a comparison of columns 17 and 18 of the appended statement.

6. The Bāgar and Hariāna tracts in all four tahsils, with the exception of a few estates transferred from Jīnd and Rohtak, were assessed by Mr. Brown in 1840. The settlement of the Nāli was made by Mr. Dumergue in 1852. The settlement now under revision was carried out by Munshi Amīn Chand in 1863. It embraced the whole tract except the six villages in the Hānsi Hariāna received from Rohtak. The existing settlement of these villages expired in 1870, but the demand was not enhanced, although the cultivation had more than doubled. No details can be given as to Mr. Dumergue's assessment of the Nāli, which had been preceded by a fluctuating assessment at rates double as high as those now realised in the corresponding villages of the Sirsa Tahsil. The methods and financial results of the settlements of 1840 and 1863 were fully discussed in the Review of the Bhiwāni Report. The assessment of 1840 followed a period of inordinate demands which were never collected, and for the first time gave

the district a reasonable assessment. Unfortunately in 1863 and 1870 Government failed to take the enhancement which the development of the resources of the district fairly entitled it to claim, at any rate in very many villages, and even submitted to a reduction; and this fact has greatly increased the difficulties of Mr. Anderson's present task. The following table shows the growth of cultivation since 1840 and the results of past assessments. The cultivated area and the assessment of 1863 are shown as 100. It is impossible to give complete figures for Barwála and Fatahabad :—

| TANHAL. | Tract. | CULTIVATION AT VARIOUS PERIODS. | | | REVENUE OF | |
|---------------|-------------------|---------------------------------|-------|-------|---|---------------------------|
| | | 1840. | 1863. | 1890. | First Regular Settlement (1840 and 1852). | Revised Settlement, 1863. |
| Hánsi ... | Whole ... | 54 | 100 | 135 | 117 | 100 |
| Hissar ... | Do. ... | 91 | 100 | 136 | 113 | 100 |
| Barwála ... | West Hariána ... | 63 | 100 | 191 | 107 | 100 |
| Do. ... | Remainder ... | ... | 100 | 182 | ... | 100 |
| Fatahabad ... | Bágar and Hariána | 59 | 100 | 151 | 90 | 100 |
| | Náli ... | ... | 100 | 227 | 130 | 100 |

In Hánsi the reduction was chiefly in the canal estates, where relief was really required; but in the face of a large increase in the cultivated area of the Baráni villages their revenue was also lowered, though not in the same degree. The increase in the Fatahabad Bágar and Hariána was only on paper, being due to the resumption of assignments.

7. The questions of the rise of prices since last settlement and of the assumed yield of the principal crops are less important than usual, as Mr. Anderson's assessment proposals are based chiefly on cash rents. Mr. Ibbetson would hesitate to admit that a rise of 60 per cent. has taken place, merely on the statistics furnished in General Statement II appended to the Preliminary Report. But the figures of Statement I afford a basis of comparison from which the abnormally high prices recently obtaining can be excluded; and the result seems to show a rise of 47 per cent. for wheat, of 40 per cent. for gram, 55 per cent. for bájra, 60 per cent. for barley and moth, and 67 per cent. for jowár. Thus the conclusion, which has been accepted by the Commissioner and Mr. Young, that prices on the whole have risen by something like 60 per cent. since settlement, is probably not far removed from the truth. The rates assumed for valuing the yield fairly represent those current in the market before the great fall in exchange raised them to their present high figures, plus the usual allowance of some 20 or 25 per cent. on account of the differences between village and market rates, and may be accepted. With the exception of the inundated portion to the north, the whole of the tract is within easy reach of markets; and the Railway which now traverses it will prevent the violent fluctuation which characterises the prices of past years.

The rates of yield assumed are moderate, but they compare fairly well with those adopted in Sirsa, Kaithal and Ferozepore. Mr. Anderson's method of computing the yield of an average holding has already been accepted by Mr. Young.

8. The facts of cultivating occupancy are shown below in a convenient form :—

| Tahsil. | Cultivated by owners. | Cultivated by occupancy tenants. | CULTIVATED BY TENANTS-AT-WILL INCLUDING HOUSE-HOLDERS. | | |
|------------------|-----------------------|----------------------------------|--|-----------------|--------|
| | | | Paying in cash. | Paying in kind. | Total. |
| Hansi | 62 | 9 | 26 | 3 | 29 |
| Hissar | 40 | 16 | 42½ | 1½ | 44 |
| Barwála | 40½ | 9 | 26 | 24½ | 50½ |
| Fatahabad | 38 | 12 | 33½ | 16½ | 50 |

Obviously there are in all four tahsils abundant materials for an assessment founded on cash rents, while it is hardly necessary to consider batai rates and half assets estimates based upon them at all; as except in the canal tracts of Hansi, and in Barwála and Fatahabad, in discussing the assessment of which the subject will be noticed, the whole area held on produce rents by tenants-at-will does not reach 10,000 acres. The proprietary holdings are necessarily large, even excluding zamindari villages. The normal area per owner is estimated by Mr. Anderson at 18 acres in the Hariána and double this area in the Bágur tract. There seems, however, to be no difficulty in procuring cultivators. Tenancy holdings are comparatively small; fallow nowhere exceeds $\frac{1}{4}$ per cent. of total area; rents are rising; and the very unequal distribution of the rainfall, more especially in the Bágur, yearly sets free the cultivators of an unfortunate village to assist those who have been more favoured; while in the Nali tenants can be obtained in any number from Patiala. The extension of canal irrigation to the two northern tahsils will doubtless attract tenants from the baráni tracts; but the disturbance will probably be temporary.

9. As might be expected in a tract where rainfall is precarious and waste extensive, the profits from cattle and camels form a considerable portion of total income.

It has been noted in the Bhiwani Report that in the Bágur the revenue is often paid from the proceeds of the carrying trade. In the four tahsils now under consideration the number of cattle has increased since settlement by over 80 per cent., while the number of camels has been trebled. Mr. Anderson estimates that at the two great cattle fairs alone, a sum of 5 lakhs of rupees, or considerably more than the whole land revenue of the old Hissar District, comes into the district. This is in addition to the earnings of carriage already alluded to. As Mr. Anderson puts it, "the cattle of the district form the treasury where the people store their wealth in good years; and their sale provides in bad years the means of living and of paying the revenue." Unfortunately, this form of investment is perishable.

10. To sum up. The tract, the assessment of which is under consideration, consists, with the exception of a small flooded area to the north, of light soil varying gradually but continuously from good loam in the west to the sandiest soil that will grow crops at all in the east. Of the total area 76½ per cent. is under the plough, the canal irrigates something under 4 per cent., well irrigation is practically unknown, while 3 per cent. is inundated in greater or smaller measure by the uncertain spill of the Ghaggar or Choya Naddis in times of high flood. The remaining cultivation depends upon a rainfall of some 16 inches, sufficient in itself for the light soil of the tract, but eminently precarious and capricious in its local distribution. In the eastern and northern portions of the tract a fair proportion of rabi is sown, for the most part gram or barley and mixed crops. To the westward rabi is practically unknown, and bájra and pulses take the place of jowar. The population is sparse, and the holdings large; but agricultural operations are easy, and cultivators and appliances are sufficient. An unusually large proportion

of the area is held by the tenants of great owners, who are often rack-rented. The rents are, however, paid without serious default, though not without unpunctuality. On the whole, something like half the area is held by Jāts, but this proportion falls off to the west, while the north of the tract is largely in the hands of the Pachāda, one of the worst cultivators in the Punjab. The proceeds of agriculture are largely supplemented by the profits of cattle-breeding, and, in the west, of a carrying trade with Rājputāna.

11. In 1840 a reasonable demand was, for the first time, assessed upon the villages. It amounted, roughly speaking, to Rs. 3,93,520 on 6,80,500 acres of cultivation, giving a rate of Re. 0.58 per acre. In 1863 the cultivation had increased to 905,500 acres, or by 33 per cent., but the demand was reduced to Rs. 3,57,500, with an incidence of Re. 0.39 per acre. This demand has since been reduced to Rs. 3,56,442, and with the exception of years of actual distress, in which relief will always be needed and given, has been collected with ease. Meanwhile the resources of the tract have increased enormously. The cultivated area has risen

to 1,381,000 acres, or by 53 per cent.* since the last settlement, while it has more than doubled since 1840; the live stock has more than doubled in number; population has increased, and is still increasing; a railway has been constructed across the tract; prices have risen by some 60 per cent.; rents also have risen considerably and are now again rising rapidly; the value of land has increased largely and bears a high ratio to the assessment, while alienations to strangers have been small in extent; and a new canal is about to irrigate the unflooded portions of the two northern tahsils. On the other hand, the uncultivated area in the western portions of the tract is for the most part too light to yield crops, while the cultivation in the same localities has for long shown, in parts at least, signs of exhaustion, and throughout the tract the precarious nature of the yield makes moderation in assessments more than ordinarily necessary; while the insufficiency of past assessments makes it impossible to take the full increase which half net assets would result in.

12. Before proceeding to discuss the detailed assessment of the tract thus described, it will be convenient to dispose of two preliminary questions,—the assessment of well lands and that of waste. In the whole tract the area of cultivation irrigated from wells is only 917 acres, of which no less than 517 are situated in the Fatahabad Sotar. In Bhiwāni, where the *chahi* area reached 1,217 acres, Mr. Anderson gives reasons (page 37 of his Report) for not fixing any special rate for well land. His proposal was accepted by Mr. Young (paragraph 10 of his Review), and the same course will be followed here. Mr. Anderson will doubtless give such small weight as may be due to the existence of wells in fixing his village assessments.

13. At the Settlement of 1863 a fourth of the total area of each village was exempted from assessment. Mr. Anderson now proposes to follow the Rohtak system, by which so much only of the waste of a village is assessed as may be in excess of one-fourth of the cultivated area. This system secures that an assessment shall be imposed upon pasture lands, only where in addition to supporting the cattle necessary to agriculture they yield a substantial addition to the income of the village. The

figures in the margin show what portion of the total waste of each tahsil will be assessed under this system. The rates proposed are half an anna in the Bāgar, one anna in Hariāna including the Eastern Bāgar of Fatahabad, and one-and-a-half annas in the Nāli. Much of the Bāgar waste is practically barren, while cattle grazing is most largely practised in the Nāli. The large income derived from cattle has already been noticed, and the instances given in paragraph 24 of the Preliminary Report, where the proposed rates are discussed, show that those rates are quite adequate to secure to Govern-

| Tahsil. | | Assessment of waste. | |
|-----------|-----|----------------------|-------------------|
| | | Acres waste. | Acres assessable. |
| Hansi | ... | 53,062 | 9,728 |
| Hissar | ... | 91,381 | 23,333 |
| Barwāla | ... | 82,740 | 37,061 |
| Fatahabad | ... | 91,863 | 33,941 |
| Total | ... | 329,046 | 104,063 |

ment its half share of the net assets where land is specially set apart in considerable quantity for the purposes of pasture. But such cases are exceptional and should so be treated. It must not be forgotten that, except in the Náli, the cattle are largely fed upon the produce of the fields, whether in the form of fodder crops or of the pála which succeeds the crops (*cf.* paragraph 42 of present Report).

The Financial Commissioner accepts the proposed rates as all-round rates, subject to any readjustment that it may be found necessary to make in considering the detailed rates for the several circles. But it must be understood that they will only be applicable to villages which have extended their cultivation reasonably and depend mainly upon it; and that where the whole or a large proportion of a village has been withheld from the plough and devoted to purposes of pasture, as in the instances quoted by Mr. Anderson in paragraph 24 of his Preliminary Report, the assessment should approach as nearly to actual half net assets as is safe in consideration of the fluctuating nature of the income. On the other hand, where the owners of two contiguous villages have fully cultivated one and reserved the other for pasture, as appears to have been done in the case quoted in paragraph 68 of the Preliminary Report, the area of both should be considered together.

14. Mr. Ibbetson shares the regret expressed by Mr. Anderson in paragraph 41 of his Report at the disappearance of the old custom of distributing a portion of the Government demand over the cattle of the village. It is useful as providing a machinery, made ready to hand, for the distribution of the burden in years when the fields fail to yield the means of bearing it.

15. The material available for the assessment of the uninundated portions of the tract is a peculiarly ample record of cash rents, which are paid by tenants-at-will upon 431,173 acres, or 35½ per cent. of its total cultivated area. When we add to this, the fact that something like 25 per cent. of the cultivation of the whole tract is included in 'zamindari', and 15 per cent. more in pattidari villages, where true rents are approached to, the value of the material and the importance of treating it rightly will be apparent. The statistics are stated and discussed with great fullness by Mr. Anderson in his Preliminary Report, and the results are abstracted for the several circles in columns 20 to 25 of the appended statement. In paragraph 5 of his note upon the Preliminary Report, Mr. Young has pointed out that, for reasons stated, it is probable that, if anything, they fall somewhat short of full net assets. Some, but not all, of the items thus noted as excluded are connected with pasture land; but even they may be fairly considered as attached to that portion of the pasture which has been exempted from assessment as providing for the needs of the cultivators. The comparison made by Mr. Anderson for each circle in his Preliminary Report between the income resulting from the application of average rent rates to cultivated area, and the actual collections in numerous large villages held by single owners, proves that the rents are paid, in such villages, with a regularity which appears quite extraordinary in a tract where the seasons are so capricious and the yield so precarious. But the figures set the fact beyond the possibility of doubt.

16. It will be noticed that rent rates are almost invariably lower in bhayachara than in pattidari, and in pattidari than in zamindari villages, and that the difference is often considerable. In paragraph 37 of the present Report Mr. Anderson gives his reasons for holding these last to represent true rents. It is noticeable that in bhayachara villages rents are not paid without reference to the season, as in the other two classes of estates. On the other hand only the worst portions of the cultivation are ordinarily let to tenants in bhayachara villages, while favourable rates are allowed to relations, priests, menials, and the like. Thus the bhayachara rent rate is not a safe index to the true value of the land. In many of the zamindari villages, and especially in the Skinner villages, the tenants are rack-rented and wretchedly poor. But they are, as a rule, inferior cultivators; and

men of a better class could pay their rents with less difficulty. The rent of which Government claims half, is that rent which a prosperous cultivator of the class to which the proprietors of the village belong can afford to pay without imperilling his prosperity; and it must probably be admitted that the zamindari rent rates, if they represented the whole of the demand upon the tenants' purses, would tend to exceed the rent so defined. But it has already been shown that the rent as quoted by Mr. Anderson is not all that the tenant pays. And there are other reasons for believing that the true competition value of the land has not yet been arrived at, even in the zamindari villages of Hissar. In paragraph 114 of the Preliminary Report Mr. Anderson points out that occupancy tenants pay but little less than tenants-at-will, and his remarks apply to almost all his circles. This fact, and the facts noted by Colonel Grey at the foot of pages 5 and 13 of the Preliminary Report, tend to show that the rents paid even by tenants-at-will are still to some extent regulated by custom. In paragraph 150 of the same Report he states that zamindars' rents are still rising and at the end of paragraph 38 of the present Report he says that they are rising; rapidly, except in the worst portions of the Bāgar, and will soon reach Re. 1·2 an acre as a general rate, and Re. 1·6 or more in special cases. This will be an enormous increase on current rates. It is, however, unsafe to lay too much stress upon the present rise. It is not improbably the result of the period of low exchange, active export, and high prices, which set in in 1880; and it is very uncertain how long these influences will continue to operate. Finally, it must be remembered that, whereas we apply our revenue rates to cultivation only, the area upon which rent is paid includes over 23,000 acres which we class as uncultivated.

17. The general conclusion to be drawn from the above considerations is that probably even the zamindari rent rates fall somewhat short of the true rental of land; and that at any rate they certainly do not exceed that rental of which Government on general grounds may claim one-half as its land revenue. It follows that pattidari and still more bhayachara rates fall below it.

18. It may be noticed here that Mr. Anderson frequently urges as a reason for moderation in assessment that a large proportion of a tract is held by tenants-at-will. When the tenants hold under small proprietors, the Financial Commissioner agrees with him that the ground is a good one. But when it merely means that a high proportion of the tract is in the hands of a few large owners who do not cultivate, the argument ceases to be sound. The point will be referred to again after the proposed assessments have been discussed.

19. In considering the proposed assessments it will be necessary to refer to the Preliminary as well as to the Assessment Report. Turning to the table appended to this Review we find that the first four circles for consideration belong to the Bāgar tract. The figures of columns 9 to 15 suffice to show its marked inferiority to the remainder of the district. It is true that the crops are probably not so uncertain here as in the stiffer soil of Hariāna. But at the best they are light; and the poor sandy soil is quickly exhausted and calls for rest. Even as long ago as 1840 Mr. Brown found this process in operation, and the people leaving their exhausted land (paragraph 11, Bhiwani Report). At the same time the Hissar and Fatahabad Bāgars are markedly superior to that of Bhiwani (paragraph 110, Preliminary Report). It will be convenient to consider the two Hissar circles first. The proportion of Jāts is small, especially in the south, while if the figures are to be trusted, population has fallen off in both. The southern division is the Siwani tract which Mr. Brown noted in 1840 as suffering from exhaustion of soil and emigration. It adjoins the Amrain Bāgar of Bhiwani for which 3 annas 7 pies* was proposed and 3 annas 9 pies fixed by Mr. Young; and it will be transferred to Bhiwani on the re-arrangement of tahsils. It shows, however, an increase of cultivation, while Amrain shared a decrease, and it is generally more prosperous and the soil more fertile (paragraph 79, Preliminary Report). The average rent has fallen somewhat since settlement, but zamindari rents give

* Note.—Rates in this section of the Review are always stated in annas and pies.

us 5 annas 2 pies for our revenue rate, zamíndári and pattídári 4 annas 5 pies, while the whole average is 3 annas 11 pies. Mr. Anderson proposes to take 3 annas 6 pies, which gives an increase of 13 per cent. in the demand, against an increase of 17 per cent. in cultivation, or of 15 per cent. if fallow be included. The revenue rate at last settlement was 3 annas 6 pies, but 3 annas 8 pies was actually assessed. The nature of the proprietary body and the decrease of population (if the latter be real) are the weak points of the circle; but Mr. Anderson says that he would have maintained an existing demand up to 3 annas 9 pies, though he hesitates to raise it to that figure.

A revenue rate of 4 annas was fixed by Mr. Anderson as representing half assets, while his produce estimates gave 4 annas 2 pies. A rate of 3 annas 8 pies would yield Rs. 19,751, or an increase of 18 per cent.; and the Financial Commissioner was inclined to adopt this rate. Before deciding to do so, however, he discussed the matter personally with Mr. Anderson, who urges that the soil will certainly deteriorate during the currency of settlement; that increase of cultivation means much less than elsewhere in the Bágár, where it is enough to run a plough through the sandy soil and throw in seed, to turn waste into cultivation; that the seasons of survey were unusually favourable, and therefore the area of cultivation exaggerated; and that Rángars hold 35 per cent. of the cultivated area, and Rájpúts 7 per cent. more. His rough distribution over the villages of the assessment resulting from his rates has convinced him that no further increase than he proposes is desirable. Mr. Ibbetson has therefore decided to accept his proposals. The amount at issue is small, a very substantial increase is being taken on the district as a whole, and the Southern Hissar Bágár is that portion of it in which it is most important to err, if at all, on the side of moderation.

20. The Northern circle is described as much superior to the Southern, and equal in parts to the Hissar Hariána. At last settlement it was assessed at 5 annas. Zamíndári rates give 6 annas 1 pie, or, allowing for an exceptional village, 5 annas 6 pies; and this rate, which is 5 pies in excess of the pattídári rate, was accepted by Mr. Anderson as his half assets. He now proposes 5 annas, which will give an increase of 42 per cent. or about the percentage by which cultivation has extended. But the inclusion of fallow would reduce this latter figure to 30 per cent. The Financial Commissioner accepts these proposals.

21. The two remaining Bágár circles lie in Fatahabad. The Western, which is the inferior of the two, is described as better than the Southern Bágár of Hissar. It belongs almost entirely to Játs, and is rich in cattle. There are no pattídári villages, and only one zamíndári; but the bhayachára rate is 4 annas. In 1840 Mr. Brown assessed it at 6 annas 4 pies and considered then it was still under-assessed. It was assessed at last settlement at 3 annas 9 pies, and cultivation has increased by 36 per cent., which the inclusion of fallow reduces to 24 per cent. Mr. Anderson proposes to maintain the rate of 3 annas 9 pies, which gives an increase of 36 per cent. His reason for going below the bhayachára rate is chiefly that in the adjoining tract of Sirsa a rate of 2 annas 4 pies was used. But the Sirsa rates were notoriously low; and he himself proposes to exceed them by 60 per cent. The produce estimate rate is 4 annas 3 pies. The full bhayachára rate of 4 annas would give Rs. 14,262, or an increase of 48 per cent. The increase is not excessive, and should, Mr. Ibbetson thinks, be taken.

22. The Eastern circle is described as combining the advantages of Bágár and Hariána, and Mr. Anderson has applied the Hariána rate to its waste, alone of all the Bágár circles. Its weak point is the class to which its proprietors belong, only one-fifth being owned by Játs. But more than half the whole cultivation is held by tenants-at-will who pay cash. Almost the whole of it will presently be irrigated from the Sirsa Canal. Mr. Brown assessed it at 5 annas 11 pies in 1840, and considered that it was under-assessed. In 1863 it was assessed at 4 annas. The zamíndári rate is 6 annas 9 pies, the pattídári 6 annas 3 pies, and even the bhayachára is 5 annas 9 pies, the average being 6 annas 5 pies. The rise in rents since settlement has been large, and cultivation has increased

by 58 per cent., or, including fallow, by 49 per cent. The revenue rate fixed by Mr. Anderson was 6 annas 6 pies, but he now proposes to assess at 4 annas 6 pies, giving an increase of 85 per cent. in the demand. A rate of 5 annas or the same as proposed for the North Bāgar of Hissar would give Rs. 31,218, or an increase of 105 per cent. Mr. Anderson justifies his proposal by the large increase it involves and by the class of proprietors and tenants. The question of the assessment of zamīndāri estates will be considered later. It may be that the greater portion of the increase will fall upon them. The Financial Commissioner will not raise a Bāgar rate that already increases the current demand by 85 per cent. But in assessing it must be remembered that the lowness of the rate is justified by that increase alone; and that a higher rate may fairly be applied to villages where the increase is not excessive.

23. The next great sub-division of the district is the Hariāna, with which are included, in the appended table, those portions of the Nāli tracts which lie beyond the influence of the floods. Here the crops are, if anything, even less certain than in the Bāgar. But they are heavier, for the soil is better, and bājra is largely replaced by jowār, while the proportion of rabi increases. The stiff soil, too, is much less liable to exhaustion, while the culturable waste is more valuable. The Fatahabad Hariāna was assessed by Mr. Brown in 1840 at 5 annas 8 pies, and was said by him to be under-assessed. In 1863 the incidence was reduced to 4 annas 3 pies, though 5 annas was the rate assumed. The present average rate from rents is 6 annas 2 pies and the bhayachāra rate 6 annas, while 6 annas 6 pies is the assumed revenue rate. The general run of rates is almost the same as in the Fatahabad Eastern Bāgar, which this circle much resembles, though the latter is somewhat superior, and includes a much larger proportion of cultivating proprietors. The assessment is discussed in paragraph 54 of Mr. Anderson's Report. He proposes 5 annas, which gives an increase of 81 per cent. against an increase of 54 per cent. in cultivation. The Financial Commissioner accepts his rate, subject to the remarks presently to be made about the assessment of zamīndāri villages. The new Sirsa Canal will irrigate the circle.

24. The next two circles for consideration are the Western Hariānas of Hissar and Hānsi. In paragraph 50 Mr. Anderson arrives at the conclusion that the Hānsi Hariāna is inferior to the Western circle of Rohtak, which was assessed at 7 annas 11 pies, and his reasons for this conclusion appear to be substantial. He also is of opinion that the Bāngar and Jangal circles of Kaithal, in which the revenue rate was 7 annas, are better than the best part of the Hissar Hariāna. Mr. Douie considers that no useful comparison can be made with the Kaithal Jangal, the nature of the tract being more akin to that of the Ludhiāna Jangal, and the assessment having been kept unduly low owing to the extraordinary lightness of the previous demand. He points out, moreover, that the comparison with the Kaithal Bāgar is in some respects misleading; since, for instance, the Kaithal figures include canal-irrigated cultivation which includes much of the wheat and cotton, while the pulses are for the most part included with the jowārs among which they are grown. He notes thus: "The real fact probably is that in the Kaithal Bāngar, with its stiffer soil, a greater percentage of crops fail than in Hānsi, but that where the Kaithal Bāngar does get a good harvest, the yield is somewhat heavier." In Kaithal the increase of cultivation was 73 per cent. and a revenue rate of 7 annas on cultivation with 1 anna on all waste, which raised the demand on cultivation to 7 annas 14 pies, was used, giving an increase of 48 per cent. in the demand. In Bhiwāni Hariāna rates of 8 annas 6 pies and 5 annas 9 pies were sanctioned for the Eastern and Western circles, giving increases of 52 and 37 per cent. against a slight decrease in cultivation in the former and a small increase in the latter. The joint rate was 7 annas 3 pies with an increase of demand of 46 per cent. and in cultivation of 8 per cent.

25. The general deterioration of the soil from east to west should make the Western circle of Hissar considerably inferior to that of Hānsi, from which it is separated by the whole breadth of the East Hissar Hariāna. The figures of columns 9 to

15 show that this is the case, while the nature of the proprietary body is also inferior. But the Hissar circle includes a larger number of zamíndári villages. In this circle the bhayachára rents have been raised to an unusually high level as compared with the zamíndári and patídári rates, and are indeed higher than the latter, which, however, are taken on a very small area. The zamíndári rate is 6 annas 10 pies, the bhayachára 6 annas 1 pie, and the average 6 annas 4 pies. The rise since settlement has been considerable. At last settlement 4 annas 7 pies was assessed. The assumed revenue rate is 6 annas 6 pies. Mr. Anderson proposes to take 5 annas 6 pies only, which gives an increase in the demand of 50 per cent. against one in cultivation of 24 per cent., or, including fallow, of 21 per cent. Looking only at the rent rates, there would seem to be no reason why the bhayachára rate of 6 annas should not be taken. But this is higher than the corresponding rates in the remaining Hariána circles, which are undoubtedly superior. Mr. Anderson states that this circle is in parts showing signs of exhaustion of soil; the population is shown as having fallen off; and it will probably be wiser to accept his rate of 5 annas 6 pies. There need, however, be less hesitation than usual in this circle in taking considerable increases in bhayachára villages, if the rates point to them.

26. In the Hánsi circle also the rise in rents since settlement has been considerable. The rate proposed is 6 annas, or the same as the patídári rate, the bhayachára rate being 5 annas 2 pies, the zamíndári 6 annas 10 pies, and the average 5 annas 7 pies, while the assumed revenue rate is only 6 annas 3 pies. This gives a rise of 51 per cent. in the demand against an increase of 35 per cent. in cultivation, or of 30 per cent., including fallow, and may be accepted. It must be remembered that in the Hissar and Hánsi Hariána the exemption of one-fourth of the waste reduces the rate on total waste to less than 2 pies an acre, except in Hissar West, where it reaches 3 pies; and that the waste is, as a rule, good grazing ground.

27. The next two circles are the unflooded portions of the Náli tracts of Fatahabad and Barwála, lying out of the influence of the Choya and Ghaggar, and, in Fatahabad, for the most part between them. Here again the westernmost is the inferior circle of the two. In both, but especially in Fatahabad, the proprietors belong to classes very inferior to those of any circle hitherto discussed; but the proportion held on zamíndári tenure is exceedingly large. As in the corresponding tract of Sirsa, the soil here is the same light upland soil that characterises the whole Hariána tract except where traversed by the valleys of the two streams. The profits from grazing are exceedingly large (*see* paragraphs 131 and 162 of Mr. Anderson's Preliminary Report). In these circles, and especially in Barwála, produce rents assume some importance. Landlords take either one-fourth with, or one-third, usually without a share of the straw, plus a *serinah* varying from one-twentieth to one-eighth of the share taken. Other small dues are sometimes taken in addition. Probably three-sixteenths of the grain would fairly represent the Government share.

28. The Fatahabad circle is described at paragraph 61 of the Report. The difficulty here arises from the fact that the cultivation has more than doubled since settlement, or, if fallow be excluded, has increased by 75 per cent. Waste is extensive and cultivators could be obtained in plenty, but the profits of grazing are large, and the tract is the richest in cattle of the whole district. Almost two-thirds of the cultivation lies in zamíndári villages owned by single proprietors; and of this the Skinners own more than half. Zamíndári rates give 6 annas 11 pies, and bhayachára 6 annas 1 pie, while the total average is 6 annas 4 pies. Batai at one-sixth, which is below the truth, gives 7 annas 10 pies. The revenue rate assumed was 6 annas 9 pies. The revenue rate at settlement was 4 annas, but assessment on waste raised the incidence of the demand on cultivation to 6 annas 8 pies. Mr. Anderson proposes a rate of 5 annas 6 pies, which gives the very large increase of

156 per cent. on the current demand. He hesitates to go higher, because so large a portion (40·6 per cent.) of the area is owned by Pachádas, and many of the cultivators in the Skinner villages belong to the same caste. And, subject to orders to be given presently regarding zamíndári and bhayachára villages, Mr. Ibbetson is content to accept this rate. But the discrepancy between the proportions of the cultivated and total areas held by Pachádas shows that a very large part of the valuable waste is in the hands of village communities of this caste. And he thinks that the rate on culturable waste should be raised to 2 annas in order to intercept a fair proportion of the profits. Even then this will only amount to an average of 8 pies per acre on waste ;

* The figures of the Preliminary Report were given before remeasurements were complete.

for out of a total of 12,920* acres of waste, only 4,470 are assessed. This will raise the demand at rates to Rs. 15,943, leaving the percentage of increase unaltered.

29. The Barwála circle is very similar to that just discussed. Pachádas

Barwála Nāli Barāni.

own only 7·3 per cent., but Rānghars own 15·4 per cent., and Syads and Patháns 7·9 per cent.

more, while many of the cultivators in zamíndári villages belong to the same classes. Owners cultivate only one-third of the cultivated area, and the batai-paying area is large. One-quarter of the circle is in the hands of the Skinners and Banyas. The increase in cultivation has been 130 per cent., which the inclusion of fallow reduces to 108. The zamíndári rate is 7 annas 1 pie, the bhayachára 6 annas 5 pies, and the average 6 annas 11 pies. Yield estimates give 8 annas 8 pies, and actual collections from batai in zamíndári villages 8 annas. The assessed revenue rate was "safely taken at 6 annas 9 pies ; perhaps 7 annas might be nearer ;" and figures for actual collections show that this is true. The assessment of last settlement, including the demand on waste, fell at 6 annas 11 pies on the cultivated area. Mr. Anderson proposes to take 5 annas 6 pies, which gives an increase in the demand of 94 per cent., and he justifies the relinquishment of so large a proportion of the State's theoretical claim by the same considerations as in the corresponding circle of Fatahabad. Here again, on the same understanding, the Financial Commissioner accepts the rate for cultivation, but raises the rate on waste to 2 annas. Here too only half the waste is to be assessed, while Mr. Anderson is of opinion that "half the culturable waste will almost certainly come under the plough within the next five years." A portion of it will be irrigated from the new canal. This will raise the total demand to Rs. 27,283, and the increase to 99 per cent.

30. In both these circles a very large proportion of the cultivated area

Nāli Barāni assessment.

is held by tenants-at-will, the great majority of whom pay cash. But here, where the general increase is so large, there will be more than usual need for the discretion in assessing the cultivating proprietary communities, the necessity for which will be pointed out later on.

31. The next circles for discussion are the Eastern and Western Hariānas

Barwála Hariāna, East and West.

of Barwála. The greater portion of both will be irrigated from the new Sirsa Canal. There is very little difference in fertility between them. The Eastern circle has a large area held in zamíndári and pattidári tenures, while the corresponding area in the Western circle is insignificant, though more than 33,000 acres are held by tenants-at-will of bhayachára communities. The joint zamíndári pattidári rate is 7 annas 3 pies ; the bhayachára 5 annas 1 pie in the east and 5 annas 6 pies in the west, the latter being the truer rate. Yield estimates give 6 annas 9 pies. The assessed revenue rate is 7 annas 3 pies in the Eastern division. In the Western Mr. Anderson thought it "should not be less than 6 annas 6 pies, and perhaps 7 annas might be justified." Probably full competition rentals would give something nearer 7 annas 3 pies in both circles. Mr. Anderson proposes to take 6 annas in both, which will give increases in demand of 62 and 94 per cent. against increases in cultivation of 48 and 91 per cent., or, including fallow, of 41 and 82 per cent., respectively. He describes them as

being "in almost every respect as good as the Hānsi Tahsil." In the Western circle it will certainly be unwise, considering the large increase, to go above this proposal. About the Eastern circle Mr. Ibbetson is more doubtful. By position it should be better, though the difference is small. And the rents are higher, owing, however, to the zamīndāri area, which will be separately provided for. The bhayachāra rate, however is much lower (5 annas 1 pie against 5 annas 6 pies). On the other hand, 6 annas has been taken for the Western Hariāna of Hānsi, which is certainly inferior. A rate of 6 annas 6 pies would give a demand of Rs. 30,854, or an increase of 75 per cent., or nearly double the increase in cultivation, including fallow. On the whole, the Financial Commissioner is content to let Mr. Anderson's rate stand. It will, in practice, be a common rate for the whole circle; and a certain amount of adjustment can be made in assessing villages, to ease off the great increase in the west, and allow for the superiority of the east.

32. The two remaining Hariāna circles are the Eastern sub-divisions Eastern Hariāna of Hissar and Hānsi. in Hānsi and Hissar. The Western sub-division of Hānsi should in point of fertility occupy a position between these two; but the rents do not support such a classification. The Hānsi is distinctly superior to the Hissar circle, and comprises some of the best villages in the district. More than half is owned by Jāts, against one-third in Hissar. In both cultivation has increased by 41 to 45 per cent., or, including fallow, by 35 per cent. In Hissar, however, population is shown as having fallen-off, while it has increased in Hānsi. In Hissar the zamīndāri rate on a large area is 7 annas 5 pies, and the combined zamīndāri and pattidāri 7 annas 3 pies. The bhayachāra rate on some 12,000 acres is 6 annas 10 pies, and the average 7 annas 1 pie, or a rise of more than 20 per cent. since settlement. The produce rate is 6 annas 11 pies, while the collections in a village paying batai give 7 annas 5 pies. The circle is well situated between the two markets of Hānsi and Hissar and the waste is ample. Mr. Anderson assumed a revenue rate of "at least 7 annas," and proposes to take 6 annas, which gives an increase of 63 per cent. In Hānsi the zamīndāri rate on a small area is 10 annas 8 pies, and the pattidāri rate on a large one 7 annas 4 pies. The bhayachāra rate on a very large area is, however, only 5 annas 5 pies, probably owing to the small proportion of zamīndāri villages in the circle. The produce rate is 8 annas 4 pies. In the south of the circle and in its neighbourhood the prevailing rent-rate gives 9 annas 6 pies. Mr. Anderson fixed the revenue rate "not below 7 annas 6 pies." He now proposes to take 6 annas 6 pies, which gives an increase of 65 per cent. In the adjoining circle of Rohtak 7 annas 11 pies has been assessed; the neighbouring villages of Jīnd pay from 10 annas 6 pies to 12 annas 8 pies; and in the corresponding portion of Bhiwāni 8 annas 6 pies was sanctioned, although it gave an increase of 52 per cent. in the demand against a slight decrease in cultivation. The comparison with the Kaithal circles has already been commented upon. The Financial Commissioner thinks Mr. Anderson has been too lenient in both these circles. He would raise the rates to 6 annas 6 pies and 7 annas, giving increases of 76 and 77 per cent., respectively. The nominal assessment on the waste in these Hariāna circles has already been commented upon. In these two cases the actual incidence will be well under 2 pies per acre of pasture land.

33. In the next two circles the presence of canal irrigation, and the intended introduction of owner's rates present a new element for consideration. The general rule on the Western Jumna Canal is that owner's rate shall be half occupier's rate; and it would require very strong reasons to justify an exception being made in the case of Hissar. This rule gives an average owner's rate of 16 annas. Were canal irrigation being introduced for the first time into the district, it might be enough to fix a true dry assessment, leaving the people to accept the water or not as they chose at the terms offered. But where, as here, irrigation is well established and of long standing, the whole interior economy of the village has moulded itself upon the irrigated model, and to impose a total assessment, by what-

Assessment of canal tract.

ever names it might be called, which would practically compel the people to forego at once a large portion of their irrigation, would be quite unjustifiable. Mr. Anderson has, in paragraph 72 of his Preliminary Report, examined the figures for 14 very representative villages in the two tahsils concerned, comparing their actual collections for a term of years with the revenue assessed at his full assumed dry revenue rates for the circles within which they lie, plus half the average occupier's rates. The comparison proves, as conclusively as figures can prove a point, that the resulting demand amounts almost exactly to the Government's half share of the assets.

34. In paragraph 76 of the Preliminary Report Mr. Anderson considers what portion of the existing demand should be considered to represent owner's rates. He comes to the conclusion that the rates of last settlement may be taken at 20 annas for flow and 16 annas for lift irrigation, and 6 annas in Hānsi and 5 annas in Hissar for dry cultivation.* These figures give Rs. 44,136 in Hānsi, and Rs. 4,917 in Hissar for water-advantage revenue, the remainder of the current demand being considered the dry assessment. This procedure is perfectly fair for the purpose of deciding to what book credit the canal is entitled. It gives, perhaps not unfairly, the respective assessments upon the irrigated and unirrigated cultivation of the tract, for water is given, where there is a choice, to the best land, and that land is best tilled and most freely manured to which water has been given. But it is not safe to go a step further and argue that, even supposing the original assessment to have been a full one, the rate of incidence of the dry portion of it, calculated as above, upon the unirrigated cultivation, adequately represents the value of a field in the irrigated portion of the tract, in a year in which water is not given to it. Such a field shares, so long as the general irrigation of the tract is maintained, in the general benefits ensuing from that irrigation. And it is to such fields, to a large extent, that the dry revenue now to be assessed will be applied.

35. The dry revenue rates used by Mr. Anderson in the comparison in paragraph 72 alluded to above were 7 annas 6 pies in Hānsi and 7 annas and 6 annas 6 pies in Hissar, according as the villages lie east or west of the town of Hissar.† These were his revenue rates for the barāni villages of the circles within which the canal villages are included; and in all three cases they were framed with great moderation. Mr. Anderson proposes to assess at 7 annas and 6 annas 6 pies, or 6 pies below his revenue rates, and 6 pies above the rates he proposed to adopt in assessing the barāni portion of the circle, which have, however, been raised by the Financial Commissioner from 6 annas 6 pies and 6 annas to 7 annas and 6 annas 6 pies, or the same rates as Mr. Anderson proposes for the canal villages. It is to be regretted that Mr. Anderson should have left us so entirely without information as to the rents in canal villages, and as to the yield of the considerable batai-paying area in Hānsi. Figures are given in Tahsil Statement II attached to the Preliminary Report, and are reproduced in the table appended to this review. But it has been ascertained from Mr. Anderson that they include both canal and barāni cultivation, and are therefore useless for our present purposes. The fact is that the substitution of flow irrigation for lift which is now in progress has shifted somewhat the irrigated area, while the rents have not yet, in many cases, shifted with it. Still sufficient figures might have been procured to afford valuable indications. As regards the true barāni land in canal villages, Mr. Anderson states (verbally) that rents are practically the same as in the non-canal villages of the circles; if anything, *slightly* lower. This is natural, as the best land is irrigated. Thus, the rates of 6 annas 6 pies and 7 annas which Mr. Anderson proposes, and which have been fixed by the Financial Commissioner for the non-canal

Present water-advantage rate.

* Note.—It would appear from column 26 of the statement appended to this review that these last figures are under the mark.

Hānsi and Hissar Canal tracts.

† Probably most of the Hissar villages lie east of the town, as in paragraph 52 Mr. Anderson quotes the 7-anna rate only.

villages, may be accepted for this land. The full rent rates for canal land are (see above) 23 annas and 22 annas 6 pies, of which 16 annas will be owner's rate. But the payment of the owner's rate will be optional; now that its price has been raised by 50 per cent., water will often not be taken when rain is sufficient, while the fact that it can be taken at any moment makes the cultivation secure; the unirrigated canal fields share in the prevailing moisture of the tract; ample water is available for the cattle; fodder is safe; in bad years the neighbouring villagers flock into the canal villages and pay high rents for all available cultivation; while the owners reap the full advantage of the high prices which obtain in a year of scarcity. These considerations justify the assessment of dry revenue upon canal irrigation at the full rate obtained by deducting owner's rates from rents, and (supposing the owner's rate to fairly represent the additional revenue due to irrigation) at higher rates than *baráni* land. In Hissar the irrigated area is small, being only one-sixth of the whole, and it will be sufficient to bear in mind in assessing that the rate is too low for canal land. In Hānsi nearly half the cultivation is irrigated, and on this a dry rate of 8 annas should be imposed, giving an all-round rate of a little under 7 annas 6 pies. The result for the two circles will then stand as follows:—

| DETAIL OF DEMAND. | HISSAR. | | HANSI. | |
|------------------------|----------|-----------|----------|-----------|
| | Current. | Proposed. | Current. | Proposed. |
| | Rs. | Rs. | Rs. | Rs. |
| On waste | ... | 377 | ... | 167 |
| Dry assessment | 18,020 | 21,065 | 35,171 | 58,366 |
| Owner's rate | 4,917 | 9,000 | 44,136 | 71,000 |
| Occupier's rate | 18,000 | 18,000 | 1,42,000 | 1,42,000 |
| Total | 35,937 | 48,442 | 2,21,307 | 2,71,533 |

Or an increase in the dry demand of 65 and 66 per cent., and in the total demand of 35 and 23 per cent. in Hissar and Hānsi, respectively. The increase in irrigation has been 10 and 36 per cent., and in cultivation 57 and 25 per cent., or, including fallow, 47 and 23 per cent., respectively. The increase in total demand cannot, however, be fairly compared with the increase in cultivation, as the occupier's rates have risen as cultivation extended, and were probably much smaller in total amount at last settlement than now. The district lies at the tail of the canal, and the supply of water is uncertain; while there is a certain (apparently small) amount of *reh* and water-logging. Lift irrigation is being replaced by flow, and 20 annas may be taken as the irrigated and 5 annas 9 pies to 6 annas 4 pies as the dry rates of last settlement. There is a great demand for land in both circles. The superior crops occupy 76 and 86 per cent. of the cultivated area in the respective circles, while 30 per cent. is cropped twice in the year. Jāts hold a third in Hissar and a half in Hānsi, while in the former 37 and in the latter 28 per cent. are in the hands of the Skinners, or of money-lenders. It must be remembered in considering the increase in demand, that for the future the payment not only of the occupier's, but also of the owner's, rates will be absolutely at the option of the cultivator; and that an increase of 50 per cent. in the price of water, which is the practical result of the new system, will infallibly lead to a contraction of irrigation, at any rate in Hānsi, where nearly half the cultivated and more than a third of the total area is irrigated.

36. The two circles that remain for consideration are the Sotar or inundated circles of Fatahabad and Barwāla. This tract is perhaps the most difficult to deal with in the whole district. Here again, as in the Nāli Barāni circles of the

same tahsils, Pachádas are many and Játs few, while the Skinners hold large areas. Here too cultivation has doubled since settlement, while the fact that the inundated area fluctuates enormously and that inundated land pays, as a rule, produce rents and not cash, introduces a dangerous element of uncertainty into our calculations. Moderation, therefore, becomes essential. Mr. Anderson has borne this fact in mind. He has followed the extremely moderate estimates of yield that Mr. Wilson framed for the corresponding and adjoining tract in Sirsa. He has somewhat reduced the prices with which he worked in the rest of the district, in consideration of the distance from markets and the difficulties of communication. The batai rate is one-fourth of grain and straw, or one-third of grain often without straw, but with one-twentieth to one-tenth of the landlord's share added in both cases. Thus his estimate of one-sixth of the

* It has since been discovered that the figures which gave 13 annas for Barwála (paragraph 168, Preliminary Report) were inaccurate.

grain as the Government share is moderate. This gives for flooded land a rate of 16 annas.* The few cash rents give an average of 12 annas 9 pies in both tahsils, except in one village in Fatahabad, where 19 annas is the figure. The revenue rates which Mr. Anderson proposes are fully described in paragraphs 139 and 140 of his Preliminary Report. They are the rates proposed and sanctioned (but not assessed up to) in Sirsa. Here they give an acreage of 12 annas, against 14 annas in Sirsa; but, as will presently be seen, the circumstances of inundation are more favourable there than in Hissar. They may probably be accepted as fairly representing full half net assets, if *applied to the full recorded areas*. Indeed, the figures given in paragraphs 144 and 173 show that they do so in certain villages of both tahsils. But here the question to be decided is rather what Government can take than what it can claim. The whole facts are so uncertain that a discussion of the latter question can be little more than academic.

37. In turning to the discussion of the former question, the first point for consideration is what area may safely be assessed as flooded. In paragraph 34 of his present Report Mr. Anderson explains that, whereas ordinary floods inundate the Sirsa villages, in Barwála, and to a less extent in Fatahabad, it is only in an exceptional flood that the water passes beyond the river banks. He finds an area of 36,136 acres recorded in his papers as flooded in Fatahabad, and one of 17,617 acres in Barwála. These areas he proposes to reduce for assessment purposes to 18,000 and 9,500 respectively. He gives his reasons fully, but concisely, in paragraphs 35 and 36 of the present Report, with which paragraph 58 should also be read; and it is impossible to condense and useless to reproduce them. It is sufficient to note that Mr. Wilson found it necessary to make a similar reduction in Sirsa from 42,331 to 25,000 acres. The Financial Commissioner accepts the reduction proposed for Fatahabad. That for Barwála is less fully justified. But Barwála is less favourably situated than Fatahabad. The fact stated in the last sentence of paragraph 36 (if correctly stated—the last words should apparently be “recorded as inundated”—) is alarming; and Mr. Ibbetson will not attempt to dispute the accuracy of Mr. Anderson's conclusions. For these reductions in total areas are after all only round figures by way of estimates. In applying the same process to the recorded areas in individual villages great care and judgment will be necessary, and Mr. Anderson's local knowledge will enable him to arrive at a result which will be as satisfactory as the circumstances will permit.

38. Mr. Anderson discusses the suitability of his assumed revenue rates in paragraph 58 of the Report. It appears from pages 434-435 of the Sirsa Settlement Report that Mr. Wilson, whose rates Mr. Anderson had so far followed, found that his records, like those of Mr. Anderson, showed as flooded a much larger area than could safely be treated as inundated on the average of a series of years. Accordingly, for the purpose of distributing his total assessment, he reduced these rates by something like 25 per cent. But I understand that he applied his rates so reduced to the *total area recorded as flooded* to arrive at his fixed assessment. Mr. Anderson has already allowed fully for excess in recorded area; and if we are to follow Mr. Wilson, it is, I think, the original, and not the reduced, rates that must be applied to Mr. Anderson's reduced area. But Mr. Anderson further urges that the experience of the past seven years proves these rates to have been too high, as the actual collections of the fluctuating assessment have fallen short

by some 12 per cent. of the estimated fixed assessment which resulted from the application of these rates. The Financial Commissioner agrees that a fixed assessment, to be safe, should give results decidedly below the average collections of a full fluctuating assessment. But Mr. Anderson's argument involves two postulates,—(1) that Mr. Wilson's reduction was sufficient to rectify the difference between recorded and average inundated area; (2) that Mr. Wilson's rates for fluctuating assessment fully represented the Government share of the produce. Now, Mr. Wilson's reduction in his rates was under 25 per cent., while his recorded area was 40 per cent., and Mr. Anderson's is 50 per cent. in excess. And the Sirsa rates are understood to have been purposely kept very low. Indeed, it is difficult to admit that if Rs. 2, Re. 1 and 8 annas are anything like safe fixed rates for total flooded area in a tract of uncertain inundation, Rs. 2-8, Re. 1-8 and 12 annas are at all full rates for actual crops harvested. In the face of actual facts, such as are set forth in the Preliminary Report, and especially in paragraphs 144 and 173 and already summarised above, Mr. Ibbetson hesitates to admit that Mr. Anderson has shown sufficient grounds for holding that the Sirsa rates, which applied in Hissar result in an all-round rate of 12 annas, do more than represent the Government share of the net assets of flooded land in the Hissar Sotar.

39. At the top of page 48 of the present Report Mr. Anderson explains

Assessment of flooded land.

* Mr. Anderson explains that the rice areas have not been halved in this calculation, as rice is only grown in land that is always flooded.

how he arrives at his proposed rates for Fatahabad, and the same process has been followed for Barwála.* He applies the crop rates fixed for the fluctuating assessment of the Sirsa villages (page 481, Sirsa Settlement Report) to his *reduced* flooded area. This gives an all-round rate of 16 annas. But as his *recorded* flooded area is double the reduced area, this means 8 annas on the recorded area; and this rate he proposes to fix. Whether he also proposes to apply it in his actual assessment, or whether he will follow the process above described in each individual village, the 8 annas rate merely representing the general result for purposes of comparison, does not appear. The latter system is clearly the one to be followed. Assuming that the 16 annas an acre represents the full average rate for land when flooded, and that his reduced half areas represent the average area flooded in a series of years, his process amounts to leaving out of account altogether so much of his recorded inundated land as is not flooded: in other words, to assessing on the assumption that, in Sotar land, nothing can be grown when the

† It should be noted that the flooded areas which Mr. Anderson worked upon in his Preliminary Report differ considerably from his final areas.

floods do not reach the field. It is nowhere stated in the Report that this is so, but it has been ascertained from Mr. Anderson that this is the case in Hissar, as it is in Sirsa. Thus we have†—

- (1) a batai rate of 16 annas on *total* area based upon the figures of unusually favourable seasons;
- (2) a rent rate of 12 annas 9 pies or over on *total* area;
- (3) a rate of 12 annas on *total* area resulting from Mr. Wilson's rates which stands comparison with actual collections;
- (4) a rate of 16 annas on *reduced*, or 8 annas on *total* area, resulting from the rates used for fluctuating assessments in the Sirsa Tahsil.

This last rate of 8 annas, taken with the baráni and grazing assessments, which will be discussed presently, gives an increase in total demand of 64 per cent. in Fatahabad and of 61 per cent. in Barwála, against increases in cultivation of 109 and 92 per cent., or of 91 and 69 per cent., respectively, if fallow is excluded; and this rate Mr. Anderson proposes to adopt. The figures given in the lower half of the table on page 50 show that the rates adopted give a revenue which is close upon half the average collections of the past ten years. The Financial Commissioner accepts a rate of 8 annas as representing the general result. In actual assessment it is understood that Mr. Anderson will apply Mr. Wilson's fluctuating assessment rates to a proportion of the area recorded as inundated which Mr. Anderson must fix for himself with reference to the circumstances of each village; and Mr. Anderson states that, in villages below the main bank, where the land is always flooded, this results in a rate of 16 annas, and that generally in the Ghaggar villages, as distinguished from those on the Choya, the rate will vary from 12 annas

to 16 annas. The 8 annas rate will be merely a guide to the total assessment that is to be distributed. That assessment is probably very considerably below average half assets. But here the income of the owner depends wholly upon the harvest, as rent is paid on the produce; the rabi crops require both the floods and the winter rains to be fairly favourable, or they fail; and under the peculiar circumstances of the tract Mr. Ibbetson is convinced that the increase which it is proposed to take is as high as is safe. The distribution of it will call for the most careful judgment. It is perhaps questionable whether Mr. Wilson's proportional rate for rice should not be reduced for the above purposes. It is doubtless fair enough as a rate on crops harvested. But as a scale for distributing a fixed assessment it is perhaps too high by comparison with the others, for inundated rice land is apt to suffer both from excessive and from insufficient floods; and is often either too dry or too wet for rabi crops. This point may safely be left to Mr. Anderson's consideration.

40. As regards the unflooded area, the matter is simple enough. The Assessment of unflooded land and rents for baráni land, which are shown in columns waste. 20 to 25 of the appended statement, agree very closely with those in the adjoining Nali baráni circles of Barwála and Fatahabad. The general circumstances of the two divisions of the Nali, so far as they affect the assessment of uninundated soil, are fairly similar; the increase in cultivation has been enormous in both cases; and Mr. Anderson's proposal to assess baráni land at 5 annas 6 pies in Fatahabad and 6 annas in Barwála may be accepted without hesitation. In the latter tahsil the area is smaller and more intermingled with inundated tracts than in the former, and apparently resembles more closely the soil of Hariána. The increase in baráni cultivation since settlement has been 100 per cent. in Fatahabad and 78 per cent. in Barwála; and these high figures justify the rates being kept well below the revenue rate of 6 annas 9 pies, which is in itself moderate. The grazing rate will be raised to 2 annas as in the baráni division of the circles, the same remarks applying to both.

41. In paragraph 62 of his Report Mr. Anderson discusses the advisability of putting the Sotar villages under fluctuating assessment. He decides against it on the grounds that (1) suspensions and remissions are more easily given than formerly; (2) the people object; (3) the fixed assessment will be payable in an ordinary year; (4) there are no stronger grounds for a fluctuating assessment in the Sotar than in the remainder of the district. The Commissioner concurs with him, and the Financial Commissioner accepts the conclusion that a fluctuating assessment should not be forced upon the people against their wishes. But he is unable wholly to agree with Mr. Anderson's fourth ground quoted above. The comparison upon which he bases it is made between villages in either tract in which rents are calculated in grain. But this state of affairs is exceptional in the Bágár and Hariána, while usual in the Sotar; so that the comparison holds true of khudkásht lands only. Moreover, the channels which floods follow may shift and desert a village entirely, which can never be the case with rain. Villages in an inundated tract, again, are subject to epidemics of fever, which prostrate the whole community, and from which dry villages are comparatively exempt. Mr. Ibbetson would allow any Sotar village to claim now, or at any future time during the currency of settlement, to be put under fluctuating assessment consisting of a fixed rate of two annas an acre, plus the Sirsa rates on crops harvested, half the latter rates being remitted on new cultivation for the first two years, and rice-bunds being protected (if necessary in Hissar) as at page 481 of the Sirsa Settlement Report. It will have been abundantly apparent from the above discussion how very largely the assessment of each estate will depend upon estimates which not even the greatest judgment and local knowledge can secure in all cases against serious error. The option thus afforded will be a safeguard to the people against such error in the present, and will allow them to escape more easily and fully than they otherwise could from the effects of any change in the conditions of inundation that may take place in the future.

42. With regard to suspensions, it should be remembered that rents in the Sotar almost invariably take the form of a share of the produce, so that where there is no crop there is no rent; and that suspensions will therefore be more often required and should be more readily given here than in those portions of the district where cash rents prevail. This point should be especially mentioned in the Final

Report. The table on page 50 of the present Report shows how widely the rental fluctuates when based upon the produce of the harvests.

43. In reviewing the Bhiwani Assessment Report Mr. Young pointed out that the regularity with which rents were paid rendered unnecessary any discussion of the propriety of introducing the cycle system into that tahsil. The same remark applies practically to the whole of the Hissar District. A copy of the letters noted in the margin is forwarded with this Review. In the Financial Commissioner's opinion Colonel Wace's remarks referred to by Mr. Anderson effectually dispose of the question. The collector now has a very free hand in the matters of suspensions; and any officer who lacks the courage or common-sense to work the rules effectively will be equally timid and ineffective in his working of cycle assessments.

44. The following figures summarise the changes made in Mr. Anderson's rates :—

| CIRCLE. | MR. ANDERSON. | | FINALLY FIXED. | |
|------------------------------|---------------|--------------|----------------|--------------|
| | Waste. | Cultivation. | Waste. | Cultivation. |
| | As. Pies. | As. Pies. | As. Pies. | As. Pies. |
| Fatahabad Bāgar West | ... | 5 9 | ... | 4 0 |
| Ditto Nāli Barāni | 1 6 | ... | 2 0 | ... |
| Barwāla ditto | 1 6 | ... | 2 0 | ... |
| Hissar Hariāna East | ... | 6 0 | ... | 6 6 |
| Hānsi ditto | ... | 6 6 | ... | 7 0 |
| Hānsi Canal ... { Dry | ... | 7 0 | ... | 7 0 |
| ... { Canal | ... | 7 0 | ... | 8 0 |
| Fatahabad Nāli Sotar | 1 6 | ... | 2 0 | ... |
| Barwāla ditto | 1 6 | ... | 2 0 | ... |

45. So far Mr. Anderson's sub-divisions of his circles have been considered separately. But the final rates he proposes are all-round rates for each circle as a whole. His procedure in this respect has been sanctioned by authority. But the Financial Commissioner thinks that it is not free from inconvenience, and should not be followed in future settlements. It amounts to working with 17 assessment circles up to a certain point, and then clubbing them into 8 in order to reduce the labour of maintaining separate statistics for them after settlement. Now, either sub-divisions are sufficiently distinct to be treated as separate assessment circles, or they are not. If they are, separate statistics should be maintained for them throughout. If they are not, it is quite legitimate, and often advisable, for the Settlement Officer to consider them separately for his own purposes, but they should not be reported upon separately.

46. In clubbing his assessments for the sub-divisions, Mr. Anderson has taken the nearest all-round rate and applied it to the total area, bringing out a demand which differs slightly from the total of his sub-divisional assessments. The same course has of necessity been followed with the rates as now altered, and the results are shown in the table opposite.

| Circles. | MR. ANDERSON'S PROPOSALS. | | | | | | FINAL RATES AND DEMAND. | | | |
|-------------------|---------------------------|-----|-----|---------|----------------------------------|---|-----------------------------------|----------|--------------|--------|
| | Rates. | | | Demand. | Percentage of increase on demand | Percentage of increase in cultivation since Settlement. | Percentage of increase on demand. | Demand. | Rates. | |
| | Waste. | As. | P. | | | | | | Cultivation. | Waste. |
| Hissar | ... | ... | ... | ... | ... | ... | ... | Rs. | As. | P. |
| Bigar | ... | ... | ... | ... | 30 | 29 | 30 | 52,527 | 4 | 0 |
| Fatahabad Do. | ... | ... | ... | ... | 68 | 49 | 71 | 42,544 | 4 | 0 |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Fatahabad Hariana | ... | ... | ... | ... | 81 | 54 | 81 | 14,066 | 5 | 0 |
| Barwala Do. | ... | ... | ... | ... | 77 | 67 | 77 | 58,154 | 6 | 0 |
| Hissar Do. | ... | ... | ... | ... | 60 | 43 | 66 | 73,694 | 6 | 0 |
| Hansi Do. | ... | ... | ... | ... | 57 | 35 | 68 | 1,63,377 | 6 | 0 |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Barwala Nali | ... | ... | ... | ... | 80 | 117 | 84 | 43,361 | 5 | 0 |
| Fatahabad Do. | ... | ... | ... | ... | 79 | 127 | 81 | 65,728 | 5 | 0 |
| | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| TOTAL | ... | ... | ... | ... | 62 | 53 | 67 | 5,13,451 | ... | ... |

The result of the alterations made by the Financial Commissioner is to raise Mr. Anderson's increase in total dry demand from 63 to 67 per cent. The revenue rates proposed in the Preliminary Report, which were framed with studious moderation, would give a demand of Rs. 5,87,114, or an increase of 91 per cent. It is with much hesitation that Mr. Ibbetson has interfered even thus slightly with proposals based upon minute local knowledge, and marked by the care and judgment which characterise Mr. Anderson's work. But the chief difficulty of the present assessment arises from the inadequacy of the last, and it will take several settlements to fully recover lost ground. The circumstances of the Hissar District enable us to ascertain with unusual accuracy the amount to which Government is entitled as its half share of the net assets and to assure ourselves that the income upon which it is calculated is realised with considerable certainty. It is true that this fact enables us to go nearer the truth in our assessments than we should have dared to do in the absence of such positive information. But the fact remains; and nothing can justify us in relinquishing any larger portion of that amount than will suffice to leave a safe margin, except where to realise it in full would so largely increase the Government demand as to endanger the prosperity of the village communities. It must be remembered, too, that the increase is not wholly or even chiefly due to rise in prices, rents or rates, but is accompanied by and based upon a very substantial increase in the actual area cultivated.

47. Mr. Ibbetson remarks that the most difficult part of the assessment is still to come. The rates, as has been pointed out, fall far below true half net asset rates. But their application will doubtless lead in some cases to demands enormously in excess of the current demand. When the village concerned is held by a true cultivating proprietary community, and especially when the increase results more from the inadequacy of past assessments than from development of the resources of the village, it will be impossible to assess fully up to revenue rates, and the reduction which it will be necessary to make on this account may in some circles be considerable. On the other hand when a village, whether zamindari or pattidari, is held by a single owner or a few large owners who derive their income from the rents paid by their tenants, Mr. Anderson should not limit himself to his rates, but should assess without hesitation up to half net assets, leaving only so much margin as may be necessary to provide fully against possible errors in estimating their amount. The rule of assessment is the same for both classes; both are liable to Government for half the net income from their land. As a matter of grace and of policy, Government relinquishes a portion of its claim in favour of the small man. But it is not bound to extend the same grace to the big man; for in his case the same reasons do not exist. To suddenly reduce the income of a man of moderate means lowers his general standard of living, and reduces his home comforts throughout the scale. If, as is too often the case, he cannot or will not make the change, his ruin is the result. In the case of a wealthy man, a similarly proportionate reduction of his income only cuts off a few superfluous luxuries, or decreases the amount of his annual savings. As Mr. Anderson points out in paragraph 38 of his Report, to reduce the full share due to the State from a rack-renting landlord leaves the tenants as before, and simply puts more money into the landlord's pocket. Whether the enhancements upon the revenue rates demand in the one case will be greater or less than the reductions in the other case will depend upon the circumstances of each circle; but as a rule, and on the whole tract, it is probable that the final assessment will exceed that demand.

48. I am to remark that Mr. Ibbetson has not discussed the question of progressive assessments, as he understands that the policy of Government is conclusively opposed to them.

49. Mr. Anderson's proposals regarding the instalments of land revenue are approved. The Patwáris' cess has been separately reported on for the whole district. The local rate will doubtless be fixed at Rs. 10-6-8 per cent., and the term of the settlement, subject to the orders of the Government of India, at 20 years. The new assessment should be introduced with effect from kharif 1890.

50. Finally, I am to express the Financial Commissioner's sense of the care, judgment, and local knowledge which characterise Mr. Anderson's Report. Wherever he has been unable to support its proposals, it has been because they have, in the Financial Commissioner's opinion, erred on the right side—the side of caution.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|----------------------|-----------|----------|---------------|-----------------------------------|----------------------------|-----------|-----------------------|--|---------|-----------------------|--------|-------------------|--------|-------|
| Consecutive Numbers. | TAHSIL. | Circle. | Sub-Division. | LEADING STATISTICS | | | | | | | | | | |
| | | | | Rural population per square mile. | PERCENTAGE OF AREA HELD BY | | | AVERAGE PERCENTAGE OF CULTIVATION, 1886-90.* | | | | | | |
| | | | | | Jats. | Pachahia. | Shinner and Mahajans. | Unown. | Failed. | Rice, cotton, indigo. | Jowar. | Bajra and pulses. | Wheat. | Rabi. |
| 1 | Fatahabad | Bagar | West | 84 | 85.9 | ... | 2.5 | 8.9 | 25.0 | ... | 5.7 | 54.7 | 0.2 | 5.9 |
| 2 | Hissar | " | South | 90 | 34.7 | ... | 5.3 | 8.6 | 25.4 | ... | 4.9 | 56.6 | 0.1 | 6.8 |
| 3 | " | " | North | 98 | 48.8 | ... | 19.6 | 8.6 | 25.4 | ... | 4.9 | 56.6 | 0.1 | 6.8 |
| 4 | Fatahabad | " | East | 106 | 19.4 | 15.9 | 33.3 | 8.9 | 25.0 | ... | 5.7 | 54.7 | 0.2 | 5.9 |
| 5 | Fatahabad | Harianna | East | 117 | 57.6 | 1.1 | 5.5 | 5.4 | 22.8 | ... | 10.1 | 54.3 | 0.1 | 7.2 |
| 6 | Hissar | " | West | 117 | 34.5 | ... | 27.7 | 8.0 | 27.5 | ... | 11.7 | 42.7 | 0.1 | 12.5 |
| 7 | Hansi | " | " | 141 | 61.7 | ... | 9.8 | 15.3 | 13.7 | 1.1 | 18.5 | 33.4 | 0.3 | 21.6 |
| 8 | Fatahabad | Nali | Barani | 145 | 7.4 | 40.6 | 37.5 | 6.5 | 18.2 | ... | 13.9 | 40.1 | 0.2 | 20.7 |
| 9 | Barwala | " | " | 153 | 29.6 | 7.3 | 25.5 | 2.7 | 20.0 | ... | 16.7 | 35.8 | 0.3 | 23.7 |
| 10 | " | Haryana | East | 149 | 55.3 | ... | 6.6 | 9.2 | 22.8 | ... | 12.1 | 42.5 | 0.2 | 15.0 |
| 11 | " | " | West | 123 | 49.7 | ... | 1.0 | 9.2 | 22.8 | ... | 12.1 | 42.5 | 0.2 | 15.0 |
| 12 | Hissar | " | East | 127 | 31.4 | ... | 32.8 | 8.0 | 27.5 | ... | 11.7 | 42.7 | 0.1 | 12.5 |
| 13 | Hansi | " | " | 158 | 56.1 | ... | 10.4 | 15.3 | 15.3 | ... | ... | 32.4 | 0.3 | 21.6 |
| 14 | Hissar | Canal | East | 118 | 38.4 | ... | 37.2 | ... | 11.9 | 35.6 | 3.6 | 4.7 | 41.9 | 78.8 |
| 15 | Hansi | " | " | 175 | 51.7 | ... | 28.5 | ... | 10.8 | 55.5 | 2.7 | 0.4 | 21.0 | 55.3 |
| 16 | Fatahabad | Nali | Sotar | 145 | 20.1 | 27.1 | 20.6 | 7.4 | 10.4 | 6.6 | 5.0 | 3.2 | 8.9 | 70.9 |
| 17 | Barwala | " | " | 121 | 22.5 | 14.5 | 31.4 | 13.0 | 8.0 | 0.8 | 2.7 | 0.5 | 14.9 | 77.8 |

* Figures are available for circles only, and

† These figures apply

| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
|--|--------------|--------------------------|-------------|---|---------------|--------------------------|----------------|-----------------|-------------------|---|---------------------|---------------------|---------------|--------------|---------------------------------------|--------------|
| OF THE TRACT. | | | | REVENUE AND RENT RATES. | | | | | | | | | | | | |
| PERCENTAGE OF INCREASE SINCE SETTLEMENT. | | | | HALF RENT RATES IN ANNAS AND PIES WITH ACRES ON WHICH PAID. | | | | | | REVENUE RATES AND RESULTING REVENUE, DRY CULTIVATION. | | | | | PERCENTAGE OF INCREASE ON SETTLEMENT. | |
| Rural population. | Cultivation. | Cultivation plus fallow. | Irrigation. | Zamindari. | Pattidari. | Zamindari and Pattidari. | Bhuyachara. | Total. | Settlement, 1863. | Current revenue on cultivation, 1863. | Area of 1889. | | | | Dry revenue. | Cultivation. |
| | | | | | | | | | | | Revenue rate, 1863. | Revenue rate, 1889. | Proposed. | Waste. | | |
| + 0 | 36 | 24 | ... | 4-3 761 | ... | 4-3 761 | 4-0 16,722 | 4-1 17,483 | 3-6 4,082 | 3-9 3,644 | 4-0 14,124 | 4-0 14,124 | 3-9 13,241 | 0-6 133 | 39 | 55 |
| - 12 | 17 | 15 | ... | 5-2 9,475 | 3-8 9,577 | 4-5 19,052 | 3-3 17,868 | 3-11 36,920 | 4-0 25,692 | 3-8 16,733 | 3-6 18,553 | 4-0 21,546 | 3-6 18,855 | 0-6 115 | 13 | 17 |
| - 13 | 41 | 30 | ... | 6-1 9,373 | 5-1 6,573 | 5-8 15,946 | 4-6 18,928 | 5-2 34,874 | 4-6 14,366 | 5-0 23,573 | 4-0 26,586 | 5-6 35,555 | 5-0 33,232 | 0-6 269 | 42 | 41 |
| + 6 | 58 | 49 | ... | 6-9 25,344 | 6-2 12,534 | 6-7 33,228 | 5-9 13,178 | 6-5 51,406 | 5-2 17,854 | 4-0 15,220 | 4-0 24,667 | 6-6 40,083 | 4-6 27,750 | 1-0 384 | 86 | 58 |
| + 6 | 54 | 54 | ... | 6-8 4,355 | ... | 6-8 4,355 | 6-0 11,439 | 6-2 16,794 | 4-3 3,398 | 4-3 7,762 | 5-0 13,990 | 6-6 18,187 | 5-0 13,990 | 1-0 76 | 81 | 74 |
| - 10 | 24 | 21 | ... | 6-10 8,081 | 5-9 1,280 | 6-8 9,361 | 6-1 9,312 | 6-4 18,673 | 5-2 6,036 | 4-7 10,187 | 5-0 13,758 | 6-6 17,685 | 5-6 15,134 | 1-0 164 | 50 | 24 |
| + 4 | 35 | 30 | ... | 6-10 4,160 | 6-0 4,877 | 6-5 9,027 | 5-2 16,590 | 5-7 25,617 | 4-7 5,492 | 5-5 20,920 | 6-0 31,397 | 6-3 32,705 | 6-0 31,397 | 1-0 175 | 51 | 35 |
| + 27 | 202 | 174 | ... | 6-11 15,944 | 5-11 2,001 | 6-10 18,005 | 5-5 934 | 6-9 18,930 | 5-0 6,431 | 6-8 6,163 | 4-0 11,188 | 6-9 18,880 | 5-6 15,384 | 1-6 419 | 156 | 202 |
| + 31 | 130 | 108 | ... | 7-1 11,418 | 6-11 7,047 | 7-0 18,460 | 6-5 2,782 | 6-11 21,242 | 5-3 3,347 | 6-11 13,761 | 4-0 18,313 | 6-9 30,903 | 5-6 25,150 | 1-6 1,677 | 94 | 130 |
| + 10 | 48 | 41 | ... | 7-2 14,101 | 7-8 4,531 | 7-3 18,632 | 5-1 7,927 | 6-7 36,559 | 5-3 11,912 | 5-6 17,610 | 5-0 23,632 | 7-3 34,122 | 6-0 28,239 | 1-0 262 | 62 | 48 |
| + 7 | 91 | 82 | ... | ... | 7-3 1,140 | 7-3 1,140 | 5-6 26,364 | 5-7 27,504 | 5-6 6,403 | 5-11 15,265 | 6-0 24,693 | 7-0 34,430 | 6-0 29,612 | 1-0 141 | 94 | 91 |
| - 10 | 45 | 35 | ... | 7-5 12,738 | 6-10 7,372 | 7-3 27,110 | 6-10 12,375 | 7-1 39,482 | 5-9 20,791 | 5-5 21,007 | 5-0 28,437 | 7-0 39,812 | 6-0 34,125 | 1-0 154 | 63 | 45 |
| + 9 | 41 | 35 | ... | 10-8 3,876 | 7-4 6,223 | 8-7 10,104 | 5-5 30,025 | 6-3 40,129 | 6-10 9,522 | 5-8 41,250 | 6-0 62,424 | 7-6 78,029 | 6-6 67,626 | 1-0 266 | 65 | 41 |
| - 2 | 57 | 47 | 36 | 8-6 8,049 | ... | 8-6 8,049 | 12-6 11,717 | 10-10 19,766 | 8-1 6,978 | 6-4 13,020 | 5-0 16,204 | 7-0 21,917 | 6-6 21,063 | 1-0 377 | 65 | 57 |
| + 0 | 28 | 23 | 10 | 12-8 12,640 | 16-8 8,691 | 14-3 31,216 | 10-8 13,926 | 12-10 35,136 | 10-5 3,273 | 5-9 35,171 | 6-0 46,908 | 7-6 58,635 | 7-0 54,726 | 1-0 167 | 56 | 28 |
| + 27 | 109 | 91 | 138 | 6-11 8,166 | 6-7 12,291 | 6-8 30,457 | 6-2 7,326 | 6-7 27,783 | 5-8 11,334 | 7-0 17,775 | 4-0 21,458 | 6-3 36,210 | 5-6 29,505 | 1-5 1,559 | 64 | 109 |
| + 33 | 92 | 69 | 113 | 7-2 1,743 | 6-6 511 | 7-0 2,254 | 4-6 539 | 6-6 2,793 | 4-7 573 | 9-1 4,663 | 4-0 3,629 | 6-9 6,242 | 6-0 5,650 | 1-5 1,293 | 61 | 92 |

have been repeated for each sub-division.
to barani soil only.

No. 456, dated 25th August 1890.

From—Colonel L. J. H. GREY, C.B.I., Commissioner and Superintendent, Delhi Division,
To—The Senior Secretary to the Financial Commissioner, Punjab.

In compliance with your No. 4118, dated 2nd July 1890, I forward, with entire concurrence, a report* by Mr. Anderson.

* No. 144, dated 15th August 1890.

2. I fail to see any advantage in the cycle system over one of free suspensions. I endorse Mr. Anderson's remarks in paragraph 6 of his letter attached. It is not the weight of the revenue demand which commits the people to the Bania, but a credit resulting on light assessment and power of alienation. The former of these renders land desirable in the money-lender's eyes; the latter leads the agriculturist to indulge in litigation and other extravagance.

No. 144, dated 15th August 1890.

From—A. ANDERSON, Esquire, Deputy Commissioner, Hissar,
To—The Commissioner and Superintendent, Delhi Division.

Introduction of a cycle system of assessment in the Hissar District.

In reply to your No. 134, dated 16th July 1890, I beg to submit my opinion in regard to the introduction of a cycle system of assessment in the Hissar District.

2. No action has ever been taken on the entries in the Sirsa records. Suspensions have on several occasions been allowed, but the balances have been collected within comparatively short periods and the necessity for changing the existing system has never arisen.

3. In regard to the introduction of the system in the five tahsils now under settlement, I beg to state that I agree with what Colonel Wace wrote in paragraph 46 of his Review of the Sirsa Assessment Report. There seems to me no sufficient reason for a change. The revenue that has now been proposed by me is certainly heavier than the Sirsa revenue, but it will, I believe, be paid without the cycle system and without driving proprietors to the Bania more than they will go under any system whatsoever. I have discussed the subject with the people, and they are unanimously against it. It was not a new idea to some of the older men, who had apparently talked it over with Sir Robert Egerton.

4. Half of the cultivated area of the district is in the hands of the proprietors and half is held by tenants paying almost all rent in cash. Less than 4 per cent. of the cultivated area pays as rent a share of the produce, and this form of rent is almost entirely confined to the Nāli of Barwāla and Fatabābad. Rent in cash is paid in bad years as well as good, and the accounts of the Skinner family show that even in the worst years the rent is paid. This is certainly true of tenants: and if tenants pay rent we may expect proprietors to pay revenue. The people themselves pleaded that the system should not be introduced because it might interfere with the existing customs in regard to the payment of revenue. They said the revenue was often paid by hiring out a camel, or by working as a labourer, or by selling ghi, or by exercising self-denial in some luxury or even necessary; and that if the revenue were to depend on the harvest of the year, the incentive to labour and to thrift would be withdrawn. They dreaded also an accumulation of arrears towards the end of the period, which they would be unable to clear off by labour or otherwise within the short space allowed, whereas thrift and industry for a short time every year will put them past their troubles. This is no mere fanciful objection. I know that rent and revenue are often paid in this district by the wages of labour.

5. Then in taking revenue in advance there will be numerous objections to the Tahsildār's report, and it will be for the Collector to decide these as best he can. In collecting arrears, he has the sympathy of the people with him; in collecting advances, the people will be generally against him, and in the beginning of the cycle there will be a tendency not to collect all that the harvest would justify, and bad villages will certainly try to get suspensions and plead that they will pay in coming years. No doubt if the Collector knows the people and the villages he will be able with the assistance of the note-books to decide what should be taken. But in my opinion no sufficient reason has been given for the increased worry that will be caused to the people by the enquiry which the system will require.

6. It is not the payment of the revenue that drives the people to the money-lenders, and the cycle system will not in my opinion aid materially in keeping them out of debt. But the condition made in the Sirsa records may be applied to the rest of the district. Beyond this I do not think we should go.

The original enclosures are herewith returned as requested.

No. 473 A., dated 31st August 1890.

From—Colonel L. J. H. GREY, C.B.I., Commissioner and Superintendent, Delhi Division,
To—The Senior Secretary to Financial Commissioner, Punjab.

The Assessment Report of the Hānsi, Hissar, Barwāla and Fatabābad Tahsils of Hissar is with you in type, of which a copy reached me on 29th August. It is of more importance

to obtain the early orders of Government and thus to permit of our obtaining a large enhanced revenue from this kharif than to detain the Report for detailed review of proposals with which I concur. All I have to say has been fully said in my Hissar forecast of 1886 and in my Reviews of the Preliminary Report and of the Bhiwani Assessment Report.

2. Mr. Anderson proposes an increase of 54 per cent. over the whole district, or 62 per cent. in the four tahsils now under consideration, and his highest rate of increase is 78 per cent. in Barwala. Doubtless it will run out to 200 per cent. and more in some estates (*e. g.*, No. 7 of the list in paragraph 62). His justification is stated in paragraph 63. Rent accounts leave no loophole for escape, for rent accounts would already justify an increase of over 70 per cent. over the whole district, and "rents are rising rapidly" (paragraph 38).

3. I support his proposals, though, as I have before often said, I would prefer getting our dues in a different way. I did say in 1886 that I feared an immediate increase of 50 per cent., but we had not then the great discretion in suspensions and the well-organized revenue machinery that we now have. It is a serious matter in view of future assessments to forego 20 per cent. of increment to which we are entitled, but an immediate increase of 74 per cent. over the whole district could not probably be taken and it is useless to suggest progressive rates on a ten years' contract. Therefore I accept Mr. Anderson's compromise.

4. I did also in 1886 suggest a fluctuating assessment in part of the Nali, but Mr. Anderson's remarks in paragraph 62 are decisive. Any reason which applies to the Nali applies to the whole district.

5. I recommend the acceptance of Mr. Anderson's proposals as they stand, and prompt orders to him to give out his detailed assessments and to proceed with the Bâch.

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PART I.

GENERAL DESCRIPTION.

THIS Report relates to the assessment of the Hansi, Hissar, Barwala, and Fatehabad Tahsils, or the whole of the old Hissar District except the Bhiwani Tahsil, for which an Assessment Report has already been submitted. The tract is compact, and, excluding the triangular projection on the south-west corner, which forms the old Siwani Pargana, it is about 60 miles from east to west and about as many from north to south.

| TAHSIL. | No. of villages. | Area by Revenue Survey. | Area by present measurements. | Area cultivated. |
|------------------|------------------|-------------------------|-------------------------------|------------------|
| | | Square miles. | Square miles. | Square miles. |
| Hansi | 125 | 745·6 | 738·1 | 586 |
| Hissar | 137 | 776·4 | 767·8 | 593 |
| Barwala | 139 | 569·2 | 565·7 | 406 |
| Fatehabad | 158 | 768 | 765·4 | 573 |
| Total | 559 | 2,859·2 | 2,837 | 2,158 |

The Hissar Bir, or Government Cattle Farm, with an area of 66 square miles, is not included in these areas.

In Hansi and Hissar the difference between the recent Revenue Survey area and the area by the Patwaris' measurements is 1·1, in Barwala ·6 and in Fatehabad ·4, and in the four Tahsils together ·8 per cent. I cannot explain why there should be so much difference in two Tahsils compared with the others; the system of measurement was the same in all cases. The new areas are in each Tahsil less than by the Revenue Survey, and in the Hansi and Barwala Tahsils they are much less than the measurements of the expiring Settlement. The villages vary much in size; the smallest has an area of 225 acres, whilst the largest is 26,060 acres in extent. Taking the tract as a whole three-fourths are cultivated; but the northern parts of the Barwala and Fatehabad Tahsils are more backward than the rest.

2. On the south the tract is bounded by the Bhiwani Tahsil; on the east by Rohtak, Jhind, and Patiala; on the north by Patiala; and on the west by Sirsa Tahsil and Bikanir. It is naturally divided into two parts, the eastern country with hard good soil, and the western with its sandy hills, and loamy valleys. The account given of the Bhiwani Tahsil applies generally to these two tracts, with the exception that the western part is not quite so much a desert of sand as is the Bhiwani Bagar, but the difference is only in degree. There are sand hills scattered over the eastern part, but they are not very extensive and are generally culturable. There is no loss in having some part of the village cultivation of a light soil, as it will grow something when the rains are light. With the exception of these occasional hills, the country is an almost dead level.

There are two towns, Hissar and Hansi, with a population of 14,167 and 12,656, respectively, but their trade is almost entirely local. They are not centres for the distribution of English goods to Rajputana; but in good seasons grain for export is collected in large quantities, especially at Hansi.

Towns.

3. The Rewari-Firozpur State Railway runs through the Hansi, Hissar, and Fatehabad Tahsils, with stations at Bhiwani, Hansi, Satrand, Hissar, Jakhand, Adampur, and Bhattu, which last station is 11 miles from Fatehabad. The Delhi and Sirsa road runs from Mehm to Hansi, Hissar, and Fatehabad. Besides it there are various roads of more or less importance: Hansi to Bhiwani, Hansi to Jhind, Hansi to Barwala, and on to Tohana and the Patiala territory; Hissar to Barwala, Bhattu to Fatehabad and on to Ratia and Patiala territory. Some part of the Delhi-Sirsa road has been metalled; otherwise all the roads are unmetalled, and suited only for country carts and camels. The rain-fall is small; the country is mostly level, with no marked drainage lines except the Ghaggar, the Choya, and the Western Jamna Canal, which occupies the bed of an old stream. The roads are therefore easily maintained and at no season present any difficulty except at the Ghaggar. There are 3 ferries at Ratia, Alawalwas, and Kalautha in the Fatehabad Tahsil, but the income from them is very small, and they are maintained more for the convenience of the neighbouring villages than for general traffic which is as a rule stopped in the rainy season as camels are then of little use. The whole tract has been well opened up except the northern part of the Barwala and Fatehabad Tahsils. A branch of the Rewari-Firozpur Railway from Hansi through Barwala, Ratia, and into the "Jangal" country of Patiala, would tap a great grain-producing country which will become more valuable when the Indri-Sirsa Canal is opened. To the west of the Railway, the roads towards Rajputana are mere sandy tracks suitable only for camels, which are the only possible means of transport.

Communications.

4. The Western Jamna Canal enters the district on the east of the Hansi Tahsil, and, passing the towns of Hansi and Hissar, one branch runs through the western corner of the Fatehabad Tahsil, and another, more to the south, runs into Bikanir where a small area is irrigated. The irrigation in Fatehabad extends only to a few acres, and the area below Hissar is also small. The Hansi villages have a more certain supply than those in the Hissar Tahsil; and in the former Tahsil the irrigation is mostly by flow; but the level of the Canal has been gradually raised and the area of lift-irrigation is getting smaller.

The projected Indri-Sirsa Kharif Canal will enter the district at a point due north of Barwala, and, passing south of Bahuna and Fatehabad and north of Bhattu, will pass near Ding, and go on to Sirsa. The tract traversed by it is equal to the best in the district in regard to soil, and in a few years the large wastes in Pachadha villages will be growing indigo, cotton, and wheat.

Indri-Sirsa Canal.

5. The Ghaggar Nali and the Choya Nala (or Joiya as it is commonly called in this district) run through the northern part of the Barwala and Fatehabad Tahsils. These streams have been described in para. 5 of Mr. Wilson's Sirsa Report and in No. 19, Printed Selections from the Records of the Financial Commissioner's Office. In the latter is also given a sufficient account of the Rangoi Nala which was dug in 1865 to catch the spill of the Ghaggar, and carry it to the Choya. The Rangoi was cleaned out once by Colonel Forster, but it has not done much good to the upper villages, which paid part of the cost of construction, and the general complaint is that it has carried all the water past them and down to Fatehabad, where, no doubt, there has been an increase in the flooded area.

Ghaggar Nali and Choya Nala.

There are still indications of an old channel south of the Choya, known as the Sukar Nal which left the Choya just below Dharsul, and ran in a tortuous course through Zabtawala, Bahunra, Muhammadpur Sotar, Shekhupur Sotar, and Bhirana, and thence into the main channel. The Sukar Nal does not now run, but most of the villages between it and the Choya are still partially subject

to floods from the Choya, either naturally or by means of channels (Kúnd). At Hasanga, which is at the outside edge of the present flooded area, there are several old masonry wells, 60 feet deep, where water is now 100 feet from the surface. It is possible that this gradual change of course is not yet ended. Some distance below where the Ghaggar enters the Fatehabad Tahsil, there is a spill which runs into a *dabar* or depression under Mahmra village, and thence through Bhagwargarh, Bhundarwas, and into the main channel at Ratangarh and Mir-rána. Of the 5 villages dependent for inundation on this spill, four were not shown as Sotar villages in 1863; and it was not until the high floods of 1884 and of 1887 that the inundated area became extensive. Perhaps this spill will develope into the main channel by cutting off the corner towards Ratia.

No improvement has yet taken place in the irrigation from the Ghaggar. A proposal was made by Colonel Grey several years ago for the better utilization of its water, but no action has yet been taken on his recommendations, the consideration of which is still pending. The assessment now proposed is based on existing circumstances, which will be very materially changed by the acceptance of Colonel Grey's proposals; and it may, therefore, be necessary, if a fixed assessment is given, to provide for a re-assessment, if the Ghaggar is brought under the Canal Act.

6. The average rain-fall of the four Tahsils is 16 inches a year, and it does not differ materially in distribution. I give below the monthly average of the last 22 years for each Tahsil; and in Tahsil Statement No. I the monthly rain-fall for each year of this period is given for each Tahsil:—

Rain-fall.

Average rain-fall of the last 22 years.

| Tahsil. | April. | May. | June. | Total of April, May, and June. | July. | August. | September. | Total of July, August and September. | October. | November. | December. | Total of October, November and December. | January. | February. | March. | Total of January, February, and March. | Total of the year. |
|------------------|--------|------|-------|--------------------------------|-------|---------|------------|--------------------------------------|----------|-----------|-----------|--|----------|-----------|--------|--|--------------------|
| Hissar | 0.25 | 0.57 | 1.58 | 2.3 | 5.14 | 4.38 | 2.02 | 11.54 | 0.16 | 0.05 | 0.58 | 0.79 | 0.58 | 0.48 | 0.60 | 1.66 | 16.4 |
| Hansi | 0.34 | 0.79 | 1.43 | 2.56 | 4.25 | 3.9 | 2.9 | 11.05 | 0.17 | 0.02 | 0.47 | 0.66 | 0.65 | 0.53 | 0.43 | 1.61 | 15.9 |
| Barwala | 0.24 | 0.63 | 1.50 | 2.4 | 4.67 | 3.7 | 2.14 | 10.51 | 0.29 | 0.06 | 0.37 | 0.72 | 0.67 | 0.40 | 0.70 | 1.77 | 15.6 |
| Fatehabad | 0.29 | 0.70 | 1.48 | 2.47 | 4.87 | 3.63 | 2.66 | 11.16 | 0.34 | 0.04 | 0.40 | 0.78 | 0.62 | 0.44 | 0.56 | 1.62 | 16.06 |

The averages show that Hissar has a somewhat better rain-fall than the other Tahsils, but I doubt if this is really the case. The Meteorological Reporter's Statement puts it just the other way and gives Hissar only $15\frac{1}{2}$ inches. The rain-fall is on an average the same in all these Tahsils. The rain-fall in July, August, and September varies from $10\frac{1}{2}$ inches in Barwala to $11\frac{1}{2}$ inches in Hissar: and the average is 11 inches. Roughly $4\frac{1}{2}$ inches fall in July, 4 in August, and $2\frac{1}{2}$ in September: and if the rain came in good showers, and was general, this quantity, small though it is compared with other districts, would be sufficient for the generally light soil of this district. Unfortunately, as has been already shown in the Report for the Bhiwani Tahsil, the amount of rain varies greatly from the average, not merely from year to year, but from month to month. To illustrate this by the Hissar Tahsil, it will be seen that in 1868 only 3.2 inches fell in July, August, and September: and even this was confined to the month of July. In 1871, the rain-fall of these three months was only 2.1 inches. In other years as much as 10 and 12 inches have fallen in one month. The average rain-fall in October, November, and December is only $\frac{3}{4}$ inch; and in January, February, and March, $1\frac{3}{4}$ inch; and in April, May, and June, $2\frac{1}{2}$ inches. If there is one good shower in October, and fairly good Christmas rains (mahawat), there will be a fairly good Rabi harvest. It is astonishing to see the crops of gram that are produced with only two good showers. Mr. Brown pointed out in 1840 that the hard clay soil yields little or no crop in an indifferent season, and that a failure of the ordinary crop of grass was not uncommon, so that in bad seasons distinctions of soil were so levelled that the villages which suffered most were the very villages which comprised within their bounds the largest area of what was generally considered the best quality of land. The *dakar* or clay soil is not now looked upon as the best: the medium between the sand and the clay is everywhere preferred, as in any season, with good rain or bad rain, some crop will be produced. I have in the Bhiwani Report remarked on the partial manner in which the rain comes in thunder storms, flooding a few villages and leaving others almost dry. This has been well illustrated in the rains of 1889. In some villages there have been better crops than have been harvested for many years, and, within a short distance, other villages have had neither a Kharif nor a Rabi crop. The conditions of the rain-fall are somewhat similar to those of hail, and this has to be remembered in granting suspensions of revenue.

7. In the preliminary report it has been shown that the existing Assessment Circles will be sufficient for the purposes of the Re-assessment (see paras. 1 and 2 of that Report) and to this the Financial Commissioner has agreed. As the Circles are large, and there is a distinct, though very gradual, deterioration of the soil from east to west, I have in most cases sub-divided the circles in each Tahsil to show how far each part differs from the average; and statistics have been prepared for these sub-divisions. It is not intended that they should be hereafter treated as circles: but in this Report each sub-division will receive separate consideration. I give below a list of the circles and sub-divisions in each Tahsil in the order in which they will be treated in this Report, whenever it is necessary to treat them separately.

| <i>Tahsil.</i> | <i>Circle.</i> | <i>Sub-division.</i> |
|----------------|----------------|------------------------------------|
| Hansi | ... Haryana | ... Eastern. Western. Canal. |
| Hissar | ... Bagar | ... Southern. Northern. |
| | Haryana | ... Eastern. Western. Canal. |
| Barwala | ... Haryana | ... Eastern. Western. |
| | Nali | Barani. Sotar. |

| <i>Tahsil.</i> | <i>Circle.</i> | <i>Sub-division.</i> |
|----------------|----------------|--------------------------|
| Fatehabad | ... Bagar | ... Western. Eastern. |
| | Hariana | |
| | Nali | ... Barani. Sotar. |

8. In the Settlement now expiring, a record was made of dakar, rosli, and bhur soils according to the N.-W. P. system, but these soils were not used in the Assessment, and no record has now been made of them (*see* para. 3, Preliminary Report). The classification into cultivated, barani, nahri, sailab, and waste, kadim, and jadid, which is prescribed in the rules under the Land Revenue Act, was considered sufficient for all purposes of Assessment, and this has been approved by the Financial Commissioner. The only apparent exception to this is in the inundated part of the Nali Circles in Tahsils Barwala, and Fatehabad, where rates have been fixed for soils, the nature of the soils being determined by the crops ordinarily produced. It is unnecessary to discuss this matter here: it is applicable only to the comparatively small area that is inundated by the Ghaggar and Joiya streams, and will be explained in connection with the Assessment of the Nali Circle.

PART II.

FISCAL HISTORY.

9. The four Tahsils now under assessment were settled by Mr. Brown in 1840, with the following exceptions:—
Former Settlements.

- (a) 6 villages received from the Rohtak district and now in the Hansi Tahsil.
- (b) 12 villages received in exchange from Jhind and now in the Barwala Tahsil.
- (c) The Nali Circle of Barwala.
- (d) The Nali Circle of Fatehabad.

These four exceptions will be disposed of first.

10. The six villages added to the Hansi Tahsil in 1861 from the Mehm-Bhiwani Tahsil of Rohtak were settled in 1840 by Mr. Mills, a full account of whose settlement has been given in Mr. Fanshawe's Assessment Report of the Rohtak Tahsil (*see also paras. 14, 20 and 40 of the Bhiwani Tahsil Assessment Report, and Hansi Tahsil statement No. VI*). In that Report the special position held by the villages settled by Mr. Mills has been considered, and it is enough to note here that in the 6 Hansi villages the cultivation more than doubled between 1840 and 1870, but the revenue was maintained at its old figure. It was admitted that the resources of these villages had increased, and that they were generally in good circumstances, but the object of the revision of settlement in 1870 was rather the reduction of the demand where necessary, than its enhancement where possible. The result is that these six villages have paid the same revenue from 1840 up to this time, though the circle rate of 1863 applied to the cultivated area would have justified an increase in 1870 of 33 per cent. Between 1840 and 1890 cultivation has increased three-fold: and, at 8 annas an acre, the revenue rate proposed for the corresponding villages in the Bhiwani Tahsil, the new demand would be Rs. 8,806, in place of an existing demand of only Rs. 3,714.

11. The twelve villages in the Barwala Tahsil not settled by Mr. Brown were received in 1861 from the Raja of Jhind in exchange for certain villages in the Thanesar (Karnal) district, which were more conveniently situated for the Raja. The inclusion of these 12 villages in Hissar improved the boundary of the district, as the Jhind territory projected at a very acute angle between the Hansi and the Barwala Tahsils. The villages thus received were regularly settled for the first time by Munshi Amin Chand in 1863.

12. The Nali circles of the Barwala and Fatehabad Tahsils could not be settled in 1840 by Mr. Brown along with the rest of the district because of the uncertainty of the boundary line between the Haryana tract and the Patiala State, and also because Government wished to have the Ghaggar villages under observation for some years prior to granting them a settlement for a long period. The history of the boundary dispute which was not finally settled until 1856 has been given at pages 15—18 of the Hissar Gazetteer. Up to 1850 the revenue of the Rohi or Barani villages was collected on short summary settlements made by Mr. Brown, Mr. Mackenzie, and Mr. Dumergue: and the Sotar villages which were subject to the Ghaggar floods were under *Kham* management, though their revenue was shown at a

fixed sum in the rent-roll, which was never fully collected. In 1850, Mr. Thomason visited Hissar and ordered a regular Settlement of the Rohi villages for a period corresponding with that of the rest of the district, that is, up to 1860. He maintained the existing arrangements for the Sotar villages: but on his second visit to the Bhattee territory, when he recorded the "Memorandum regarding the Bhattee Territory," referred to in para. 43 of Mr. Wilson's Report, the orders passed for the Sotar lands of Sirsa (*vide* para. 13 of the Memo.) were made applicable to the Hariana tract, on the ground that it was impolitic to retain on the books the old excessive demand, and annually to write off the difference between it and the *Kham* collections. Experience had by this time shown that the rates demanded for the Sotar lands were excessive: and a fair revenue was now to be fixed with some reference to the average collections of past years.

Under these orders the Nali circles of Barwala and Fatehabad were settled for the unexpired portion of Mr. Brown's Settlement. This Settlement was made (with the exception of five villages) by Mr. Dumergue in 1852. I have failed in getting his report, and have no exact information about the Nali villages except the amount of revenue fixed at the Settlement. The yearly demand in Sotar villages before that time was fixed by a rate on the cultivated area which varied from Re. 1-9-6 to Rs. 2-6-6 per acre, the higher rate being considered the customary or normal rate. It is no wonder that a demand based on such a rate was found to be excessive, for the average collections in Sirsa since 1882, in spite of a large area of rice, only give Re. 1-2-10 per acre of cultivation. The people everywhere look back with dread to the *Kham* management before 1852 and have unanimously resolved to have nothing to do with a fluctuating assessment unless it is compulsorily imposed on them.

In para. 13 of the "Memo. on the Bhattee Territory," Mr. Thomason directed that a fixed assessment should be given to the Nali villages, but that in very bad seasons the Sotar lands should be held *Kham* and the balance left for possible recovery in future years. In good seasons if there was no balance, the people were to be left without stint and grudge to the enjoyment of what their good fortune had given them. On this the Sudder Board of Revenue directed that a rate should be fixed per *bigah* of actual cultivation, and that it should be arranged beforehand that the collections be made in bad years at that rate instead of at the assessed demand, whenever the people desired it, and the revenue authorities saw sufficient grounds for complying with their application. The deficiency in the collections was to be realized at such times and in such ways as might be thought expedient. It is not known whether this system of suspension of revenue was ever acted on: nor is there any information as to how Mr. Dumergue's Settlement worked. It is known that 25 Nali and 22 Barani villages were sold between 1840 and 1860, either voluntarily or on decrees of Court, or for balance of land revenue, but these sales were mostly the result of the famine of 1850-51, and cannot be ascribed to the Settlement made in 1852.

13. In the Bliwani Assessment Report a general account has been given of Mr. Brown's Settlement, and in this Report it is necessary to give only the special details for each tahsil.

The following statement shows the state of cultivation in the Hansi Tahsil at the three Settlements of 1840, 1863, and 1890:—

Cultivation at various periods.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------|-------------------------|---------|------------------|-------------------|------------|---------|---------------|---------|
| CIRCLE. | Sub-division of Circle. | Period. | Cultivated area. | Culturable area. | | | Unculturable. | Total. |
| | | | | Lately abandoned. | Old waste. | Total. | | |
| | | | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Haryana | Eastern | 1840 | 59,411 | 15,422 | 117,735 | 133,157 | 14,339 | 206,907 |
| | | 1863 | 118,287 | 6,122 | 73,975 | 80,097 | 14,148 | 212,532 |
| | | 1890 | 106,463 | 1,065 | 27,722 | 28,787 | 11,633 | 206,883 |
| | Western | 1840 | 34,575 | 6,635 | 55,808 | 62,493 | 9,309 | 106,677 |
| | | 1863 | 62,015 | 2,661 | 38,028 | 40,689 | 7,490 | 110,194 |
| | | 1890 | 83,724 | 466 | 18,072 | 18,538 | 5,594 | 107,856 |
| | Canal | 1840 | 56,580 | 1,197 | 80,607 | 81,804 | 20,727 | 159,111 |
| | | 1863 | 97,750 | 5,307 | 48,503 | 53,810 | 12,715 | 164,275 |
| | | 1890 | 125,086 | 864 | 17,268 | 18,132 | 14,402 | 137,629 |
| | Total tahsil and Circle | 1840 | 150,866 | 23,304 | 254,150 | 277,454 | 44,375 | 472,035 |
| | | 1863 | 278,052 | 14,090 | 160,506 | 174,596 | 31,353 | 487,001 |
| | | 1890 | 375,273 | 2,395 | 63,062 | 65,457 | 31,629 | 472,359 |

Allowance has been made for change of boundaries, and this statement as well as the statement in the next paragraph includes the six villages settled by Mr. Mills (*see* paragraph 10).

The highest revenue demand in the various Settlements up to the present is given below for each part of the Tahsil:—

Highest Demand.

| Settlement. | Eastern. | Western. | Canal. | Total. |
|-----------------------------|----------|----------|--------|----------|
| | Rs. | Rs. | Rs. | Rs. |
| 1st, 1815-24 | 77,006 | 59,387 | 57,975 | 1,94,368 |
| 2nd, 1825-29 | 77,784 | 50,020 | 55,690 | 1,83,494 |
| 3rd, 1830-39 | 79,432 | 45,980 | 60,398 | 1,85,810 |
| Average of 5 years, 1835-39 | 77,240 | 44,817 | 58,731 | 1,80,788 |
| 1st Revised demand, 1840 | 62,431 | 31,770 | 78,970 | 1,73,171 |
| 2nd „ „ „ | 43,230 | 23,520 | 99,080 | 1,65,830 |
| Settlement of 1860-63 | 41,289 | 20,922 | 79,528 | 1,41,739 |

Mr. Brown noted in 1840 that scarcely a third of the Tahsil was cultivated, that the population had decreased by emigration, and that, after allowing for inferiority of soil and produce, the tract was not in a prosperous state. This he ascribed mainly to the unsettled nature of the people, who on the

occurrence of bad seasons, or on pressure brought for the payment of the revenue, moved off with all that belonged to them into the neighbouring native States: also to the excessive demand of the first Settlement which caused a high demand in all succeeding Settlements, and to the vicious revenue system that prevailed. The nature of that system may be gathered from a comparison of the collections with the demand in the barani villages.

Demand and Collections.

| Average demand for 15 years prior to 1840. | Average collections for this period. | Average demand for 10 years prior to 1840. | Average collections for this period. | Average demand for 5 years prior to 1840. | Average collections for this period. |
|--|---|--|---|---|---|
| Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 1,29,002 | 88,244 | 1,27,721 | 72,568 | 1,25,823 | 69,883 |

Mr. Brown reduced the demand by 47 per cent. and fixed it at 8 per cent. below the average collections of the previous 10 years and $4\frac{1}{2}$ per cent. below the average collections of the previous five years. The reduction would have been greater but for the fact that up to 1839 the canal villages had been assessed as barani villages, and it was Mr. Brown who for the first time took for Government a share of the large profits reaped in the irrigated villages. In assessing the canal tract he was very careful to base his demand on the area actually irrigated year by year; but he took as the standard revenue rate for this district what was paid in the Rohtak district, where sugarcane and other rich crops were grown. The average barani rate was 9 annas 4 pies per acre, and the average rate on canal land was Rs. 2-10-7 per acre, or somewhat less, as the barani rate for unirrigated land in canal villages was probably above the average of the barani villages. The irrigated land was over assessed, and the reduction given in the succeeding settlement was necessary.

14. The whole of the Hissar Tahsil was settled by Mr. Brown in 1840; and, after adjustment of boundaries which have changed very much since that time, the statistics in the following tables show the state of cultivation, and the revenue demands for the existing circles and their sub-divisions:—

Mr. Brown's Settlement,
Hissar Tahsil.

Cultivation at various periods.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---------------|-------------------------|---------|------------------|-------------------|------------|---------|--------------------|-------------|
| CIRCLE. | Sub-division of Circle. | Period. | Cultivated area. | Culturable. | | | Unculturable area. | Total area. |
| | | | | Lately abandoned. | Old waste. | Total. | | |
| | | | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Bagar | Southern | 1840 | 59,406 | 2,789 | 37,703 | 40,492 | 9,698 | 109,596 |
| | | 1863 | 73,745 | 2,742 | 26,449 | 29,191 | 5,267 | 108,203 |
| | | 1890 | 86,188 | 1,539 | 16,804 | 18,343 | 3,898 | 108,429 |
| | Northern | 1840 | 79,442 | 5,655 | 44,871 | 50,526 | 10,314 | 140,282 |
| | | 1863 | 75,205 | 6,960 | 53,843 | 60,803 | 5,460 | 141,477 |
| | | 1890 | 106,342 | 285 | 29,279 | 29,564 | 3,698 | 139,599 |
| | Total Circle | 1840 | 138,848 | 8,444 | 82,574 | 91,018 | 20,012 | 249,578 |
| | | 1863 | 148,950 | 9,702 | 80,292 | 89,994 | 10,736 | 249,680 |
| | | 1890 | 192,530 | 1,824 | 46,083 | 47,907 | 7,591 | 248,028 |
| Haryana... .. | Eastern | 1840 | 50,071 | 9,617 | 44,426 | 54,043 | 11,097 | 115,211 |
| | | 1863 | 62,697 | 4,578 | 42,925 | 47,503 | 5,927 | 116,127 |
| | | 1890 | 90,098 | 25 | 18,214 | 18,239 | 4,610 | 118,856 |
| | Western | 1840 | 31,900 | 2,387 | 16,158 | 18,545 | 3,068 | 53,513 |
| | | 1863 | 35,527 | 1,172 | 17,835 | 19,027 | 2,509 | 57,063 |
| | | 1890 | 44,027 | 191 | 10,861 | 11,052 | 1,869 | 56,888 |
| | Canal | 1840 | 32,849 | 454 | 33,239 | 33,693 | 6,181 | 72,723 |
| | | 1863 | 32,960 | 2,450 | 33,097 | 35,547 | 4,701 | 73,208 |
| | | 1890 | 51,852 | 165 | 16,223 | 16,388 | 4,362 | 72,602 |
| | Total Circle | 1840 | 114,820 | 12,458 | 93,823 | 106,281 | 20,346 | 241,447 |
| | | 1863 | 131,184 | 8,200 | 93,877 | 102,077 | 13,137 | 246,398 |
| | | 1890 | 186,877 | 381 | 45,298 | 45,679 | 10,790 | 243,346 |
| | Total Tahsil | 1840 | 253,668 | 20,902 | 176,397 | 197,299 | 40,358 | 491,325 |
| | | 1863 | 280,134 | 17,902 | 174,169 | 192,071 | 23,873 | 496,078 |
| | | 1890 | 379,407 | 2,205 | 91,331 | 93,586 | 18,381 | 491,374 |

Highest demand.

| Settlement. | Southern Bagar | Northern Bagar | Total Bagar Circle. | Haryana West-ern. | Haryana East-ern. | Haryana Canal | Total. |
|------------------------------------|----------------|----------------|---------------------|-------------------|-------------------|---------------|--------|
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 1st, 1815-24 | 30,311 | 31,282 | 61,593 | 7,502 | 19,122 | 14,494 | 41,118 |
| 2nd, 1825-29 | 36,650 | 42,759 | 79,409 | 14,225 | 28,955 | 21,027 | 64,207 |
| 3rd, 1830-39 | 36,335 | 43,094 | 79,429 | 16,595 | 32,828 | 24,879 | 74,302 |
| Average of 5 years, 1835-39 | 35,229 | 42,924 | 78,153 | 16,475 | 32,780 | 24,237 | 73,492 |
| 1st Revised demand, 1840 | 24,325 | 34,170 | 58,495 | 12,590 | 31,236 | 22,729 | 66,555 |
| 2nd do. do. | 19,398 | 26,250 | 45,648 | 10,335 | 21,168 | 23,980 | 55,483 |
| Settlement of 1860-63 ... | 16,733 | 23,700 | 40,433 | 10,203 | 21,118 | 18,131 | 49,452 |

The collections in the Siwani pargana which corresponds to the southern Bagar, and in the Hissar pargana which roughly corresponds to the northern Bagar and the Hariana circle together, are given in the following table:—

Demand and Collections.

| | | Average demand for 15 years prior to 1840. | Average collections for this period. | Average demand for 10 years prior to 1840. | Average collections for this period. | Average demand for 5 years prior to 1840. | Average collections for this period. |
|----------------|--------|--|--------------------------------------|--|--------------------------------------|---|--------------------------------------|
| | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Siwani Pargana | | 36,105 | 25,214 | 35,832 | 20,492 | 35,229 | 20,422 |
| Hissar Pargana | | 88,092 | 63,578 | 89,768 | 55,415 | 89,539 | 55,725 |

Mr. Brown's general remarks on the Bhur or Bagar tracts have been quoted at para. 11 of the Bhiwani Report. He fixed the revenue of the Siwani or southern Bagar at 45 per cent. under the former demand, and somewhat under the average collections. The new demand fell at a rate of 5 annas per acre on cultivation and 3 annas 1 pie on the whole malguzari area. Of Hissar he wrote that the population was composed principally of Bagri settlers and other foreign emigrants who occupied its waste lands on the resumption of the country by the British Government. It was the pargana last abandoned after the famous *chalisa* famine and the first re-occupied, and it contains more traces of its original inhabitants of the Jat and Ranghar caste than the other parganas except Hansi, the inhabitants of which as a body maintained their footing throughout. In 1843 the cultivation was half the total area: the first demands had been comparatively light as compared with Hansi, and the tract had advanced in prosperity more steadily. The collections had been made with little difficulty, and for these times the balances which amounted to about 37 per cent. of the demand were considered trifling. The new revenue was, therefore, based on the collections without any further deduction such as was given in other places. The incidence of the new demand in the barani villages was only 5 annas 2 pies on cultivation and 3 annas 9 pies on the malguzari area. These rates applied to the northern Bagar, as well as to the Hariana tracts. The rate on canal land was Rs. 2-13-5, but this has been calculated on the supposition that the rate on barani land in the Canal villages was only 5 annas 2 pies, whereas it was probably more; and the Canal rate was certainly not more than Rs. 2-10-7, the Hansi rate.

15. Mr. Brown settled the whole of the western part of the Hariana Circle of the Barwala Tahsil, and 20 out of the 32 villages in the eastern part. Below are given for the whole Tahsil statements in the same form as for Hansi and Hissar, but the information is complete only for the part settled by Mr. Brown:—

Mr. Brown's Settlement,
Barwala Tahsil.

Cultivation at various periods.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------|------------------------|---------|------------------|-------------------|------------|---------|---------------|---------|
| CIRCLE. | Subdivision of Circle. | Period. | Cultivated area. | Culturable area. | | | Unculturable. | TOTAL. |
| | | | | Lately abandoned. | Old waste. | Total. | | |
| | | | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Haryana | Eastern | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 50,901 | 2,509 | 33,798 | 41,307 | 5,918 | 98,126 |
| | | 1890 | 75,304 | 139 | 14,793 | 14,932 | 4,839 | 95,075 |
| | Western | 1840 | 25,846 | ... | 68,352 | 68,352 | 5,209 | 99,407 |
| | | 1863 | 41,161 | 2,334 | 51,166 | 53,500 | 5,899 | 100,560 |
| | | 1890 | 78,699 | 134 | 16,173 | 16,312 | 3,645 | 93,656 |
| | Total Circle ... | 1840 | 25,846 | ... | 68,352 | 68,352 | 5,209 | 99,407 |
| | | 1863 | 92,062 | 4,843 | 89,964 | 94,807 | 11,817 | 193,686 |
| | | 1890 | 154,003 | 273 | 30,971 | 31,244 | 8,484 | 193,731 |
| | Barani | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 31,789 | 3,447 | 70,896 | 74,343 | 8,024 | 114,156 |
| | | 1890 | 73,252 | 5 | 31,065 | 31,070 | 7,010 | 111,339 |
| Nali | Sotar | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 16,895 | 2,318 | 34,079 | 36,427 | 4,921 | 58,243 |
| | | 1890 | 32,415 | 39 | 20,704 | 20,748 | 3,843 | 57,001 |
| | Total Circle ... | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 48,684 | 5,795 | 104,975 | 110,770 | 12,945 | 172,399 |
| | | 1890 | 105,667 | 44 | 51,769 | 51,813 | 10,859 | 168,329 |
| | Total Tahsil ... | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 140,746 | 10,638 | 194,939 | 205,577 | 24,762 | 371,085 |
| | | 1890 | 259,670 | 317 | 82,740 | 83,057 | 19,343 | 362,070 |

Highest demand.

| SETTLEMENT. | Haryana Eastern. | Haryana Western. | Total Haryana Circle. | Nali Barani. | Nali Sotar. | Total Nali Circle. |
|------------------------------------|------------------|------------------|-----------------------|--------------|-------------|--------------------|
| 1st, 1815-24 | 3,654 | 16,735 | 20,389 | ... | ... | ... |
| 2nd, 1825-29 | 6,398 | 19,145 | 25,543 | ... | ... | ... |
| 3rd, 1830-39 | 10,423 | 22,300 | 32,723 | ... | ... | ... |
| Average of 5 years, 1835-39 | 10,400 | 22,305 | 32,705 | ... | ... | ... |
| 1st Revised demand | 9,720 | 16,430 | 26,150 | ... | ... | ... |
| Settlement of 1860-63 | 17,610 | 15,265 | 32,875 | 13,751 | 9,855 | 23,606 |

The Hariana Circle of Barwala corresponds to Hansi in the nature of its soil and products and also in its population. In 1840 about a third was cultivated, and the population was very sparse as there were few foreign settlers. The revenue demand of former Settlements had been very moderate, and in striking contrast to the Hansi Tahsil: and the balances amounted only to one-third of the demand:—

Demand and Collections.

| Average demand for 15 years prior to 1840. | Average collections for this period. | Average demand for 10 years prior to 1840. | Average collections for this period. | Average demand for 5 years prior to 1840. | Average collections for this period. |
|--|--------------------------------------|--|--------------------------------------|---|--------------------------------------|
| Rs. | Rs. | Rs. | Rs. | Bs. | Rs. |
| 27,700 | 20,216 | 30,246 | 18,871 | 30,190 | 19,900 |

Having regard to the progressive nature of the tract, Mr. Brown assessed the revenue at 22 per cent. below the average demand of the past 5 years, but 25 per cent. over the collections of the past 10 years. The rate on cultivated land was 9 annas 2 pies per acre and 2 annas 10 pies on the malguzari area; the rate on cultivation being practically the same as in the Hansi Tahsil.

16. Mr. Brown settled only the Bagar and Hariana Circles of the Fatchabad Tahsil; but, as in Barwala, statements have been prepared for the whole Tahsil as far as information is forthcoming, though comparison with the present Circles is scarcely possible, as in 1840 there were many *Sukhlambri* or *Jagir* villages which were not settled.

Cultivation at various periods.

| CIRCLE. | Sub-Division of Circle. | Period. | Cultivated area. | Cultivable. | | | Uncultivable. | Total. |
|----------------|-------------------------|---------|------------------|------------------|------------|---------|---------------|---------|
| | | | | Latest assessed. | Old waste. | Total. | | |
| | | | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Bagar | Western | 1840 | 32,065 | 1,967 | 34,737 | 36,704 | 5,508 | 74,277 |
| | | 1863 | 41,677 | 4,357 | 26,111 | 30,468 | 2,564 | 74,709 |
| | | 1890 | 56,495 | 701 | 12,194 | 12,895 | 4,888 | 74,278 |
| | Eastern | 1840 | 27,859 | 1,461 | 67,884 | 69,345 | 9,280 | 106,484 |
| | | 1863 | 62,493 | 3,820 | 57,573 | 61,393 | 5,612 | 129,498 |
| | | 1890 | 98,668 | 139 | 20,495 | 20,634 | 8,699 | 128,001 |
| | Total Circle | 1840 | 59,924 | 3,428 | 12,621 | 106,049 | 14,728 | 180,761 |
| | | 1863 | 104,170 | 8,177 | 83,684 | 91,861 | 8,176 | 204,207 |
| | | 1890 | 155,163 | 810 | 32,689 | 33,529 | 13,587 | 202,279 |
| Hariana | ... | 1840 | 18,897 | 869 | 31,695 | 35,564 | 4,688 | 59,059 |
| | | 1863 | 29,090 | 166 | 24,590 | 24,756 | 3,206 | 57,052 |
| | | 1890 | 44,769 | 133 | 7,458 | 7,591 | 4,757 | 57,117 |
| Nali | Barani | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 14,892 | 1,459 | 42,011 | 43,470 | 3,039 | 61,401 |
| | | 1890 | 44,760 | 18 | 12,902 | 12,920 | 2,794 | 60,464 |
| | Sotar | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 58,457 | 5,645 | 97,001 | 102,546 | 11,310 | 172,315 |
| | | 1890 | 121,969 | 677 | 38,814 | 39,491 | 8,515 | 169,975 |
| | Total Circle | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 73,349 | 7,004 | 139,012 | 146,016 | 14,340 | 233,714 |
| | | 1890 | 166,719 | 695 | 51,716 | 52,411 | 11,309 | 230,439 |
| | Total Tahsil | 1840 | ... | ... | ... | ... | ... | ... |
| | | 1863 | 206,009 | 15,347 | 247,296 | 262,633 | 25,731 | 494,973 |
| | | 1890 | 366,651 | 1,668 | 91,863 | 93,631 | 29,653 | 489,835 |

Highest demand.

| SETTLEMENT. | Bagar Western. | Bagar Eastern. | Bagar Total Circle. | Hariana. | Nali Barani. | Nali Sotar. | Total Nali Circle. |
|---------------------------------------|----------------|----------------|---------------------|----------|--------------|-------------|--------------------|
| | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| 1st, 1815-24 ... | 8,058 | 1,935 | 9,993 | 1,925 | ... | ... | ... |
| 2nd, 1825-29 ... | 9,150 | 6,469 | 15,610 | 5,280 | ... | ... | ... |
| 3rd, 1830-39 ... | 9,320 | 10,274 | 19,594 | 6,850 | ... | ... | ... |
| Average of 5 years, 1835-39 ... | 8,605 | 10,028 | 18,633 | 6,820 | ... | ... | ... |
| 1st Revised demand, 1840 and 1852 ... | 12,785 | 10,255 | 23,040 | 6,680 | 6,314 | 40,919 | 47,233 |
| Settlement, 1860-63 ... | 15,713 | 9,675 | 25,388 | 7,762 | 6,163 | 30,125 | 36,288 |

Of the Fatehabad Pargana, corresponding to the present Bagar Circle, Mr. Brown wrote that it consisted of the lightest quality of bhur or loose sand: but the Revenue demand of former Settlements had fallen far short of the rapid increase in population and in cultivation, and was felt as a very moderate demand. The following table shows that the balances during the 5 years before 1840 had been only 24 per cent. of the demand.

Demand and Collections.

| Average demand of 10 years prior to 1840. | Average collections for that period. | Average demand of 5 years prior to 1840. | Average collections for that period. |
|---|--------------------------------------|--|--------------------------------------|
| Rs. | Rs. | Rs. | Rs. |
| 15,905 | 9,762 | 15,543 | 11,830 |

Mr. Brown, while taking into consideration the probable deterioration of soil in a bhur or Bagar tract, raised the new demand to 4 per cent. over the demand of the previous 5 years, and to 65 per cent. over the collections of the previous 10 years: and he considered that this demand still left the tract under-assessed with reference to its capabilities, and the certainty of their being speedily taken advantage of. The incidence of the new demand on cultivation was 5 annas 4 pies per acre and on the whole malguzari area 2 annas 3 pies.

The Agroha pargana was much larger than the Hariana Circle of Fatehabad, and it now lies in three Tahsils, and partly in the Bagar and partly in the Hariana Circles. The small Hariana Circle of Fatehabad which falls entirely within the old Agroha pargana is the most convenient place for giving an account of Mr. Brown's Settlement of this part. Settlers had resorted to this tract in any numbers only within the 15 years before 1840; and there had been a rapid improvement, so that the revenue demand was greatly below the scale of assessment of similar parts of the district. The tract lay between the older settled parganas to the east, and the extensive waste tracts in the Bhatti territory to the west; and he fixed the new demand as a medium between the higher assessment of the former and the very low terms which must necessarily prevail in the latter. He did not base his demand on the collections, as remissions had been given without consideration of the moderation of the demand. He fixed it at 94 per cent. over the 10 years' average collections and 7 per cent. over the average demand of the previous 5 years. The incidence on cultivation was 6 annas 11 pies per acre and on the malguzari area 2 annas 1 pie per acre.

17. The sanction of Government to Mr. Brown's Settlement was given in 1845, and the following extract is made from the order passed :—

Orders of Government on Mr. Brown's Settlement.

"The very large reductions made in this district were most wise and successful. It was vain to expect in such a country and such an arid climate that a high rate of Assessment, which was paid for a few years when the surrounding country was in a distracted state and the pargana for a time a place of refuge for the neighbourhood and when the soil was fresh and peculiarly productive, should be maintained when the introduction of order and settled rule in the vicinity withdrew a part of the population and when the soil had become exhausted. There is every reason to believe that the lightness of the present assessment will tend to fix the population, giving them habits of industry and application, and will confer on landed property a value that has long been unknown... The principles on which Mr. Brown fixed his assessment appear so fair and liberal that his jamas should not be reduced except on proof of some permanent error or mis-calculation."

There is no information as to how the Settlement worked. Between 1840 and 1863, 68 villages changed hands in the four Tahsils, but of these 47, which were settled in 1852 by Mr. Dumergue, had been sold or abandoned in the famine of 1850-51. No villages were sold in the Hansi and Hissar Tahsils for balance of revenue, and only 12 villages changed hands in these Tahsils. In Barwala and Fatehabad 9 villages were sold for balance or other causes. The people certainly considered Mr. Brown's Settlement as fair and moderate, and they look back to him with great respect as the first who conferred on them a definite title in their lands and confirmed them in possession by a fair assessment of the revenue.

18. The term of the Settlements made by Mr. Brown and Mr. Dumergue expired in 1860, and, as explained in para. 16 of the Summary Settlement of 1860-63. Bhiwani Report, a Summary Settlement made for 3 years by General Van Courtlandt filled the interval between these Settlements and the Settlement of 1863, now expiring. The following table shows, by Circles, the changes made by the Summary Settlement and also by the Regular Settlement of 1863.

| 1 | 2 | 3 | 4 | 5 | 6 |
|---------------|-------------|------------------------------|-----------|--------------------------------------|------------------------|
| Tahsil. | Circle. | Summary Settlement, 1860-63. | | Revenue prior to Settlement of 1863. | Revenue fixed in 1863. |
| | | Increase. | Decrease. | | |
| | | Rs. | Rs. | Rs. | Rs. |
| Hansi | Haryana ... | 1,625 | 6,392 | 1,60,209 | 1,41,739 |
| Hissar | Bagar ... | ... | 1,075 | 44,965 | 40,433 |
| | Haryana ... | 725 | 750 | 56,239 | 49,452 |
| Total | ... | 725 | 1,825 | 1,01,204 | 89,835 |
| Barwala... .. | Haryana ... | ... | ... | 34,165 | 32,875 |
| | Nali ... | ... | ... | 29,638 | 23,606 |
| Total | ... | ... | ... | 63,743 | 56,481 |
| Fatehabad ... | Bagar ... | 105 | ... | 24,765 | 25,388 |
| | Haryana ... | ... | ... | 7,475 | 7,762 |
| | Nali ... | 473 | 1,736 | 46,826 | 36,288 |
| Total | ... | 578 | 1,736 | 79,066 | 69,438 |

The increase taken in the Summary Settlement was entirely in barani villages; the decrease in Hansi was given only in Canal villages and in Fatehabad only in Nali villages. The object in view was merely the relief of villages over-assessed, and this explains why in the Barwala Tahsil and in the Fatehabad Bagar and Hariana, where cultivation had largely increased and the capabilities of the tract had improved, there was no enhancement of the revenue.

In columns 5 and 6 of the statement in the last para. are given the revenue demands before and after the Settlement of 1863. The figures in these columns do not agree with those in the corresponding columns of the statement at page 28 of Munshi Amin Chand's Report, as in all Tahsils the revenue of *maafi* plots had to be added (the statement giving only the assignments of whole villages) and in Hansi the villages transferred from Rohtak had to be included, and in Hissar one village had to be excluded as it forms part of the Government Cattle Farm.

19. In para. 19 of the Bhiwani Report the principles on which the Settlement of 1863 was made have already been stated. (See also paras. 83—86 of Munshi Amin Chand's printed report.) The demand in the Hariana and Bagar Circles of Fatehabad which were under-assessed by Mr. Brown and in which cultivation had increased more than 50 per cent. was left the same as before, the small increase shown being the result of the resumption of Revenue Assignments. In every other Circle there was a reduction, even in the Hariana of Barwala where cultivation had increased 55 per cent. and where there was no complication arising from the Canal or the Ghaggar. Of the total reduction of Rs. 46,679 given in the four Tahsils, Rs. 17,566 was in Canal and Rs. 12,420 in Nali villages, leaving only Rs. 16,693 for the barani villages; and this, though the Canal and Nali villages had already got a substantial reduction of revenue in the Summary Settlement. In spite of the rule that the Government demand was to be one-half, instead of $\frac{2}{3}$, of the net produce, I think the demand existing before 1863 might have been maintained, and relief given where it was necessary by a redistribution of the revenue, which was certainly called for.

20. A light assessment such as was imposed in 1863 could not but work well. The demand was on the whole very fairly distributed, though there are instances of exceptionally low revenue for which no explanation is now forthcoming. The following table giving the suspensions and remissions of revenue during the expiring Settlement shows that only on 5 occasions was the demand not collected at the fixed dates:—

| Year of Instalment. | Tahsil. | Amount suspended. | No. of villages concerned. | Amount collected. | Up to what time collected. | Amount remitted. | When remitted. |
|---------------------|------------------|-------------------|----------------------------|-------------------|----------------------------|------------------|----------------|
| | | | | Rs. | | Rs. | |
| Kharif, 1864 | Barwala | 750 | 2 | ... | ... | 750 | January 1865. |
| " | Fatehabad | 2,014 | 3 | ... | ... | 2,014 | Do. |
| Kharif, 1868 | Hansi | 29,886 | 67 | 24,131 | December 1869 ... | 5,755 | January 1870. |
| " | Hissar | 1,870 | 6 | 1,620 | January 1870 ... | 250 | Do. |
| " | Barwala | 2,047 | 7 | 2,047 | May 1870 | ... | ... |
| Rabi, 1869 | Hansi | 355 | 3 | 355 | December 1869 ... | ... | ... |
| " | Barwala | 1,334 | 7 | 1,334 | June 1870 | ... | ... |
| " | Fatehabad | 790 | 3 | 115 | December 1869 ... | 675 | January 1870. |
| Kharif, 1871 | Hansi | 7,484 | 18 | 7,484 | December 1872 ... | ... | ... |
| " | Hissar | 6,317 | 25 | 6,317 | " | ... | ... |
| " | Barwala | 4,243 | 15 | 4,243 | " | ... | ... |
| " | Fatehabad | 3,167 | 11 | 3,167 | August 1872 ... | ... | ... |
| Rabi, 1884 | Hansi | 1,392 | 6 | 1,392 | November 1884 ... | ... | ... |
| " | Barwala | 4,779 | 23 | 4,779 | " | ... | ... |

At first the tendency was to remit rather than suspend. The remission of Rs. 2,764 for the Kharif of 1864 was granted before the nature of the next Kharif was known. Since 1869 there have been no remissions, and the suspensions made in 1871 and 1884 were promptly collected. The remissions and suspensions were mostly in Rajput Muhammadan and Pachadha villages, and these are the classes that will have trouble in paying, or at least will give trouble in collecting, the new enhanced demand. I have nothing to add on this subject or on the issue of coercive processes for the collection of the revenue beyond what has been noted in paras. 21 and 22 of the Bhiwani Report.

21. The following Statement shows for each Circle in each Tahsil the Revenue now under revision, revenue fixed in 1863, and the changes that have taken place since, and the revenue according to the Rent-Roll of 1889-90 :—

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---------------|-------------|------------------|--------|----------|--|---|---------------------|--------|----------|
| Tahsil. | Circle. | Revenue of 1863. | | | Increase in Khalsa from resumption of manas. | Reduction in Khalsa on land acquired for public purposes. | Revenue of 1889-90. | | |
| | | Khalsa. | Maafi. | Total. | | | Khalsa. | Maafi. | Total. |
| | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Hansi... | Haryana ... | 1,40,656 | 1,083 | 1,41,739 | 107 | 268 | 1,40,405 | 976 | 1,41,471 |
| Hissar ... | Bagar ... | 40,433 | ... | 40,433 | ... | 56 | 40,397 | ... | 40,397 |
| | Haryana ... | 48,851 | 601 | 49,452 | 266 | 251 | 48,866 | 360 | 49,226 |
| Total ... | ... | 89,284 | 601 | 89,885 | 266 | 287 | 89,263 | 360 | 89,623 |
| Barwala ... | Haryana ... | 32,875 | ... | 32,875 | ... | ... | 32,875 | ... | 32,875 |
| | Nali ... | 23,456 | 150 | 23,606 | ... | 32 | 23,424 | 150 | 23,574 |
| Total ... | ... | 56,331 | 150 | 56,481 | ... | 32 | 56,299 | 150 | 56,449 |
| Fatehabad ... | Bagar ... | 24,254 | 1,134 | 25,388 | 406 | 54 | 24,136 | 728 | 24,864 |
| | Haryana ... | 7,210 | 522 | 7,732 | 209 | ... | 7,449 | 313 | 7,762 |
| | Nali ... | 35,655 | 633 | 36,288 | 214 | 15 | 35,854 | 419 | 36,273 |
| Total ... | ... | 67,149 | 2,289 | 69,438 | 829 | 69 | 67,439 | 1,460 | 68,899 |

The revenue in column 10 is the revenue now undergoing revision. In the Khalsa of Hansi and of Fatehabad two sums of Rs. 30 and Rs. 630 respectively have been included, though they are not paid into the Treasury. These sums are the revenue paid in 1861 on account of two pieces of land in Hansi adjoining the residences of the Skinner family and of the village of Badopal in Fatehabad, which revenue was in 1861 redeemed under Government Resolution of 17th October 1861. These lands still belong to the Skinner family who pay only cesses on the revenue demand of 1861. The village of Badopal was assessed in 1863 at Rs. 1,100; and this is included in column 3 of the statement, but, as cesses have been taken only on Rs. 330 and as this sum is for this purpose shown in the rent-roll, a sum of only Rs. 630 is shown in column 8. The demands for the Hansi and Hissar Tahsils include Rs. 44,136 and Rs. 5,008 respectively on account of water advantage.

PART III.

GENERAL STATISTICS.

22. As a preface to this Part a statement is given showing the percentages of areas according to classes for each Circle and Tahsil.

Percentages of areas by Classes and Circles.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|--------------------------|----------------|---------|--------|--------|--------|--------|-------------------|------------|--------|---------------|
| Tahsil. | Circle. | Barani. | Sotar. | Nahri. | Chahi. | Total. | Lately abandoned. | Old waste. | Total. | Unculturable. |
| Hansi | Haryana | 67.1 | ... | 12.3 | ... | 79.4 | 0.5 | 13.4 | 13.9 | 6.7 |
| Hisar | Bagar | 77.6 | ... | ... | ... | 77.6 | 0.7 | 18.6 | 19.3 | 3.1 |
| | Haryana | 73.3 | ... | 3.5 | ... | 76.8 | 0.2 | 18.6 | 18.8 | 4.4 |
| | Total | 75.5 | ... | 1.7 | ... | 77.2 | 0.5 | 18.6 | 19.1 | 3.7 |
| Barwala | Haryana | 79.5 | ... | ... | ... | 79.5 | 0.1 | 16.0 | 16.1 | 4.4 |
| | Nali | 52.0 | 10.5 | ... | 0.2 | 62.7 | ... | 30.8 | 30.8 | 6.5 |
| | Total | 66.7 | 4.9 | ... | 0.1 | 71.7 | 0.1 | 22.8 | 22.9 | 4.5 |
| Fatehabad | Bagar | 76.7 | ... | ... | ... | 76.7 | 0.4 | 16.2 | 16.6 | 6.7 |
| | Haryana | 78.3 | ... | ... | ... | 78.3 | 0.2 | 13.2 | 13.4 | 8.3 |
| | Nali | 56.4 | 15.7 | ... | 0.2 | 72.3 | 0.3 | 22.5 | 22.8 | 4.9 |
| | Total | 67.4 | 7.3 | ... | 0.1 | 74.8 | 0.3 | 18.8 | 19.1 | 6.1 |
| Total of four tahsils... | ... | 69.4 | 2.9 | 3.7 | 0.1 | 76.1 | 0.4 | 18.1 | 18.5 | 5.4 |

The Haryana tracts in Hansi and Barwala are the most advanced, and the Nali Circle in both Barwala and Fatehabad is the most backward, especially in Barwala, where only .63 is cultivated, against an average in the four Tahsils of .76. It is only in the Nali Circle that the available waste exceeds one-fifth of the whole area.

23. One great peculiarity of this district as compared with most Punjab districts is the large number of villages belonging to single proprietors, or to several proprietors holding in common. Of the 559 villages in the four Tahsils, no fewer than 172 are zemindari; 64

belonging to the Skinner family; 27 to Mahajans; 34 to Jats; 10 to Pathans; and the rest to Saiyads, Ranghars, and others.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------------------|----------------|----------------------------|---------------------|--------------------------------|---------------------|--------------------------------|---------------------|--------------------------------|
| TAHSIL. | Circle. | No. of villages in Circle. | Zamindari. | | Pattidari. | | Bhayachara. | |
| | | | Number of villages. | Percentage of cultivated area. | Number of villages. | Percentage of cultivated area. | Number of villages. | Percentage of cultivated area. |
| Hansi | Haryana | 125 | 22 | 13.0 | 17 | 12.6 | 86 | 74.4 |
| Hissar | Bagar | 59 | 16 | 20.5 | 12 | 14.8 | 31 | 64.7 |
| | Haryana | 78 | 26 | 31.2 | 11 | 12.1 | 41 | 56.7 |
| Barwala | Haryana | 45 | 10 | 11.0 | 4 | 5.5 | 21 | 83.5 |
| | Nali | 94 | 45 | 34.3 | 19 | 29.4 | 30 | 36.3 |
| Fatehabad | Bagar | 51 | 13 | 26.2 | 7 | 16.7 | 31 | 57.1 |
| | Haryana | 14 | 5 | 18.4 | ... | ... | 9 | 81.6 |
| | Nali | 93 | 35 | 32.8 | 19 | 33.6 | 39 | 33.6 |

This table gives the percentage of the cultivated area of each Circle lying in each class; and in general statement No. II the same information has been given for each sub-division of a Circle, as the proportion of cultivated area in the zamindari and pattidari villages has a very direct bearing on the rent rates, and the present assessment is based almost exclusively on these rates. There cannot be much doubt about the real value of land to a tenant-at-will in the Hissar Haryana, Fatehabad Eastern Bagar and the barani part of the Nali Circle, where from 30 to 60 per cent. of the whole cultivated area lies in zamindari villages.

24. In statement No. II for each Tahsil, the details of ownership by castes have been given for each sub-division of a Circle; and these statements are abstracted in the following table:

Ownership by castes.

The Hansi Tahsil is most fortunate in its owners: more than half belongs to Jats, and the next largest proprietor is the Skinner family. The Rajputs have .08 of the Tahsil, but they are mostly in the Barani villages. In the Canal villages they own only .01 and there the Skinner family has .21, the Ranghars having parted with their land to Colonel Skinner. In the Hissar Tahsil, in both Circles, Ranghars hold considerable areas, and the Skinner family have one-fourth of the whole Haryana Circle. The Haryana of Barwala comes nearest Hansi in the classes of its owners as in other respects. In the Nali of Barwala, the Pachadhas first of all appear. I would willingly avoid the use of this name, for the people to whom it is applied do not like it (see para. 81 of Wilson's Sirsa Report), but they are a distinct class for whom no other general name exists. They call themselves Chauhan Rajputs, or describe themselves by their clans Jhorar, Bhaneka, Sukhera. There is an immense difference between the Ranghar, or Musalman Rajput, and the Pachadha. The latter is a wretched cultivator, but a good breeder and grazier of cattle, and a perfect cattle-lifter. The Ranghar is a better cultivator, not to any extent a cattle-breeder, but given to cattle-lifting. His redeeming feature is his capacity for service, especially as a cavalry soldier. The Pachadha, on the other hand, is generally wanting in self-respect and is unfit for service of any kind. Both are improvident to a degree: but, while we would foster the Ranghar on account of his good qualities, there is scarcely a reason for showing any consideration to the Pachadha. Pachadhas are found only in the Barwala and Fatehabad Tahsils, and principally in the Nali Circles where the grazing is good. Many of the zamindari villages now belonging to the Skinner family and to Mahajans belonged to them; and they still cultivate much of the land in these villages. They are never found in the real Bagar which is not a good grazing country, but they hold several villages in the eastern part of the Fatehabad Bagar which resembles the Haryana more than the Bagar.

25. The average cultivated area per proprietary holding and per owner has been given, but the large number of Zamindari villages, and also the large area held in some circles by Kadim-Kirsan (Malik-Kabza—see para. 24 of the Bhiwani Report) vitiate the result, and no correct conclusion can be drawn from the figures. Excluding all malik-kabza, the following statement gives the size of proprietary holdings belonging to the three principal classes:—

| | Hansi. | Hissar. | | Barwala. | | Fatehabad. | | |
|-----------------------------|----------|---------|----------|----------|-------|------------|----------|-------|
| | Haryana. | Bagar. | Haryana. | Haryana. | Nali. | Bagar. | Haryana. | Nali. |
| Jat— | | | | | | | | |
| Part of tahsil owned ... | .56 | .43 | .34 | .52 | .27 | .44 | .58 | .17 |
| Cultivated area per holding | 25 | 64 | 30 | 27 | 21 | 52 | 54 | 43 |
| Cultivated area per owner, | 18 | 47 | 25 | 20 | 13 | 41 | 40 | 29 |
| Rajput— | | | | | | | | |
| Part of tahsil owned ... | 0.8 | .14 | .11 | .14 | .12 | .002 | .05 | .05 |
| Cultivated area per holding | 27 | 48 | 70 | 56 | 47 | 63 | 291 | 52 |
| Cultivated area per owner, | 17 | 32 | 49 | 34 | 32 | 55 | 102 | 33 |
| Pachadha— | | | | | | | | |
| Part of tahsil owned ... | ... | ... | ... | ... | .10 | .10 | .01 | .31 |
| Cultivated area per holding | ... | ... | ... | ... | 17 | 48 | 18 | 25 |
| Cultivated area per owner, | ... | ... | ... | ... | 11 | 20 | 17 | 14 |

The normal cultivated area for a proprietor may be taken as 25 acres per holding and 18 acres per owner. These are the averages in Hansi where there are only 3 zamindari villages belonging to Jats. For the Bagar, these areas may be doubled. In all cases the holdings are large: in not a single instance has sub-division reached a stage that makes it difficult for a biswahdar to live on his holding. The only possible fear in this district for some time to come must be whether there is a sufficient number of tenants to cultivate the land which the biswahdars cannot themselves cultivate. On this score, however, I do not think there need be any anxiety. The average size of a tenant's holding is only 8 acres; in the Bagar it is 13 acres; and this shows a sufficient demand for land. Rents are also rising which indicates competition for land.

26. In the Preliminary Report details were given for each sub-division of a Circle in regard to cultivating possession, and in Statement No. III for each Tahsil the information has been again repeated. An abstract of the information is given by Circles in the following table:

Percentage of area cultivated.

| Tahsil. | Circle. | | By full proprietors. | By malik-kabza. | Total by proprietors. | By occupancy tenants. | By tenants-at-will. | Khudkashit area (excluding malik-kabza). | | |
|-----------|---------|---------|----------------------|-----------------|-----------------------|-----------------------|---------------------|--|------------|----|
| | | | | | | | | Per hold- ing. | Per owner. | |
| | | | | | | | | Acres. | Acres. | |
| Hansi | ... | Hariana | ... | 58.2 | 3.5 | 61.7 | 9.6 | 28.7 | 18 | 13 |
| Hissar | ... | Bagar | ... | 26.6 | 19.2 | 45.8 | 8.9 | 40.7 | 24 | 17 |
| | | Hariana | ... | 27.6 | 12.7 | 40.3 | 15.7 | 44.0 | 16 | 13 |
| Barwala | ... | Hariana | ... | 53.4 | 4.2 | 57.6 | 7.3 | 35.1 | 19 | 14 |
| | | Nali | ... | 42.2 | 0.2 | 42.4 | 8.1 | 49.5 | 14 | 9 |
| Fatehabad | ... | Bagar | ... | 29.6 | 8.9 | 38.5 | 18 | 43.5 | 25 | 16 |
| | | Hariana | ... | 29.9 | 11.7 | 41.6 | 19 | 39.4 | 24 | 17 |
| | | Nali | ... | 38.9 | ... | 38.9 | 13.9 | 47.2 | 19 | 12 |

The Hansi and Barwala Hariana Circles have the largest proportion cultivated by the owners; and the areas per holding and per owner are almost the same. In the Fatehabad Hariana, the Khud-Kasht average per holding is large, and, for a Circle in which the Jats have no zamindari villages, the size of a Jat proprietary holding is also large; but in spite of this the fallow area during the last four years is under the average of other similar tracts. There never seems to be any difficulty in getting tenants. The size of Khud-Kasht holdings is larger in the Bagar than in the Hariana, as was to be expected from the light nature of the soil. The average size of a Khud-Kasht holding of a Malik Kabza is from 5 to 8 acres; and of an occupancy tenant 8 acres in the Hariana to 13 acres in the Bagar. Hence large part of the land cultivated by tenants-at-will is really in the hands of Kadim-kirsan and occupancy tenants. In the Skinner estate, the occupancy tenants who always have small holdings are driven to pay any rent that is demanded for the land they want in addition to their occupancy holdings. They cannot leave the village, and must submit to any terms the landlord is willing to give.

27. The population in the Hansi Tahsil was practically stationary between 1868 and 1881; the increase was only 3 per cent. There was a decrease in the town of Hansi, and also in the Canal villages; but an increase in the barani villages, specially in the eastern part. There can be no doubt that the Canal villages, including Hansi, are not so healthy as the Barani villages. In some parts the land is water-logged, and an enquiry recently made by the Deputy Sanitary Commissioner shows that the people are subject to malarious fever, weak, and anaemic. Steps are being taken to prevent excessive irrigation, but no good can result for several years.

In Hissar Tahsil population fell from 107,442 in 1868 to 98,106 in 1881. The details show that it was stationary in the town of Hissar, but that there was a decrease in every other part of the Tahsil; in the Bagar as much as 13 per cent. and in Hariana 8 per cent. Mr. Ibbetson in the Census Report ascribed the small increase in the Hissar district as a whole to the ravages of disease and famine especially in 1878-79; but he also noted that before 1868 there was enormous immigration, and since that year the district had been losing by emigration. This stream of emigration was from west to east: many went to Patiala and the Ferozpur canals, but some halted nearer home and did not get beyond the Barwala and Fatehabad Tahsils. The decrease in the Bagar may be also in part ascribed to the bad seasons in 1880-81, and to the fact that the Census was taken in winter when there is no crop on the ground, and all spare hands are absent with their camels on hire.

In Fatehabad Tahsil, where the population may be regarded as entirely rural, there was an increase of 16 per cent.; and the greater part of this was in the Nali Circle, where the cultivation has more than doubled since Settlement. So, in the Barwala Tahsil there was an increase of 19 per cent.; and in the Barwala Nali the increase was 32 per cent.

On the whole it may be taken that population is increasing. The special emigration towards the Canal-irrigated tracts has probably ceased, at all events the stream of emigration will soon be towards the Indri-Sirsa Canal, and will not go beyond the district. Population is least dense in the Bagar, where it is only 98 per square mile; and most dense in the canal villages of Hansi where it is 175 per square mile. Hansi Tahsil as a whole is the most densely populated, but the rate per square mile is only 160.

28. In Tahsil Statements No. IV. A., B., C., full details have been given of the sales and mortgages of land in the circles and their sub-divisions. The following table is an abstract of the areas alienated. The Bhiwani figures have been added for convenience of reference.

Percentages of cultivation alienated.

| Tahsil. | Circle. | Sold since 1863. | | | | Mortgaged. | | | | Total sold and mortgaged. | Area left in hands of original owners. |
|------------------|----------------|-----------------------------------|--------------------------------------|-------------------|--------|-----------------------------------|--------------------------------------|-------------------|--------|---------------------------|--|
| | | To agriculturists of the village. | To agriculturists of other villages. | To money-lenders. | Total. | To agriculturists of the village. | To agriculturists of other villages. | To money-lenders. | Total. | | |
| Hansi | Hariana | 2.6 | 0.5 | 1.4 | 4.5 | 1.8 | 0.4 | 2.1 | 4.3 | 8.8 | 91.2 |
| Hissar | Bagar | 4.8 | 2.0 | 2.3 | 9.1 | 1.8 | 0.6 | 2.1 | 4.5 | 13.6 | 86.4 |
| | Hariana | 3.1 | 0.5 | 2.2 | 5.8 | 1.2 | 0.4 | 2.1 | 3.7 | 9.5 | 90.5 |
| Barwala | Hariana | 1.3 | 0.1 | 0.3 | 1.7 | 0.7 | 0.3 | 1.8 | 2.8 | 4.5 | 95.5 |
| | Nali | 0.5 | 0.1 | 0.1 | 0.7 | 0.6 | 0.8 | 0.2 | 1.6 | 2.3 | 97.7 |
| Fatehabad | Bagar | 4.6 | 1.5 | 1.1 | 7.2 | 1.2 | 1.2 | 0.9 | 3.3 | 10.5 | 89.5 |
| | Hariana | 0.8 | 0.3 | 0.1 | 1.2 | 0.6 | 0.6 | 1.4 | 2.6 | 3.8 | 96.2 |
| | Nali | 3.9 | 2.0 | 4.7 | 10.6 | 0.9 | 0.3 | 1.8 | 3.0 | 13.6 | 86.4 |
| Bhiwani | Bagar | 2.0 | 0.8 | 0.8 | 3.6 | 2.0 | 0.5 | 1.9 | 4.4 | 8.0 | 92.0 |
| | Hariana | 1.9 | 0.3 | 2.6 | 4.8 | 9.2 | 2.1 | 9 | 20.3 | 25.1 | 74.9 |

In none of the four Tahsils is there at present any cause for anxiety; in no circle have the alienations been so great as in Hariana Circle of the Bhiwani Tahsil; and the actual circumstances of the four Tahsils now under consideration are better even than the figures would show. The transfer of a whole village or a share of a village from one absentee land-lord to another does not imply the economic conditions or political consequences which attend the alienation to money-lenders of small holdings belonging to the resident Rajput and other cultivators. Again in this district holdings are large, and no great harm is done by their sub-division and transfer of part to agriculturists. It is only in mortgages that the Bhiwani Hariana differs materially from the Hansi Hariana which it most resembles. It has been suggested that the Bhiwani mortgages are only for short periods, as the mortgage money is much below the actual value. An examination of the mortgage deeds in the registration office shows that in Bhiwani many mortgages have been redeemed; but the statistics still prove that mortgagors do not redeem their land when the mortgage money is far short of the value and when by selling part they might redeem the rest. They hope in time to redeem the whole, and, so long as they are allowed to cultivate the land on payment of the ordinary rent, they have little inducement to redeem, unless they have spare money in hand which is very rarely the case. The rent is not more than sufficient to cover the revenue and the interest on the mortgage money; and they would not gain much, if anything, by borrowing money to pay the mortgagee. When rents rise and the owners are to be ousted from their land, then they will think of selling and redeeming. But, whether the mortgages are for short or long periods, there certainly exists in the Bhiwani Tahsil a degree of indebtedness that is not found in the other Tahsils.

29. The following statement shows by periods the sales, mortgages, Sales and mortgages by and consideration-money, for each Circle and Tahsil:—
periods.

Sales and mortgages by periods.

| TAHSIL. | CIRCLE. | PERIOD. | SALES SINCE 1863. | | | | | MORTGAGES NOW EXISTING. | | | | |
|---------|---------|------------------|-----------------------|---------------|-------------------------|----|----|----------------------------|----------------|-------------------------|----|----|
| | | | Cultivated area sold. | Consideration | Consideration per acre. | | | Cultivated area mortgaged. | Consideration. | Consideration per acre. | | |
| | | | | | Rs. | A. | P. | | | Rs. | A. | P. |
| Hansi | Hariana | Up to 1881 | 5,590 | 72,734 | 13 | 0 | 2 | 6,423 | 41,537 | 6 | 7 | 5 |
| | | For 1882 to 1885 | 5,586 | 60,995 | 10 | 14 | 8 | 2,331 | 15,631 | 6 | 11 | 3 |
| | | For 1886 to 1890 | 5,523 | 68,730 | 12 | 7 | 1 | 7,327 | 57,118 | 7 | 12 | 8 |
| | | Total | 16,699 | 2,02,459 | 12 | 2 | 0 | 16,083 | 1,14,286 | 7 | 1 | 9 |
| | Bagar | Up to 1881 | 11,125 | 34,983 | 3 | 2 | 3 | 2,643 | 7,701 | 2 | 14 | 7 |
| Hisar | Bagar | For 1882 to 1885 | 2,376 | 10,569 | 4 | 7 | 2 | 1,059 | 3,739 | 3 | 8 | 6 |
| | | For 1886 to 1890 | 4,022 | 23,336 | 5 | 12 | 10 | 4,848 | 17,861 | 3 | 10 | 11 |
| | | Total | 17,523 | 68,893 | 3 | 14 | 11 | 8,550 | 29,301 | 3 | 6 | 9 |
| | Hariana | Up to 1881 | 5,459 | 74,634 | 13 | 10 | 9 | 3,001 | 20,527 | 6 | 13 | 5 |
| | | For 1882 to 1885 | 2,330 | 26,556 | 11 | 6 | 4 | 776 | 8,379 | 10 | 12 | 9 |
| | | For 1886 to 1890 | 3,025 | 71,918 | 23 | 12 | 5 | 3,066 | 31,783 | 10 | 5 | 10 |
| | | Total | 10,814 | 1,83,108 | 16 | 14 | 11 | 6,843 | 60,689 | 8 | 13 | 10 |
| Barwala | Hariana | Up to 1881 | 1,856 | 9,163 | 4 | 15 | 0 | 393 | 2,548 | 6 | 11 | 10 |
| | | For 1882 to 1885 | 174 | 1,014 | 5 | 13 | 3 | 2,340 | 15,792 | 6 | 12 | 0 |
| | | For 1886 to 1890 | 593 | 6,446 | 10 | 13 | 11 | 1,508 | 10,115 | 6 | 11 | 4 |
| | | Total | 2,623 | 16,623 | 6 | 5 | 5 | 4,241 | 28,555 | 6 | 11 | 9 |
| | Nali | Up to 1881 | 215 | 3,173 | 14 | 12 | 6 | 316 | 4,010 | 12 | 11 | 1 |
| | Nali | For 1882 to 1885 | 304 | 4,192 | 13 | 12 | 8 | 422 | 4,504 | 10 | 14 | 9 |
| | | For 1886 to 1890 | 253 | 7,324 | 28 | 15 | 2 | 937 | 14,492 | 15 | 7 | 5 |
| | | Total | 772 | 14,694 | 19 | 0 | 6 | 1,675 | 23,106 | 13 | 12 | 10 |

Sales and mortgages by periods.—(Concluded).

| TAHSIL. | CIRCLE. | PERIOD. | SALES SINCE 1863. | | | | MORTGAGES NOW EXISTING. | | | |
|---------------|-------------|------------------|-----------------------|----------------|-------------------------|-------|----------------------------|----------------|-------------------------|-------|
| | | | Cultivated area sold. | Consideration. | Consideration per acre. | | Cultivated area mortgaged. | Consideration. | Consideration per acre. | |
| | | | Acres. | Rs. | Rs. | A. P. | Acres. | Rs. | Rs. | A. P. |
| Fatehabad ... | Bagar ... | Up to 1881 ... | 6,357 | 30,430 | 4 | 12 7 | 531 | 1,944 | 3 | 10 7 |
| | | For 1882 to 1885 | 1,834 | 12,897 | 7 | 0 6 | 984 | 6,005 | 6 | 1 8 |
| | | For 1886 to 1890 | 3,017 | 34,742 | 11 | 8 3 | 3,619 | 20,332 | 5 | 9 11 |
| | Total ... | ... | 11,208 | 78,069 | 6 | 15 5 | 5,134 | 28,281 | 5 | 8 2 |
| | Hariana ... | Up to 1881 ... | 148 | 904 | 5 | 1 8 | 226 | 606 | 2 | 10 11 |
| | | For 1882 to 1885 | 249 | 1,293 | 5 | 3 1 | 353 | 1,808 | 5 | 0 10 |
| | | For 1886 to 1890 | 133 | 1,746 | 13 | 2 1 | 594 | 4,164 | 7 | 0 2 |
| | Total ... | ... | 530 | 3,943 | 7 | 7 0 | 1,173 | 6,578 | 5 | 9 4 |
| | Nali ... | Up to 1881 ... | 10,215 | 67,814 | 6 | 10 2 | 238 | 3,465 | 14 | 8 11 |
| | | For 1882 to 1885 | 4,063 | 39,395 | 9 | 13 5 | 3,175 | 34,715 | 10 | 14 11 |
| | | For 1886 to 1890 | 3,439 | 54,441 | 15 | 13 3 | 1,525 | 21,948 | 14 | 6 3 |
| | Total ... | ... | 17,657 | 1,61,650 | 9 | 2 2 | 4,938 | 60,128 | 12 | 2 10 |

NOTE.—The sales are only since 1863; but the mortgages are all now existing even though entered into before 1863.

The abnormally large areas sold in the Hissar Bagar and Fatehabad Nali before 1880 are explained by the facts that shares in Zamindari villages were transferred, and that in the Fatehabad Nali the Sukhlambar maafidars often sell their land as soon as the assignment has been resumed. Of the 11,125 acres sold in Hissar Bagar, 3,001 acres were in four villages, and half of the whole area was sold to agriculturists of the village. So in the Nali 6,079 out of 10,215 acres lie in four villages. The sales in the four Tahsils during the last nine years amounted to 36,862 acres, as compared with 40,965 acres for the period from 1863 to 1881, and it cannot be said that there has been any increase in the rate of transfer by sale. It is different, however, with mortgages. The area mortgaged up to 1881 was 13,773 acres, and in the nine following years it was 34,869 acres. The money lender had scarcely got into the Barwala and Fatehabad Tahsils in 1881, but he has now established a firm footing. The most serious fact in connection with the alienations of land is that the land of certain classes is passing out of their hands much more rapidly than the area held by them would justify. Musalman Rajputs (Ranghars) hold only .08 of the Hansi Tahsil, but of the area sold .17, and of the area mortgaged .39, belonged to them, so that this class has sold twice as much, and mortgaged five times as much, as their share in the Tahsil would justify. It is the same in Hissar, and Barwala. There is not the same cause for regret that the absentee sukhlabars are rapidly transferring their rights to residents: and the Pachadhas are so utterly bad cultivators that, but for the political aspect of the matter, a transfer of their land to any other class would be a decided improvement.

30. As regard price, there is a marked increase in the value of land during the last 10 years, and especially during the last 5 years. To show the difference in value between the northern and southern Bagar in Hissar, it will be noted that the price of land in the former is Rs. 5-6-0 per acre, and only Rs. 2-11-0 in the latter: so in the Fatehabad Eastern Bagar it is Rs. 4-6-0 and in the Western Rs. 8-9-0. In the other sub-divisions of circles, the difference is not so marked. The proportion of purchase money to the revenue is

| | | | | | | | |
|-------------|---------|-----|-----|-----|-----|-----|-----------|
| In Hansi | Haryana | ... | ... | ... | ... | ... | 41 times. |
| „ Hissar | „ | ... | ... | ... | ... | ... | 55 „ |
| „ Barwala | „ | ... | ... | ... | ... | ... | 31 „ |
| „ Fatehabad | „ | ... | ... | ... | ... | ... | 38 „ |
| „ Hissar | Bagar | ... | ... | ... | ... | ... | 28 „ |
| „ Fatehabad | „ | ... | ... | ... | ... | ... | 39 „ |
| „ Barwala | Nali | ... | ... | ... | ... | ... | 83 „ |
| „ Fatehabad | „ | ... | ... | ... | ... | ... | 43 „ |

The area sold in the Barwala Nali is small, and the price paid was abnormal.

31. In the tables in paras. 13, 14, 15, and 16, the cultivated areas in 1840, 1863, and 1890, have been given. There has been an increase from period to period, and the increase since 1863 is in some circles very great. The Hansi Tahsil had more than doubled its cultivation between 1840 and 1863, and the increase during the expiring Settlement has been only 35 per cent. There was no great increase in Hissar before 1863, but the increase since has been 36 per cent. These two tahsils had at a somewhat early time reached a fair degree of development. The Fatehabad and Barwala Tahsils were more backward, at least, in their northern parts; and in the Nali circles of these tahsils, which border on Patiala, cultivation has more than doubled since 1863, and it is in these circles that there still is relatively the largest area of culturable waste. In Barwala it is almost one-third and in Fatehabad it is more than one-fourth of the whole culturable area.

32. The Western Jumna Canal runs through Hansi and Hissar Tahsils, and just into Fatehabad, to which Tahsil it was extended rather to supply drinking water than with the intention of irrigation. The areas irrigated are given below:—

| TAHSIL. | | | | Irrigated in 1863. | Irrigated in 1890. |
|-----------|-----|-----|-----|--------------------|--------------------|
| | | | | Acres. | Acres. |
| Hansi | ... | ... | ... | 53,020 | 58,323 |
| Hissar | ... | ... | ... | 6,282 | 8,542 |
| Fatehabad | ... | ... | ... | ... | 55 |

The increase in area is not great, nor is any attempt to extend it advisable. This district lies at the end of the Canal, and it is not unfrequently impossible for the Canal Department to give the required quantity of water. Complaints are often made and are, no doubt, more or less correct that, while water is plentiful at the sowing time, it is scarce at the ripening time, when so much depends on it. There is certainly waste of water in the villages above Hansi which grow rice to a large extent, and which in consequence are becoming white with efflorescence. The level of the canal has also been raised, and this entails some percolation and stagnation of water near it. A reference has recently been made on this subject, proposing to prohibit the irrigation of rice on the old branch of the Canal, as it will be prohibited on the new Indri-Sirsa Branch.

33. The following table shows that irrigation from wells practically does not exist in the Bagar and Haryana Circles, and to a very limited extent in the Nali Circle:—

Area irrigated from wells.

| Tahsil. | Circle. | 1863. | 1885-86. | 1886-87. | 1887-88. | 1888-89. | 1889-90. | Total of last 5 years. | Average. |
|----------------|--------------|--------|----------|----------|----------|----------|----------|------------------------|----------|
| | | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Hansi | Haryana ... | 58 | 37 | 36 | 24 | 28 | 25 | 150 | 30 |
| Hissar | Bagar | 28 | 19 | 12 | 6 | 17 | 18 | 72 | 14 |
| | Haryana ... | ... | ... | 1 | 2 | ... | ... | 3 | 1 |
| Barwala | Haryana ... | 16 | ... | 5 | ... | 5 | 6 | 16 | 3 |
| | Nali | 634 | 324 | 305 | 47 | 63 | 936 | 1,681 | 336 |
| Fatehabad ... | Bagar | ... | 4 | 7 | 1 | 1 | 1 | 14 | 3 |
| | Haryana ... | 1 | ... | ... | ... | ... | ... | ... | ... |
| | Nali | 670 | 267 | 737 | 211 | 255 | 439 | 1,909 | 382 |

In the Nali, the area irrigated depends almost entirely on the season. The rains were favourable in 1887-88 and 1888-89, and the area on wells is, therefore, far below the average. The present year, 1889-90, though fairly good in Fatehabad, was very bad in Barwala, where the comparatively large area of 936 acres was irrigated. For reasons given in the Preliminary Report, it has been proposed not to put a special assessment on well-irrigated land, and it is unnecessary, therefore, to go into further details.

34. There is a great difference between the floods in Barwala and Fatehabad and those in Sirsa. In these two Tahsils the river flows between banks which are generally above the level of the surrounding country, and so the inundation extends only to the comparatively small area between the banks, and to depressions which are filled by natural or artificial channels taking out of the main stream. Near Ratia there is more of a valley, and the inundated area becomes wider; but it again contracts, and it is not until the stream reaches Channal and Dhanūr that it spreads itself over large shallow depressions; and it is only below this that the villages with fluctuating assessment are found. A steady flow on the Ghaggar would inundate a large area in Sirsa; but in such a year the Barwala villages and many in Fatehabad also would be left high and dry. To flood any considerable area in these Tahsils, the river must be in flood, and overflow its banks, and fill the Choya and Rangoi.

35. The Nali sub-division in Fatehabad contains 68 villages which now are, or once were, subject to the Ghaggar and Choya floods. Of these, 37 are on the Ghaggar, 3 are mostly dependent on the Rangoi, and 28 entirely on the Choya. Some are not now flooded at all, and others to such a small extent, or at such long intervals, that the Sotar area in them may be neglected. The area according to the new records is 36,136 acres. The areas of former years are as under:—

| At settle- ment. | Average from 1877 to 1884. | 1885-86. | 1886-87. | 1887-88. | 1888-89. | 1889-90. |
|---------------------|-------------------------------------|----------|----------|----------|----------|----------|
| Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| 15,196 | 16,854 | 22,401 | 26,820 | 34,169 | 33,911 | 24,168 |

The area varies much from year to year; in 1877-78, it was only 9,550, and in 1883-84, it was 12,647 acres; and even these areas were probably much greater than the actually flooded areas.

The area of 36,136 acres may be regarded as the maximum of possible irrigation. The floods in 1887-88 on which the measurements are founded were exceptionally high and convenient for the sowing, and the new records give, therefore, an altogether exaggerated idea of the extent of the Ghaggar irrigation. From para. 58 it will be seen that in the Sirsa villages with fixed assessment the area rose from 12,698 acres in 1881 to 22,927 acres in 1887-88; and in the villages with fluctuating assessment, in which the areas may be accepted as trustworthy, the areas in 1887-88 and in 1888-89 were 24,774 and 28,564 acres as compared with 20,000 acres in the three previous years, and with 11,596 acres in 1883-84. A reduction of one-third should be made on account of the abnormal flood in 1887-88. An area of 2,894 acres can be ascribed solely to the Mahmra spill which reached large dimensions only in that year. Again in the two villages of Hijraon-kalan and Hijraon-khurd which lie between Fatehabad and the Sirsa border, the Sotar area is shown in the Patwari's papers as 3,693 acres. The Ghaggar had not reached Hijraon-khurd, for several years before 1887-88, and in 1889-90 this village was again unflooded. So in Hijraon-kalan, the area usually inundated is probably not 200 acres. These two cases would justify a reduction of 6,386 acres.

In 1883, Colonel Gray after inspection of the whole Ghaggar recorded in regard to the Ghaggar irrigation as distinct from Choya and Rangoi irrigation that an area of 6,793 acres, said to be a 5-years' average of the land cultivated by the assistance of the floods, was very greatly in excess of truth, and represented the possible irrigation in case of excessive floods rather than actual irrigation in any given year. The area now recorded as sotar in the 37 Ghaggar villages is 15,848 acres; and, after deducting the area recently inundated by the Mahmra spill, there remains 13,000 acres of sotar, only half of which was in 1883 considered likely to be flooded.

At the same time Colonel Gray expressed the opinion that 23,856 acres on account of Ghaggar and Choya possible irrigation was excessive; but the figure in the new records is 36,136 of which 20,288 acres are in Choya villages, which at Settlement had a Sotar area of only 5,747 acres. Much of the so-called irrigated land in Choya villages would have been shown as barani but for the high floods in 1887 and the subsequent year. Still there has been a fairly certain extension of irrigation in the villages near Fatehabad, and perhaps, as alleged by the villages at the head of the Rangoi, the extension is due to that cut. In Fatehabad there is only a slight increase, but in Bhirana, Basti Bhiman, and Ayalki, the Sotar area is now shown as 4,864 acres against 768 at Settlement; and half of this may be regarded as liable to inundation, because in these three villages there is 800 acres of rice land, which fact implies that there is a considerable depression. The increase in most other Choya villages is not to be depended on. This is seen in such a year as 1889-90 when only 8,935 acres were sown out of a recorded cultivated area of 24,168 acres. On the whole, I estimate the area of Sotar which may be safely used as basis of fixed assessment at only 18,000 acres, or half the area recorded as Sotar; it is the average of the ten years before 1887, and 16 per cent. increase on the Settlement area. This is not the area flooded every year, but it corresponds to the barani cultivated area which may or may not be sown, depending on the season. The reduction of area merely eliminates the most abnormal floods, just as famine years may be eliminated in calculating the area ordinarily sown.

36. The Nali Sub-division of Barwala has 44 villages which now are, or once were, subject to the Ghaggar, and Choya, and Rangoi floods. Nine villages are on the Ghaggar, 29 on the Choya, and 6 depend more or less on the Rangoi. The area now recorded as Sotar is 17,617 acres, and the areas in past years are these:—

Barwala Nali.

| At Settlement. | Average from 1877 to 1884. | 1885-86. | 1886-87. | 1887-88. | 1888-89. | 1889-90. |
|----------------|----------------------------------|----------|----------|----------|----------|----------|
| Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| 8,287 | 7,498 | 18,155 | 15,455 | 16,433 | 17,423 | 16,967 |

I have shown, in regard to Fatehabad, that the area in the record is excessive, and as in Fatehabad it is cut down by half, so in Barwala a large reduction is necessary. The average for the 10 years before 1887-88 is 9,349 acres; and judging from the area of Sotar at Settlement and this average, I think the area of Sotar to be used as the basis of a fixed assessment should be 9,500 acres. In 1883 Col. Grey wrote that 9,628 acres, the average of 5 years, was excessive, and he considered 1,916 acres, shown as the irrigated area in the nine Ghaggar villages, to be greatly in excess of truth. The area now recorded as Sotar in the Ghaggar villages is 4,125 acres, or more than twice the amount that was held to be excessive. In 1889-90 the area sown was only 1,225 acres, out of 16,967 acres recorded as cultivated.

37. The revenue rates proposed in the Preliminary Report were founded almost entirely on rents, and I proved, by the Rents in zamindari and bhayachara villages. accounts of landlords extending over ten years, that the rents were collected regularly whether the years were good or bad, and this is certainly the case in the zamindari villages. There is, however, some difference between Zamindari and Bhayachara villages in regard to rents. In the latter villages, only spare land, that is land which the owner is unable to cultivate with his own plough and bullocks, is given to tenants and such land is given, as a rule, year by year. The agreement is made in such cases just as the rains commence, when there is some assurance of a harvest, and the landlord has his hands full with his own Khud-kasht. In good years, especially if the rains are good at the commencement, and the sowing season is a long one, the whole cultivated area is sown, and the landlord gets his full rent. In bad years, when the rains are poor, especially when the sowing season is short, there may be no demand for the spare land, and it may lie fallow and no rent be paid for it. Many of the tenants-at-will in Bhayachara villages are malik-kabza and occupancy-tenants, who do not rent other land until they are fairly certain of being able at least to sow it. In zamindari villages, on the other hand, though the leases are nominally from year to year, the tenants do not intend to give up their land, nor do landlords intend to eject them at the end of the year. The tenants have probably broken up the land, and have spent a little money or labour on it; or, if they got it in a cultivated state, they paid nazarana on entry; and in both cases they will continue to hold the land even though the rains fail. They have built houses in the village, and have settled with the intention of not leaving it, and in the hope that they will not be ejected. Litigation shows that they will pay, or promise, any rent rather than be ejected; and, as they would run the risk of losing land for which they have not paid rent, they pay, on the whole area in their possession, karipari, cultivated or fallow. The tenants of large landlords are, therefore, not so well off as those in bhayachara villages, and the nature of the village can often be guessed from the state of the home-stead. Not a few of the Skinner villages are wretched hamlets, with a very mixed class of residents; many of them of low castes. Anxious though the tenants are to be left in possession, they are not generally in good circumstances, but they know that their chances of getting land elsewhere on cheaper terms are small and so they hold on.

These are the only reasons I can find for thinking that the rent rate applicable to zamindari is somewhat high for bhayachara villages: but all the same, that rent rate is the true test of what the land is worth, and what small

land-lords could get for their land if they wanted to take full rent. A perfectly safe demand will be given by a revenue rate of half the rent rate in zamindari villages applied to the sown area: and, anticipating the chapter on assessment, I may note that the revenue now proposed is well within this safe estimate.

38. For convenience, I give a table showing the areas and rent rates for all the barani tracts now under consideration.

Rent rate.

| Tahsil. | Circle. | Sub-division of Circle. | Zamindari. | Pattidari. | Zamindari and Pattidari. |
|------------------|---------------------|-------------------------|---------------------------------|---------------------------------|---------------------------------|
| | | | Area and average rent per acre. | Area and average rent per acre. | Area and average rent per acre. |
| Hansi | Haryana | Eastern | 3,876 1 5 3 | 6,228 0 14 7 | 10,104 1 1 1 |
| | | Western | 4,150 0 13 8 | 4,877 0 11 11 | 9,027 0 12 9 |
| | | Total Barani | 8,026 1 1 4 | 11,105 0 13 4 | 19,131 0 15 0 |
| | | | | | |
| Hissar | Bagar | Southern | 9,475 0 10 4 | 9,577 0 7 5 | 19,052 0 8 10 |
| | | Northern | 9,373 0 12 1 | 6,573 0 10 2 | 15,946 0 11 4 |
| | Total Circle | | 18,848 0 11 2 | 16,150 0 8 8 | 34,998 0 10 0 |
| | Haryana | Eastern | 19,758 0 14 10 | 7,372 0 13 7 | 27,110 0 14 6 |
| | | Western | 8,081 0 13 7 | 1,280 0 11 5 | 9,361 0 13 3 |
| | Total Circle | | 27,819 0 14 5 | 8,652 0 13 3 | 36,471 0 14 2 |
| | Barwala | Eastern | 14,101 0 14 3 | 4,531 0 15 4 | 18,632 0 14 6 |
| | | Western | ... | 1,140 0 14 6 | 1,140 0 14 6 |
| Fatehabad | Barwala | Total Circle | 14,101 0 14 3 | 5,671 0 15 2 | 19,772 0 14 0 |
| | | | | | |
| | Nali | Barani | 11,413 0 14 1 | 7,047 0 13 9 | 18,460 0 13 11 |
| | | | | | |
| | Bagar | Western | 761 0 8 5 | ... | 761 0 8 5 |
| | | Eastern | 25,344 0 13 6 | 12,884 0 12 4 | 38,228 0 13 1 |
| | Total Circle | | 26,105 0 13 5 | 12,884 0 12 4 | 38,989 0 13 0 |
| | Haryana | | 4,355 0 13 3 | ... | 4,355 0 13 3 |
| Fatehabad | Nali | Barani | 15,944 0 13 9 | 2,061 0 11 9 | 18,005 0 13 7 |
| | | | | | |

It will be noticed that the rate in Zamindari villages of the Haryana Circle is highest in Hansi where it is Re.1-1-4 per acre, and lowest in Fatehabad where it is Re. 0-13-3. In both Barwala and Hissar which lie midway in position, the rate is a little over 14 annas.

The larger areas for both the zamindari and pattidari villages give the same result which is in keeping with the general deterioration in the value of land from east to west. In the barani parts of the Nali Circle the rent rate is 14 annas, being the same as the average Haryana. The better parts of the Bagar circles in Hissar and Fatehabad have rates of $10\frac{1}{2}$ and 12 annas, and the southern part of the Hissar Bagar has a rate of 10 a. 4 p. The area paying true rent in the western part of the Fatehabad Bagar is too small to give

a correct average. These rates are all fairly indicative of the value of the land, and the revenue rates proposed for the various parts bear a similar proportion to each other that the rent rates bear.

Rents are rising rapidly and in the whole tract, exclusive of the worst Bagar, the rent will soon be generally 4 annas a Kachcha bigah or Re. 1.2 per acre, and in many places as much as Re. 1.6. Large landlords have refused Re. 1.6 per acre karipari on a long lease. In the villages belonging to the Skinner family, rents, though already above the average, will be raised still higher; and, as there is no means of preventing rack-renting except the compensation clauses of the Tenancy Act, which do not give the tenant much, there seems no reason why the State should not take its full share. Any reduction of revenue made in consideration of the tenants will never reach them and will merely put more money into the landlords' pocket.

39. In General Statement No. IV have been given details of the numbers of cattle, carts, and ploughs, now and at the Settlement of 1863. This statement shows more clearly than any other the great improvement in prosperity, and material wealth, that has taken place in this district under the now expiring Settlement. In each Tahsil the number of carts has doubled; the number of ploughs has increased by half, and in Barwala has almost doubled. The total number of cattle of all kinds has increased by more than half in every Tahsil; and in some cases the increase is much greater. The greatest increase is in camels which now number 15,767 in these four Tahsils as against 5,244 in 1863. Cows and bullocks have increased from 1,63,487 to 3,04,875, and buffaloes from 44,833 to 60,560. Taking animals of all kinds into consideration, the Fatehabad Nali, of which one-third belongs to the grazing tribe of Pachadhas, is the richest in the district. There are 229 head per square mile, and 1,586 per 1,000 of the population. In the following table four circles of the Kaithal Tahsil are compared with the Hissar circles; and in doing so only cows, bullocks, buffaloes, and camels, have been counted in Hissar (sheep, goats, horses, and asses, being excluded) as judging from para. 38 of Mr. Douie's Report these were excluded in his enumeration.

| Tahsil. | | Circle. | No. of cattle. | No. per square mile. | No. per 1000 of population. | |
|-----------|-----|---------|----------------|----------------------|-----------------------------|-------|
| Kaithal | ... | Nardak | ... | 32,842 | 138 | 977 |
| | | Bangar | ... | 71,420 | 197 | 925 |
| | | Jangal | ... | 8,479 | 157 | 711 |
| | | Nali | ... | 26,156 | 120 | 761 |
| Hansi | ... | Hariana | ... | 1,11,645 | 151 | 855 |
| Hissar | ... | Bagar | ... | 32,560 | 84 | 868 |
| | | Hariana | ... | 61,211 | 161 | 1,010 |
| Barwala | ... | Do. | ... | 47,320 | 156 | 1,150 |
| | | Nali | ... | 34,700 | 132 | 928 |
| Fatehsbad | ... | Bagar | ... | 31,362 | 99 | 1,015 |
| | | Hariana | ... | 11,510 | 129 | 1,105 |
| | | Nali | ... | 50,894 | 141 | 978 |

As was to be expected, the Bagar tracts have fewer head for the area, but they come up to the average when the population is taken into consideration. They are the great cattle and camel breeding tracts; and probably the profits are as great in the Bagar as in the Hariana or Nali Circles.

40. Two fairs are held annually at Hissar in the spring and in the autumn for the sale of agricultural stock.

Cattle Fairs.

| Period. | Average number of cattle sold. | Total value. | Average per head. |
|------------------------------|--------------------------------|--------------|-------------------|
| | | Rs. | Rs. |
| 5 years, 1879 to 1883 | 26,073 | 7,00,227 | 27 |
| 5 „ 1884 to 1888 | 36,740 | 8,62,978 | 24 |

A reduction of about a third on the total value must be made on account of re-sales and of cattle brought from Bikanir; but it may be safely said that 5 lakhs of rupees come into this district at these fairs, and this is far short of the actual receipts as sales go on all the year round. The Hariana cattle are eagerly bought up by dealers from the Punjab, and especially from the North-Western Provinces. A good pair of bullocks will bring Rs. 70, and many are sold at much higher prices. The average has been about Rs. 50 per pair during the last ten years, but of late many young animals have been sold, showing either that the supply of fodder is not sufficient or that the people are now in somewhat more straitened circumstances. Probably both causes are at work. It is becoming more profitable to breed and sell than to rear the cattle. This is, I think, certainly the case in the Bagar, where ploughing is done largely by camels, and bullocks are at most required only for a month or two during the rains, and are almost useless for the rest of the year. In the Nali and Hariana Circles, where the soil is suitable for gram, and where both Kharif and Rabi crops are grown, and where camels are not so useful, and therefore not so common, the plough bullocks must be kept the whole year, and cannot be sold in autumn. Fodder is stocked in much larger quantities in the Bagar and Hariana than in the Nali. One reason assigned is that the number of cattle on the Nali is so great that the supply of fodder is sufficient only for the year; but the real cause is probably the improvident nature of the Pachadhas, who are quite ready to move off their herds to other grazing grounds when fodder fails at home. In bad years, most of the cattle, except those giving milk, are taken to the Kaithal side, or if the harvest is good in Bikanir, as in 1889, then to the Bagar country; and the grazing charges to be paid, which are often high, reduce the profits of the breeders.

41. In almost every zamindari and pattidari village where any waste remains, the residents have to pay a grazing fee, the *pukhta ang*, or full charge, being Re. 1 for a buffalo, 8 annas for a cow, and 4 annas for a calf. Where the waste is small, half these rates are charged. In some bhayachara villages, especially on the Patiala border, the old system of collecting the revenue by a *bach* on the cattle still remains to some extent. A rate is levied on all cattle (plough bullocks excepted) using the waste even though they belong to the biswahdars themselves; and the proceeds of this rate along with the hearth tax (*kudi*) on non-agriculturists and the rent on common cultivated land is often sufficient to pay the revenue. Any deficiency is made up by a *bach* on the land cultivated by the biswahdars. This is a most fair arrangement as each has to pay according to the extent he has used the waste, and it works well in the strong Jat communities where it principally obtains. It is matter for regret that this mode of collecting the Government demand was so discouraged in past years that it has almost disappeared. No doubt natural causes were also at work, but if it had been encouraged, it would have survived in many villages where it would have been beneficial.

Grazing dues.

42. In Hansi the area of waste is now small ; being only one-sixth of the cultivation, and in the Hariana of Barwala, which is very similar to Hansi, it is one-fifth, and even a less proportion in the Fatehabad Hariana. The area of waste is largest in the Nali of Fatehabad, where it is one-third of the cultivation, and in the Nali of Barwala where it is a half. It is in these two circles where Pachadhas, as owners and cultivators, abound : and it is in these two circles that the grazing is most valuable. In other places, the cattle are largely fed on jowar and bajra, gwár, and pala, grown on the cultivated land ; but in the Nali a fodder stack is rarely seen, and it is common to find the Bishnois and Jats of the Bagar selling their old jowar to the Nali people in years of scarcity. In assessing the waste, it is to be remembered that no deduction has been made from the cultivated area for land required for the maintenance of plough bullocks and also that the rent of land required for the growth of fodder crops should be deducted from the profits from the sale of cattle.

43. The cattle of the district form the treasury where the people store their wealth in good years ; and their sale provides in bad years the means of living, and of paying the revenue. Without them even the light revenue which has hitherto been imposed could not have been paid in many years : and any great mortality among cattle from disease or scarcity of fodder will be felt perhaps more severely than a failure of the grain crop.

PART IV.

CROPS.

44. Full details of the areas under each crop during the four years 1885 to 1888 are given in the Statement No. V. for each Tahsil. The averages for these years for the barani land are collected below for each Circle and Tahsil, and the corresponding figures for the Jangal and Bangar circles of the Kaithal Tahsil, and for the Bagar and Hariana circles of Bhiwani are added for comparison.

Percentages of cultivated area crops on Barani land.

| TAHSIL. | CIRCLE. | K H A R I F. | | | | | | | R A B I. | | | | | | | | W H O L E Y E A R. | | | |
|-----------|---------|--------------|--------|----------------|--------------------------|---------------|----------|------------|----------|--------------------------|---------|---------------------------|----------------|---------------|----------|------------|-----------------------|------------|------|------|
| | | Jowar. | Bajra. | Moth, Mash. | Gwar and other crops. | Area cropped. | Kharaba. | Area sown. | Wheat. | Mixtures of wheat. | Barley. | Gram and its mixtures. | Other produce. | Area cropped. | Kharaba. | Area sown. | Area cropped. | Area sown. | | |
| Hansi | ... | Haryana | ... | 18.5 | 20.4 | 8.8 | 4.8 | 52.5 | 10.4 | 62.9 | 0.3 | 1.0 | 0.3 | 15.7 | 1.2 | 18.5 | 3.1 | 21.6 | 71.0 | 84.5 |
| Hissar | ... | Bagar | ... | 4.9 | 31.5 | 19.5 | 5.8 | 61.7 | 23.1 | 84.8 | 0.1 | ... | 0.6 | 3.4 | 0.2 | 4.3 | 2.5 | 6.8 | 66.0 | 91.6 |
| | | Haryana | ... | 11.8 | 27.7 | 10.3 | 5.2 | 55.0 | 24.5 | 79.5 | 0.1 | 0.2 | 1.0 | 7.7 | 0.6 | 9.6 | 2.9 | 12.5 | 64.6 | 92.0 |
| Barwala | ... | " | ... | 12.1 | 31.0 | 8.4 | 4.7 | 56.2 | 19.6 | 75.8 | 0.2 | 1.5 | 1.0 | 7.4 | 1.7 | 11.8 | 3.2 | 15.0 | 68.0 | 90.8 |
| | | Nali | ... | 16.7 | 28.3 | 4.9 | 5.0 | 54.9 | 13.7 | 68.6 | 0.3 | 0.6 | 6.5 | 11.9 | 3.1 | 22.4 | 6.3 | 28.7 | 77.3 | 97.3 |
| Fatehabad | ... | Bagar | ... | 5.7 | 40.4 | 11.0 | 4.3 | 61.4 | 23.8 | 85.2 | 0.1 | 0.1 | 1.3 | 2.9 | 0.3 | 4.7 | 1.2 | 5.9 | 66.1 | 91.1 |
| | | Haryana | ... | 10.1 | 42.0 | 8.7 | 5.1 | 65.9 | 21.5 | 87.4 | 0.1 | 0.2 | 1.5 | 3.8 | 0.3 | 5.9 | 1.3 | 7.2 | 71.8 | 94.6 |
| | | Nali | ... | 13.9 | 32.0 | 5.3 | 5.5 | 56.7 | 16.1 | 72.8 | 0.2 | 0.1 | 7.0 | 8.7 | 2.6 | 18.6 | 2.1 | 20.7 | 75.3 | 93.5 |
| Kaithal | ... | Jangal | ... | 21.2 | 12.8 | 3.9 | 1.0 | 38.9 | 4.7 | 43.6 | 0.3 | ... | 5.3 | 31.1 | 10.1 | 46.8 | 6.6 | 53.4 | 85.7 | 97.0 |
| | | Bangar | ... | 22.2 | 15.7 | 2.3 | 6.2 | 46.4 | 13.1 | 59.5 | 3.5 | ... | 0.5 | 12.4 | 1.7 | 18.1 | 4.4 | 22.5 | 64.5 | 82.0 |
| Bhiwani | ... | Bagar | ... | 1.1 | 26.7 | 31.2 | 7.8 | 66.8 | 16.8 | 83.6 | ... | ... | 0.5 | 1.0 | ... | 1.5 | 0.6 | 2.1 | 68.3 | 85.7 |
| | | Haryana | ... | 20.2 | 13.8 | 7.3 | 4.7 | 46.1 | 13.5 | 64.6 | 0.3 | 0.3 | 0.3 | 19.3 | 0.4 | 21.5 | 4.3 | 25.8 | 67.6 | 90.4 |

The area under Kharif crops decreases from the Bagar towards the east; and the nature of the crops also distinctly changes. In the east there is a larger area under jowar and better crops than under bajra and pulses. In the Bagar only 6 per cent. is sown for the Rabi: this increases in the Fatehabad Haryana to 7.2, then in Hissar to 12.5, is over 20 in the Nali, and 53 in the Jangal circle. There is a remarkable similarity between the Hansi Haryana and the Kaithal Bangar so far as crops are concerned. The great difference between the Bhiwani Haryana, and the Haryana of the other four Tahsils justifies a higher revenue rate in the former. The areas under the better crops are larger in Bhiwani than even in Hansi, and this fact points in the same direction.

45. The four years of which statistics have been given were on the whole considerably above the average. In 1885-86 the rainfall was over the average, but it was not very seasonably distributed, being very slight in September, and the crops were described as being only average but the area cropped was over 90 per cent. which for Hissar is certainly far over the ordinary. In 1886-87 the rainfall for sowing was sufficient; but a drought set in towards the end of August, and, with the exception of the

Nature of seasons, 1885 to 1888.

early bajra, the harvest was poor, and below the average. The failure of the rains in September prevented the sowing of the Rabi, which in many places was a complete failure. In 1887-88 the rains, though somewhat late, were still in time, and, being continuous, the Kharif was an excellent harvest, especially in fodder. The Rabi was also exceptionally good. In 1888-89, the average area was sown, but there was a break in the rains in August and September, and large areas were withered up, and what came to maturity was very light. Fodder was sufficient; but on the whole the year was not equal to the average and in the Hissar Tahsil and Bagar Circle, generally, it was far below it. The rains were not quite seasonable for the rabi sowings, and the winter rains kept off until the very end of January. The crop was poor on the Hariana circle, but an average in the Nali.

The four years were exceptionally good on the Nali, and the floods in 1887 were higher and more seasonable than in any of the previous ten years. In that year a late flood injured the rice crop, but, on the other hand, it inundated a large area for the rabi sowings; so that the rabi was specially good. In 1888, the floods were again above the average; and though heavy rain in January damaged the rabi crops on low land, still the rest of the crop was saved. A comparison of the accurate returns kept for the villages in Sirsa with fluctuating assessment shows that the area cultivated in these four years with the aid of the floods was far above the average: and in para. 26 I have given reasons for reducing the ordinary sotar area to 9,500 acres in Barwala, 18,000 acres in Fatehabad, that is, to about half of what is shown to have been cultivated in 1887-88.

The crops on the sotar land are dependent on the winter rains quite as much as the barani rabi crops; but one good shower in the end of December or in January is generally sufficient to ensure that the crop will ripen in fair condition. The nature of the sowings on the inundated land depends not merely on the soil, but also on the time of the flood. Gram is generally sown on very hard clay soil which forms clods, and can be worked into a fine seed-bed only with more labour than most cultivators are willing to expend on it. But, even where the soil is lighter (mahra rather than sotar), gram is sown when the floods have inundated it in Sawan Bhaddon (corresponding to July and August), whereas if the floods had come in Kartik (corresponding to October), wheat would have been sown. The surface becomes hard and baked in the first case by the great heat; but, when the floods are late, ploughing and sowing operations can be started sooner. The floods during the last four years have been exceptionally seasonable, and we cannot expect the areas cropped will be maintained.

46. In Tahsil Statement No. V the percentages of areas under each crop and of areas cropped and failed for each of the four years have been given to show how the area cropped varies from year to year, and how unsafe it is to work on the mere averages; and in General Statement No. V the yearly areas cropped, failed, and sown, have been tabulated and the actual areas as well as percentages have been given for the land irrigated by the Western Jamna Canal and by the Ghaggar. In Hansi the area cropped varied from 42 to 90 per cent. of the cultivated area; and in Hissar and Fatehabad Bagar, the variation has been even greater. In para. 36 of the Bhiwani Report, illustrations have been given of the extent to which the receipts of landlords from rents-in-kind have varied during the last ten years, and the subject will be again discussed in this report in regard to the introduction of a fluctuating assessment in the Nali villages. It cannot, however, be too often repeated in an assessment Report of the Hissar district that the produce is very precarious, and that great caution is necessary in raising the demand.

PART V.

PROPOSED REVENUE RATES.

47. In the Preliminary Report it was proposed that no special rate should be assessed on land irrigated from wells, as the area was altogether small, and moreover wells were worked only in bad years. The average *chāhi* area in all the four Tahsils during the last five years was only 769 acres; and in 1887-88 when the rains were good, and both harvests were far above the average, the area was only 291 acres. In the Haryana and Bagar circles, irrigation from wells is practically unknown: it does exist to some extent in the Nali, but the area is so small that a special assessment does not seem necessary. The Commissioner in forwarding the Preliminary Report concurred in this, and the Financial Commissioner saw no reason to object to the exemption of wells from assessment.

48. The assessment of the waste land was also fully considered in the Preliminary Report; and in this report I have nothing to add, but for convenience I collect the proposals, and the results by circles.

| Tahsil. | Circle. | Rate on waste exceeding $\frac{1}{4}$ area of cultivation. | | Resulting assessment. | |
|-----------------------|--------------|--|-------|-----------------------|-------|
| | | Rs. | A. P. | Rs. | A. P. |
| Hansi | Haryana ... | 0 | 1 0 | 608 | 0 0 |
| Hissar | Bagar | 0 | 0 6 | 384 | 0 0 |
| | Haryana ... | 0 | 1 0 | 695 | 0 0 |
| Barwala | Haryana ... | 0 | 1 0 | 403 | 0 0 |
| | Nali | 0 | 1 6 | 2,870 | 0 0 |
| Fatehabad | Bagar | 0 | 1 0 | 522 | 0 0 |
| | Haryana ... | 0 | 0 6 | | |
| | Nali | 0 | 1 0 | 76 | 0 0 |
| Total of four Tahsils | | 0 | 1 6 | 2,078 | 0 0 |
| | | ... | ... | 7,636 | 0 0 |

The excess waste is extensive only in the Nali Circle where the population consists largely of Pachadhas who prefer cattle grazing to cultivation.

49. In treating the assessment of the cultivated area, I shall give some general remarks on each circle in order, Haryana, Bagar, Nali, and then discuss separately the assessment of the part of each circle in each Tahsil, heading each part by a table comparing the present revenue and its incidence, with the proposed demand; showing also the demand by the rates proposed in the Preliminary Report. The table gives the demand by sub-divisions of circles, but the actual demand for each circle as a whole, together with a revenue rate for the whole circle is also given.

50. The circle in the Rohtak district which most resembles the Haryana of Hissar is the Western Circle, which adjoins the Hansi Tahsil. The incidence of the total revenue in this circle was 7 annas 11 pies per acre of cultivation. In many respects this circle is much better than the Hansi Haryana. Half of the Western Circle

is under jowar Crops; and in Hansi less than a fifth. Pulses, such as moth and mung, are scarcely grown in the former, while one-eighth of the whole cultivated area in Hansi grows nothing else. Five out of a hundred acres grow cotton in the Rohtak Circle; and scarcely one acre in Hansi. This proves that the soil in Hansi is generally lighter than in Rohtak, and corroborates the general statement made in paragraph 41 of the Bhiwani Assessment Report that the soil deteriorates gradually, but distinctly, from east to west. Sand hills become more frequent and, with the greater intensity of the hot winds, spread more rapidly and damage a larger area in their vicinity. In both these circles, irrigation from wells scarcely exists. The population in Rohtak is 325, and in Hansi only 172, per square mile. Altogether, then, the Hariana of Hansi is not equal to the Western Circle of Rohtak.

Of recently settled tracts, the Bangar and Jangal circles of the Kaithal
 Bangar and Jangal cir- Tahsil come nearest in position and in circumstances to the
 cles of Kaithal. Hariana of the Hissar district. These two circles are
 compared below with the Hansi Hariana which is by far the best part of the
 Hariana circle.

Percentages of cultivated area.

| | Bangar. | Jangal. | Hansi Hariana. |
|-------------------------------|---------|---------|-------------------|
| Jawar | 22.2 | 21.1 | 18.5 |
| Bajra | 15.7 | 12.8 | 20.4 |
| Pulses | 2.3 | 3.9 | 12.9 |
| Cotton | 2.0 | | 0.9 |
| Other Crops | 4.2 | 1.0 | 0.7 |
| Total Kharif | 46.4 | 38.9 | 52.5 |
| Failed | 13.1 | 4.7 | 10.6 |
| Total sown in Kharif ... | 59.5 | 43.6 | 63.1 |
| Wheat and mixtures of wheat | 3.5 | 0.3 | 1.3 |
| Barley and mixtures of barley | .5 | 5.3 | .6 |
| Gram | 12.4 | 31.1 | 15.4 |
| Other Crops | 1.7 | 10.1 | 1.2 |
| Total Rabi | 18.1 | 46.8 | 18.5 |
| Failed | 4.4 | 6.6 | 3.1 |
| Total sown in Rabi ... | 22.5 | 54.4 | 21.6 |

There is a remarkable similarity between the Bangar and the Hariana; but the crops show that the Bangar is somewhat better. The area under the more valuable crops is larger in the Bangar. The Jangal circle is very much better than the Hariana: this is evident from the great contrast in the area sown and cropped in the rabi. Again in the Bangar and Jangal circles, proprietors cultivate 79 and 81 per cent. and in Hansi only 62 per cent. The Bangar also has the advantage in population and in cattle. In almost every respect these circles are better than the best part of the Hissar Hariana, and I have no hesitation in recommending that the revenue rate for the Hariana circle should be less than 7 annas per acre, the rate fixed in these two Kaithal circles.

The revenue rate in the Sirsa Rohi which closely resembles the Hariana
 Sirsa-Rohi. was 4 annas, but this is admitted on all hands to be a very
 low rate. For the small Hariana circle of Bhiwani, I
 have proposed a revenue rate of 7 annas 3 pies. The rate there has been

raised by the competition for land and consequent high rents near the large town of Bhiwani: there is no such influence at work in Hansi, and moreover the circle as a whole is not equal to Bhiwani circle.

Lansi-Haryana.

51. Hansi Haryana.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------|----------------------|---|---------------------------------|---|---------------------------|--------------------------|---|
| Circle. | Division of Circle. | Present dry revenue and its incidence on cultivation of 1863. | REVENUE ON PRESENT CULTIVATION. | | | Revenue on excess waste. | Totals of columns 6 and 7, being the proposed demand. |
| | | | At the revenue rate of 1863. | At rate proposed in the preliminary report. | At the rate now proposed. | | |
| | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Haryana | Eastern | 41,250 | 62,424 | 78,029 | 67,626 | 266 | 67,892 |
| | | 0 5 8 | 0 6 0 | 0 7 6 | 0 6 6 | | |
| | Western | 20,920 | 31,397 | 32,705 | 31,397 | 175 | 31,512 |
| | | 0 5 5 | 0 6 0 | 0 6 3 | 0 6 0 | | |
| | Canal | 35,171 | 46,908 | 58,635 | 54,726 | 167 | 54,893 |
| | | 0 5 9 | 0 6 0 | 0 7 6 | 0 7 0 | | |
| Total | Circle and Tahsil... | 97,341 | 1,40,729 | 1,69,369 | 1,53,749 | 608 | 1,54,357 |
| | | 0 5 7 | 0 6 0 | 0 7 3 | 0 6 6 | | |

Revenue on cultivation of circle at $6\frac{1}{2}$ annas per acre ... Rs. 1,52,454

Revenue on waste 608

Total revenue now proposed 1,53,062

Increase of revenue per cent. 57.

„ cultivation „ 35.

After a careful consideration of the circumstances of each village, I cannot recommend a rate higher than $6\frac{1}{2}$ annas which gives an increase of 57 per cent. This result, which was arrived at independently, is in accordance with the general conclusion that the rate for the Hansi Tahsil should be less than 7 annas, the rate for the Bangar and Jangal circles. The differences proposed in the sub-divisions are justified by the nature of the tracts; and in the canal villages by the demand for land in Hansi, Sisai, and Narnaund. The rent rate for the barani land in the canal villages fully justifies this revenue rate. Indeed the Tahsildar was inclined to put a higher demand on these villages, but besides the increase in the dry rate there is the further enhancement from the owner's rate.

| | Dry revenue. | Water advantage. | Total. |
|-----------------------|--------------|------------------|----------|
| | Rs. | Rs. | Rs. |
| Present demand | 35,171 | 44,136 | 79,307 |
| New demand | 54,893 | 71,000 | 1,25,893 |

In the Preliminary Report (paragraph 72) I have shown that the rent rates justify the extension to the Hansi and Hissar Tahsils of the ordinary rule of the Western Jumna Canal that the owner's rate should be half the occupier's rate. This has been proved by an examination of the accounts of the

owners of 14 zamindari villages lying along the canal from Jhind to Bikanir. The same conclusion has been arrived at by consideration of the rent rates paid in the canal villages. The average income from occupier's rate during the last five years has been in Hansi Tahsil Rs. 1,42,185; and the amount of the owner's rate has therefore been taken at Rs. 71,000.

Hissar Haryana.

52. Hissar Haryana.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|----------------|---------------------|---|---------------------------------|---|---------------------------|--------------------------|---|
| Circle. | Division of Circle. | Present dry revenue and its incidence on cultivation of 1863. | REVENUE ON PRESENT CULTIVATION. | | | Revenue on excess waste. | Totals of columns 6 and 7, being the proposed demand. |
| | | | At the revenue rate of 1863. | At rate proposed in the preliminary report. | At the rate now proposed. | | |
| Haryana | Eastern | Rs. 21,097 0 5 5 | Rs. 28,497 0 5 0 | Rs. 39,812 0 7 0 | Rs. 34,125 0 6 0 | Rs. 154 | Rs. 34,279 |
| | Western | 10,187 0 4 7 | 13,753 0 5 0 | 17,885 0 6 6 | 15,134 0 5 6 | 164 | 15,298 |
| | Canal | 13,020 0 6 4 | 16,204 0 5 0 | 21,017 0 7 0 | 21,065 0 6 6 | 377 | 21,442 |
| | Total | 44,304 0 5 5 | 58,399 0 5 0 | 79,614 0 6 10 | 70,324 0 6 0 | 695 | 71,019 |
| | | | | | | | |

Revenue on cultivation of circle at 6 annas per acre Rs. 70,073

Revenue on waste " 695

Total revenue now proposed

Increase of revenue per cent., 60. " 70,773

" cultivation " 43.

The position of the Haryana of Hissar shows that the rate must be somewhat under the Hansi rate. The average rents paid also point in the same direction. Again Jats own only one-third, and Rajputs as much as an eighth. Only 4 is cultivated by the proprietors, against 62 in Hansi. One-third of the circle belongs to large zamindars, and only one-half the cultivated area lies in bhayachara villages. The rate for the circle has, therefore, been reduced from 6½ annas in Hansi to 6 annas in Hissar, which is also the rate proposed for Barwala. The considerations which have led to differences in the rate as between Tahsils have determined the rates as between the Sub-divisions of circles. The western part of Hissar Haryana is lighter than the Eastern part, and the soil is in some villages exhausted. The demand for land in the neighbourhood of the town of Hissar and in the villages between Hissar and Hansi justifies a somewhat higher rate in these canal villages. In paras. 72—76 of the Preliminary Report, it was calculated that the amount of revenue paid at present as water advantage was Rs. 5,008. Under the new system by which the owner's rate will be half the occupier's rate, this demand will be considerably enhanced. The average collections in this tahsil for occupier's rate during the last 5 years amount to Rs. 19,494; and the owner's rate may fairly be taken to bring in Rs. 9,000. The present and future demand in canal villages may be thus compared:—

| | Dry revenue. | water advantage. | Total. |
|--------------------|--------------|------------------|--------|
| | Rs. | Rs. | Rs. |
| Present demand ... | 13,020 | 5,008 | 18,028 |
| New " ... | 21,065 | 9,000 | 30,065 |

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---------|---------------------|---|---------------------------------|---|---------------------------|--------------------------|---|
| Circle. | Division of Circle. | Present dry revenue and its incidence on cultivation of 1863. | REVENUE ON PRESENT CULTIVATION. | | | Revenue on excess waste. | Totals of columns 6 and 7, being the proposed demand. |
| | | | At the revenue rate of 1863. | At rate proposed in the preliminary report. | At the rate now proposed. | | |
| Haryana | Eastern | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | 17,610 | 23,532 | 34,122 | 28,239 | 262 | 28,501 |
| | Western | 0 5 6 | 0 5 0 | 0 7 3 | 0 6 0 | | |
| | | 15,265 | 24,593 | 34,430 | 29,512 | 141 | 29,653 |
| | Total | 0 5 11 | 0 5 0 | 0 7 0 | 0 6 0 | | |
| | | 32,875 | 48,125 | 68,552 | 57,751 | 403 | 58,154 |
| | | 0 5 9 | 0 5 0 | 0 7 1 | 0 6 0 | | |

Revenue on cultivation of Circle at 6 annas per acre Rs. 57,751
 Revenue on waste " 403

Total revenue now proposed... .. " 58,154
 Increase of revenue per cent. 77.
 " cultivation " 67.

This part of the Haryana circle is almost in every respect as good as the Hansi Tahsil, but the rent rate is rather less though the difference is small. Mr. Fagan, Assistant Commissioner, who examined each village most carefully, suggested a demand of Rs. 59,442 in this circle being at the rate of 6½ annas in Eastern and 6 annas in Western Haryana. Instead of this, I propose a rate of 6 annas for the whole circle. The two parts differ very little; the soil is somewhat harder, more clayey in the one than in the other, but in this district this is not an unmixed advantage. The increase is 77 per cent, which implies that many villages will have to pay double, or even treble, their present revenue.

54. The Fatehabad Haryana is a small circle consisting of only 14 villages: and no sub-division was found necessary.

Fatehabad Haryana.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|---------------------|---|---------------------------------|---|---------------------------|--------------------------|---|
| Circle. | Division of Circle. | Present dry revenue and its incidence on cultivation of 1863. | REVENUE ON PRESENT CULTIVATION. | | | Revenue on excess waste. | Totals of columns 6 and 7, being the proposed demand. |
| | | | At the revenue rate of 1863. | At rate proposed in the preliminary report. | At the rate now proposed. | | |
| Haryana... | ... | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| | | 7,762 | 13,990 | 18,187 | 13,990 | 76 | 14,066 |
| | | 0 4 3 | 0 5 0 | 0 6 6 | 0 5 0 | | |

Rs.
 Revenue on cultivation of circle at 5 annas per acre ... 13,990
 Revenue on waste 76
 Total revenue now proposed 14,066
 Increase of revenue per cent. 81.
 Ditto cultivation " 54.

I am in great doubt about the assessment of this small circle. Mr. Brown states that he under-assessed it, and Munshi Amin Chand, while the revenue rate was 5 annas, assessed only up to 4 annas 3 pies. The average rent prevailing in zamindari villages is 13 annas 3 pies and in bhayachara villages 12 annas, and the average rent of more than one-third of the whole cultivation is 12 annas 3 pies. From this a revenue rate of 6 annas might be fairly deduced. This rate would give a demand of Rs. 16,788, or more than double. On the other hand cultivation has increased only 54 per cent. since 1863, but almost by 140 per cent. since 1840, when the present demand (maafis being taken into consideration) was fixed. Almost two-thirds of the circle belongs to good cultivators: but the population is very sparse, only 117 per square mile; the size of the proprietary holdings is very large for Jats, being twice the average of Hansi. Only 42 is cultivated by owners, and almost 4 by tenants-at-will. The size of Khud-kasht holdings is also much over the average. The tract is not so good as the Western Haryana of Hissar where I have proposed 5½ annas. The crop returns show that in Fatehabad a large area is under kharif crops, and even most of that is sown with bajra and pulses; and for a Haryana tract the Rabi area is very small. It is with much hesitation that I have proposed 5 annas. Even this rate, which is certainly low, gives an increase in revenue of 81 per cent., and in 7 villages out of the 14 the demand will be raised from Rs. 3,755 to Rs. 7,660. On the other hand the average receipts in the 4 zamindari villages during the last 10 years amounted to Rs. 5,106, and that though half the cultivated area is in the hands of occupancy tenants paying fixed low rents. At the rate of 5 annas an acre, the revenue of these villages would be only Rs. 2,309, while at half net assets it should be Rs. 3,000. On the whole I am unable to recommend a rate lower than 5 annas, which was also the rate in 1863; but the resulting increase in revenue is large compared with the increase in cultivation.

55. In the Bhiwani Assessment Report reasons were given for the necessity for caution in the assessment of light soil which under constant cultivation was liable to become exhausted; and a revenue rate of 3 annas 9 pies was proposed as the limit, preference being, however, shown for a rate of 3 annas 7 pies. The rate in the Sirsa Bagar is 2½ annas. The southern part of the Hissar Bagar is not much better than the Bhiwani Bagar, but the western part of the Fatehabad Bagar is decidedly better, and in both an increase is possible. The margin land between the Haryana and the Bagar, which has been included in the Bagar, has in both tahsils been separately considered, and the higher rates now proposed as compared with Bhiwani are justified by the high rents paid. In Bhiwani this margin land was included in the Haryana.

Hissar Bagar.

56. Hissar Bagar.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|---------------------|---|---------------------------------|---|---------------------------|--------------------------|---|
| Circle. | Division of Circle. | Present dry revenue and its incidence on cultivation of 1863. | REVENUE ON PRESENT CULTIVATION. | | | Revenue on excess waste. | Totals of columns 6 and 7, being the proposed demand. |
| | | | At the revenue rate of 1863. | At rate proposed in the preliminary report. | At the rate now proposed. | | |
| | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Bagar | Southern | 16,733 | 18,853 | 21,546 | 18,853 | 115 | 18,968 |
| | | 0 3 8 | 0 3 6 | 0 4 0 | 0 3 6 | | |
| | Northern | 23,573 | 26,586 | 36,555 | 33,232 | 269 | 33,501 |
| | | 0 5 0 | 0 4 0 | 0 5 6 | 0 5 0 | | |
| | Total | 40,306 | 45,439 | 58,101 | 52,085 | 384 | 52,469 |
| | | 0 4 4 | 0 3 9 | 0 4 10 | 0 4 4 | | |

| | | | | | |
|---|-----|-----|-----|-----|--------|
| | | | | | Rs. |
| Revenue on cultivation of Circle at 4½ annas per acre | ... | | | | 52,143 |
| Revenue on waste | ... | ... | ... | ... | 384 |
| | | | | | <hr/> |
| Total revenue now proposed... | ... | | | ... | 52,527 |
| Increase of revenue per cent. 30. | | | | | |
| Ditto cultivation „ 29. | | | | | |

The southern part of this Bagar is somewhat better than the Bhiwani Bagar, but it is less fortunate in the class of proprietors.

One-fourth belongs to Ranghars, and only a third to Jats. Ranghars are not good cultivators at the best, and soon lose heart in the Bagar. This explains why in this sub-division one-tenth of the whole cultivated area has been sold since Settlement. I would have maintained a revenue demand at the rate of 3 annas 9 pies if it had been paid in the past, but I hesitate to recommend an increase up to that rate, and propose the old rate of 3 annas 6 pies. This gives an increase in demand of 13 per cent. as against an increase in cultivation of 17 per cent.

The northern part of the Bagar is far superior to the southern part. In the former the average rent in zamindari villages is 12 annas and in the latter 10 annas 4 pies. The price of land sold in the northern part is Rs. 5-6-0 and in the southern Rs. 2-11-0; and there is almost as much difference in mortgages. The tal or low-lying land is as good as the Hariana, perhaps better as it gets the drainage from the hills. Half of the sub-division belongs to Jats, and they cultivate as proprietors about half the whole, but many are only kadim-kirsan. The difference between these two tracts was recognized by Mr. Brown who made the southern part a separate circle for assessment purposes. Munshi Amin Chand included both in one circle, but made a difference in his revenue rate, and a still greater difference in his actual assessment. The incidence of the present revenue is 3 annas 8 pies in the southern, and 5 annas in the northern part, which was therefore assessed higher than the Hariana of Fatehabad. I propose to maintain the rate of 5 annas. The rate proposed for the Western Hariana is 5½ annas, and the decrease in rate is justified both by the position of the tract and the difference in the average rent rate of the Hariana and Bagar. This rate gives an increase in revenue of 41 per cent. for an equal increase in cultivation.

Fatehabad Bagar.

57. Fatehabad Bagar.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|--------------|---------------------|---|---------------------------------|---|---------------------------|--------------------------|---|
| CIRCLE. | Division of Circle. | Present dry revenue and its incidence on cultivation of 1863. | REVENUE ON PRESENT CULTIVATION. | | | Revenue on excess waste. | Totals of columns 6 and 7, being the proposed demand. |
| | | | At the revenue rate of 1863. | At rate proposed in the Preliminary Report. | At the rate now proposed. | | |
| | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Bagar | Eastern | 15,220 | 24,567 | 40,083 | 27,750 | 384 | 28,134 |
| | | 0 4 0 | 0 4 0 | 0 6 6 | 0 4 6 | | |
| | Western | 9,644 | 14,124 | 14,124 | 13,241 | 138 | 13,379 |
| | | 0 3 9 | 0 4 0 | 0 4 0 | 0 3 9 | | |
| | Total | 24,864 | 38,701 | 54,207 | 40,991 | 522 | 41,513 |
| | | 0 3 11 | 0 4 0 | 0 5 7 | 0 4 3 | | |

| | | | |
|---|-----|-----|--------|
| Revenue on cultivation of Circle at 4½ annas per acre | ... | Rs. | 41,215 |
| Revenue on waste | ... | " | 522 |
| Total revenue now proposed | ... | " | 41,737 |
| Increase of revenue per cent. 68. | | | |
| " " cultivation " | 49. | | |

The Western Bagar of Fatehabad is decidedly better in soil than the Southern Bagar of Hissar. It belongs almost entirely to Western part. Jats, there is not a Ranghar or Pachadha proprietor; it is rich in horned cattle and camels. Perhaps these facts would justify the full rate of 4 annas an acre; but, remembering the liability of Bagar tracts to deteriorate, and the low revenue in the Sirsa Bagar which adjoins, I propose a rate of 3 annas 9 pies.

The eastern part of the Fatehabad Bagar corresponds with the northern part of the Hissar Bagar. Both form a margin between good Haryana and bad Bagar, and they have the good qualities of both circles without the hard clay found in the Haryana or the pure sand which is the characteristic of the Bagar. The rent rate of the zamindari and pattidari villages gives an average of 13 annas for 38,228 acres, or more than a third of the whole cultivated area. Only one-third of the subdivision is in bhayachara villages, and the rest is mostly in zamindari villages. The average of 13 annas may, therefore, be taken as the true existing rent; and the revenue rate should be 6½ annas. I cannot, however, recommend a higher rate than 4½ annas. Even this rate raises the revenue by 85 per cent. against an increase in cultivation of only 58 per cent. By the test of landlords' accounts, this rate gives a demand amounting to only one-third net assets instead of one-half (*see* statement in para. 63). Still, having regard to the revenue now paid and the class of proprietors and of tenants, I think the increase proposed is for the present sufficient. Only one-fifth of the subdivision belongs to Jats; Rajputs have '07, Pachadhas '16, and Pathans '07. The tract is not so good as the Fatehabad Haryana which it adjoins and for which a revenue rate of only 5 annas has been proposed. Some villages in the tract will soon benefit from the introduction of irrigation by the Indri-Sirsa Canal.

58. In the Sirsa Tahsil there were 84 villages described as sotar villages: (a) 28 got a fixed assessment as they were no longer subject to the Ghaggar floods; (b) 3 villages near Ellenabad got fixed assessment for special reasons; (c) 22 villages lying between Musahib-wala and Dhanur also got fixed assessment; and (d) 31 villages were compulsorily put under a fluctuating assessment (*see* paragraph 330 of Wilson's Report). In the Nali now under settlement there are no villages exactly corresponding to class (b); but a great many villages in the Hissar Nali correspond to class (c), where the Ghaggar runs in a deep and narrow bed, and even in the best seasons spreads only a short distance on either side. A fixed assessment was given in such Sirsa villages, because the produce, considered as a whole, could hardly be said to be more precarious than that of ordinary villages in the dry tract. These 22 villages had a sailab area in 1881-82 of 3,384 acres, which rose in 1888-89 to 4,259 acres. The barani cultivated area at Settlement was 32,187 acres; so that the failure of floods did not materially cripple the villages. The following table gives the cropped area since 1880-81 in all the villages that got a fixed assessment.

| Sailab area. | 1882-83. | 1883-84. | 1884-85. | 1885-86. | 1886-87. | 1887-88. | 1888-89. |
|------------------|----------|----------|----------|----------|----------|----------|----------|
| | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Cropped | 3,345 | 1,771 | 12,539 | 11,483 | 13,698 | 19,695 | 13,342 |
| Fallow or Failed | 4,725 | 2,722 | 2,017 | 2,672 | 3,349 | 3,032 | 8,982 |
| Total | 8,570 | 4,493 | 14,556 | 14,155 | 17,047 | 22,727 | 22,324 |

In the barani villages of this circle cultivation has increased from 31,789 acres to 73,252 acres, or by 130 per cent., and the average rent paid on 18,460 acres (that is one-fourth of the whole) is 13 annas 11 pies, justifying a revenue rate of 7 annas. In the Preliminary Report, I suggested 6 annas 9 pies, a rate which would give, including the revenue on waste, a demand of Rs. 32,480, which is almost $2\frac{1}{2}$ times the present demand. Mr. Fagan suggested a rate of 6 annas, which with revenue on excess waste would give a demand of Rs. 29,046, which is an increase of 111 per cent. This demand is justified by the state of the tract, but, having regard to the fact that a considerable area belongs to Pachadhas and Rajputs, and that the cultivators in zamindari villages are often Pachadhas, I cannot recommend a higher rate than $5\frac{1}{2}$ annas. Even this rate will give a demand of Rs. 26,757, in place of Rs. 13,751, or almost double. Population increased between 1868 and 1881 by one-third: it is now as dense as in the barani villages of Hansi. The number of cattle has doubled. Though cultivation is now $2\frac{1}{2}$ times as extensive as at Settlement, there still remains 31,070 acres of culturable waste, and half of this will almost certainly come under the plough within the next 5 years.

The Nali is less developed than the Hariana of Barwala; only .63 of the whole area is cultivated whereas .8 is cultivated in the Hariana circle; but the Indri-Sirsa Canal, which will irrigate several of the villages in the tract now under consideration, will attract cultivators, and the large wastes in some of the Pachadha villages will pass into the hands of purchasers who will grow indigo and cotton on them. If, then, it is considered necessary to take the whole demand at a rate of 6 annas an acre, I would recommend the postponement of the collection of the difference between this rate and $5\frac{1}{2}$ annas until 1895. At the same time, I do not recommend that this difference, amounting to Rs. 2,289, should be taken at all. The increase proposed is very large, and will be felt by all, and improvident proprietors will in bad years have difficulty in paying.

In para. 36 of this Report, the area which is subject to floods in ordinary years, has been fixed at 9,500 acres and this may be divided as under:—

| Kharif— | | | | Rabi— | | | |
|---------------|-----|-----|-----|-------|-----------------------------|--------------|-------|
| | | | | acres | | | |
| Rice... | .. | ... | ... | 122 | Wheat and mixtures of wheat | ... | 4,223 |
| Jowar | ... | ... | ... | 254 | Other rabi crops | ... | 2,681 |
| Other crops | ... | ... | ... | 272 | | | |
| Total cropped | ... | ... | ... | 648 | Total cropped | ... | 6,904 |
| Kharaba | ... | ... | ... | 224 | Kharaba | ... | 489 |
| Total sown | ... | ... | ... | 872 | Total sown | ... | 7,393 |
| Fallow | ... | ... | ... | | | | |
| | | | | | ... | 1,235 acres. | |

Applying the same rates as are used in the Fatehabad Nali (q. v.), the result is a demand of Rs. 8,978, which is practically 8 annas on the total area of 17,617 acres recorded as sotar. This demand is quite as high as can be taken; it errs perhaps in being too great.

For the barani part of these sotar villages, the rate proposed is 6 annas, which is the rate in the Hariana tract, and does not here give a too great enhancement. Mr. Fagan suggested for the sotar villages a demand composed thus—

| | | |
|--------|-----|-----------|
| Barani | ... | Rs. 5,587 |
| Sailab | ... | 10,727 |
| Waste | ... | 1,401 |
| Total | ... | 17,715 |

The only important difference between this and the proposal now made is in the sailab rate, which he fixed at 9 a. 9 p. He had not before him the Sirsa statistics and based his proposals on the figures of the four years used in preparing the produce estimates, which have been shown to be excessive.

The total demand in the Nali by the present proposals will be Rs. 42,578, against an existing revenue of Rs. 23,574, an increase of 80 per cent. The existing demand includes over Rs. 5,000 for waste land (hence the high incidence of the total demand on cultivation), so that the assessment on cultivation is now more than doubled.

Fatehabad Nali.

61. Fatehabad Nali.

| 1 | 2 | 3 | 4 5 6 | | | 7 | 8 |
|-------------|---------------------|---|---------------------------------|---|---------------------------|--------------------------|---|
| Circle. | Division of Circle. | Present dry revenue and its incidence on cultivation of 1863. | REVENUE ON PRESENT CULTIVATION. | | | Revenue on excess waste. | Totals of columns 6 and 7, being the proposed demand. |
| | | | At the revenue rate of 1863. | At rate proposed in the Preliminary Report. | At the rate now proposed. | | |
| | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Nali | Barani | 6,163 | 11,138 | 18,880 | 15,384 | 419 | 15,803 |
| | | 0 6 8 | 0 4 0 | 0 6 9 | 0 5 6 | | |
| | | 17,775 | 21,458 | 36,210 | 29,505 | | |
| | | 0 7 0 | 0 4 0 | 0 6 9 | 0 5 6 | | |
| | (Barani) | 12,335 | 20,049 | 27,102 | 18,267 | 1,559 | 49,431 |
| | Sotar | 0 12 9 | ... | 0 12 0 | ... | | |
| | (Sailab) | 30,110 | 41,507 | 63,313 | 47,772 | | |
| | (Total) | | | | | | |
| | Total | 36,273 | 62,695 | 82,192 | 63,156 | 2,078 | 65,234 |

| | Rs. |
|--|--------|
| Revenue on barani cultivation at 5½ annas per acre ... | 44,889 |
| Do. sotar do. 8 do. do. ... | 18,068 |
| Do. waste do. ... | 2,078 |
| Total revenue now proposed ... | 65,035 |
| Increase of revenue per cent. 79. | |
| Do. cultivation „ 128. | |

The circumstances of the barani villages of the Fatehabad Nali are similar to those of the barani part of the Barwala Nali; but the progress made in Fatehabad since 1863 is even greater than in Barwala. Cultivation is now three-fold; and the extent of waste is on the whole not large, though in some villages there is still a considerable area. The Fatehabad Nali is the richest part of the district in cattle. Population increased 27 per cent. between 1868 and 1881. Pachadhas own 4 of the tract; but in the whole tract only 3 is cultivated by the proprietors. Almost two-thirds lies in zamindari villages, and more than half of this area belongs to the Skinner family. The rate suggested in the Preliminary Report was 6 a. 9 p. which would give a revenue of Rs. 18,880, or more than three times the present revenue. A large increase is possible; but, with such a population, I do not think a rate higher than 5½ annas is safe. This gives along with the revenue for excess waste a demand of Rs. 15,803, in place of Rs. 6,163. The new Indri-Sirsa Canal will not touch these villages. There is still a waste area of 12,920 acres, but it is not much more than one-fourth of the cultivated area.

In the sotar villages the barani cultivation is double what it was at Settlement, and the sotar, or sailab, area is also shown as 36,136 in place of 15,196 acres at Settlement. In para. 35 reasons have been given for considering 18,000 acres as the ordinary sailab area

Barani villages.

Sotar villages.

for the purpose of estimating a fixed assessment. This area may be divided, as under, according to the averages of the last four years.

Kharif—

| | acres |
|------------------------------|-------|
| Rice | 1,921 |
| Jowar | 857 |
| Other crops | 1,029 |
| Total cropped | 3,807 |
| Kharaba | 696 |
| Total sown | 4,503 |
| Fallow | ... |
| Total cultivated area | ... |

Rabi—

| | acres |
|------------------------------------|--------------|
| Wheat and mixtures of wheat | 5,268 |
| Other rabi crops | 5,865 |
| Total cropped | 11,133 |
| Kharaba | 1,083 |
| Total sown | 12,216 |
| Fallow | 1,308 acres. |
| Total cultivated area | 18,027 „ |

Munshi Amin Chand did not adhere in distributing the demand to his rates of 8 annas and 10 annas for Choya and Ghaggar irrigation, (See para. 140 of the Preliminary Report), and his rate was about $12\frac{1}{2}$ annas all over. Produce estimates would give a rate of Re. 1 per acre; but in the Preliminary Report 12 annas was proposed as an all-round rate; and for soil rates Rs. 2 for rice-land, Re. 1 for wheat-land, and 8 annas for all other land. These soil rates are the same as were at first suggested by Mr. Wilson, but they were reduced by him to Rs. 1-12-0, 0-12-0, and 0-6-0; and in para. 58 of this Report it has been shown that even these lower rates gave a demand 12 per cent. in excess of what the eight years' experience of a fluctuating assessment would justify. The reason is that it is unsafe to apply rates to the whole area shown as cultivated, which in the Nali, whether of Sirsa or of Hissar, is always far in excess of the reality. The rates applied in the Sirsa villages to the actual cropped acres are—

- Rs. 2-8-0 for rice,
- Rs. 0-12-0 for jowar,
- Rs. 0-8-0 for other Kharif crops,
- Rs. 1-8-0 for wheat and mixtures of wheat,
- Rs. 0-12-0 for other Rabi crops;

and, if we apply these rates to the areas already given, the result is Rs. 18,267. This is practically one rupee per acre, which is also the rate deduced from produce estimates and prices. In the Preliminary Report, I proposed a rate of Re. 0-12-0; but the reduction of area justifies a larger rate on the balance, and the villages can, in my opinion, easily pay a fixed demand of Rs. 18,267. This is the assessment upon 36,136 acres, and the rate is 8 annas, which was also Munshi Amin Chand's rate for the Choya villages. For the barani part of these sotar villages, the rate proposed is $5\frac{1}{2}$ annas, as in the rest of the circle.

The result including the revenue on waste is a demand of Rs. 49,431, in place of Rs. 30,110, an increase of 64 per cent. The area of cultivation is shown as double, but part of it is uncertain, and the increase in cultivation is not more than 78 per cent. The existing demand includes a sum of Rs. 5,026 on waste land, leaving only Rs. 25,084 for cultivation (hence high incidence of total demand on cultivation), and the revenue now proposed on cultivation is Rs. 47,772, an increase of 90 per cent.

The demand for the whole circle at the proposed rates would be Rs. 65,234. The demand on cultivation is more than doubled, as the existing revenue includes more than Rs. 6,000 for waste land. The demand by the rates in the Preliminary Report would be Rs. 82,192, but this supposes, what is certainly incorrect, that the whole area recorded as sotar is, in ordinary years, subject to inundation. If it is considered necessary to take a larger revenue than is now proposed, the villages should be allowed the option of having a fluctuating assessment.

62. The revenue rates proposed in the Nali circles give a demand which can, and will be, paid in ordinary years, provided the distribution is made with due consideration of past payments and of the special circumstances of each village in regard to its sotar area. Suspensions will, no doubt, be necessary, and the

Fluctuating assessment not necessary with proposed demand.

working of a fixed settlement in these villages must always be carefully watched ; and nowadays both these conditions can be complied with. A fluctuating assessment, which is no solution of the problem, but a mere cutting of the gordian knot, would save the Settlement Officer considerable trouble, and much responsibility ; but I do not recommend such an assessment, partly in consideration of the unanimous desire of the people that the assessment should be fixed, and partly because, in my opinion, the revenue now proposed, while it is as much as the State can in a number of years expect to collect, is sufficiently low to be paid in ordinary years by cultivators with ordinary prudence. The increase is substantial, but yet not large with regard to the increase in the resources of the tract. The barani rate is decidedly low, and the assessment on waste is very small. In every case, even when the whole village is shown as sotar, the proprietors have barani land, and are not dependent only on the Ghaggar floods. The uncertainty in the produce on the Nali land is scarcely greater than in the barani villages. The failure of the Ghaggar floods is more noted, but year after year a certain number of barani villages get little or no rain, and have no produce except straw two or three feet high. The following statement gives the receipts of landlords in barani and sotar villages, where the rents are paid in kind or in cash after appraisement of the value of the standing crops :—

Yearly receipts in Sotar and Barani villages.
(Rents collected in kind or by appraisement)

| Numbers. | Tahsil. | Village. | Nature of village. | 1877-78. | 1878-79. | 1879-80. | 1880-81. | 1881-82. | Average of 5 years. | 1882-83. | 1883-84. | 1884-85. | 1885-86. | 1886-87. | Average of 5 years. | Average of 10 years. | Present No. of years. | Rent according to proposed revenue rates. | REMARKS. |
|--------------------------|-----------|-------------|--------------------|----------|----------|----------|----------|----------|---------------------|----------|----------|----------|----------|----------|---------------------|----------------------|-----------------------|---|--|
| 1 | Hansi | Dhamian | Barani | 73 | 1,468 | 1,864 | 860 | 1,213 | 1,096 | 441 | 220 | 1,105 | 1,475 | 683 | 845 | 970 | 240 | 391 | In so far as there are occupancy tenants paying at privileged rent rates, the receipts are less than the net produce of the estates. In the sotar area there are few such tenants, and the rent is generally paid in kind. |
| 2 | Hansi | Ladwa Gujar | " | 42 | 594 | 968 | 335 | 906 | 569 | 303 | 144 | 525 | 759 | 656 | 463 | 516 | 100 | 199 | |
| 3 | " | Pahal | " | 111 | 838 | 1,605 | 161 | 1,172 | 781 | 161 | 201 | 797 | 1,333 | 665 | 611 | 696 | 250 | 344 | |
| 4 | " | Bharri | " | 15 | 537 | 574 | 213 | 575 | 383 | 133 | 57 | 315 | 556 | 261 | 264 | 324 | 75 | 99 | |
| 5 | Barwala | Bhatu | " | 477 | 1,011 | 634 | 441 | 1,845 | 781 | 438 | 219 | 1,811 | 463 | 563 | 699 | 740 | 230 | 340 | |
| 6 | " | Bawan | " | 808 | 1,871 | 1,937 | 2,397 | 1,276 | 1,670 | 1,289 | 919 | 2,638 | 1,294 | 1,242 | 1,486 | 1,378 | 360 | 741 | |
| 7 | Fatehabad | Dadupur | " | 413 | 1,589 | 1,695 | 591 | 1,350 | 1,127 | 1,159 | 1,250 | 1,068 | 1,421 | 855 | 1,271 | 1,199 | 160 | 512 | |
| Total of barani villages | | | | 1,939 | 7,028 | 9,277 | 4,938 | 7,838 | 6,407 | 3,924 | \$,010 | 8,909 | 7,330 | 5,025 | 5,639 | 6,023 | 1,405 | 2,626 | |
| 8 | Barwala | Talwari | Sotar | 436 | 768 | 474 | 623 | 586 | 579 | 526 | 329 | 876 | 445 | 363 | 508 | 543 | 325 | 218 | |
| 9 | " | Chuharpur | " | 165 | 475 | 442 | 1,748 | 448 | 658 | 250 | 114 | 1,399 | 1,613 | 651 | 805 | 730 | 100 | 298 | |
| 10 | " | Mowed Khurd | " | 185 | 268 | 352 | 607 | 456 | 374 | 327 | 266 | 745 | 595 | 497 | 474 | 424 | 100 | 200 | |
| 11 | " | Rainwala | " | 107 | 510 | 331 | 329 | 496 | 352 | 385 | 235 | 904 | 844 | 854 | 642 | 497 | 150 | 295 | |
| 12 | " | Rupawadi | " | 133 | 418 | 351 | 583 | 490 | 396 | 238 | 251 | 826 | 771 | 221 | 471 | 434 | 65 | 123 | |
| 13 | " | Rafathon | " | 473 | 2,030 | 719 | 816 | 953 | 197 | 889 | 217 | 1,367 | 1,300 | 496 | 854 | 925 | 140 | 328 | |
| 14 | " | Chilewal | " | 232 | 210 | 413 | 229 | 378 | 378 | 316 | 531 | 497 | 210 | 1,273 | 645 | 452 | 120 | 199 | |
| 15 | " | Ginnu | " | 181 | 115 | 140 | 128 | 116 | 135 | 109 | 380 | 239 | 122 | 431 | 256 | 196 | 60 | 105 | |
| 16 | " | Nauhari | " | 689 | 396 | 1,053 | 410 | 370 | 623 | 451 | 1,128 | 501 | 492 | 610 | 622 | 622 | 100 | 203 | |
| 17 | Fatehabad | Lali | " | 783 | 2,140 | 560 | 1,337 | 1,850 | 1,354 | 1,232 | 1,221 | 2,744 | 2,177 | 1,079 | 1,700 | 1,537 | 580 | 904 | |
| 18 | " | Jalopur | " | 231 | 1,920 | 893 | 776 | 1,592 | 1,080 | 724 | 947 | 1,241 | 1,168 | 594 | 935 | 1,008 | 210 | 497 | |
| Total of sotar villages | | | | 3,235 | 9,240 | 5,817 | 7,507 | 7,735 | 6,864 | 5,347 | 5,699 | 11,359 | 9,668 | 7,169 | 7,312 | 7,365 | 1,860 | 3,463 | |

The variation in barani villages is as great as in the sotar villages. In Bhar-ri the variation between highest and lowest is 38 : 1, and in Ladwa-Guzar 23 : 1 and in Dhamian 26 : 1. Amongst Nali villages the greatest variation is in Ohuharpur, where it is 11 : 1. In the Nali villages the receipts were less than the revenue on only two occasions, whereas in barani villages this occurred ten times. Taking the villages together, the demand in the barani villages according to the proposed revenue rates would exceed the receipts only in one year, and would exceed half the receipts in five years. In the Nali villages, this demand would never exceed the receipts, and would exceed half the receipts only in four cases. On the whole, then, it can scarcely be said that the payment of the new revenue will be found more difficult in the sotar than in the barani villages; and, if the circumstances of the former require a fluctuating assessment, the whole district should be under the same system.

This would be a very backward step from the policy laid down forty years ago by Mr. Thomason, and it would be objectionable not only for the ordinary reasons against a fluctuating assessment but also because of the grave political consequences which would almost certainly follow. The statement proves how very uncertain husbandry is in the whole district, and how necessary it will be to suspend revenue in bad years, especially where the proprietors belong to the improvident classes.

63. The result of the proposals for the four tahsils is an increase amounting to Rs. 1,90,460 being 62 per cent; and, taking the new water advantage at Rs. 80,000 as against Rs. 49,144, there is a total increase of over Rs. 2,20,000.

General result.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----------|---------------------------|---|--------------------|------------------------|--------------------------------------|-------------------------------|-------------------|--------------------|----------|
| Tahsil. | Circle. | Original demand of existing Settlement. | Demand of 1889-90. | Proposed revenue rate. | Resulting assessment on cultivation. | Proposed assessment on waste. | Total assessment. | Increase per cent. | REMARKS. |
| | | Ra. | Ra. | Ra. A.P. | Ra. | Ra. | Ra. | | |
| Hansi | Haryana | 97,603 | 97,335 | 6 6 | 1,52,454 | 608 | 1,53,062 | 57 | |
| Hissar | Bagar | 40,342 | 40,306 | 4 4 | 52,143 | 384 | 52,527 | 30 | |
| | Haryana | 44,535 | 44,309 | 6 0 | 70,078 | 695 | 70,773 | 60 | |
| | Total Tahsil | 84,877 | 84,615 | ... | 1,22,221 | 1,079 | 1,23,300 | 46 | |
| Barwala | Haryana | 32,875 | 32,875 | 6 0 | 57,751 | 403 | 58,154 | 77 | |
| | Nali | 23,606 | 23,574 | 5 7 | 39,534 | 2,870 | 42,404 | 80 | |
| | Total Tahsil | 56,481 | 56,449 | ... | 97,285 | 3,273 | 1,00,558 | 78 | |
| Fatehabad | Bagar | 25,388 | 24,864 | 4 3 | 41,215 | 522 | 41,737 | 68 | |
| | Haryana | 7,762 | 7,762 | 5 0 | 13,990 | 76 | 14,066 | 81 | |
| | Nali | 36,288 | 36,273 | 5 6 | 62,957 | 2,078 | 65,035 | 79 | |
| | Total Tahsil | 69,438 | 68,899 | ... | 1,18,162 | 2,676 | 1,20,838 | 75 | |
| | Grand Total of 4 Tahsils. | 3,08,399 | 3,07,298 | ... | 4,90,122 | 7,636 | 4,97,758 | 62 | |
| Bhiwani | Bagar | 40,240 | 40,240 | 3 6 | 39,701 | 565 | 40,266 | ... | |
| | Haryana | 31,385 | 31,295 | 7 3 | 45,557 | 196 | 45,753 | 46 | |
| | Total Tahsil | 71,575 | 71,535 | ... | 85,258 | 761 | 86,019 | 20 | |
| | Total of the 5 Tahsils | 3,79,974 | 3,78,833 | ... | 5,75,380 | 8,397 | 5,83,777 | 54 | |

The figures for Hansi and Hissar in Columns 4 and 5 are exclusive of the water advantage. There are also some slight differences between column 4 and the figures in the assessment chapter, arising from changes in the demand since the Preliminary Report was written.

To justify this large increase, there has been a general increase in resources; cattle have increased 75 per cent., cultivation has extended by 53 per cent. all over and in some circles has been trebled. The district has been opened out by the Railway, and prices have risen more than 60 per cent. The rates are very little greater than those of 1863, and they are based on rents which have risen since settlement. A great part of the Preliminary Report was devoted to showing that these rents were paid in bad as well as in good years. The only exception I have found, and even this is not a true exception, is in the case of bhayachara villages, as explained in paragraph 37 of this Report. But accepting the exception as true, and extending it to all classes of villages by applying the average rent rate of zamindari villages to the whole sown area, as distinguished from cultivated area, still the demand now proposed is within the half net produce of the estates. Feeling the responsibility of proposing such a large increase, I would have welcomed any good reason that would have justified a reduction. The accounts of rent receipts furnished by the landlords have left no loop-hole. These accounts may be accepted as on the whole correct, at least they do not show a larger income than has been received. In paragraph 62 eighteen illustrations have been given of all kinds of villages: the average income of the last ten years was Rs. 13,361, and the demand according to the proposed rates is Rs. 6,085.

In the following table an abstract has been given for 99 villages in the various circles:—

Landlords' receipts and proposed revenue.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|------------------|-------------|-------------------------|------------------|------------------|--|--|-------------------------------------|------------------------------------|------------------|---------------|
| Tahsil. | Circle. | Sub-division of Circle. | No. of villages. | Present revenue. | Average receipts of 5 years prior to 1882. | Average receipts of 5 years prior to 1887. | Average receipts of these 10 years. | Revenue at proposed revenue rates. | Water advantage. | Total demand. |
| | | | | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. | Rs. |
| Hansi | Haryana ... | Eastern ... | 3 | 1,949 | 6,871 | 8,427 | 7,648 | 3,889 | ... | 3,889 |
| | | Western ... | 4 | 1,663 | 4,944 | 4,901 | 4,922 | 2,683 | ... | 2,683 |
| | | Canal ... | 9 | 14,257 | 37,005 | 39,233 | 38,104 | 10,874 | 7,789 | 18,663 |
| | | Total ... | 16 | 17,869 | 48,820 | 52,561 | 50,674 | 17,446 | 7,789 | 25,235 |
| Hissar | Haryana ... | Eastern ... | 14 | 6,753 | 24,482 | 26,685 | 25,588 | 11,265 | ... | 11,265 |
| | | Western ... | 3 | 1,300 | 8,120 | 8,490 | 8,306 | 3,326 | ... | 3,326 |
| | | Canal ... | 5 | 4,804 | 15,732 | 14,808 | 15,269 | 5,976 | 1,993 | 7,969 |
| | | Total ... | 22 | 12,857 | 48,334 | 49,983 | 49,163 | 20,567 | 1,993 | 22,560 |
| Barwala | Haryana ... | Eastern ... | 5 | 1,380 | 8,517 | 9,922 | 9,221 | 3,794 | ... | 3,794 |
| | | Western ... | ... | ... | ... | ... | ... | ... | ... | ... |
| | | Total ... | 5 | 1,380 | 8,517 | 9,922 | 9,221 | 3,794 | ... | 3,794 |
| Fatehabad | Haryana ... | ... | 4 | 1,375 | 5,028 | 5,186 | 5,106 | 2,309 | ... | 2,309 |
| Hissar | Bagar ... | Northern ... | 4 | 1,774 | 5,111 | 5,622 | 5,363 | 2,694 | ... | 2,694 |
| Fatehabad | " ... | Eastern ... | 7 | 4,351 | 21,637 | 24,885 | 23,245 | 8,330 | ... | 8,330 |
| Barwala | Nali ... | Barani ... | 16 | 3,236 | 15,606 | 18,079 | 17,122 | 8,079 | ... | 8,079 |
| | " ... | Sotar ... | 13 | 1,600 | 6,200 | 7,560 | 6,880 | 3,059 | ... | 3,059 |
| | | Total ... | 29 | 4,836 | 21,806 | 25,639 | 24,002 | 11,138 | ... | 11,138 |
| Fatehabad | Nali ... | Barani ... | 7 | 2,428 | 12,917 | 15,696 | 14,337 | 6,574 | ... | 6,574 |
| | " ... | Sotar ... | 5 | 3,846 | 11,216 | 11,924 | 11,571 | 4,966 | ... | 4,966 |
| | | Total ... | 12 | 6,274 | 24,133 | 27,620 | 25,878 | 11,540 | ... | 11,540 |
| | | Grand Total... | 99 | 50,616 | 1,83,386 | 2,02,018 | 1,92,650 | 77,818 | 9,782 | 87,600 |

The average receipts of the last 5 years amount to Rs. 2,02,018, (and in so far as there are occupancy-tenants paying fixed privileged rents the receipts are less than the net assets for assessment purposes) and, by the proposed rates, the revenue would be Rs. 87,600 including owner's rate. The dry revenue in these villages would be Rs. 77,818, which is 16 per cent. of the whole demand in the four Tahsils, and from this a fair inference can be drawn as to the rest. The table shows that in all Tahsils except Hansi the demand is considerably less than half the average receipts; and even in Hansi it is only in the Western Haryana that it exceeds half receipts. Of the four villages whose receipts are there given, two are below the average, and in the distribution of the revenue they will be assessed below the revenue rate. Otherwise in every case the result given by the proposed revenue rate can be paid.

The total demand in the four Tahsils at the revenue rates of 1863 would be Rs. 4,39,505; and the demand proposed is Rs. 4,97,758, an increase of 14 per cent. On the other hand, the demand at the rates in the Preliminary Report would be Rs. 5,87,110, but this is somewhat exaggerated by the excessive area of sotar, and for this a deduction of perhaps Rs. 12,000 should be made, leaving Rs. 5,75,000. Roughly calculated, the proposed revenue is .43 of the net assets instead of .5. I think it is scarcely necessary for me to give reasons for not assessing up to the figures of the Preliminary Report. The Financial Commissioner considered that the rates of that Report were not too high, and might even at that stage have been pitched higher; but moderate though they are, they would give an increase of 87 per cent., and this increase it would be impossible to take. The increase in dry revenue in all the five Tahsils now under settlement would be Rs. 2,04,944, being 54 per cent. A short time ago an increase of 50 per cent. in a circle was considered the limit; but here we have an increase of more than 50 per cent. over a whole district. It is not, therefore, without some hesitation that I recommend the enhancement given by the revenue rates, though in every case they have been reduced as far as circumstances justified.

64. The local rate and Lambardari cess are paid at Rs. 10-5-4 and at Rs. 5 per cent. on the revenue in every Tahsil. The patwar cess is paid in fixed sums and varies with each village; the average rate per cent. for all the five Tahsils is Rs. 5-11-4, the lowest being Rs. 5-2-3 in Hansi and the highest Rs. 6-4-7 in Fatchabad. If the whole income may be funded, so that the excess of one Tahsil may be used to meet the deficiency of another, then a rate of Rs. 5 per cent. on the revenue of each Tahsil will cover the whole expenditure.

This presumes that the owner's rate will be liable to pay the patwar cess which, I understand, has been decided in the case of Karnal (*vide* para. 753, Ibbetson's Settlement Report, and para. 8 of Financial Commissioner's review of it). The Local Rate has been fixed at Rs. 10-6-8 including postal cess. If the proposal as to the patwar cess is accepted the cesses will fall at Rs. 20-6-8 per cent. on the revenue including owner's rate.

65. The proposal made in para 49 of the Bhiwani Report that the Kharif revenue should be paid in one instalment on 15th December, and the Rabi revenue in one instalment on 15th June, is applicable to the whole of five Tahsils.

66. With reference to the orders of Government on recent Assessment Reports, I presume that the period for the currency of the proposed Settlement will be 20 years commencing with the Kharif of 1890.

ALEX. ANDERSON,

Deputy Commissioner.

23rd June 1890.

GLOSSARY OF VERNACULAR TERMS USED IN THIS, AND IN THE PRELIMINARY REPORT.

| | |
|----------------|---|
| AK ... | ... A shrub (<i>colotropis procera</i>). |
| BAJRA ... | ... Spiked millet (<i>Holcus spicatus</i>). |
| BAMBUL ... | ... A bush (<i>Acacia juquemonti</i>). |
| BANI ... | ... A forested area. |
| BARANI ... | ... Entirely dependent on rain. |
| BATAI ... | ... Payment of rent by division of crop. |
| BEJHAR ... | ... Mixture of barley and gram. |
| BHAYACHARA ... | ... (Village), in which the land has been divided and the area held by each proprietor is the measure of his rights in the village. |
| BHUR ... | ... A poor sandy soil. |
| BIGAH ... | ... $\frac{1}{16}$ of an acre, this is a Kachcha bigah, now in general use; a Pakka bigah is 3 Kachcha bigahs. |
| BUI ... | ... A low whitish plant. |
| CHAHU ... | ... Irrigated from wells. |
| CHARI ... | ... Great millet (<i>jowar</i>) grown for fodder. |
| DAKAR ... | ... Hard clay soil. |
| DAUL ... | ... Literally boundary, a premium paid for lease of land. |
| GOCHNI ... | ... A mixture of wheat and gram. |
| GOJRA ... | ... " " " " barley. |
| GWAR ... | ... A fodder crop. |
| JADID ... | ... Land that has lain fallow for 2 years. |
| JAL ... | ... A tree (<i>Salvadora Oleoides</i>). |
| JAMA ... | ... Land revenue demand. |
| JAND ... | ... A tree (<i>Prosopis spicigera</i>). |
| JAWAR ... | ... Great millet (<i>Holcus Sorghum</i>) grown for grain. |
| JULA ... | ... Literally Yoke of the plough, a premium paid for lease of land. |
| KADIM ... | ... Old fallow, land that has been fallow for 4 years. |
| KADIM KIRSAN | ... An old cultivator, now the same as malik kabza. |
| KAIR OR KARIQ | ... A tree (<i>Capparis aphylla</i>). |
| KAMIN ... | ... Village menial. |
| KANGERA ... | ... A thorny bush. |
| KANKUT ... | ... Payment of rent by appraisement of value of crop. |
| KARRI ... | ... Hard good loam. |
| KARSANA ... | ... Wild Indian hemp. |
| KASHT-HARSALA | ... (Rent), paid by rate on area sown in the year. |
| KATHI ... | ... See Karri. |
| KHALSA ... | ... Land revenue paid to Government. |
| KHARABA ... | ... Sown and failed; yielding no crop. |
| KHARI-PARI ... | ... (Rent), paid on area whether cultivated or not in the year. |
| KHARIF ... | ... The hot weather harvest. |
| KHUD KASHT ... | ... Land cultivated by the proprietor. |
| KIKAR ... | ... A tree. (<i>Arabica Acacia</i>). |
| MAAFI ... | ... Assignment of land revenue. |
| MAHAWAT ... | ... Seasonable winter rain. |
| MALIK-KABZA .. | ... A proprietor who has no share in the common land. |
| MASH ... | ... A pulse (<i>Phaseolus radiatus</i>). |
| MILMILA ... | ... Slightly brackish water. |
| MOTH ... | ... A pulse (<i>Phaseolus aconitifolius</i>). |
| MUNG ... | ... " " mungo. |
| MUNJ ... | ... Fibre of the Sarkanda grass. |
| NAHRI ... | ... Irrigated from a canal. |
| PALA ... | ... A bush (<i>Zizyphus nummularia</i>). |
| PARGANA ... | ... A sub-division of a Tahsil. |
| PATTIDARI ... | ... A village held on shares, where the revenue is paid by fixed shares. |
| PHOG .. | ... A bush, eaten by camels. |
| PIPAL ... | ... A tree (<i>Ficus religiosa</i>). |
| RABI ... | ... Cold weather harvest. |
| REGISTAN ... | ... A desert of sand. |
| REZ ... | ... Inundated by a stream. |
| ROSLI ... | ... Good loamy soil. |
| SAILAB ... | ... Land flooded by a stream. |
| SARKANDA ... | ... A high grass (<i>Saccharum Sara</i>). |

| | | |
|---------------|-----|--|
| SERINA ... | ... | ... An extra part of the crop taken by the land-lord by way of expenses. |
| SOTAR ... | ... | ... Hard clay soil irrigated from a stream. |
| SUKHLAMBAR... | ... | ... Assignee of land revenue holding for 3 lives. |
| TAL ... | ... | ... Valley land. |
| TIBBA ... | ... | ... Sandy hilly land. |
| UPRAHAN ... | ... | ... Waste land set aside as to collect drainage for a tank or for irrigation. |
| ZAMINDARI ... | ... | ... A village owned by one proprietor or by a number of proprietors in common. |

GENERAL STATEMENT No. 1

STATEMENT SHOWING CULTIVATED AND UNCULTIVATED AREAS IN THE DISTRICT

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