

In the adjoining Gurgaon district the cultivated area under mortgage in 1898 was over 14 per cent. of the whole and for the whole Punjab about 12·5 per cent.

60. The vast majority of the alienations by sale took place between 1878 and 1890 and are due to poverty, over-assessment, and the direct action of the State

Explanation of the large area sold.

in selling up insolvent estates or shareholders or compelling the insolvents to transfer their lands for a nominal consideration. This explains the lowness of the prices per cultivated bigah—Rs. 3 in Kumher, Re. 1 in Akhegarh, Rs. 3 in Bhartpur and Rs. 2 in Nagar. It also explains the large proportion of sales to non-agriculturists, especially in Kumher and Akhegarh. They were then, as a rule, the only persons who had the capital necessary to work the distressed estates, but as a rule, a short experience of the revenue system was sufficient to glut their land-hunger, and in the great majority of cases they were after a few years only too willing to re-transfer it to the original owners, or other zamindars, who were willing to take it off their hands. Thus in Akhegarh the whole estates of Bekru, Milkipur, Nangla Bhaola, Khohra, Baroli Jhar, and shares in two other estates, which had originally been bought up by *Mahajans* or other speculators were soon re-transferred to the zamindars.

In fact the area now held in proprietary right by others than agriculturists in any tahsil is extremely small, probably not more than one-fiftieth of the area, but among the agriculturist class estates have been chucked about like an old shoe and sold for a mere sou.

61. On the other hand, a large proportion of the mortgages are of old stand-

Explanation of the large area mortgaged in Kumher and Bhartpur.

ing, dating back to a time, especially in Kumher and Bhartpur—where alone the mortgaged area is considerable—when those tahsils were, owing to the salt trade and the general prosperity, more highly cultivated and densely populated than now, and when land was in high demand among the agricultural classes. Hence in Kumher and Bhartpur the average amount per cultivated bigah in the case of mortgages to agriculturists is Rs. 8 and Rs. 20 per bigah or Rs. 20 and Rs. 50 per acre, respectively. Since 1890 the average has fallen slightly in Kumher, but immensely in Bhartpur.

In Kumher and Bhartpur the mortgages are chiefly found in the eastern villages adjoining Muttra and Agra, which are by far the most prosperous and highly cultivated. Thus in Kumher two-thirds of the total mortgaged area is found in the ten estates of Abhora, Ajan, Awar, Borawai, Bhainsa, Talphera, Dadwari, Sunera, Santrak and Ghunsara, the totals for which are:—

Cultivated area mortgaged.	Mortgage money.	Per bigah.
15,059	122,672.	Rs. 8.

The great majority of the mortgages have hitherto been oral and have only been brought to light in the holding-to-holding attestation recently carried out. All these have now been brought on record, the terms and the mortgage money shown, and the fees due to the State on the mutation—5 per cent. on the consideration—realised. In Kumher alone Rs. 4,061 have already been realised on this account.

62. On the whole it may be said that nearly all the transfers by sale and many

General remarks on alienations.

of those by mortgage (except in the eastern villages of Kumher and Bhartpur) have been due not to extravagance or imprudence on the part of the zamindars, but to the pressure of the State demand coupled with a harsh revenue system. There have also been many transfers of *masi* lands, especially by mortgage, but these are expressly prohibited by the proclamations of the late Maharaja and are not recognised by the State.

The measures recently taken by the Durbar to restrict alienations by sale and mortgage to (1) male agnates, (2) other members of the village community, (3) in extreme cases to other agriculturist members of the same tribe, were referred

to in last year's report (paragraph 94), and the area alienated was also compared with that of adjoining British districts. In Muttra (page 80, Settlement Report) at the settlement of 1872-77, it was found that 42 per cent. of the area had been permanently transferred from the persons whom we found in possession at the conquest (1803-1825), and over one-third had changed hands within the currency of the 40 years' settlement, while in Agra during the thirty years' settlement ending in 1872, 30 per cent. of the cultivated area was permanently, and 10 per cent. temporarily alienated. In these districts the transfers have been chiefly to capitalists, while in Bhartpur not only is the proportion of the area transferred much smaller but nearly all of it has gone to agriculturists.

63. The following table extracted from the Statement I, compares the total area of each tahsil and its classification, into *mafi*, unculturable, culturable and cultivated at last settlement—1890-91—and for the year 1897-98 :—

Tahsil.	Detail.	Total area.	MAFI AND INAM.		<i>Khalsa</i> .	State property, <i>runds</i> , etc.	Government property (British).	UNCULTURABLE.		Culturable.	New fallow.	Cultivated.
			Total.	Cultivated.				Hills.	Others.			
Kumher ...	1890-91 ...	306,446	62,501	29,705	24,394	14,789	1,700	113	16,266	25,432	68,307	117,329
	1897-98 ...	306,598	59,147	35,429	24,745	14,789	1,862	95	14,227	63,095	13,570	139,813
Akhegarh ...	1890-91 ...	194,280	17,272	13,609	177,008	...	464	4,054	9,785	12,642	31,546	118,517
	1897-98 ...	194,406	16,437	13,383	178,029	...	456	4,104	10,849	18,633	18,805	125,182
Bhartpur ...	1890-91 ...	326,138	48,706	28,029	277,432	9,330	697	457	20,274	53,602	92,053	101,019
	1897-98 ...	325,023	46,548	28,483	278,475	34,254	697	452	15,778	85,425	12,135	129,734
Nagar ...	1890-91 ...	137,459	3,625	1,698	133,834	1,480	...	343	6,506	13,050	29,675	82,740
	1897-98 ...	137,211	3,095	2,432	134,116	1,574	...	338	7,579	21,333	3,444	99,848

As regards the whole area the alterations are trifling, in no case exceeding 3 per cent. It has already been explained that the maps prepared at last settlement have been retained and merely corrected and brought up to date.

The *mafi* area has, owing to resumptions, decreased as follows :—

Tahsil.	<i>Mafi</i> area resumed.	Of which cultivated.
Kumher ...	3,354	1,431
Akhegarh ...	835	614
Bhartpur ...	2,158	1,500
Nagar ...	530	350

But it still amounts to 19 per cent. of the total in Kumher, 8.5 per cent. in Akhegarh, 14.5 per cent. in Bhartpur and only 2 per cent. in Nagar. The resumed area has generally been treated as State property and given out on annual leases—a troublesome and financially bad system. The demand under this head has been included in the proposed *jama*. I have now recognised as owners the actual occupiers whether the heirs of the late *mafidars* or the zamindars, and the resumed areas will, for purposes of record and assessment, be treated as ordinary *khalsa* land. As explained in paragraph 57 the whole of Pathana and Jaroti in Akhegarh has for the present been treated as *khalsa*. Though the total *mafi* area has fallen off in each tahsil, the cultivated area shows an increase except in Akhegarh, as the *mafi* lands have shared in the general expansion of cultivation in recent years. The increase in the total *khalsa* area is of course due to resumptions modified by the revision of measurements. State property represents the *runds* or fuel and fodder reserves, and other land in the direct occupation of the State. It has increased considerably in Bhartpur owing to the inclusion of village waste in the wild-cattle enclosure.

The area occupied by the British Government for the Rajputana Malwa Railway is shown as "Government property" and is inconsiderable. The unculturable waste is shown as "(1) Hills," which cover only a nominal area except in Akhegarh, where the Alipur range covers a fairly large area, and (2) "Other," *i.e.*, other unculturable lands, such as roads, village sites, etc., as well as land which owing to *Kallar* etc., is unfit for cultivation. The area is not considerable. Owing to more careful classification it has increased slightly in Akhegarh and Nagar and decreased considerably in Kumber and Bhartpur. The culturable waste shows an enormous increase everywhere, the chief reason being that much of the land formerly shown as fallow has now, where broken up, been included in the cultivation, and of the balance all that did not come under the heading of new fallow, *i.e.*, cropped within the previous two years was included in "culturable." This also explains the decrease in "fallow" which at last settlement appears to have included all land that had at one time been cultivated, but had gone out of cultivation. The "cultivated" area means as at last settlement the area actually sown with crops during the year.

64. The total and net (*i.e.*, deducting resumed area) increase of cultivation in

Total and net increase in cultivated area and each tahsil is shown in the following proportion of cultivated, culturable and unculturable to total area. table :—

Tahsil.					Total.	Per cent.	Net.	Per cent.
Kumber	...	...	...	...	22,484	19	21,053	18
Akhegarh	...	...	...	...	6,665	5.5	6,051	5
Bhartpur	...	...	...	...	28,715	28.5	27,215	27
Nagar	...	...	...	...	17,108	17	16,758	17
Total					74,972	14.5	71,077	13.5

The net increase of cultivation has, therefore, been small in Akhegarh—5 per cent., considerable in Nagar and Kumber—17 and 18 per cent., respectively, and very large in Bhartpur—27 per cent., while for the whole tract it is 13.5 per cent.

The following table shows the main divisions of total and *khalsa* area in each tahsil :—

Tahsil.		TOTAL AREA				Khalsa AREA.			
		Unculturable.	Culturable.		Cultivated.	Unculturable.	Culturable.		Cultivated.
			Fallow.	Others.			Fallow.	Others.	
Kumber	...	11	5	27	57	13	5	25	57
Akhegarh	...	9	10	10	71	9	10	11	70
Bhartpur	...	16	5	30	49	18	4	31	47
Nagar...	...	6	3	16	75	7	3	16	74

Taking the *khalsa* area alone there is thus ample room for expansion of cultivation. In Nagar and Akhegarh the culturable area is 19 and 21 per cent. of the total area or about 30 per cent. of the area at present under tillage, in Kumher it is 30 per cent. of the whole and over 50 per cent. of the area under tillage; while in Bhartpur it is 35 per cent. of the total and equal to three-fourths of the area under tillage. I am confident that with a proper revenue administration most of this culturable land will be restored to cultivation within the next five years.

65. In Bhartpur it has been shown (paragraphs 7—9) that the enormous area of land fit for, but left out of, cultivation is due partly to causes beyond the zamindars' control, but aggravated by the fact that they are partly unwilling, partly unable to break it up: unwilling—because a large proportion of them are Gujars who live chiefly by their cattle and have a double object in keeping the land waste, as it provides them with excellent pasture, and they pay little or nothing for it as waste; unable—because many of the communities are weak in hands and have neither the labour nor the energy to work the land. The circumstances of this tahsil called for special measures, and therefore, after I had completed my village-to-village inspection, I submitted proposals to the Political Agent and Council for more speedily and effectively bringing the waste land, much of which is annually inundated from State *bands*, under cultivation and making it yield revenue to the State.

An analysis of the conditions of each estate in the tahsil showed that in some 50 out of 126 *khalsa* estates there were enormous areas of surplus waste of which the existing owners cannot or will not break up a reasonable area. The land in Bhartpur is according to the principles accepted last year (see Introduction to last year's report) primarily the property of the State, but the Zamindars have a subordinate proprietary right as long as they maintain the cultivation, manage the estate properly, and pay the State demand punctually. Where, as in the case of those villages, the Zamindars from want of the will or the means are found to be incapable of discharging these obligations, the State, as superior owner, is entitled to step in and make such arrangements as it considers best to safeguard its own interests. Hitherto the State has exercised that right of interference by making the estate *kham*. That system has, however, been proved disastrous to the people and the State revenues, and it was necessary to devise some more effective method.

66. Taking as a guide the principle embodied in section 60 of the Punjab Land Revenue Act, which empowers the Revenue-authorities, where an estate has an area of waste land exceeding its requirements, to make a separate assessment of such excess and offer it to the owners of that estate or to outsiders, I proposed in the case of the 50 estates in Bhartpur where there was such excess waste (1) that the existing owners should be left for pasturage and future extension of cultivation an area of waste land approximately equal to that at present cultivated; (2) that the surplus be marked off as a separate *chakk*, in one compact block as far as possible, and leased for the term of settlement (the proprietary right being granted at once or withheld for a time according to circumstances) not as a rule to the owners of the estate (whose incapacity was already established), but to the zamindars of other villages, priority being given to residents of the State, (3) that as an act of grace and to satisfy any objections on the part of the old owners, the State should give them an allowance of Rs. 3-2-0 per cent. or half an anna per rupee on the assessment of the newly formed *chakk*, this being the equivalent of the *hakk mokaddami* or *lambardari* allowance, which is the only profit they would usually have derived from the land hitherto, had they cultivated it through tenants, (4) that, in order to encourage agriculturists to come

forward and take up these lands for cultivation, they should be given specially favourable terms as regards the rates of the land-revenue and water-rates, *viz.*—

(a) the rates of land revenue to be ordinarily.—

1st year	...	4 annas per bigah,
2nd „	...	6 „ „ „
3rd „	...	8 „ „ „

till the expiry of the settlement, the rate to be calculated on the total culturable area allotted, whether cultivated or not;

(b) that where the land is inundated or irrigated from State *bands*, water rates be charged as follows :—

1st year	...	4 annas per bigah	} on the area actually flooded.
2nd „	...	8 „ „	
3rd „	...	Re. 1 per bigah, or the usual rate, to end of the set- tlement	

These proposals were accepted in April 1899 by the Political Agent and Council, and I am now engaged in giving effect to them through Munshi Mahmud Hasain, the Revenue Superintendent who has received considerable assistance from the Tahsildar of Bhartpur, Saiyad Barkat Ali. The favourable terms have attracted numerous applications from agriculturists all over the State and some from Alwar and British territory, and the abundant rainfall this year has also helped to make the arrangements successful. Up to the date of writing nearly all the waste land thus put at our disposal—over 30,000 bigahs—has been allotted, and is being rapidly broken up, but before finally completing the arrangements, and formally giving out the leases, we shall await the results of the present year's working. The allotments are in each case conditional on the lessees settling themselves with a certain number of cultivators on the lands by a given date, this being essential to secure continuity in the cultivation. The same system will, as circumstances require, be extended to other *tahsils* as well.

Thus in Nagar in the large village of Sandraoli, where the Gujar owners had kept nearly 5,000 bigahs of the best land in the *tahsil* for pasture, I have formed a *chakk* of about 3,000 bigahs from the surplus waste which will be assessed at 6 annas per bigah, the first year, 8 annas the second, and 12 annas the third and up to the end of settlement. The lease of this will however be given to the old owners, as they are numerous and in a position to work the land. The action thus taken will have undoubted results in stimulating cultivation of waste land in other *tahsils*. The income which the State will derive from these leases will be mentioned in next year's report and is left out of account in the present proposals.

These relate to the area now under cultivation to the consideration of which I return.

67. The following table shows total and details of cultivated area at previous settlements and for the year 1897-98, but the information as to settlements prior to 1890-91 is meagre and not very reliable:—

Tahsil.	Details.	Total cultivated.	CHAHIL.				SAIRABA.				BARANI.			REMARKS.
			PERMANENT.		TEMPORARY.	Total.	Present.	Former.	Barichi.	Total.	Barani.	Bhur.	Total.	
			Present.	Former.	Present.									
Kumher	1855	141,952	(a) Exclusive of gardens. Hence difference from statement in paragraph 63.
	1890-91	117,180	28,096	12,937	5	41,038	...	399	...	399	75,714	29	75,743	
	1897-98	139,694	25,410	14,638	753	40,801	...	364	...	364	96,517	2,012	98,529	
Akhegarh	1855	77,164	
	1890-91	118,474	34,162	6,625	...	40,788	240	...	...	240	73,372	4,074	77,446
	1897-98	125,150	26,140	7,623	368	34,131	432	...	...	432	85,187	5,406	90,593
Bhartpur	1855	Unknown	
	1890-91	101,019	27,079	9,214	361	26,655	8,211	1,260	60	9,531	54,823	...	54,823	
	1897-98	120,734	23,991	16,242	686	40,919	15,039	4,054	...	19,093	65,935	3,727	69,722	
Nagar	1855	90,303	8,917	4,156	77,230	
	1890-91	82,740	10,389	2,204	18	12,611	3	...	...	3	69,815	311	70,126
	1897-98	99,848	9,795	2,305	58	12,158	1,506	392	237	2,225	82,299	3,166	85,465	

The increase in the total cultivation has already been commented on.

The statistics of *chahi* irrigation have been discussed at length in paragraph 12. The total *chahi* area has increased in Bhartpur, decreased in Akhegarh, and remained stationary in Kumher and Nagar; but the area actually irrigated shows a serious falling off in all tahsils owing partly to the deterioration caused by bitter wells, which is a permanent influence, but mainly to the reduction of the water-supply by the drought of recent years, which is purely temporary. However a consideration of the statistics of wells and *chahi* area alone gives no justification for enhancement.

The *sairaba* area in Kumher and Akhegarh is so small that it has hardly any influence on the assessment. In Nagar it has increased from 3 to 2,225 bigahs, but this will not be taken into account, as the land will be assessed as *barani*. In Bhartpur, however, there has been a great improvement. The *sairaba* area has owing to the repair and extension of the State *bands*, practically doubled itself.

68. It is, however, in the *barani* cultivation that the greatest expansion has taken place.

Comparison of *barani* area and *barani* crops.

The table in paragraph 67 shows the absolute and the relative increase of the *barani* area but even these figures do not fully bring out the preponderance of *barani* cultivation, for much of the area recorded as *chahi* and *sairaba* will in a given year be found to be worked as *barani*.

The following table compares the classification of *soils* and of *crops* in the year 1897-98 as *chahi*, *sairaba* and *barani*:—

Tahsil.	Details.	Total.	Chahi.	Sairaba.	Barani.	Percentage of crops to cultivation.
Kumher	Area cultivated ...	139,694	40,801	364	98,529	102
	Percentage ...	100	29	....	71
	Area of crops ...	142,769	25,170	368	116,231	
	Percentage ...	100	18	....	82
Akhegarh	Area cultivated ...	125,156	34,131	432	90,593	104
	Percentage ...	100	21	5	78.5	
	Area of crops ..	130,198	26,842	443	102,913	
	Percentage ...	100	20	....	80
Bhartpur	Area cultivated ...	129,734	40,919	19,093	69,722	102
	Percentage ...	100	31	15	54	
	Area of crops ...	132,524	25,452	15,633	91,439	
	Percentage ...	100	20	12	68	
Nagar	Area cultivated ...	99,848	12,154	2,225	85,469	108
	Percentage ...	100	12	2	86	
	Area of crops ...	107,852	9,895	2,219	95,738	
	Percentage ...	100	9	2	89	

Thus in an average year 82 per cent. of the crops in Kumher, 80 per cent. in Akhegarh, 68 per cent. in Bhartpur and 89 per cent. in Nagar were grown purely as *barani* without any aid from irrigation or inundations.

69. The last column in the statement shows the percentage of double-cropping in the same year, *viz.*, 2 per cent. in Kumher and Bhartpur, 4 per cent. in

Akhegarh, 8 per cent. in Nagar. In Kumher and Bhartpur only the light sweet soil on the east adjoining Muttra and Agra is suitable for double cropping. Much of the land in Akhegarh is cool and sweet and would be twice sown, were not the winter rains so uncertain. Nagar however, if rains are favourable, has more double-cropping than any other tahsil. Double-cropping on the wells is rare, though on sweet wells vegetable or fodder crops are sometimes sown after cotton. On *barani* lands after the *bajra*, which is reaped at the end of September, is off the ground, if there have been late rains gram is often sown as a second crop, but the outturn is generally poor, and on the whole the double cropping is of little importance in these tahsils.

70. The methods of agriculture have been referred to in Chapter I and are much the same as those of the northern tahsils, described in paragraph 108 of last

year's report. The best husbandry is found in the Meo villages of Nagar and the Jat villages on the east of Kumher and Bhartpur; the worst in the Gujar villages of Bhartpur. The practice of manuring not only the *chahi* but the outlying *barani* fields is spreading. Weeding of the *kharif* crop, especially in seasons of heavy rain, is most essential and is generally practised; otherwise weeds and *pala* shut off light and air from the young plants. Gram is generally left to take its chance. The *barani* fields are rarely surrounded by small *dhauls* or field boundaries. Hence the rains if heavy drain off and often carry away the seed and the surface of the earth. This is a distinct evidence of bad agriculture.

In the tracts hitherto infested by the wild cattle the fields are protected by high walls or embankments of mud, the maintenance of which is a terrible tax on the people but now that this plague has been almost removed, these walls will be left to fall to pieces. In these villages, too, the agriculturists are often found to be quite hoarse from the continual shouting to scare off the cattle and worn out from their unceasing vigils. The nightly raids of the wild cattle render sleep impossible to a stranger also. Whether from carelessness, or kindness to God's creatures, the Zamindars, who are almost exclusively Hindus, rarely protect the crops in the ear from birds. Leaving aside the wild cattle, much damage is done to the crops, especially close to *runds* or other jungle, by wild pig, deer, *nilgai*, etc. To remedy this I have proposed that, except where it is desirable to specially preserve game for sport, the Zamindars should be authorised to protect their fields by killing, if necessary, any such animals found actually in their crops, and the Durbar has agreed to this except as regards the *nilgai*, the misleading name of which has caused some hesitation.

71. The following table abridged from statement IX shows the number of cattle, ploughs, carts, etc., at last settlement and in 1897-98 when a special enumeration was made:—

Tahsil.	Detail.	CATTLE.											Total cattle.
		Houses.	Ploughs.	Carts.	Oxen.	Cows.	He-buffaloes.	She-buffaloes.	Horses.	Mules and de k s	Camels.	Sheep and goats.	
Kumher	1890-91	10,217	4,404	305	10,567	20,601	2,074	6,806	500	735	24	8,066	49,332
	1897-98	11,886	5,009	682	16,447	23,570	5,434	9,863	1,041	1,471	48	13,020	70,894
	+ or -	+1,669	+605	+377	+5,880	+2,969	+3,360	+3,057	+532	+736	+24	+4,954	+21,562
Akhegarh	1890-91	7,351	3,042	42	5,766	13,853	840	4,208	226	370	21	5,907	31,281
	1897-98	7,065	3,465	333	7,204	15,204	1,347	6,958	373	944	105	9,536	41,671
	+ or -	+614	+423	+291	+1,438	+1,351	+507	+2,660	+147	+574	+84	+3,629	+10,390
Bhartpur	1890-91	8,766	3,643	155	7,312	16,148	939	4,745	465	264	40	7,870	37,783
	1897-98	9,524	4,307	400	10,782	16,306	2,318	6,127	721	1,205	34	11,302	48,885
	+ or -	+758	+754	+335	+3,470	+248	+1,379	+1,382	+256	+941	-6	+3,432	+11,102
Nagar	1890-91	4,255	1,864	98	3,417	7,777	395	2,238	238	115	15	3,143	17,338
	1897-98	5,472	2,623	298	7,198	9,921	1,350	5,014	509	655	49	7,584	32,280
	+ or -	+1,217	+829	+200	+3,781	+2,144	+955	+2,776	+271	+540	+34	+4,441	+14,942
TOTAL	1890-91	30,589	12,953	600	27,062	58,379	4,248	18,087	1,438	1,484	100	24,086	135,784
	1897-98	34,847	15,564	1,803	41,631	65,091	10,449	27,062	3,644	4,275	236	41,442	193,730

If we assume the figures of 1890-91 to be correct, the increase all round has been tremendous. I believe, however, the number of cattle was then underestimated. The figures for ploughs, however, are less likely to be erroneous, and these show an increase ranging from 13 per cent. in Akhegarh to over 40

per cent. in Nagar. The increase in houses is far greater than the increase of population since 1891 (paragraph 44), and much stress cannot therefore be laid upon it. The undoubted increase in ploughs necessitates the corresponding increase in plough oxen which has undoubtedly taken place. The main question is, however, whether the cattle are sufficient for purposes of agriculture, *i.e.*, to work the ploughs and wells and supply the wants of the people as regards milk, etc.

Looked at in this way, the number of cattle is more than adequate in Kumher and Bhartpur, in both of which the large area of pasture has encouraged the keeping of cattle, and though relatively fewer in Akhegarh and Nagar, where the area of pasture is smaller, still it cannot be said to be inadequate. No doubt there are many cultivators, especially in Akhegarh (see paragraph 53), who have no cattle of their own, and this is a sign of agricultural depression, but the total number of cattle is sufficient.

In the Punjab in 1898 there was one head of cattle, excluding sheep and goats, for every 2 acres of cultivation; in these tahsils in the same year there was one head of cattle for every $1\frac{1}{2}$ acres of cultivation. If we look to the number of ploughs, however, the result is not so satisfactory. In the Punjab last year there was a plough for every $12\frac{1}{2}$ acres of cultivation. The average for these tahsils is 43 bigahs or over 17 acres. This, however, is almost the same as Gurgaon, where the area per plough last year was 16 acres. There is, no doubt, however, that a further increase of ploughs would give greater efficiency of cultivation, though less ploughs are required in a *barani* area like this with an easily worked soil than where the soil is stiffer and irrigation more developed.

72. In the large area of culturable waste available for grazing, cattle from adjoining tahsils or territories with less pasture also graze in dry years. Thus last year in Kumher the enumeration showed that 2,725 head of cattle from other tahsils—chiefly the Mewat—and 1,877 from British districts were being grazed. The villages with excess waste often derive considerable income from grazing fees. In Kumher the amount was Rs. 3,372 in 1897-98 and Rs. 1,877 in 1898-99. The right to cut and carry away grass is also sold, or the grass is made into hay and sold in the sack. Last year the scarcity of pasture in the Mewat drove the Meos to buy hay and fodder in the central tahsils, and in Kumher the grass on 1,658 bigahs was sold for Rs. 382 or an average of 4 annas per bigah. Similarly the Agra Zamindars habitually bring their cattle to graze on the waste in Bhartpur, and last cold weather thousands of cattle from the north of the State and from Marwar were driven hither for pasture, but it was impossible to ascertain the income which the local people derived from grazing dues.

73. In Kumher there are three State *runds*—Heylak, Suketra and Bhataoli—with an area of 14,962 bigahs. These are primarily reserved for the supply of grass to the Imperial Service Cavalry (now disbanded) and of other State departments, but after the grass is cut and stored, they are thrown open to grazing, and bring in a small income of about Rs. 635 per annum.

In Akhegarh there was a single *rund*—Nawalpura—with an area of 1,128 bigahs, which was given out for cultivation about 25 years ago, but the lessee resigned and the land has since passed through many hands. It is now leased as a grazing ground at Rs. 601 per annum by the adjoining village of Naraoli, which has sublet it for Rs. 665 per annum, or nearly 10 annas per bigah. This shows the value of land for grazing. I am endeavouring to make an advantageous lease of this area for cultivation, but even if it is kept for a grazing ground, the State will not be a loser in the long run, as the value of grazing land will increase as the present village pastures are brought under cultivation.

Bhartpur has 6 *runds* and *ghannas viz.*, *runds* Si (466 bigahs) Kasoda (182 bigahs), Bansi (1,100 bigahs), Ikran Kalan (1,487 bigahs) Ikran Khurd (1,284 bigahs), which are primarily reserved for the grazing of State cattle and the supply of grass for State purposes, and the large *ghanna* close to the city formed out of the waste of Srinagar, Bhartpur and Bhandaur with an area of

24,217 bigahs, of which 16,108 bigahs have been enclosed for the wild cattle, and the rest is kept for the grazing of the city cattle. The usual charges are:—

Buffalo	...	...	...	...	Rs. 2.
Cows and oxen	...	...	...	...	Re. 1.
Goats	...	...	...	...	As. 6 and as. 3.
Sheep	...	...	...	...	As. 2.

The income last year was Rs. 1,477, but with proper management this could be doubled and even trebled.

In Nagar there is only a single *rund*—Rasiya—with an area of 948 bigahs, which is generally reserved for State purposes. It is not a separate estate but included in the village of Rasiya and Punchri.

The Durbar has recently had under consideration the desirability of giving up for cultivation the reserves which are not required for State purposes, and has decided to surrender the *runds* of Bhataoli in Kumher and Ikran Khurd in Bhartpur, besides certain *runds* in the northern and southern tahsils, *viz.*, Dahr Kho, Ghanna Gharsa, Siswaree and part of Auw in Dig, Karka and Gharwari in Oochain, and part of Rupbas in Rupbas. The breaking up of these reserves will not only increase the revenue, but will also lessen the damage now suffered from the wild animals which infest them. Owing to the abundance of pasture in these tahsils the area of crops grown or cut for fodder is less than in the northern tahsils, but this point will be noticed in Chapter V.

74. Among the spontaneous products may be mentioned (1) *pala*, the dwarf *ber* which grows in profusion in the loamy soils of all tahsils, produces two crops of leaves in the year, and is a most valuable form of fodder; (2) *pula* or *sarkanda* which grows in the very light soils and along the banks of sandy *nalas* and is very common in Kumher and part of Bhartpur and Nagar; (3) *gandar* grass, a kind of coarse reed which thrives on the low-lying swampy lands of Bhartpur and Kumher flooded by the Ruparel or Banganga. *Pala* is by far the most profitable even in cultivated land. After the crops are cut it sells for 2 to 4 annas per bigah. Its value in Kumher is estimated by the Deputy Collector at Rs. 4,466 and in Akhegarh at Rs. 4,110 per annum.

Both Deputy Collectors have furnished me with an estimate of the annual income derived from sales of (1) milk and ghi, (2) surplus cattle, (3) wood, in each tahsil, which I give for what it is worth:—

Particulars.	Kumher.	Akhegarh.	Bhartpur.	Nagar.
Sales of milk and ghi	72,984	49,830	49,818	35,000
" " cattle	1,09,763	63,232	74,082	48,526
" " wood	254	173	354	356
Total	1,83,001	1,13,235	1,24,254	83,882

The estimate is, I think, a moderate one except as regards the profits from sale of cattle. Though these are based on the Customs returns, I think it is dangerous to generalise from them, as many transactions are never brought to book, and the profits from sale of surplus cattle are not more than sufficient to cover the losses by disease and starvation in seasons of scarcity.

75. The remarks on these points made in paragraphs 109 and 110 of last year's report apply to these tahsils as well, but they are on the whole less prosperous than the northern tahsils, and the standard of comfort as regards foods, clothing, housing is decidedly lower than in Alwar.

* Standard of comfort, food, etc.

• Of indebtedness there is little, because hitherto there has been little power of borrowing except in the highly developed villages on the east of Kumher. The people on the whole are as industrious as could be expected considering their fiscal history, circumstances, and environment, extremely frugal from necessity, peaceful, and free from serious crime. Litigation is infinitely less than among the Meos, who are equally ready to quarrel among themselves and to combine against an outsider. Though judged by the standard of British territory, there is much economic distress, there is little social discontent, because there is little inequality.

The agricultural classes are now for the first time for 25 years getting fair play, and if a good revenue administration is maintained there is no reason why the State should not become again what it was under Captain Walter's administration, the most fertile and prosperous State in Rajputana. Certainly for its size no State can compare with it in natural advantages of soil, rainfall, capacity of irrigation from wells, *nalas* and *bands*, and agricultural conditions generally.

CHAPTER IV.

PRICES.

76. In Chapter IV of last year's report I described the methods adopted for arriving at the scale of prices to be adopted

Method of enquiry as regards prices.

(1) to calculate the total value of the produce and thus deduce the value of the State share, (2) to estimate the extent to which prices have risen since the assessment of 1890-91, and how far this rise may be taken into consideration as a reason for enhancing the demand. The same course has been followed in these tahsils. The retail or *bazar* prices for the ten years prior and the eight years subsequent to the 1890 settlement have been obtained from the registers of weekly prices kept in the tahsils and for Bhartpur from the *thani* or register of *bazar* prices maintained in the *kotwali*. Similarly the harvest prices which the Zamindars obtain for the grain have been ascertained for the same two periods from the *bahis* or account-books of the grain dealers at the chief trade centres in the tahsils and from the *bachat* or record of wholesale prices kept up in the Bhartpur City Kotwali. The latter, however, represent wholesale prices all the year round in the town and are therefore higher than the prices paid by grain dealers to the agriculturists at harvest time in the villages.

The following table shows the average harvest and retail prices for both periods, the scale of prices assumed last year for the northern tahsils, the average retail prices in Bhartpur city since 1871, as given in "Prices and Wages in India," and the scale of prices now assumed for these tahsils :—

Tahsil.	Period.	Detail.	Kharif Crops.					Rabi Crops.					Remarks.	
			Bajra.	Jowar.	Mung.	Mofh.	Cotton.	Fl.	Wheat.	Barley.	Gram.	Bajra.		Sarson.
Kumher	1880-90	Harvest	24	27	27	...	11	11	22	29	29	...	10	
		Bazar	23	25	25	...	11	10	21	27	27	...	15	
	1891-98	Harvest	24	28	23	...	10	12	20	28	28	...	14	
		Bazar	22	27	23	...	10	11	19	28	27	...	13	
	Now assumed.		26	30	25	...	11	11	21	29	30	...	14	
Akhgarh	1880-90	Harvest	27	22	26	...	11	11	22	32	30	...	14	
		Bazar	24	22	22	...	9	9	19	28	23	...	12	
	1891-98	Harvest	26	29	24	...	10	10	20	28	25	...	14	
		Bazar	20	23	19	...	10	9	16	24	22	...	12	
	Now assumed		...	As Kumher			...	...	...	...	...	...	...
Nagar	1880-90	Harvest	21	23	25	...	10	12	22	29	28	...	15	
		Bazar	20	22	24	...	10	11	21	28	26	...	14	
	1891-98	Harvest	22	26	22	...	11	10	19	27	22	...	12	
		Bazar	21	25	20	...	10	9	18	26	25	...	11	
	Now assumed		As Kumher			...	...	...	...	...	...	...	...
Bharipur	1880-90	Harvest	21	23	22	24	...	10	18	26	25	25	...	
		Bazar	21	22	23	22	...	10	18	26	24	25	...	
	1891-98	Harvest	19	23	16	22	...	9	17	25	23	23	...	
		Bazar	19	22	16	21	...	9	17	24	23	23	...	
	Now assumed		25	29	24	24	11	10	20	27	28	25	13	
City retail prices	1871-75	...	19'3	21'2	...	...	...	...	18'3	25'7	24'5	...	...
	1876-80	...	19'9	22'2	...	...	...	...	17	23'6	20'7	...	...
	1881-85	...	22'9	24'4	...	...	...	...	18'4	25'9	23'9	...	...
	1886-90	...	17'5	19'3	...	...	...	...	15'7	22'6	27'8	...	...
	1891-95	...	20'5	24'5	...	...	...	...	16'4	24'4	25'2	...	...
	Total		100'1	111'6	...	...	...	...	85'8	122'2	122'1	...	...
Average		20	22'3	...	...	...	...	17'2	24'4	24'4	...	...

77. The scale of commutation prices to be assumed for calculating the value of the crops must of course approximate to the harvest prices, which are alone of

Scale of prices assumed.

importance to the Zamindars, rather than to the retail prices paid by the consumer. The harvest prices in Kumher, Akhegarh and Nagar approximate so closely to one another, and the circumstances of these tahsils—none of which has a considerable market or large *urban* population—that I have fixed the same scale for all three. In Bhartpur, on the other hand, the figures for past years prove, what one would naturally conclude, that the presence of a large city population and a brisk market in touch with other trade centres through the railway, cause prices to rule a little higher than in the outlying tahsils. The following table shows the scale now fixed :—

Tahsil.	Bajra.	Jarwar.	Mung.	Meth.	Cotton.	Oil.	Wheat.	Barley.	Gram.	Bejar.	Sarion.
Northern tahsils ...	26	30	25	25	11	...	21	20	30	26	14
Kumher, Akhegarh, Nagar. ...	26	30	25	25	11	11	21	20	30	26	14
Bhartpur ...	25	20	24	24	11	10	20	27	28	25	13

Except in Bhartpur therefore the scale of prices is the same as that assumed in the northern tahsils, and the estimate, though framed with caution, fairly represents, I think, the prices which the Zamindars are likely to receive for their produce during the term of the new settlement on an average of years, and is therefore a safe enough basis for calculating the value of the produce.

Little is to be gained by endeavouring to estimate the extent to which prices have risen for assessment purposes, as no standard of prices was assumed in fixing the last assessment. If, however, we apply to the produce of 1897-98 in each tahsil (a) the average harvest prices of the ten years prior to the last, (b) of the eight years prior to the present settlement, we find that the enhancement varies from 1 per cent. in Nagar to 5 per cent. in Bhartpur. In fact, the last settlement has been too recent for any appreciable rise of prices beyond temporary fluctuations due to drought, etc., to have taken place since, especially as there has been no improvement of communications by the opening up of new railways, etc.

CHAPTER V.

CROPS AND OUTTURN.

78. Statement No. II shows in detail the crops sown—

Statistics of crops grown at and since last settlement.

(a) At last settlement, as given in the annual papers of 1891-92.

(b) In each of the five following years 1892-93 to 1896-97.

(c) For the year 1897-98, which is taken as the basis of the new assessment.

The statistics are summarised in the following table which shows (a) and (c) in detail and the average of the five intermediate years, also the proportion of the crops grown at each period to the total crop area and the extent of double-sowings :—

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Tahsil.	Year.	Detail.	Total cultivated area.	Total area sown.	KHARIF.								RAVI.							
					Cotton.	Rajra.	Jawar.	Meth masina.	Geswar charri.	Fil.	Others.	Total.	Wheat.	Barley.	Gram.	Bejar geschni.	Oilseeds.	Others.	Total.	Percentage of 40/aili.
Kumher	1890-91	Area	117,180	122,394	2,070	5,631	42,708	6,693	9,232	763	243	68,298	10,393	14,783	17,839	8,263	2,344	474	54,956	5
		Per cent.	...	100	2'5	4'5	35	5'5	7'5	1	...	56	8'5	12	14'5	7	2	...	44	...
	5 years' average	Area	123,761	127,633	6,883	5,633	50,611	5,963	9,877	2,582	386	81,935	9,395	13,561	13,538	5,741	2,768	745	45,748	3
		Per cent.	...	100	5	4'5	40	4'5	8	2	...	64	10'5	19'5	10'5	4'5	2	1	36	...
	1897-98	Area	139,694	141,762	2,040	14,133	52,499	9,024	7,911	5,817	562	91,085	9,445	18,011	18,941	...	3,857	530	59,784	2
		Per cent.	...	100	1'5	10	37	6'5	5'5	4	5	65	7	12	13	...	2'5	5	35	...
Akhegarh	1890-91	Area	118,414	122,730	8,569	18,903	24,383	23,331	1,405	740	344	87,135	7,521	15,880	9,036	650	542	1,966	35,595	4
		Per cent.	...	100	7'5	15	20	19	9'5	5	...	71	6	13	7'5	5	5	1'5	29	...
	5 years' average	Area	119,800	123,992	8,209	19,930	31,737	21,592	10,200	1,942	501	94,111	6,444	13,890	584	636	1,028	3,162	39,981	5
		Per cent.	...	100	3'5	16	25	17	8	2'5	5	75	5	11	5	5	1	2'5	25	...
	1897-98	Area	125,156	130,198	5,803	41,450	29,295	18,127	5,018	1,215	301	101,209	4,310	14,655	7,894	230	550	2,150	28,989	...
		Per cent.	...	100	4'5	32	22'5	14	4	1	...	78	3	11	6	...	...	2	22	...
Bhartpur	1890-91	Area	101,019	101,301	856	1,979	23,113	2,085	9,702	136	545	38,516	9,229	12,030	20,941	15,770	1,363	2,742	62,785	NH
		Per cent.	...	100	1	2	22	2	10	...	1	38	10	11	21	16	1	3	61	...
	5 years' average	Area	101,653	102,728	2,617	4,105	37,199	1,997	9,740	650	745	57,053	9,849	10,652	14,856	8,403	562	1,389	45,675	1
		Per cent.	...	100	2'5	4	36	2	9'5	1	1	56	10	10	14	8	5	1'5	44	...
	1897-98	Area	120,734	132,524	1,081	15,369	56,256	8,849	3,845	1,744	1,050	63,195	13,090	17,892	25,058	4,060	3,198	1,021	64,329	2
		Per cent.	...	100	1	12	27	7	3	1	1	52	10	13	19	3	2	1	48	...
Nagar	1890-91	Area	81,740	88,277	5,464	17,170	20,242	1,348	14,952	1,003	112	60,291	3,019	6,236	16,730	826	890	285	27,086	6
		Per cent.	...	100	6	19	23	2	17	1	...	68	4	7	19	1	1	...	32	...
	5 years' average	Area	87,450	91,990	6,808	16,201	26,504	508	14,402	939	166	65,529	2,703	6,529	15,132	663	1,038	394	26,461	5
		Per cent.	...	100	7	18	29	1	15	1	...	71	3	7	17	1	1	...	29	...
	1897-98	Area	99,843	107,852	4,160	33,223	23,610	7,461	7,889	4,417	957	81,717	2,152	6,890	14,814	1,036	948	295	26,135	8
		Per cent.	...	100	4	30	22	7	7	4	1	75	2	6	10	1	1	...	25	...
GRAND TOTAL	1890-91	Area	419,413	431,702	18,259	43,743	110,546	33,437	44,351	2,641	1,241	254,240	30,172	48,938	64,547	25,509	5,159	5,467	180,211	...
		Per cent.	...	100	4	10	25	7'2	11	6	5	58	7	11'5	15	6	1'3	1'4	42	...
	5 years' average	Area	532,664	447,493	24,517	45,870	146,051	30,060	44,219	6,113	1,798	298,628	28,390	44,632	44,110	15,447	5,996	6,190	143,065	...
		Per cent.	...	100	5'5	11	32	7	10	1'5	5	675	6	10	10	4	1	1'5	32'5	...
	1897-98	Area	389,432	513,343	13,084	104,974	141,660	33,461	24,664	13,193	2,870	343,106	28,997	57,448	66,717	5,326	8,553	3,096	176,237	...
		Per cent.	...	100	2'5	20	28	8'5	5	2'5	5	67	5'5	11	13	1	1'5	1	33	...

79. Thus as compared with last settlement there has been a very substantial increase in the total area of crops sown 1898-99. *vis.*—Kumher 14 per cent., Akhegarh 6 per cent., Bhartpur 31 per cent., and Nagar 22 per cent. This may be usefully compared with the increase of cultivation (paragraph 64). As compared with the five years' average the increase is also considerable, as they included two bad years in which much land was left out of cultivation and the extension of the latter has been most rapid only within the last year or two. To further test the fact whether the crop areas of 1897-98 fairly represent the results of an average year I give the figures for the year 1898-99 when the rains were average in Kumher and Bhartpur, but very deficient in Akhegarh and Nagar. These are:—

Tahsil.					Cultivated area.	* Area of crops.	Dofasli.
Kumher	...	...	...	...	142,455	144,633	2,178
Akhegarh	...	...	...	...	126,103	129,288	3,185
Bhartpur	...	...	...	...	135,539	137,168	1,629
Nagar	...	...	...	...	91,285	92,355	1,070

So that in Kumher and Bhartpur both the area of cultivation and of crops show a still further increase as compared with 1897-98; in Akhegarh the former has increased and the latter decreased by nearly one per cent.; while in Nagar, where the deficiency of rainfall was greatest, the cultivated area receded by nearly 9 and the area of crops by 14 per cent. This, however, is a purely temporary falling-off, and in all tahsils we can safely assume, I think, that the area of cultivation and of crops of 1897-98 will be well maintained during the currency of the new settlement, and in average or good years will be considerably surpassed. Hence there need be no hesitation in taking these areas as the basis of calculation for the new assessment. The efficiency of the cultivation as shown by double cropping has generally improved in Bhartpur and Nagar (see last column of the statement), remained stationary in Kumher, and fallen off in Bhartpur, where the *dofasli* area in 1897-98 was only 2 per cent. against 5 per cent. in the year of last settlement. No general conclusions can, however, be safely drawn, as the double cropping varies from year to year with the amount and distribution of the rainfall.

80. As regards the distribution of the crops over the autumn and spring harvests, it appears that in all tahsils the *kharif* area has increased considerably at the expense of the *rabi*, *vis.* in Kumher from 56 to 65 per cent., in Akhegarh from 71 to 78 per cent., in Bhartpur from 38 to 52 per cent., and in Nagar from 61 to 75 per cent. For the whole tract *kharif* crops now amount to 67 per cent. or two-thirds and *rabi* crops to 33 per cent. or one-third of the whole. The reasons for this will be understood from the remarks in Chapter I, as to the deficient rainfall of late years and the sinking of the water level in the wells. The *kharif* harvest is almost entirely unirrigated, but the monsoon rains are fairly certain, while the September and the winter rains on which the *rabi barani* harvest so largely depends are more uncertain and have been very scanty in recent years. Another reason is that most of the revenue is under the present distribution realised in the *kharif*, and to meet this, the agriculturists are compelled to extend their *kharif* sowings.

The proportion of each crop to the total crop area, as shown in the above table, displays very great fluctuations from year to year, but these are for the most part accidental or temporary, being due to variations in the amount or distribution of the rainfall. They will be best understood if we take each of the chief crops separately.

81. The area under cotton has fallen off considerably in all tahsils owing partly to failure of early rains for *barani* sowings, partly to the greater demand for food-grains in 1897-98 after two years' scarcity. Another reason given by the Zamindars is that the *kharif* instalment falls due before the cotton pickings can be completed, and they prefer to grow crops which can be converted into money in time to meet their obligations. The closing of the Hydraulic Cotton Press at Bhartpur has also reduced the demand. Cotton covers only 2·5 per cent. of the total area, varying from 1·5 per cent. in Kumher to 4·5 per cent. in Akhegarh, where it is grown largely and successfully on the sweet wells.

Bajra. Bajra has increased immensely in all tahsils. It now amounts to 20 per cent. or one-fifth of the whole. It is most largely sown in the light clean soils of Akhegarh and Nagar. The stiffer soils of Kumher and Bhartpur are less suited to it.

Jawar. The area under *jawar* has also increased absolutely and relatively in all tahsils. It covers 28 per cent. of the total area, and is thus the most important food-crop in the *kharif* if not in both harvests. The stiffer soils in the east of Kumher and Bhartpur are particularly well adapted to it and the stalks and the ear here attain a wonderful size in good years. These tahsils also enjoy a better rainfall than the other two and *jawar* requires a stronger soil and better rainfall than *bajra*.

Masina. The lighter *kharif* pulses—*moth*, *mung*, *chawala*—which, whether sown alone or in combination with *jawar*, *bajra* or *til*, are known as *masina*, are chiefly confined to the lighter soils. The cultivation of these crops has increased considerably in all tahsils but Akhegarh, where it has always been largely grown, and now comes to 8·5 per cent. of the whole, *viz.*, in Akhegarh, 14 per cent.; in the other tahsils, about 7 per cent. Last year in Akhegarh I noticed that the crop did remarkably well in spite of the deficient rains.

Gawar, charri. *Gawar* and *charri* are grown exclusively for fodder of the agriculturists' cattle, except in Bhartpur, where some is sold in the city. The area fluctuates, therefore, with the supply of pasture and other forms of fodder. In all tahsils the area has fallen off immensely since last settlement, but this may be due to erroneous classification at that time. It now covers 5 per cent. of the total crop area ranging from 3 per cent. in Bhartpur, where pasture is most abundant, to 7 per cent. in Nagar, where the grazing area is least.

Til. The cultivation of *sésamum* (*til*) has increased enormously. At last settlement it was only 5 per cent. of the crop area, whereas it has now risen to 2·5 per cent. It is chiefly grown in Kumher and Nagar and of late years has been a very paying crop.

Other kharif crops. Other *kharif* crops—sugarcane, maize, vegetables—are of little importance, amounting to only 5 per cent. of the crop area. The valuable *kharif* crops—cane and maize—are almost unknown now, but cane appears to have been largely grown a generation back when prices were better and agriculture more flourishing. Recent legislation against imported bounty-fed sugar and the improvement of the irrigation system may stimulate its growth once more.

82. Coming to *rabi* crops we find that the area under wheat has fallen off everywhere except in Bhartpur, where the increase is due to recent extensions of *band* irrigation. In the other tahsils wheat is confined entirely to *chahi* lands, and hence its cultivation has been affected by the unfavourable circumstances of recent years already referred to. For the whole tract the area is only 5·5 per cent. and varies from 2 per cent. in Nagar to 10 per cent. in Bhartpur.

The cultivation of barley—generally an irrigated crop—has increased considerably in Kumher and Bhartpur which have most facilities for irrigation, slightly in Nagar, and has fallen off in Akhegarh owing to the impaired efficiency of the well irrigation in that tahsil. The area is double that of wheat, *viz.*, 11 per cent., the extremes being 6 per cent. in Nagar and 13 per cent. in Bhartpur. It is the most important food and revenue-paying crop in the *rabi*.

The area under gram, which is the most important *rabi barani* crop, has increased absolutely but not relatively in Kumher and Bhartpur and fallen off considerably in the other two tahsils. This crop is dependent on September rains for sowing and winter rains for maturing, and the scarcity or failure of these in recent years and in 1897-98 has reduced the sowings. It is still, however, the largest *rabi* crop in area, coming to 13 per cent. of the total area for the whole tract, while it varies from 6 per cent. in Akhegarh to 19 per cent. in Bhartpur.

The various combinations of gram, wheat and barley known as *bejar*, *gochni*, *gojra* cover only a small area—1 per cent. of the whole. In Kumher and Akhegarh the area under these mixed crops in 1897-98 has, I think, been distributed over the pure crops—wheat, barley and gram—proportionately.

The cultivation of *rabi* oilseeds shows a trifling improvement in Kumher and Nagar, where however they are still less than 1 per cent. of the total, and a large increase in Kumher and Bhartpur, where the area is more than 2 per cent. They are generally sown in combination with wheat or gram. The soil of all four tahsils is well suited to this very paying crop, but only the more intelligent and industrious Zamindars take the trouble to cultivate it.

Other *rabi* crops are unimportant, forming less than 1 per cent. of the total area. They are chiefly grown in Akhegarh, where they come to 2 per cent. of the crop area. As some of these crops, *zira* or cummin, and tobacco, are valuable, I show the area in detail below :—

Tahsil.				Tobacco.	Zira.	Carrots.	Vegetables.	Total.
Kumher	...	...	...	148	75	...	307	530
Akhegarh	...	...	...	420	1,072	557	101	2,150
Bhartpur	...	...	...	24	58	157	675	914
Nagar	...	...	...	176	10	48	61	295

These crops are always grown on wells and require sweet water. Hence the area is largest in Akhegarh.

83. Taking a brief survey of both harvests it cannot be said that there has been any improvement in the *rabi*, the area of which is now, in spite of the increase of cultivation, less than at last settlement, while the proportion of valuable crops has not increased. In the *kh-rif*, on the other hand, not only has there been a

General remarks on crops.

great increase in area, but the agriculture as measured by the classes of crops grown has improved. The single exception is the decrease of cotton which is probably only temporary. Agriculturally, Akhegarh and Nagar resemble the adjoining Katumbar and Govindgarh tahsils of Alwar on the west, while Bhartpur and Kumber have more in common with the adjoining tahsils of the Muttra and Agra districts on the east. In Agra and the cis-Jumna tahsils in Muttra 60 per cent. of the crops are raised in the *kharif*. In Agra the chief crops are as here :—

<i>Jawar</i>	... 22 per cent.	Wheat	... 12 per cent.
<i>Bajra</i>	... 18 „	Barley	... 2 „
<i>Masina</i>	... 3 „	Gram	... 15 „
<i>Gawar charri</i>	... 2 „		

But owing to canal irrigation and more abundant well water the proportion of valuable crops—cane, maize, cotton and vegetables—is higher in Agra.

84. In a tract like this where, as will appear from Chapter VII, competitive cash rents are rare, it is advisable to base the estimates of the new jama partly on

Average outturn.

a calculation of the value of the produce, and to ascertain this it is necessary to form an estimate of the outturn. There are no past *data* to go upon, but since the beginning of the present settlement in 1896 experiments to determine the outturn of the different crops in different classes of soils have been made every harvest by the tahsil and settlement establishment. Details of these experiments by soils are shown in Appendix B. The total number made on each of the chief crops in each tahsil was as follows :—

Tahsil.	Cotton.	Bajra.	Jowar.	Moth masina.	Til.	Wheat.	Barley.	Gram.	Bajr.	Oilseeds.	TOTAL.	
Kumher	47	76	10	8	64	112	33	12	1	363	
Akhegarh	2	7	18	13	4	35	54	13	6	152	
Bhartpur	2	20	28	...	1	45	27	9	20	3	155
Nagar	1	21	24	2	1	34	56	19	10	1	169
Total	...	5	95	146	25	14	178	249	74	48	5	839

The experiments of 1898-99 were made very carefully in superior, average, and inferior plots selected as far as possible by the Deputy Collectors who in person carried out a considerable number. I was not able to personally make any experiments in these tahsils, but I made a good many last year in similar land in Kama and Dig. By checking the results obtained with those of the Bhartpur tahsils on the north (paragraph 130 of last year's report) and with those already fixed for the 9 recently assessed Alwar tahsils on the west, also with what we elicited by continual enquiries from agriculturists on one side and the tahsil officials on the other, the Deputy Collectors and myself fixed the following rates of yield as representing the average outturn in the different classes of soil :—

Class of soil.	Tahsil.	Cotton.	Bajra.	Jowar.	Marina.	Til.	Wheat.	Barley.	Gram.	Bejar.	Gechni.	Gujra.	Oilseeds.
		Md.	Md.	Md.	Md.	Md.	Md.	Md.	Md.	Md.	Md.	Md.	Md.
Chahi hal	Kumher ...	3'5	5	3'5	2'0	...	6	7	7	...	...	...	2
	Akhegarh ...	3'5	5	3'5	2'5	2	7'5	9	7	8	8	...	2
	Bhartpur ...	4	5	3'5	2'5	2	6	7	7	...	6	5'0	2'5
	Nagar ...	4	5	...	...	2	7	7	7	...	7	...	2
Chahi sabika	Kumher ...	...	...	...	Same as barani		...	...	...	...	...	...	...
	Akhegarh ...	...	...	...	Same as barani		...	...	...	...	...	...	...
	Bhartpur ...	2'5	3	3	2	2	3'5	4	4	...	4	...	2
	Nagar ...	2	3	3	2'5	2	4	4	3	2'5	...	...	2
Sairaba hal ...	Bhartpur ...	3	4	4	2'5	2	5	6	5	...	5'0	5	2
Sairaba sabika (and hal in Nagar.)	Kumher ...	2'5	2'5	3	2'5	2	3'5	4	3	...	...	...	...
	Akhegarh ...	...	2'5	3	2'5	...	3	4	3	...	...	...	...
	Bhartpur ...	2'5	3	3	2	2	3'5	4	4	...	4	...	...
	Nagar ...	...	...	Same as barani		...	...	...	...	...	...	...	...
Barani	Kumher ...	2'5	2'5	3	2'5	2	3'5	4	3	...	...	...	2
	Akhegarh ...	2	2'5	3	2'5	2	...	4	3	3'5	...	...	2
	Bhartpur ...	2	2'5	2'5	2	2	3	3'5	3	...	3'5	...	2
	Nagar ...	2	2'5	2'5	2'5	2	3	3	3	...	3'5	...	2
Bhur	Kumher ...	2'5	2	2'5	1'5	1	3	4	3	...	...	...	2
	Akhegarh ...	...	2'5	...	1'5	2	...	...	...	...	...	...	2
	Bhartpur ...	1'5	2	2	1'5	1	...	3	3	...	...	...	1'5
	Nagar ...	2	2'5	2'5	2	2	...	3	2'5	...	...	...	2

where the entry under any crop and opposite any class of soil is blank, that signifies that the crop was not grown on that class of soil. In Kumher and Akhegarh the outturn on *chahi sabika*, i.e., not actually irrigated within the year is assumed to be the same as *barani*; in Bhartpur and Nagar it is taken as a little higher. The outturn of *sairaba hal* in Nagar has been taken as the same as *barani* as it is to be assessed at *barani* rates.

85. The outturn on *chahi* land except in Akhegarh is generally slightly below that assumed in the northern tahsils where the wells are sweeter, water more abundant, and the agriculture better. Similarly the yield on *sairaba hal* which is only

found in Bhartpur is much lower than that fixed for the northern tahsils, as the Banganga floods are not so fertilising, so certain, or so well distributed as those of the Ruparel. The yield for *sairaba sabika* is taken lower than in the northern tahsils for the same reason. The chief *barani* crops are *bajra* and *jawar* in the *kharif*, gram in the *rabi*. In the northern tahsils I took 3 *mans* as the average yield for *barani bajra*; in these tahsils I have taken $2\frac{1}{2}$ *mans*. For *jawar* my estimate was 4 *mans* in Gopalgarh, 3 *mans* in the other northern tahsils. Here I have taken 3 *mans* in Kumher and Akhegarh, $2\frac{1}{2}$ in Bhartpur and Nagar. *Barani* gram was taken as 4 *mans* in the northern tahsils. Here I have put it at the same figure in Kumher and Akhegarh, $3\frac{1}{2}$ in Bhartpur and 3 in Nagar. The main reason for the difference as compared with the northern tahsils is that the Zamindars of the latter, chiefly Meos, are more prosperous and industrious and so are able to make more out of the land.

I have endeavoured to check my estimates of yield by comparison with those of the adjoining Agra and Muttra Districts. But I find that the re-assessment of these districts in 1872-77 was based on assumed cash rents, and the settlement reports contain no reference to rates of yield. I, therefore, compare the outturn for a few of the leading crops with those for the Gurgaon District and the Agra Division quoted in paragraph 132 of last year's report, the figures in each case representing *mans* per acre—

Crop.	Kind of soil.	Bhartpur, Northern	Bhartpur Central.	Gurgaon.	Agra Division.
<i>Jawar</i>	<i>Barani</i>	6·2 to 10	6·2 to 7·5	7·7	8
<i>Bajra</i>	"	6·2 to 7·5	6·2	5·5	7
<i>Masina</i>	"	3·7 to 6·2	5 to 6·2	4	8
Gram	"	10 to 12·5	7·5	7·5	5
Wheat	<i>Chahi</i>	17·5 to 20	15 to 18·8	12	15
Barley	"	17·5 to 22·5	17·5 to 22·5	15	16

Thus my estimates for *jawar* are slightly below those of the Gurgaon District and the Agra Division, that for *bajra* is exactly the mean of Gurgaon and of Agra. Similarly my estimate for *masina* is higher than the Gurgaon, but considerably below the Agra estimate, which to me seems very excessive; while for gram mine is exactly the same as Gurgaon, but considerably higher than the Agra estimate of 5 *mans* per acre. For irrigated wheat and barley my assumed rates are a good deal higher than those of Gurgaon, but not much above the Agra figures. The explanation of the higher rate in Bhartpur may be that the well areas are much smaller (paragraph 12 (d)) than in Agra or Gurgaon and the irrigation therefore more efficient; but my experience in these States, based on continual enquiries when on tour, and a considerable number of personal experiments, leads me to think that, in the Punjab at least, we are apt to underestimate the outturn on *chahi* lands. On the whole, I think the comparison with adjacent tracts under similar conditions of rainfall and agriculture shows that the rates now assumed are reasonable and moderate. For miscellaneous crops, of which it is difficult to determine the actual outturn and selling value, I have assumed the following cash rates per bigah:—

	Rs.
Tobacco and opium	30
Sugarcane	20
<i>Zira</i> (cummin seed)	15
Vegetables	12
Other crops	10

The area of these miscellaneous crops is only 1·25 per cent of the whole.

'86. Before calculating the total value of the produce of 1897-98, according to the rates of yield now determined and the commutation prices fixed in Chapter IV, it is necessary to make allowances for (1) the crops that fail to come to maturity, (2) the crops that are cut for fodder of the cattle employed in agriculture, (3) the portion of the produce that goes to remunerate the various village menials for thier services in agriculture.

(a) For fodder crops.

The deductions for fodder found by observation and enquiry to be appropriate

are :—

Tahsil.	<i>Gawar charri.</i>	<i>Moth Masina.</i>	Barley and sarson.	Carrots.	Percentage of total crops.
Kumher	All	25 per cent.	5 per cent.	All	6.3
Akhegarh	"	Ditto.	Ditto.	Nil	4.9
Nagar	"	Ditto.	Ditto.	"	9.4
Bhartpur	One-half	20 per cent.	Ditto.	...	3.6

Gawar and *charri* are grown exclusively for the cultivators' cattle except in Bhartpur, where the abundance of pasture and the presence of a market for fodder in the city allow of a considerable portion (estimated at one-half) being converted into cash. A large proportion of the *masina* is also cut for fodder in September, or the cattle are turned loose to graze on it in October. This is estimated at from 20 to 25 per cent. of the crops. Of the winter crops, carrots in Akhegarh and 5 per cent. of the barley and *sarson* in all tahsils is a moderate estimate of what goes to the plough and well cattle. The total deductions vary from under 4 per cent. in Bhartpur, where fodder is plentiful, to over 9 per cent. in Nagar, where it is comparatively scarce.

The necessity for making allowances for failure of crops will appear from the reference to past harvests in Chapter II. Such failure may be due to drought, the most frequent cause in Nagar and Akhegarh, or to overflowing which often spoils the crops in the low-lying lands of Kumher and Bhartpur, or to winter frosts which, as has been seen, often ruin the gram crop. Hail and locusts may also be mentioned as active agents, but these are calamities which are unforeseen and which should be met as under the British revenue system by special suspensions or remissions of revenue. I here propose only to allow for the ordinary calamities of season, which cannot be and have not been taken account of in fixing the rates of yield, and for which a separate deduction must therefore be made.

After comparison with adjoining tracts (see paragraph 135 of last year's report) and consultation with the Deputy Collectors and local officials I have decided to allow the following deductions :—

Tahsil.	<i>Rabi chahi.</i>	All other crops.	Percentage of total crops.
Kumber and Akhegarh	4	10	8
Nagar	4	10	9.5
Bhartpur	4	8	7.2

Thus the allowance for failure is least—7·2 per cent—in Bhartpur, where the rainfall is greatest and irrigation most abundant, and highest in Nagar which has the poorest rainfall and the smallest proportion of irrigation.

The menials who receive a share in the crop as a matter of right are the *tarkan* or carpenter and the *lohar* or blacksmith whose services in furnishing plough-shares, repairing the ploughs and wells are rewarded by 1 *ser* per *man* each from the grain of each harvest. Hence the deduction on this account is 5 per cent of the whole.

87. We are now in possession of all the data *viz.*, area of crops sown in 1897-98, estimate of outturn of each crop or its cash value, standard of prices, deductions to be made for fodder, failure of crops and menials' dues, necessary to determine the value of the crops of that year. The result is shown in the following table:—

Tahsil.	KHARIF.		RABI.		TOTAL.	
	Gross value.	Net value.	Gross value.	Net value.	Gross value.	Net value.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Kumher	3,79,941	3,04,923	3,54,106	3,27,751	6,84,047	6,32,684
Akhegarh	3,86,642	3,50,744	2,93,179	2,69,756	6,79,819	6,20,500
Bhartpur	2,42,596	2,30,466	4,73,225	4,46,320	7,15,821	6,80,030
Nagar	2,71,304	2,57,739	1,58,903	1,50,958	4,30,207	4,08,697

The details of the calculation are given in Appendix C. In Bhartpur and Nagar the *kharaba* and fodder are excluded from the gross value, in Kumher and Akhegarh fodder is included, but both as well as allowance for menials dues, are excluded from the net value. Taking one-fourth of this as representing the State share, the result works out:—

Kumher.	Akhegarh.	Bhartpur.	Nagar.	Total.
158,171	155,125	170,007	102,174	585,477

CHAPTER VI.

OWNERS' SHARE OF THE PRODUCE AND ITS VALUE.

88. The table in paragraph 49 shows that the area paying a share of the produce as rent is infinitesimal, *viz.* :—

Tahsil.	One-half.		Two-fifths.		One-third.	
	Irrigated.	Unirrigated.	Irrigated.	Unirrigated.	Irrigated.	Unirrigated.
Kumher	7	9	...	...	...	9
Akhegarh	...	...	...	3	13	22
Nagar	...	...	...	...	...	8

In Bhartpur rents in kind do not exist at all, and in the other tahsils the areas are too small to generalise from.

The *halat dehi* or accounts of the village prepared at the summary settlement generally state that where the State realised in kind the share it took was generally one-third in *chahi* and two-fifths in *dahri* and *barani* land. The State was then in the habit of collecting the full proprietor's share, and therefore in the absence of actual rents in kind and for the reasons given in paragraph 128 of last year's report I have assumed the owners share to be one-third on *chahi* and two-fifths on other soils, as in the northern tahsils and in Alwar.

89. Assuming that the whole cultivated area is held by tenants-at-will paying in kind at these rates we can by taking one-third of the value of the *chahi* crops and two-fifths of all others arrive at the total value of the owner's share.

It has been already decided that the standard of assessment in Bhartpur is to be two-thirds of the net assets; so taking two-thirds of the owner's share as thus determined we obtain the theoretical State share by this standard as shown below.

Tahsil.					Cash value of owner's share.	State share at two-thirds.	Average per bigah.
					Rs.	Rs.	
Kumher	...	...	...	...	2,37,262	1,58,175	1 2 1
Akhegarh	...	...	...	...	2,28,069	1,52,046	1 3 4
Bhartpur	...	...	...	...	2,55,705	1,70,470	1 5 0
Nagar	...	...	...	...	1,57,458	1,04,793	1 0 9

The result is almost the same as that obtained by taking one-fourth of the gross produce in Chapter V.

90. By the same process we can deduce, not only the total net-assets and the State share by produce rents, but also the net-assets and revenue-rate

Net assets and revenue rates per bigah by per bigah. The method was explained in rents in kind. paragraph 140 of last year's report.

Our crop returns show the total area and details of the crops grown on each class of soil—*chahi hal*, *barani*, etc. Having ascertained their money value in the manner already described, this is divided by the total cultivated area of that class. The result is the average money value of the crops grown on a *bigah* of that class of soil. One-third of this in the case of *chahi* or two-fifths in other cases gives the money value of the owner's share, i.e., the net assets per bigah, or in other words the cash value of the kind rents, and two-thirds of the latter gives the State share or theoretical revenue rate per *bigah*. As the rates thus deduced will be useful for comparison with the rent and revenue rates deduced from cash rents, I show them below for each class of soil in each tahsil:—

Class of soil.					Kumher.	Akhegarh.	Bhartpur.	Nagar.
					Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
<i>Chahi hal</i>	...	...	...	...	2 1 0	2 10 1	2 3 3	2 2 1
" <i>sabika</i>	...	...	...	...	1 0 4	0 15 0	1 2 2	1 7 10
<i>Sairaba hal</i>	...	...	...	...	...	1 0 10	1 14 9	...
" <i>sabika</i>	...	...	...	...	1 3 0	...	1 2 2	0 14 9
<i>Barani</i>	...	...	—	...	0 14 6	0 13 3	0 14 10	0 14 9
<i>Dhur</i>	...	...	...	...	0 11 7	0 11 1	0 11 7	0 13 2

These rates applied to the cultivated area will bring out the demand shown in the last paragraph. Increased by 50 per cent. in each case, they represent the cash value per *bigah* of the rents in kind.

91. It may be argued that the process above described is so hypothetical and based on such a variety of assumptions as to be of little value. In justification of it I quote the instructions contained in the Government of India letter No. 43-L-A., dated 5th January 1897, for the re-assessment of Alwar, which apply with equal force in Bhartpur.

"It appears that in Alwar, as in the neighbouring British districts, the greater part of the cultivation, as well as all the best lands, is in the hands of the owners. This being so, rent rates will be of comparatively small assistance in calculating the assessment, and the Punjab system of estimates will have to be followed."

The results so arrived at are of course only theoretical until tested by comparison with the actual *data* furnished by cash rents which will now be considered.

CHAPTER VII.

CASH RENTS.

92. The tabular statement in paragraph 49 shows that from 40 to 59 per cent. of the area of each tahsil is held by tenants-at-will, paying cash rents either (1) at owner's rates or (2) at other rates.

Comparison of cash rents at owners rates and at other rates.

The details of these rents by soils are given in the following statement :—

Class of soil.	Details.	KUMHER.			AKHEGARH.			BHARTPUR.			NAGAR.		
		Area.	Rent.	Rate.	Area.	Rent.	Rate.	Area.	Rent.	Rate.	Area.	Rent.	Rate.
			Rs.	Rs. A. P.		Rs.	Rs. A. P.		Rs.	Rs. A. P.		Rs.	Rs. A. P.
Chahi hal	At owner's rates	6,334	10,221	1 10 0	1,634	5,115	3 2 3	11,710	16,742	1 6 10	3,205	8,447	2 12 2
	At other rates	7,925	15,084	1 14 3	13,317	37,662	2 13 3	7,865	15,746	2 0 0	1,094	2,334	2 2 2
Chahi sabika	Owner's rates	3,310	3,846	1 2 7	312	468	1 8 0	Included in hal.			Included in hal.		
	Other rates	2,462	4,398	1 12 6	3,167	6,710	0 1 11	2,212	3,873	1 12 0	285	437	1 8 0
Sairaba hal	Owner's rates	...	...	...	...	...	...	4,539	5,044	1 4 11	391	459	1 0 0
	Other rates	...	...	...	276	388	1 6 6	6,788	8,668	1 4 5	18	18	1 0 0
Sairaba sabika	Owner's rates	...	...	...	...	...	...	Included in barani.			...		
	Other rates	131	235	1 13 0	...	...	...	...	...	...	...	...	...
Barani	Owner's rates	23,073	23,674	1 0 6	6,162	5,433	0 14 2	21,021	25,413	1 2 11	28,302	25,306	0 14 4
	Other rates	3,729	24,591	1 0 6	40,079	32,670	0 13 0	20,801	19,780	0 15 3	6,622	5,159	0 12 5
Bhur	Owner's rates	...	...	...	...	...	...	Included in barani.			...		
	Other rates	80	108	1 5 6	3,832	1,979	0 8 3	2,019	1,086	0 8 7	38	48	1 4 2
Total	Owner's rates	32,717	37,741	1 2 6	8,105	11,016	1 5 9	37,260	48,119	1 4 8	31,898	34,212	1 1 6
	Other rates	14,327	44,416	1 4 9	60,664	79,400	1 5 0	39,685	49,153	1 3 9	8,058	7,996	0 15 11

Thus except in Kumher, where the competition for land in the eastern villages has raised the standard of "other cash rents," these latter are below even the rents at owner's rates. Assuming for the moment that they are competitive and representative, we obtain by applying them to the whole cultivated area to ascertain the net assets and taking two-thirds as the State share the following result :—

Tahsil.					Net assets by other cash rents.	State share.	Present <i>jama</i> .
					Rs.	Rs.	Rs.
Kumher	...	...	...	...	1,74,140	1,16,093	1,35,743
Akhegarh	...	...	...	...	1,76,273	1,17,515	1,39,342
Bhartpur	...	...	...	...	1,65,460	1,10,307	1,43,603
Nagar	...	...	...	...	94,532	63,021	90,007

93. Thus the application of the "other cash rents" would necessitate an enormous reduction of even the existing demand in all tahsils. The same result was observed in the northern tahsils (paragraph 143 of last year's report) and the causes are the same in both cases, *vis.* :—

- (1) the rents are not full nor competitive, because the State policy has hitherto, and especially since the break down of 1877-78, prohibited the owners from realising more from their tenants than the State demand ;
- (2) the rents are frequently understated, for on account of (1) the owners even when they levy from the tenants a profit rent, *i.e.*, more than they pay to the State, conceal the fact from the fear that their profits will be confiscated, or that they will get into trouble for over-realisation ;
- (3) even where the rents disclosed are genuine, their lowness is due to the fact that the owners having more land than they can work themselves, are glad to let out the surplus to tenants at lenient rents, generally not exceeding the State demand and sometimes falling short of it ;
- (4) in every tahsil the owners have nearly half the cultivation in their own hands, and this is generally the best land.

Thus there are several villages in which the revenue is distributed on owners and tenants alike by an all-round rate on cultivation. I may instance the following in Kumher—Sikrora, Saketra, Santrak and Nangli—in which the all-round rate varies from Rs. 1-6-0 to Rs. 1-12-0 per bigah. In these the owners pay for the best land what the tenants pay for the worst and thus indirectly reap a profit. In another village, Sarauta, where the all-round rate is only Re. 0-8-9 per bigah, the owners realise an additional Re. 1 per bigah from the tenants as *nazrana* or profit, but this has hitherto never been shown in the village accounts.

94. It therefore became necessary either to ascertain the actual competitive rents where such exist or to assume cash rent rates representing the full letting value. Little assistance could be derived from an examination of the rents levied by *Mafidars*, as these were, if anything, lower

Difficulty in ascertaining true competitive rents.

than those on adjoining *Khalsa* lands. The fact is that in an agriculturally backward tract like this where custom not competition still regulates the dealings between landlord and tenant, and the area is often in excess of the labour available to work it, the rent generally varies with the State demand. Where the latter is high the rent rises in harmony with it, where it is low or non-existent as in the case of *mafi* lands the rent, except in special cases, has a tendency to remain low too, irrespective of the quality of the land and the profits to be derived from it.

95. In two large villages of Kumher, Asthawan and Rara full competitive rents are levied by the *mafidars*, the average of which was found to be :—
Special enquiry made in Kumher.

Name of village.		Chahi hal.		Chahi sabika.		Barani.	
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Asthawan	...	2 0 0 to	4 0 0	2 8 0		1 4 0 to	2 0 0
Rara	...	2 14 0 to	3 0 0	2 0 0 to	3 0 0	1 8 0 to	3 0 0

These villages are, however, rather above the average, and it would be unsafe to generalise from them. The Deputy Collector, therefore, as last year in Kama and Dig, selected specimen villages all over the tahsil in which the rents were believed to be accurately ascertained and fairly competitive, and taking all the holdings let out on cash rents, the following results were arrived at :—

Class of soil.	Number of villages.	Area.	Rental.	Average per bigah.
				Rs. A. P.
Chahi hal ...	36	3,836	9,739	2 8 8
Chahi sabika...	10	1,128	2,717	2 6 8
Sairaba sabika	1	132	235	1 13 0
Barani ...	35	6,328	9,607	1 8 6
Bhur, ...	3	80	110	1 6 0
Fallow ...	8	1,401	350	0 4 0

As the villages were fairly selected and the area of the holdings investigated amounts to over 10 per cent. of the whole area, I think these rents may be taken on the whole to be fairly representative of the letting value of the different classes of land. The rents for *bhur* may perhaps be rather high and the area is too small to assure average results, but the *bhur* in all these tahsils is a very fair soil, which with a moderate rainfall yields good crops of *bajra* and *masina*. If the above rents be applied to the total cultivated area and fallow, they give a net assets of Rs. 2,26,065, of which the State share at two-thirds would be Rs. 1,50,710.

The rent rates in 14 Muttra villages adjoining Kumher have also been ascertained. The average is :—

Chahi hal.	Chahi sabika.	Barani.	Bhur.
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
2 0 0	1 8 0	1 4 0	0 8 6

These villages are very similar to the eastern portion of Kumher, but the rents are lower than in Kumher, because the standard of assessment in Muttra is lower.

96. In tahsil Akhegarh there is much less demand for land than in Kumber and cash rents are at present undoubtedly low—
 Absence of competitive rents in Akhegarh. though not so low as shown in the table. The *jama* of this tahsil has been steadily enhanced at each successive reassessment and is now 78 per cent. higher than it was at the summary settlement. It, therefore, has absorbed most of the profits of cultivation and the margin left is small. The break-down and transfer of a great number of villages alter the famine, the desertion of owners and tenants, and the inequalities caused by a distribution by shares, all have tended to keep rents low. Moreover, a large area of land is held revenue-free from the villages by *chaukidars* and village servants, the State demand on which amounting to about Rs. 4,000 has to be paid by the agriculturists.

It has been found impossible for these reasons to ascertain the true competitive cash rents in this tahsil. The *mafi* rents are even lower than the *khalsa*, and need not be referred to. It should be mentioned, however, that fallow and culturable land also brings in a considerable income. In 1897-98 the rent on 5,034 bigahs of fallow and culturable waste was Rs. 2,360, or about $7\frac{1}{2}$ annas per bigah.

97. In Nagar the area held by tenants paying "other cash rents" is relatively small, only 8 per cent. of the whole, and these rents as stated by the owners and recorded in the *khataunis* come out lower than the rents at "owner's rates," which are found on no less than 32 per cent. of the area. In fact the total net assets of the tahsil if worked out by these rents only, just exceed the State demand, and leave hardly any margin of profit. Many of the Nagar villages are, however, decidedly prosperous, and it is well known that the owners often secretly take a profit rent of 4 to 8 annas per bigah from the tenant. The average of barani rents at "other rates" in this tahsil comes to only Rs. 0-12-5 per bigah, but in October when on tour during the reaping of the autumn harvest I took special pains to verify the rents actually paid from the cultivators and the cases were very few indeed where these fell short of Re. 1 per bigah. It was, however, only when questioned apart from the owner or in case of dispute with the latter that the tenants disclosed the true rents. In only 4 out of the 81 estates in this tahsil do the revenue papers show that profit rents are generally taken. In these the cultivated area is 5,103 bigahs, the State demand Rs. 3,847 and the profits disclosed Rs. 1,321.

98. From all that has been said already about the impoverishment and demoralisation of the Bhartpur tahsil, it will be understood that profit rents are not very common, and where they exist are concealed. In only 38 out of the 125 *khalsa* estates do the revenue papers show profit rents realised in excess of the State demand. These have a cultivated area of 29,293 bigahs paying a *jama* of Rs. 49 195, while the profit left to the owners from the rents paid by tenants amount to Rs. 7,365. In this tahsil, however, many villages look to the large area of pasture land for their profits.

The rents on the large *mafi* area as recorded are even lower than on *khalsa* lands. An investigation of the rents in 30 villages, chiefly on the east of the tahsil adjoining Agra, has furnished the following *data* which, I believe, approach the standard of full competitive cash rents:—

Soil.	Area.	Rent in Rs.	Rate per bigah.
			Rs. A. P
Chahi nal ...	1,095	2,826	2 9 4
" sabika ...	316	692	2 3 0

Soil.					Area.	Rent in Rs	Rate per bigah.
							Rs. A. P.
<i>Sairaba hal</i>	...	...	...	...	486	872	1 12 9
<i>Barani</i>	...	...	...	...	4,322	6,398	1 7 8
<i>Bhur</i>	...	...	...	...	8	7	0 4 0

The area observed is, however, only 15 per cent. of the total area held at other cash rents, and the results therefore, though useful, are not so convincing as in Kumher.* These rents, if applied to the whole *cultivated* area of each class, would bring out a net assets for the tahsil of Rs. 2,33,139, of which the State share at two-thirds comes to Rs. 1,55,426 excluding fallow and culturable.

No doubt bad revenue administration and the bad management of the Zamindars have in this tahsil had hitherto the effect of checking that healthy competition for land which the proximity of a large city and the facilities of communication, would naturally develope.

99. In two out of the four tahsils we have, therefore, to face the fact that, though a very large proportion of the area is held by cash-paying tenants, the cash rents disclosed (being for various reasons non-competitive or understated) are not a very useful guide for assessment. In fact in respect to rents Bhartpur is now in much the same position as the three adjoining British districts of Gurgaon, Muttra and Agra were when re-assessed over 20 years ago.

The Settlement Officer of Agra in proposing a demand higher than was justified by the recorded rents, the genuineness of which was apparently not open to doubt, wrote then (paragraph 10, Settlement Report):—

"A detailed examination of the rent-rates of the estates has completely convinced me that as yet nothing like the full rent, which it is possible for a tenant to pay, is taken as a rule by the landlord. Competition has not taken the place of custom in determining the rent, and rack-renting is utterly unknown."

The Settlement Officer of Gurgaon in paragraph 90 of his report says:—

"Hitherto the great majority of the tenants paying cash rents have been holding at customary privileged rents which had their origin in the days when the land was plenty and the cultivators were few. During the past few years, however, and especially since the announcement of the new assessments there has been a marked tendency on the part of the owners to insist on their right to receive larger rents."

In the Fatehpur Sikri tahsil which adjoins and is very similar to Bhartpur, the actual average rental was even then Rs. 3-13-0 per acre or Rs. 1-8-6 per Bhartpur bigah, while the actual recorded rate now in Bhartpur is only Rs. 1-3-9 per bigah.

Similarly in reviewing the assessment of the *cis*-Jamna tahsils of Muttra adjoining Bhartpur and Kumher the Government of the North-Western Provinces wrote in 1880:—

"If a fixed and low rent be the highest good of a tenancy, the system sanctioned by tradition in these *cis*-Jamna *parganas* secures it. The peculiarity is that the tenants in many of these *bhayachara* villages are not required to pay more than the share of the Government revenue and village expenses that is proportionate to the land held by them. They hold as it is termed at revenue rates. In these estates the bulk of the land is cultivated by the members of the brotherhood themselves. The surplus land alone is held by tenants; and as the only contribution required from cultivating proprietors by the village council is their *quota* of the land tax and other expenses, the custom grew

up of dealing with any tenants there might be in the same way. The distinction between rent proper and revenue is thus obliterated or rather unknown in these *bhayachara* villages. Here the important point to observe is the salutary effect of this system of revenue rates in preventing, as Mr. Whiteway (Settlement Officer) says, any but the actual cultivator deriving any profit from the land."

The difficulties with which I am confronted in assessing these tahsils are exactly the same as the Settlement Officer of Muttra had to deal with in assessing the *cis*-Jamna tahsils of Chhata, Kosi and Muttra, all touching Bhartpur. A large portion of the land does not pay rent, being cultivated by the proprietors themselves. A further portion is held by privileged or leniently-assessed tenants paying little more than the State dues and village expenses. The proprietary bodies are numerous and for the most part poor. They rely for subsistence less on rent than on the profits of their own cultivation. For the same reasons that in Chhata the Settlement Officer, though the standard of assessment was half-assets, fixed a revenue demand of Rs. 2,02,933 on a recorded rental of Rs. 3,07,419, and in Kosi a demand of Rs. 1,67,040 on a recorded rental of Rs. 2,10,495—thus taking nearly 80 per cent. of the recorded rental, I shall be compelled in these tahsils, in order to fix a demand representing two-thirds of the net assets, to swallow up nearly the whole recorded rental. I have however, the advantage, which the North-Western Provinces Settlement Officers had not, of checking my calculation with reference to the estimated value of the produce and the net assets derived from it in Chapter VI.

In Chhata and Kosi the rent of "unirrigated outlying" loams corresponding to the ordinary *barani* of these tahsils was found to run from Rs. 3-4-0 to Rs. 4 per acre, which would be from Rs. 1-5-0 to Rs. 1-11-6 per Bhartpur bigah. This agrees fairly closely with the actual competitive rent now ascertained for Kumher and Bhartpur, Rs. 1-8-6 and Rs. 1-7-8 per bigah, and I think the actual rates ascertained for Kumher may be safely used as a guide for the other tahsils. The rents now recorded, where they are not wilfully understated, are non-competitive and do not represent the full letting value of the land. The increase of assessment in the adjoining British districts caused an almost immediate rise in cash rents, though those were already higher than rents now are on land of the same quality in Bhartpur, and the low rate of cash rents is therefore not in itself a sufficient reason against enhancing the demand if such enhancement is justified by other grounds.

CHAPTER VIII.

RATE OF FORMER SETTLEMENTS, PRESENT INCIDENCE WITH CESSES, ETC.

100. The methods employed in fixing the assessment of 1890-91 have been described in paragraphs 15 and 16 of last year's report and referred to in paragraph 33 above. There is nothing on record beyond a mass of confusing statistics to show on what principles the Assessing Committee worked. It appears to have relied less on general rates for each tahsil or circle than on rates suggested by the Tahsildar for each class of soil in each village to bring out the assessment proposed. To arrive at the general rates it is therefore necessary to extract from the *jama dhuul* or assessment statistics prepared for each village the total assessment imposed on each class of land. Adding up these for all the villages in the tahsil and dividing the result by the total area of that class of soil, we obtain the average soil rates. These when obtained are not of much value, as they were worked out in an arbitrary and haphazard fashion. However, I give them below and the areas to which they were applied for what they are worth, but it must be remembered that they are deduced from the areas of 1888-89, which the Committee took as the basis of its calculations, whereas the new assessment did not

come into force till 1890-91 by which year the cultivated area had considerably expanded.

Tahsil.	Detail.	Chahi.	Sairaha.	Barani.	Bhur.	Total cultivation.	Fallow.	Banjar.	Total.
Kumher ...	Area of 1888-89 ...	39,308	590	57,893	5,087	102,878	27,107	1,159	131,1
	Jama imposed ...	71,166	837	52,604	2,711	127,318	7,227	127	134,6
	Rate per bigah ...	Rs. 1 13 0	Rs. 1 6 8	Rs. 0 14 6	Rs. 0 8 6	Rs. 1 3 9	Rs. 0 4 3	Rs. 0 1 9	...
Akhgarh ...	Area ...	29,869	221	60,500	9,036	99,626	24,619	2,819	127,
	Jama ...	66,009	269	53,721	5,805	125,804	5,259	690	131,753
	Rate ...	Rs. 2 3 4	Rs. 1 5 5	Rs. 0 14 2	Rs. 0 10 3	Rs. 1 4 3	Rs. 0 3 5	Rs. 0 3 11	...
Bhartpur ...	Area ...	41,350	8,042	41,044	in barani	90,436	58,215	...	148,651
	Jama ...	79,168	10,955	37,253	...	127,376	18,468	...	145,844
	Rate ...	Rs. 1 14 7	Rs. 1 5 9	Rs. 0 14 6	...	Rs. 1 6 10	Rs. 0 5 1	...	...
Nagar ...	Area ...	...	...	...	...	...	...	...	...
	Jama ...	38,635	42	50,836	...	89,513	...	...	...
	Rate ...	Rs. 3 1 0	Rs. 0 11 7	...	...	Rs. 1 1 4	...	...	...

101. The application of these soil rates to the present areas in each tahsil would give the following demand.

Application of last settlement rates to present area.

Kumher.	Akhgarh.	Bhartpur.	Nagar.
Rs.	Rs.	Rs.	Rs.
1,66,609	1,58,856	1,68,999	1,00,718

I do not however attach much value to these results because—

- (1) the Jama and rates of last settlement were framed on no principles,
- (2) the Jama has not been paid in full in any tahsil but Nagar,
- (3) the arrears would have been even greater were it not that the great subsequent expansion of cultivation reduced the pressure of the demand.

102. All the references hitherto made to the demand and incidence of former settlements, deal only with the *khalsa* demand exclusive of cesses. The latter however represent a considerable addition to the demand as will appear from the following table showing the various items of demand for the year 1897-98.

Details.	AKHEGARH.					Remarks.
	Kumher.	On Khalsa alone.	Including Pathana as khalsa.	Bhartpur.	Nagar.	
Khalsa demand	133,936	137,919	142,121	141,893	89,668	
Resumed Mafis	1,807	1,423	1,423	1,991	339	
Total land revenue	135,743	139,342	143,544	143,884	90,007	
ADD CESSES, ETC., viz.						
Local rate at Rs. 4-11-0 per cent.	6,305	6,503	6,699	6,754	4,221	
Patwar cess at Rs. 3-2-0	4,300	4,354	4,485	4,503	2,824	
Percentage levied for old arrears up to 1885	2,145	2,356	2,356	4,314	1,867	
Percentage for arrears from 1888 to 1890 ... ..	...	...	...	310	1,056	
Subscriptions for temples, etc.	968	796	796	1,503	931	
Water nuts (<i>singhara</i>) ... ..	...	...	...	37	...	
Miscellaneous	384	77	77	11	...	
Total cesses	14,002	14,086	14,413	17,452	10,899	
GRAND TOTAL	149,745	153,428	157,957	161,336	100,906	

The land revenue demand for Bhartpur does not include a sum of Rs. 1,250 due to the temporary attachment of Jama of Mauza Naugaun which is part of the *Jagir* of Faujdar Debi Singh (see paragraph 56) but has been temporarily taken over by the State. The area is included in and will be assessed as *Mafi*. The excess of Rs. 603 in the Akhegarh tahsil over the demand shown in paragraph 33, I am at present unable to explain. Considering the extraordinary difficulty of getting accurate accounts in Bhartpur, I congratulate myself that the discrepancies are not greater and more numerous.

103. These extra cesses which are collected as part of the land revenue

Explanation of extra cesses and proposals to abolish all but local rate and Patwar cess.

amount to between 10 and 11 per cent. of the demand in Kumher and Akhegarh. and to 12 per cent. in Bhartpur and Nagar. As already sanctioned by the Political Agent and Council in the northern tahsils all of them will now be abolished with the exception of the two regular and fixed cesses viz., (1) local rate Rs. 4-11-0 per cent. or 3 pice per rupee (2) Patwar cess Rs. 3-2-0 per cent. or 2 pice per rupee and (3) the contribution for arrears since last settlement which requires separate explanation.

At last settlement the old arrears were classified as (a) arrears prior to 1888, which were taken account of by the Assessing Committee in their calculation, (b) arrears of 1888 and 1889. In giving out the assessments instalments varying from 1 to 8 per cent. on the new demand according to the circumstances of the case were imposed for the liquidation of these arrears, to be realised over

and above the *khalsa* demand, and the tahsildars appear to have been given or at least to have exercised a discretion of realising even more than this percentage on account of old arrears in good harvests. The amount which has been realised by both of these methods has been noted in paragraph 37, *viz.*,

Kumher.	Akhegarh.	Bhartpur.	Nagar.
14,735	28,421	33,644	26,033

According to my proposals in paragraph 38, all arrears prior to the 1890-91 settlement will now be wiped out, all demand on account of them will cease, and we shall limit ourselves to realising as much as is practicable of the arrears since that date, as explained in Chapter IX.

Hence under the new assessment the regular items of the legitimate State demand will be limited to—

- (1) land revenue now imposed,
- (2) local rate at Rs. 4-11-0 per cent. on (1),
- (3) Patwar cess at Rs. 3-2-0 per cent. on (1),
- (4) Instalments on account of arrears since 1890-91 in certain villages.

104. Among other miscellaneous items at present realised I may mention
 Other items of demand. (1) Rs. 1,030 is realised by the State on account of village expenses in the three partly *Mafi* partly *Khalsa* estates of Pathena, Hasanpur, and Gadoli in Akhegarh. This will be separately enquired into.

(2) In all tahsils considerable sums are realised as *Talbana* (process fees) from villages which are late in paying up the revenue. The average amount in Kumher and Akhegarh respectively is Rs. 440 and Rs. 245, in Bhartpur the amount was Rs. 79 in 1897-98, Rs. 756 in 1898-99 and in Nagar Rs. 101 and Rs. 158 in these years. Rules limiting the fees charged for such processes have lately been issued by the Revenue Department. A considerable portion of the arrears since last settlement falls under this head.

105. In addition to the payments to the State, account must also be taken of the payment for *malba* or fund for village expenses which is administered by the lambardars. The various rates at which it is levied and the total payments last year were as follows :—

Tahsil.					Rate per cent.	Amount in Rs.	Percentage on Jama.		
							Rs.	A.	P.
Kumher	...	...	...	...	3 to 12	4,702	3	5	0
Akhegarh	...	...	...	...	3 „ 10	7,008	5	0	0
Bhartpur	...	...	...	...	5 „ 10	8,940	6	4	0
Nagar	...	...	...	...	4 „ 10	5,057	5	10	0

As explained in paragraph 157 of last year's report these varying rates were fixed at last settlement on no principle but the caprice of the Tahsildars, though there is a tradition that the higher rates are a concession to *lambardars* of the same race as the ruling family *i.e.* Sinsinwar Jats.

The lambardars in many cases have come to regard the *malba* as a personal perquisite, and it has often had the effect of making them look to this rather than to honest labour for their livelihood. I have now graduated the scale at which it is to be levied according to the *jama* of the village *viz.*—

Up to Rs. 500 Rs. 7-13-0 per cent. or 5 pice per rupee.

500-1,000 „ 6-4-0 „ „ „ 4 „ „ „

1,000-3,000 „ 4-11-0 „ „ „ 3 „ „ „

Above 3,000 „ 3-2-0 „ „ „ 2 „ „ „

In each case one pice per rupee or 1-9-0 per cent. on the jama will go to the lambardars as an increase to the *hakk mokaddami* which they receive from the State, while the objects to which the balance should be devoted have been carefully defined in the *wajibularz*. The new scale will equalise the burden as between different estates and different tahsils. Thus if applied to the present village jamas it would yield Rs. 5,813 in Kumher and Rs. 5,878 in Akhegarh, an increase of over Rs. 1,000 in the former, and a corresponding decrease in the latter.

106. The origin of the percentage paid by the State to the lambardars as *hakk mokaddami* in recognition of their position, and as remuneration for their duties in collecting the revenue was explained in paragraph 158 of my last report. The former varying rates of payment and the total amount paid annually up to last year are shown below :—

Tahsil.	No of Khalsa estates.	No of lam- bardars.	Rate of hakk mokad- dami.		Amount in Rupees.	Percentage on land revenue.		Average per lambardar.
			Rs.	A. P.		Rs.	A. P.	
Kumher	82	958	1	10 6 to 5	4 510	3	6 0	5 0 0
Akhegarh	72	423	1	14 6 „ 4	4,466	3	3 0	10 8 0
Bhartpur	125	840	2	0 0 „ 5	3,754	2	10 0	4 8 0
Nagar	80	314	1	12 0 „ 4 6 0	2,251	2	8 0	7 4 0

It will be seen that even within each tahsil the rates vary enormously. The highest rate of Rs. 5 per cent. found in Kumher and Bhartpur is generally a concession given to Jat Sinsinwar villages, the lowest rates are given on lands which had been resumed some time before last settlement, while nothing at all is allowed on the jama of lands since resumed. These rates were not however allowed on the full jama of the villages in Kumher and Bhartpur, but after deducting from 10 to 20 per cent. The origin of this deduction is not clear, but it is said to have been originally intended to remunerate the collectors (*monasil*) employed by the State to assist the lambardars in realising the revenue. The whole system has hitherto been very unsatisfactory, and in a great number of villages the lambardars received no remuneration at all, as it was stopped in payment of arrears. Hence they had no stimulus to the active discharge of their duties, but a distinct encouragement to make up the loss by embezzling the State revenue, or cooking the village accounts.

The Darbar therefore last year made a thorough reform of the system. For the whole State a uniform rate of Rs. 3-2-0 per cent. on the jama was sanctioned—which is paid by the State on the collections, while the lambardars also collect Rs. 1-9-0 per cent. on the Jama from the *Malba* thus raising the total remuneration to Rs. 4-11-0 per cent. The *hakk mokaddami* has hitherto in some villages, especially in Bhartpur, been divided among all the shareholders, but is now to be paid to the lambardars alone, and this will help to strengthen their position and make them more active in the discharge of their duties. Another cause of the inefficiency of the lambardars is the low average of remuneration caused by their excessive number. With the sanction of the Darbar steps are being taken to reduce their number. Lambardars are also now being regularly appointed for the first time in *Mafi*, *Inam*, and *Chauth* villages, and where the

Maifidar is not himself *lambardar*, the latter will receive *hakk mokaddami* from the former at the same rate as in *Khalsa* villages; while in *Chauth* villages the *lambardars* will receive Rs. 3-2-0 per cent. on the *Chauth* Jama.

CHAPTER IX.

Part I.—Standards of assessment and proposed demand.

107. We have now to consider the various grounds for enhancing or reducing the present assessment and to determine the assessment to be imposed.

The following table shows the percentage of increase or decrease in cultivated area (paragraph 64) crops, (79) irrigated area, and wells (12), loas (12), ploughs (71), population (44) since 1890-91.

Tahsil.	Cultivat- ed area.	Crops.	CHAHI AREA.		MASONRY.				Kacha Wells.	Ploughs.	Population.	REMARKS.
			Hal.	Total.	WELLS.		Loas, Working.					
					Working.	Total.						
Kumher	+18	+14	-10	-1	-1	+8	-7	-7	+14	+8		
Akhegarh	+5	+6	-22	-16	-8	-2	-7	+31	+13	-16		
Bhartpur	+27	+31	-12	+11	-13	+10	-14	-8	+21	+2		
Nagar	+17	+22	-6	-2	-5	+5	-10	+47	+44	+8		

All of these facts except the decrease in working wells and *chahi* area, which is probably, only temporary, indicate a marked improvement in agricultural conditions. Moreover, the *sairaba* area has doubled in Bhartpur. As regards prices, I do not think we can count upon any increase for purposes of enhancement. The harvest rates of the 8 years since last settlement no doubt show a small rise of 1 to 5 per cent. on the 10 years prior to it, but it is on these high prices of the last 8 years that the present demand has been paid, and we cannot assume that prices will rise still higher during the currency of the new assessment.

108. Among other reasons for enhancement are (1) the improvement in the administration generally and especially in the revenue administration; (2) the large margin left for extension of cultivation in each tahsil; (3) the abatement of the wild cattle nuisance in Kumher and Bhartpur—the number still at large having now been reduced to under 1,000; (4) the improvement in *band* irrigation in Bhartpur; (5) the remission of the enormous amount of old arrears prior to 1890 and of all demands on account of them.

109. The considerations weighing against enhancement on the other hand are obvious and striking, (1) the revenue has been enormously enhanced (paragraph 23) within the last 40 years by frequent reassessments for short terms; (2) the condition of the people owing to agricultural calamities and gross revenue maladministration deteriorated steadily between 1876 and 1890 and it is only within the last few years that it has shown signs of recovery; (3) in consequence of (2) even the assessment of 1890-91 has not been paid in full, except in Nagar and the annual arrears average Rs. 4,839 in Kumher, Rs. 7,731 in Akhegarh and Rs. 19,757 in Bhartpur; (4) the assessment of 1890-91 was a heavy one at the time, especially in Akhegarh and Bhartpur and the arrears would have been greater but for the great expansion of cultivation; (5) in Kumher, Akhegarh and Nagar from 80 to

90 per cent. and in Bhartpur 68 per cent. of the crops are raised solely by the rainfall, which, though fairly abundant on an average of years, is subject to great fluctuations from year to year, especially in Akhegarh and Nagar; (6) a large proportion of the wells are bitter or brackish, and the irrigation from them unless aided by the rainfall tends to deteriorate the land and yields only inferior crops, while the drought of recent years has considerably reduced the irrigating capacity of all wells and thrown several out of working, (7); the village communities are generally weak in numbers and the insufficiency of cultivators, whether owners or tenants, retards the expansion of cultivation, and keeps down rents, which at present over most of the tract leave little or no margin of profit to the owners; (8) there is still some damage from wild cattle in parts of Bhartpur and Kumher and from wild animals in all tahsils.

110. Bearing these considerations in mind, it must now be decided with reference to the standard of assessment fixed, two-thirds of the net-assets—what will be a fair assessment for each tahsil *i. e.*, which the people may reasonably be expected to pay in full on an average of years. The various estimates for fixing the new demand are summed up in the following table:—

No.	Estimates of new demand.	Kumher.	AKHEGARH.		Bhartpur.	Nagar.	Total.	REMARKS.
			Khalsa.	Including all Pathana.				
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
	Present demand 1897-98 ...	1,35,743	1,39,342	1,43,544	(a) 1,43,884	90,007	5,13,178	(a) excluding Nau-gaun.
	„ with cesses to be abolished ...	1,39,240	1,42,571	1,46,773	1,50,040	93,861	5,29,914	
	„ with all cesses ...	1,49,745	1,53,428	1,57,957	1,61,199	1,00,896	5,69,797	
A.	By summary rates of last settlement ...	1,82,905	...	1,66,702	1,86,745	1,08,168	6,44,520	
B.	„ soil „ „ „ ...	1,66,609	...	1,58,856	1,68,099	1,00,718	5,95,182	
C.	One-fourth of the produce (Chapter V) ...	1,58,171	...	1,55,125	1,70,007	1,02,174	5,85,477	
D.	Kind rents. State share being taken as two-thirds of owner's share.	1,58,175	...	1,52,046	1,70,470	1,04,793	5,85,484	
E.	Cash rents stated by the Zamindar ...	1,16,093	...	1,17,515	1,10,307	63,021	4,06,936	
F.	Cash rents ascertained to be competitive and specially attested.	1,50,710	...	...	1,55,426	...	...

(A) The summary rates of last settlement are not a safe guide. The jama was excessive at the time, and has never been fully paid except in Nagar. Moreover, the summary rate even if a just one at the time would not be so now, as nearly all the increase in cultivation has been in *barani* which cannot pay the all-round rate of last settlement, varying from Rs. 1-1-4 in Nagar to Re. 1-6-10 in Bhartpur.

(B) The soil rates of last settlement are not open to the latter objection though they are to the former. The demand brought out by them is a useful guide, for even if we regard them as heavy at the time the subsequent improvement in agricultural conditions would make them easier now.

- (C) (D) The estimates based respectively on the value of one-fourth of the produce, and two-thirds of the owners' share by rents in kind, yield almost identical result, and as they were framed with caution, and reasonable allowance made for all necessary deductions, I consider these estimates the most useful guide, especially in Akhegarh and Nagar, where there are no competitive cash rents. In Bhartpur the result seems to me too high as perhaps sufficient allowance was not made for damage by wild animals.
- (E) The estimate based on the cash rents entered in the *Khataunis* is, for reasons fully discussed in Chapter VII, of very little use for our calculations.
- (F) Could we obtain true competitive cash rents over a fairly wide area they would furnish the most certain basis for calculating the State demand, but there are no such data in Akhegarh and Nagar. The estimates founded on the competitive cash rents specially attested over a considerable area in Kumher and Bhartpur are however very valuable as in themselves a means of determining the new jama, and as affording a practical and certain test of the value of the other estimates. I am very much re-assured to find that in Kumher this cash rent estimate falls short of the kind rent estimate by only five per cent. and in Bhartpur by less than nine per cent.

111. If we eliminate A—the demand given by the all-round rate of last settlement—as clearly excessive, and E.—the estimate based on *khatauni* rents—as obviously an understatement, the variation in the remaining estimates is considerably narrowed down, *viz.*,

Tahsil.					Lowest.	Highest.
					Rs.	Rs.
Kumher	...	...	...	..	1,50,710	1,66,609
Akhegarh	...	...	...	...	1,52,046	1,58,856
Bhartpur	...	...	...	...	1,55,426	1,70,470
Nagar	...	...	...	...	1,00,718	1,04,793

and therefore, theoretically speaking, we may expect to find the correct demand intermediate between or close to those figures. It is at this stage that local knowledge must be brought in to supplement the deficiencies inherent to all theoretical calculations. I have been over this tract two years running, and have made a detailed inspection of every estate except a few in Bhartpur. The main object of my inspections was to determine the working of the present and the pitch of the future assessment. The Deputy Collectors have inspected each estate at least twice, once to note and write up all the facts as to its condition, and again with me, when, in the light of our joint observations, and of the agricultural conditions, we discussed the future assessment carefully. M. Hira Singh, the Deputy Collector in charge of Kumher and Akhegarh, is an officer who to over 20 years settlement experience in the Punjab has added two years in Bhartpur, and who is well known for his ability and sound judgment. M. Mahmud Hussain the officer in immediate charge of Bhartpur and Nagar is also a Settlement and Revenue officer of long standing, and has now had over five years experience of Bhartpur.

112. After consultation with these officers, I have come to the conclusion that, having regard to all the reasons for and against enhancement already urged, the following will be a fair assessment in each case:—

Kumher.	Akhegarh.	Bhartpur.	Nagar.	TOTAL.
Rs.	Rs.	Rs.	Rs.	Rs.
1,55,000	1,50,000	1,60,000	1,05,000	5,70,000

The enhancement on (1) the present *khalsa* jama (2) the *khalsa* jama with cesses to be abolished, as well as (3) the incidence per bigah and per acre cultivated are shown in the following table:—

No.	Details.	Kumher.	Akhegarh.	Bhartpur.	Nagar.	TOTAL.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1	Present <i>khalsa</i> jama ...	1,35,743 0 0	1,43,544 0 0	1,43,884 0 0	90,007 0 0	5,13,178 0 0
2	Ditto with cesses and arrear instalments to be abolished.	1,39,240 0 0	1,46,773 0 0	1,50,040 0 0	93,861 0 0	5,29,914 0 0
3	Proposed jama ...	1,55,000 0 0	1,50,000 0 0	1,60,000 0 0	1,05,000 0 0	5,70,000 0 0
4	Increase on (1) ...	19,257 0 0	6,456 0 0	16,112 0 0	14,993 0 0	56,822 0 0
	Percentage ...	14.2	4.4	11.2	16.5	11.1
5	Increase per cent. on (2) ...	15,760 0 0	3,927 0 0	9,960 0 0	11,139 0 0	40,686 0 0
	Percentage ...	11.3	2.7	6.6	12	8
6	Incidence per cultivated (1) bigah ...	1 1 9	1 3 2	1 3 9	1 0 9	1 2 5
	(2) acre ...	2 12 4	3 0 6	3 1 4	2 9 10	3 14 0
	Incidence of 1895 jama per bigah ...	1 3 0	1 4 3	1 6 10	1 1 4	...

Thus the proposed assessment gives an increase of Rs. 56,822 or 11.1 per cent. on the present *khalsa* demand, and an increase of Rs. 40,686 or 8 per cent. on the present *khalsa* demand plus the cesses and payments for arrears, which it is now proposed to abolish. The increase—4.4 per cent.—is least in Akhegarh, where many villages are so depressed as to require a reduction of the present demand, and greatest—16.5 per cent.—in Nagar, where the village communities are strongest. In Kumher it is 14.2 per cent. and in Bhartpur 11.2 per cent. on the present demand.

113. If however we compare the proposed assessment not with the present demand but with the average collections since last settlement (paragraph 33), the enhancement will be found to be much

greater except in Nagar. To make the comparison more accurate the old arrears realised since last settlement (paragraph 37) may be taken into account. The result is as follows—

Tahsil.	Average realisation since 1890 including old arrears.	New demand.	Incidence.	
			Rs.	Percentage.
Kumher	1,31,921	1,55,000	23,079	17.5
Akhegarh	1,35,371	1,50,000	14,629	10.7
Bhartpur	1,32,977	1,60,000	27,023	20.5
Nagar	92,622	1,05,000	12,378	13.2
Total	4,92,891	5,70,000	77,109	15.6

Viewed in this light the enhancement is very heavy, especially in Kumher and Bhartpur, and I would hesitate to propose a demand so largely in excess of the past collections in Bhartpur were it not that—

- (a) The large arrears since 1890 are partly due to the wild cattle plague which has now been almost got rid of, partly to two years of exceptional scarcity, when remissions or suspensions of revenue should have been granted, and partly to the slackness in collections shown by some of the tahsildars, which in future will, it is hoped, be corrected by a more watchful supervision from above.
- (b) The great increase of cultivation has taken place chiefly within the last few years.
- (c) The proposed demand includes the water rate on all lands now recorded as *sairaba*, whereas hitherto lands, which owing to the extension of the irrigation system have become *sairaba* since last settlement, have had to pay a separate water rate of Re. 1 per bigah over and above the jama. The demand on this account for the last two years has been—1897-98, Rs. 13,647, 1898-99, Rs. 15,243—which would imply that 13,647 and 15,243 bigahs have been irrigated in these years in excess of the *sairaba* area of last settlement. The actual increase, however, (paragraph 67) had not been more than 7,000 bigahs up to 1897-98 and there is some reason for thinking that *all* the land irrigated—whether assessed as *sairaba* at last settlement or not—has been charged water rates. At all events, many villages deny liability and the full demand has not been nearly realised. The incorporation of this fluctuating demand in the fixed *jama* will I think be a gain to the State and the people. Of course, any lands in excess of the area of 1897-98 hereafter irrigated, will pay a separate water rate.

114. The assessment now proposed is in round numbers, and the sum total of the village assessments may fall short of or exceed it by Rs. 1,000 or so in any tahsil, but for the whole tract the result will be close to Rs. 5,70,000. In some cases it may be necessary to take part of the enhancement progressively, as where a village is now rather depressed but has a large area of culturable land and is likely to extend its cultivation considerably within the next few years, but the extent to which this will be done, cannot be known till the assessments are given out. The jama now proposed does not include the demand on the *Chakks* or blocks of excess waste given out for cultivation under the system described in paragraphs 65 and 66. The income from this source will be considerable in Bhartpur, and will be shown in next year's report.

The net increase of assessment, Rs. 40,086 in these tahsils, is certainly more than I anticipated a year ago, and is, I think, more than the State counted upon. In proposing it, I am influenced by the fact that the better administration which has recently been inaugurated will encourage the people and help them to meet their liabilities, and above all that the wild cattle pest has almost been, and will I hope soon be completely stamped out. If these conditions are maintained, the *jama* proposed, which we shall take every care to distribute equitably, is such that it can be realised promptly and fully in ordinary years. The State will, however, I trust, recognise the necessity of assisting the people by suspensions or remissions in case of serious drought or other agricultural calamities, and not pursue the mistaken policy of endeavouring to wring the last farthing out of the people in bad years, which in the past has been responsible for the break-down of so many communities.

The all round incidence of the demand now proposed is considerably less than that of the 1890 Settlement and for the four tahsils averages Rs. 1-2-5 per cultivated bigah or Rs. 2-14-0 per acre.

115. The rates which I propose to bring out this demand are based partly on the kind rent soil rates in Chapter VII modified by the cash rates in Chapter VII.

Soil rates proposed.

These are as follows :—

Tahsil.	CHAHÍ.			SAIRABA.			Barani.	Bhur.	AVERAGE ON CULTIVATION.		New fallow.	Banjar.	Total on banjar and fallow.	Grand total.
	Hal.	Sabika.	Average.	Hal.	Sabika and barshi.	Average.			Total on cultivation.	Rate.				
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs.
Kumher ...	2 0 0	0 15 6	1 9 11	...	0 13 3	...	0 13 3	0 8 0	1,47,716	1 0 11	0 4 0	0 1 0	9,424	1,57,140
Akhegarh ...	2 4 0	1 11 6	2 3 1	1 0 0	...	...	0 13 0	0 8 0	1,45,094	1 2 6	0 4 0	...	4,701	1,49,795
Bhartpur ...	2 2 0	1 2 0	1 12 0	1 8 0	1 2 0	...	0 13 0	0 8 0	1,53,299	1 3 0	0 4 0	(a) 0 2 0	6,784	1,60,083
Nagar ...	2 0 0	1 8 0	1 14 6	0 15 0	0 15 0	...	0 15 0	0 10 0	1,04,383	1 0 9	0 4 0	...	861	1,05,244

(a) On 30,000 bigahs.

I have shown separately the result of applying these rates (1) to the cultivated area and (2) the *banjar* and fallow lands to be assessed, the incidence of demand brought out on the cultivated area per cultivated bigah, and the total demand on cultivated and uncultivated. The latter agrees very closely with the demand proposed in paragraph 113.

The rate for *chahi hal* is Rs. 2 in Kumher, where the water is most bitter, and in Nagar where many of the wells are bitter and the supply often short, Rs. 2-2-0 in Bhartpur where though the water is often bad, it is near the surface and abundant owing to the influence of the Banganga floods, and Rs. 2-4-0 in Akhegarh where the wells are generally sweet, and grow a certain amount of cotton, vegetables and *sira*.

The rate for *chahi sabika* show a wide variation from 0-15-6 in Kumher to 1-11-6 in Akhegarh. The reason for this will be understood from the remarks as to the nature and results of the well irrigation in the different tahsils in Chapter I, and also from the statistics of cash rents in Chapter VII. In Kumher after an irrigated crop is grown the land has to be frequently left fallow, the next year and even if a *barani* crop is sown the outturn is often no better than in ordinary *barani* land. In Akhegarh, on the other hand, the *chahi sabika* rarely remains unsown. In fact, after an irrigated *rabi* crop is raised, cotton is often sown as a dry autumn crop or grain in the following *rabi*. The previous irrigation is on sweet wells beneficial to the subsequent dry cropping, whereas on the bitter wells

so frequent in Kumher it is positively injurious. In Akhegarh, 4,790 bigahs of *chahi sabik* held by tenants pay the same rent as *chahi hal*, and for this the rate of Rs. 2 is justified, while for the remaining area a rate of 1-4-0 is reasonable, giving an all round incidence of 1-11-6. The low rate Rs. 1-2-0 in Bhartpur is due to the same causes as in Kumher, and the rate of Rs. 1-8-0 in Nagar is in accordance with local circumstances.

For the total *chahi* area in each tahsil the rate varies from Rs. 1-9-11 per bigah in Kumher to 2-2-1 in Akhegarh, i.e., from Rs. 4-1-0 to 5-5-0 per acre, and this I think is by no means excessive. In the northern tahsils the rate varied from Rs. 4-13-0 to 6-1-0 per acre.

The *sairaba hal* in Akhegarh is only nominal in area and of poor quality, so the rate imposed—Rs. 1—is only a little above that of *barani*. In Bhartpur the area is considerable, but though the inundations are regular they have not hitherto been turned to the best advantage and the crops are sometimes damaged by overflowing or have to be sown very late. For these reasons and also on account of the low rents I have proposed a low rate—1-8-0 per bigah—whereas in the northern tahsils, where the Ruparel irrigation is better regulated and utilised, my rate on *sairaba hal* runs from Rs. 2-0-0 to 2-4-0 per bigah.

In Nagar for reasons given in paragraph 16, the *sairaba* is assessed at *barani* rates, but a separate water rate will be levied when it is actually flooded. My rate for *sairaba barishi* in Kumher is the same as for *barani*, the area being small and the benefit from local drainage only nominal. In Bhartpur the rate Rs. 1-2-0 is intermediate between the *sairaba hal* and *barani* rates, and calls for no further explanation. In this tahsil all land now recorded as *sairaba* is assessed as such and will not therefore be liable to pay any separate water rate for the term of settlement, but such a rate will be levied on *barani* land which may in future receive *band* irrigation or on land now *banjar* which may hereafter be broken up and similarly irrigated.

My rates on *barani* and *bhur* are practically the same in Kumher, Akhegarh and Bhartpur, all being part of the same plain with similar conditions of soil, rainfall, and agriculture generally. For *barani* the rate is considerably lower than in the northern tahsils. In Nagar, on the other hand the *barani* cultivation is better than in the three central tahsils, though the rainfall is rather less, and the *barani* and *bhur* rates—15 and 10 annas per bigah—are practically the same as for Dig and Kama. The all round incidence of the rate Jama on the cultivated area per cultivated bigah varies from Rs. 1-0-9 in Nagar, where the proportion of the area irrigated is least, to Rs. 1-3-0 in Bhartpur, where it is highest, or from Rs. 2-10-0 to Rs. 2-15-6 per cultivated acre, and bearing in mind that the standard of assessment is two-thirds of the net assets, I do not think this incidence by any means oppressive.

116. It only remains to explain the rates proposed for new fallow in all tahsils, and for culturable waste in Kumher and Bhartpur. The rate on fallow is four annas per bigah in each tahsil. The imposition of such a rate is justified by the fact that this land is only out of cultivation temporarily owing to bad seasons, scarcity of tenants etc., and any improvement of these conditions will bring it more or less rapidly under the plough. In fact, last year, 1898-99, about 2,000 bigahs were restored to cultivation in Kumher and Bhartpur, and if the favourable conditions with which the present year has opened are maintained, a very large area will be brought under cultivation in all tahsils. The area of fallow is largest—over 18,000 bigahs—in Akhegarh, where last year over 5,000 bigahs held by tenants paid an average rent of nearly 8 annas per bigah. In fact, the Zamindars generally in their own *bachh* impose a rate higher than what I propose on fallow.

The area of culturable waste—excluding fallow—is not very considerable in Akhegarh and Nagar, and I do not propose to assess it in these tahsils, as the fallow is being assessed; and, moreover, in Nagar 2,900 bigahs in Sandraoli is being specially leased to the Zamindars. In Kumher and Bhartpur, however, the area is very large (see paragraph 63). In Bhartpur about 30,000 bigahs has this year been given out, as described in paragraphs

65 and 66, on special leases. Of the remaining area—about 55,000 bigahs—I propose to assess about 30,000 bigahs—in villages where the area is in excess of local requirements—at 2 annas per bigah; the rest to remain free. In Kumher too, arrangements are being made for leasing, but for the present calculation, I propose a rate of 0-1-0 per bigah on the total or 2 annas per bigah on half the area of waste, which comes to nearly Rs. 4,000, but in practice this will be distributed only over villages in which the area of waste is considerable. The fact that the Zamindars of such villages derive considerable profits from the waste by breeding cattle, levying grazing dues, amply justifies the rates proposed.

Comparison with rates of Alwar, Muttra and Agra.

117. In the the following table the rates now proposed are compared—

- (1) with those sanctioned last year for the eastern tahsils of Alwar which touch Nagar, and for the four northern tahsils of Bhartpur which adjoin Kumher and Nagar;
- (2) with the rates recently proposed for the Katumbar tahsil of Alwar which marches with Nagar and Akhegarh;
- (3) with the rates for the cis-Jumna tahsils of the Muttra and Agra districts, assessed over 20 years ago, which touch Kumher and Bhartpur. The figures represent in each case rates per acre—

District.	Tahsil.	Chahi.	SAIRABA.		Barani.	Bhur.	Average on cultivated area.
			Hal.	Sabika barichi.			
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Northern tahsils, Bhartpur ...	Gopalgarh ...	6 1 6	5 10 0	3 12 0	2 8 0	1 4 0	4 0 10
(Sanctioned) ...	Dig ...	4 12 3	5 0 0	2 14 3	2 4 3	1 9 0	2 13 0
Eastern tahsils, Alwar ...	Govindgarh ...	5 2 0	5 3 0	4 0 0	2 12 0	1 3 0	3 8 0
(Sanctioned) ...	Lachmangarh ...	4 14 0	3 8 0	2 11 0	2 0 0	1 0 0	2 10 0
Alwar (proposed) ...	Katumbar ...	5 3 0	3 11 0	2 13 0	2 1 0	1 3 3	2 10 8
Muttra (page 127 Gazetteer)	Cis-Jumna ...	3 12 0	...	...	1 8 0	1 0 0	1 11 10
"	"	to	...	...	to	to	to
"	"	5 4 0	...	...	4 0 0	2 4 0	2 0 5
Agra cis-Jumna ...	Agra ...	2 15 4	...	...	1 13 0	...	2 0 5
(Page 90 Settlement Report)	Farah ...	2 7 0	...	...	1 6 6	...	1 14 8
"	Fattehpur Sikri ...	2 11 0	...	...	1 14 0	...	2 5 6
Central tahsils, Bhartpur (proposed) ...	Central tahsils ...	4 1 0	2 8 0	2 0 9	2 0 6	1 4 0	2 10 0
"	"	to	to	to	to	to	to
"	"	5 5 0	3 12 0	2 8 0	2 6 6	1 9 0	2 15 0

The rates for Nagar and Akhegarh may most aptly be compared with those of Gopalgarh and Dig in Bhartpur, and of Govindgarh, Lachmangarh and Katumbar in Alwar; Kumher with Dig and Muttra, and Bhartpur with the adjoining Agra tahsils.

As compared with the northern tahsils, the rates in these central tahsils for *chahi* and *sairaba* are rather light, for *barani* and *bhur* they are almost the same. Compared with the Alwar tahsils the rates show a very close agreement, except as regards *chahi* which is generally superior in quality in Alwar and therefore pays a higher rate. Compared with Agra and Muttra, if allowance be made for the difference in the standard of assessment, the British districts being assessed at $\frac{3}{8}$ and Bhartpur at $\frac{4}{8}$ of the net assets, and also for the fact that they were assessed over 20 years ago, and prices and rent rates have risen since then, the rates proposed for Bhartpur seem moderate.

118. The assessment proposed represents, I think, a full two-thirds of the net-assets on the present cultivated area, but if the expansion of cultivation, which I anticipate, is realised and an efficient and sympathetic revenue administration is maintained, which will secure that the State demand is properly enforced in ordinary years and that the burthen is alleviated by suspensions or remissions in years of distress, I see no reason why it should not be paid with comparative ease during the term of settlement. To the *khalsa* demand we must also add Rs. 4-11-0 per cent. for local rate and Rs. 3-2-0 per cent. for Patwar cess, which raises the proportion of the net assets taken by the State to between 70 and 75 per cent.

119. In some estates there will be an additional demand on account of Balances since 1890 to be remitted and arrears since 1890. The amount of these recovered. to the end of 1898-99 has been shown in paragraph 36, *viz.* :—

Kumher.	Akhegarh.	Bhartpur.	Nagar.
41,127	65,712	133,656	897

As these are chiefly due to the bad years 1895-96, 1896-97, 1898-99, I think that, having regard to the increase in the demand, and the fact that a large proportion is due from *kham* or distressed villages, or from co-sharers who have died or disappeared, the State would be wise in exacting not more than the following sums—

Kumher	Akhegarh	Bhartpur	Nagar	Total
20,000	25,000	20,000	Nil	65,000

and in consultation with the Revenue Department of the State, which is at present investigating the subject, I propose to decide from what villages and to what extent the arrears should be realised to make up these amounts. This having been determined, it will also be decided whether the arrears to be realised are due from the whole community jointly or only from individual co-sharers. In either case, in order to make the realisation more easy and therefore more certain, I would generally distribute the amount over the whole term of settlement, and realise it with the land revenue instalments. This will safeguard the people from the untimely and ill-judged interference of the tahsil officials.

120. The term of settlement should be 20 years as already sanctioned for the northern tahsils. Frequent re-assessments made by ignorant and self-seeking officials or Committees have hitherto been the curse of the State, and have discouraged improvements. I confidently anticipate that, if the Darbar adheres faithfully to the conditions of the settlement now being made, the people will not only honestly meet their liabilities, but will increase in comfort and prosperity and at the expiry of the term be in a position to pay a further substantial enhancement. As regards the dates of the revenue instalments, the State Council considered the dates suggested for the northern tahsils (paragraph 179 of last year's report) too late, and the Agent to the Governor-General (paragraph 14 of his review) thought it better to leave the question open till the operations were further advanced. The existing dates may therefore be maintained for the present; and next year, after I have inspected the southern tahsils, I shall make final proposals in consultation with the Political Agent and Council. The latter are quite correct in saying that the ryots of the central and southern *tahsils* always try to evade payment of their revenue but for this I hold the past policy of the State and not the people responsible.

PART II.

REVENUE FREE GRANTS AND MISCELLANEOUS.

121. The proposals in Part I of this Chapter refer only to *khalsa* lands.

Classes of revenue free grants.

In order to complete the survey of the tenures and agricultural conditions of these tahsils, it is fitting to describe briefly the various forms of revenue-free grants, and give some details of their total and cultivated area, the cesses and other dues or services which they at present pay to the State, and the *Jama* that would be imposed on them if *khalsa*. These grants take the form of—

- (1) *Nankar* or grants of money from the State treasury to *chaudhries* and *lambardars*. The amount of *nankar* in Kumher is Rs. 643. It is distributed over 14 estates of which 3 are held by Khuntel Jats, one by Gujars, one by Ledhas and the rest by Sinsinwar Jats. In four villages all the shareholders divide the grant. In the rest it goes to the *lambardars* alone. In Akhegarh Rs. 792 is allotted as *nankar* in 28 villages, of which 5 are held by Sinsinwars and the rest by other Jats and Gujars. The *lambardars* receive the *hakk mukkaddami* in addition. I have no details for Bhartpur and Nagar. In Bhartpur the amount is Rs. 662 in 11 villages, and in Nagar Rs. 100 in two villages.
- (2) *Inam* or *chakri* grants of estates in whole or part on conditions of service.
- (3) *Punarth* or charitable grants for religious purposes to temples, Brahmins, *purohits*, etc.
- (4) Grants for other services known as *Iwaz Khidmat*.
- (5) *Kansa* or maintenance grants to State Sirdars, generally relatives of the ruling family or the so-called Thakurs of the *Sola kotris* descended from the 16 sons of Raja Badan Singh.
- (6) *Jagir* grants to foster-relations of the Chief or other persons of importance.

All of these grants except (1) are grants of land. The number of whole estates so held in each tahsil and the total and cultivated area are shown in paragraph 4.

122. The details of area, number of estates, cesses levied, *Jama* by new rates, etc., for each class of grant are shown as far as available in the following table.

Tahsil.	Class.	No. of estates.	Cesses.														
			Total area.	Cultivated.	Fallow.	Banjar.	Jama by new rates.	Patwar.	Local rate.	Excess area.	Absence penalty.	Bhatt.	Necta.	Chandla.	Profits.	Resumed.	Total.
			Rs.					Rs.	Rs.								Rs.
Kumher	(a) Punarth	Whole	8	8,405	4,100	341	...	317	117	...	...	...	...	8	...	...	342
		Petty grants.	...	3,237	1,837	276	...	102	...	...	...	...	...	...	...	...	102
		Total	8	11,732	5,937	617	...	319	117	...	...	...	...	8	...	...	444
	(b) Iwaz Khidmat.	...	...	730	114	8	...	4	...	...	...	...	...	...	...	...	4
		Whole	3	3,129	1,377	234	...	76	40	...	...	...	...	3	...	...	121
	(c) Kansa	Flots.	...	6,062	3,394	231	...	201	49	...	...	...	...	3	...	...	253
		Total	3	9,191	4,771	465	...	279	89	...	...	...	...	6	...	...	374

Tahsil.	Class.	No. of estates.	CESSES.															
			Total area.	Cultivated.	Fallow.	Bar jar.	Jama by new rates.	Patwar.	Local rate.	Excess area.	Absence penalty.	Bhatt.	Neota.	Chanda.	Profits.	Resumed.	Total.	
	(d) Jagir	Whole	2	9,015	5,373	718	...	...	271	159	...	...	...	...	3	...	...	433
	Whole	17	27,360	18,459	1,216	...	...	775	...	...	35	...	...	...	...	...	810	
	Plots.	...	1,710	804	179	...	...	54	...	...	18	...	...	...	...	...	72	
	(e) Inam or Chakri.	Total	17	29,070	19,263	1,395	...	...	829	...	...	53	...	...	...	...	882	
	Total Tahsil ...	...	30	59,147	35,358	3,103	17,664	39,779	1,702	365	...	55	...	...	17	...	...	2,137
Akhegarh	(a) Punarth	Whole	2½	3,972	3,163	151	...	...	105	57	...	...	...	...	7	...	...	169
	Plots.	...	797	704	36	...	...	25	...	9	...	...	...	...	...	...	34	
	Total	...	2½	4,769	3,867	187	...	...	130	57	9	...	...	...	7	...	...	203
	(b) Iwaz Khidmat.	...	...	104	84	13	...	...	3	...	...	...	...	...	...	...	...	3
	(c) Kansa	Whole	5½	14,164	10,451	1,072	...	...	493	263	335	...	...	...	18	...	...	1,104
	Whole	½	785	664	7	...	...	24	12	...	...	...	...	1	...	...	37	
	Plots.	...	166	147	11	...	...	5	...	...	...	...	...	...	...	...	5	
	(d) Jagir	Total	½	951	811	18	...	...	29	12	...	...	...	...	1	...	...	42
	...	...	1½	732	673	7	...	...	21	...	...	(1) 156	6	...	...	...	...	183
	(e) Chakri or Inam.	...	...	510	355	126	...	...	20	...	...	85	6	...	...	...	...	111
	Total	...	11½	13,242	10,028	133	...	...	41	...	...	241	12	...	...	...	...	394
	Total Tahsil ...	...	10	21,330	16,241	1,423	...	15,696	686	337	344	241	12	...	26	...	...	1,646
Bhartpur	(a) Punarth	Whole	5	4,970	2,652	...	...	...	261	101	...	...	...	...	...	...	...	362
	(b) Iwaz Khidmat.	Whole	½	4,208	1,947	...	...	...	...	...	...	...	...	...	...	...	...	...
	(c) Kansa	Whole	6½	11,190	5,261	...	...	...	399	200	...	...	...	...	...	...	...	569
	(d) Inam	Whole	10½	25,180	18,623	...	...	...	938	...	295	...	276	...	...	125	97	1,791
	Total Tahsil ...	...	22½	46,548	28,483	2,608	13,308	33,593	1,628	391	295	...	276	...	...	125	97	2,722
Nagar	(a) Punarth	Plots	...	410	368	18	30	427	14	20	...	...	...	...	...	...	...	34
	(b) Iwaz Khidmat.	Plots	...	927	475	...	447	469	15	22	...	...	...	...	...	...	...	37
	(c) Kansa	Whole	1	901	788	10	48	895	28	42	...	...	...	...	...	...	...	70
	(d) Inam	Plots	...	857	801	...	32	774	24	36	...	...	...	...	...	...	...	60
	Total Tahsil ...	...	1	3,095	2,432	595	...	2,566	81	120	...	...	...	...	...	...	...	201

The assessment of the total *mafi* area at the same rates as *khalsa* works
 • out thus:—

	Rs
Kumher	... 39,779 or about one-fifth of the total.
Akhegarh	... 15,696 " " one-tenth " (including Pathena).
Bhartpur	... 33,563 or about one-sixth "
Nagar	... 2,573 " " one-fortieth "
Total	... 91,611 " " one-sixth "

In arriving at this result, a rate of one anna per bigah has been put on the culturable waste in Kumher and Bhartpur.

In calculating the number of estates held in each class, shares are taken into account. Thus the $10\frac{1}{2}$ estates held in *Inam* in Bhartpur are made up of seven whole estates, one-half share in four, and a three-fourth share in two estates. Besides whole estates or share in them, *Inam* plots are found in five estates in Nagar and 28 in Bhartpur, while *mafi* plots (of different kinds) are found in 21 villages of Nagar and 53 of Bhartpur. The state of things in Kumher and Bhartpur is similar.

123. The nature of these grants was described in some details in paragraphs

Explanation of cesses levied.

183 to 190 of last year's report. The statement shows that all grants pay *dami* or

Patwar cess. This has hitherto been calculated at the rate of half an anna per bigah on the total area of the grant. Whole estates held revenue free, whether as *Punarth*, *Kansa* or *Jagir*, pay local rates, which has I believe generally been calculated, not as in *Khalsa* villages at Rs. 4-11-0 per cent. on the actual Jama, but at 2 per cent. on an assumed jama, while plots of land so held do not appear as a rule to pay local rate. I doubt, however, if there is any fixed rule on the point. *Inam* or *chakiri* grants, whether consisting of whole estates or merely plots, pay only *dami* and not local rate, but they also pay *nazar bhait* a sort of feudal offering in token of allegiance.

124. The chief liability, however, in the case of *Inam* grants, is that of fur-

Service or absence penalty levied from *Inam* grants.

nishing so many 'guns' originally for military service, but now that feudal levies are at a discount, for watch and ward at

tahsils, *thanas*, State palaces, gardens, etc. This liability can be, and now frequently is, commuted for a money payment of one rupee per gun per month for absence.

The 17 estates held in *Inam* in Kumher were originally responsible for the supply of 498 'guns', but owing to the resumption of the shares of childless *Inamis* the number has now been reduced to 416, most of which for the last two years have paid the absence penalty. The $1\frac{1}{2}$ villages held in *Inam* in Akhegarh are liable for 20 guns, for which the grantees invariably pay the money penalty of Rs. 240 per annum. There are also 11 guns from which no service or penalty is exacted. The small *Inam* area in Nagar is held on condition of service of $10\frac{1}{6}$ guns, all of which have commuted for absence. In Bhartpur the *Inam* area is very large and is liable to render the service of 795 guns, but the obligation has been remitted in many cases, and the number of guns, charged with the absence penalty in case of default is $381\frac{2}{3}$. Last year nearly all, if not all, elected to pay the commutation. As the services now rendered are of the most nominal kind and of little or no practical use to the Darbar, I think the State might either commute it in all cases, or call upon the *Inamis* to decide whether they wish to commute for the term of Settlement, in which case the absence penalty would be regularly realised as part of the assessment. The present system of realisation is very unsatisfactory indeed.

125. I have not included the demand on account of absence penalty in the state-

Other items of demand and proposals for future cesses.

ment as it is at present fluctuating. The

other items of demand in revenue free villages or plots are (a) *barha* or payment for area held in excess of the grant, (b) *neota*, originally a marriage contribution, (c) *chanda* or sums to be paid to temples. These as well as *nazar bhait* have been fixed by custom or prescription and need not be interfered with. *Dami* or Patwar cess is at present levied on all grants at half an anna per bigah irrespective of the quality of the land and of the fact whether it is cultivated or not. In future, it should be calculated on the nominal assessment fixed, at the rate of Rs. 3-2-0 per cent. as in *khalsa* villages. The question whether all revenue-free grants should in future pay local rate as some now do—at the rate of 2 per cent.—and if so at what rate, has yet to be settled by the Darbar, and I trust it will come to an early decision on the matter.

Arrears due from revenue free grantees.

Kumher	...	...	...	48,280	23,342	71,622
Akhegarh	...	...	...	359	3,071	3,430
Bhartpur	...	...	...	...	...	52,907
Nagar	...	...	...	...	...	...

but they are separate from the other arrears shown in paragraph 39.

In the northern tahsils the Council and Political Agent last year sanctioned the striking off of the arrears prior to 1887-88, and I would suggest that a speedy decision be come to as regards these tahsils also. It will probably be found very difficult to recover the arrears prior to 1890, and, while I hesitate to give any definite opinion on the point, I think the State would be wise to confine itself to realising the arrears since 1890, or as much of them as may be found on enquiry to be fully recoverable.

127. From a settlement point of view the most important question as to these revenue free grants is their liability to assessment. I propose to fix a nominal assessment for all revenue-free lands at the same rates as *khalsa* lands. This will not only be convenient as showing the extent to which revenue has been alienated by the State, but will also be of practical utility, as the Patwar-cess and local rate (on such grants and at such rate as the Darbar may decide to levy it) will be calculated on such assessment, and in case of resumption owing to failure of heirs etc., this nominal assessment will be enforced. The next question is, to what extent, if any, the State should enforce the nominal assessment as between the *mafidars* (including all grantees under that name) and the Zamindars cultivating the revenue-free lands. This point was discussed in paragraphs 42 and 43 of the introduction to last year's report, and in paragraph 9 of the Political Agent's and paragraph 15 of the Agent to the Governor-General's reviews thereof. The matter has been further discussed in the correspondence noted below.

1st Assistant to the Agent to the Governor-General's letter No. 946-C,
dated 27th January 1899 to Political Agent.

My letter No. 1-C., dated 12th February 1899.

Political Agent's letter No. 7819, dated 21st February 1899, to First Assistant to the Agent to the Governor-General.

Where, as frequently happens, the proprietary rights in the revenue-free grant vest in the grantee and the cultivators are merely the tenants, no question arises, for the *mafidar*, like any other owner, can make his own arrangements with the tenants, subject to the general revenue rules of the State. The difficulty arises in cases where the cultivating zamindars are owners of the land, and the *mafidar* (using the word in its widest sense) is only entitled to the *jama*, as frequently happens where the *mafi* grant is of recent origin.

In such cases the *mafidar* is admittedly only entitled to realise revenue (locally expressed in the term *mafidar sirf bhej ka malik hai*), and the question is should he have the power of fixing the revenue at his pleasure, or is it to be fixed by the agency of the State, as between the *mafidar* and the owner of the land.

The past practice has been that maps and records have been prepared for all revenue free estates, in the same way as for *khalsa* villages, but the amount of the assessment to be levied by the *mafidar* has, except in special cases, been left over to be settled by the *mafidar* and the owners. The system, as might be expected, has led to many disputes, and when the dispute came to a head, the State has, especially in the time of the late Maharaja, freely exercised the right to interfere and fix the revenue to which the *mafidar* was entitled. It is obvious, that when such disputes arise the power to settle them must vest in some tribunal, *viz.*, in the supreme authority in the State, or whomsoever it may depute for the purpose.

Proposals now made for assessment.

128. The proposals I put forward to meet the difficulty are:—

- (1) a nominal *Jama* must in any case be fixed for the calculation of cesses,
- (2) where the owners and the *mafidar* wish to continue the present system of settling the annual demand by private arrangement, no interference is necessary.
- (3) Should (a) the owners, or (b) the *mafidar*, now or at any future time, owing to disputes, appeal to have the demand fixed, then the nominal *Jama* now fixed will be given effect to as between them for the term of settlement.

In doing this the State will not be outstepping its authority, departing from past practice or infringing the rights of either party. At present the zamindars in *mafi* estates almost invariably pay a cash assessment, fixed generally year by year or for a term of years, and the accident of the revenue of their lands being assigned to *mafidars* instead of being realised by the State should not deprive them of the right to have the amount of that revenue fixed for the same term, and on the same lines as in *khalsa* estates. The system proposed is not only in the interests of the zamindars, but of a great proportion of the *mafidars* as well. Most of the non-resident *mafidars* at present receive a much smaller *jama* than the State would demand if the estate were *khalsa*, and are habitually defrauded by the zamindars. In fact, several of them have recently come forward and petitioned to have the *jama* fixed for twenty years, as in *khalsa* villages.

Of course in fixing the *jama*, any special cesses or privileges, which the *mafidar* has hitherto enjoyed will be taken into consideration, and each case will be disposed of on its own merits.

The Political Agent Major Herbert concurs in these views, which are I think now accepted by the State Council also, but I think it advisable to bring the matter forward again, in case there may be any desire to further discuss it.

Summary of proposals.

129. The main points in the proposals on which orders are now required are—

- (1) The proposal to assess existing *sairaba* lands in Bhartpur at *sairaba* and in Nagar at dry rates (paragraph 16).
- (2) The wiping out of the old arrears of land revenue and cesses prior to last Settlement in all tahsils (paragraph 38).
- (3) The abolition of miscellaneous cesses as a separate charge and their inclusion in the new *jama* (paragraph 103).
- (4) The proposed new assessment and revenue rates for each tahsil (paragraphs 112 and 115).
- (5) The remission of part and recovery of part of the arrears since last settlement (paragraph 119).
- (6) The fixing of the rates of *malba* (paragraph 107) and the term of settlement (paragraph 120) as in the northern tahsils.

(7) The decision by the Darbar (a) what cesses should be levied from *mafidars* and at what rates (paragraph 125), (b) how the arrears due from *mafidars* should be dealt with (paragraph 127).

(8) The proposals for the assessment of revenue free lands (paragraph 128).

All of these matters, except the assessment and rates proposed, were discussed more or less fully in last year's report and have since been talked over frequently with Major Herbert, the Political Agent and the Council. Their disposal should not therefore be attended with any difficulties. It will not be out of place if I here acknowledge the hearty co-operation which I have received from Major Herbert, whose interest in the Settlement, and tact in smoothing over the difficulties which must naturally arise from the introduction of a new machinery into the State has much facilitated my work. To the State Council too and in particular to the Revenue Member—Rai Sahib Sohan Lal—I am much indebted for their cordial support, the readiness with which they have put at my disposal, when necessary, the materials and agency under their control, and the action they have taken to secure that the Revenue Officials should assist in the operations, instead of regarding them with jealousy and suspicion.

130. The Statements and Appendices attached to this report are in the same form as those submitted with last year's report *vis* :—

List of Statements and Appendices.

- I.—*Milan Rakba* or statement of areas, showing details of area at the last and present settlements.
- II.—*Jinswar* or crop statement, showing the crop grown at last settlement, in the 5 years 1892-1893 to 1896-97, and in the year 1897-98.
- III.—*Jama Wasil Baki*, showing the demand, realisations and balances of the various settlements since 1855. Not printed separately (see text of Chapter II).
- IV.—Showing sales and mortgages from 1855 up to the settlement of 1890-91 and from 1890-91 up to date.
- V.—Statement of cultivating occupancy, showing area cultivated by owners and the various classes of tenants in 1897-98.
- VI.—Statement of rents, showing the area held and the total and average rents paid by the various classes of tenants on different classes of soil in 1897-98.
- VII.—Statement of tenures, showing the number of estates held by the different tribes, with details of area and *jama* in 1897-98.
- VIII.—Statement showing population, houses, carts, ploughs and cattle in 1890-91 and 1897-98.
- IX.—Statement showing details of wells and well area in 1890-91 and 1897-98.

There are also three Appendices to show—

- I.—Rainfall monthly and annually for the last 12 years.
- II.—Prices for the 10 years preceding and 8 years subsequent to the settlement of 1890-91.
- III.—Produce estimate according to the crop areas of 1897-98.

As many of these statements are, from the necessities of the case, rather cumbrous and not easy to follow, I have generally summarised them in the text.

131. I regret that I have not been able to make this report briefer, but the complete absence of previous reports and other sources of information as to revenue conditions in Bhartpur has made it advisable to put on record all the information I could collect which may help to explain or elucidate these conditions. Much

of what has been written in Chapters I—III may have no direct bearing on the assessment, but it will I hope, be of some use in directing the attention of those who will carry on the revenue administration of the State to the weak points in the system.

I must here again acknowledge the excellent work done by and the great assistance I have received from both the Deputy Collectors. Munshi Hira Singh's thorough knowledge of all the details of settlement work which his sound judgment, tact and common sense have enabled him to adapt most successfully to local conditions, have been a most valuable help to me, and deserve special acknowledgment. M. Mahmud Husain's local knowledge and sympathy with the people have enabled him to carry on the work in his tahsils with success and without friction. He has been particularly active in the arrangements for the leasing of the waste land—a subject to which I shall return in next year's report. Of the Sadar Munsarims, Gurdial in Dig, Bakhshish Singh in Kumher, Bahauddin in Akhegarh, Jai Narain in Pahari, and Hari Chand in Gopalgarh have worked zealously and well.

In conclusion, I earnestly solicit the favour of early orders on this report. To carry out the programme of work which I have laid down for Alwar and Bhartpur, it is very necessary that the assessments of these four tahsils should be announced early in October, and come into working from the *kharif* of 1899, which promises so far to be a favourable one and likely to give a good start to the new demand. In the financial interests of the State too, it is desirable that the enhancement of revenue be obtained as soon as possible. The total expenditure on the settlement from its commencement in November 1896, up to the 30th June 1899 has been Rs. 163,249-13-7, or little more than half the cost of the operations in Alwar up to the same date.

Finis.

SIMLA,
19th July 1899. }

M. F. O'DWYER, I.C.S.,
Settlement Commissioner,
Alwar and Bhartpur States.

APPENDIX A.

Rainfall—Kumher and Akhegarh.

Appendix A.

Rainfall—Kumher and Akhegarh.

Name of months,	Tahsils,	1886-87,	1887-88,	1888-89,	1889-90,	1890-91,	1891-92,	1892-93,	1893-94,	1894-95,	1895-96,	1896-97,	1897-98,	Total.	Average.	1898-99.
April	Kumher	...	...	...	40	05	15	...	...	...	59	29	...	144	12	...
	Akhegarh	...	...	...	...	20	...	...	...	...	25	...	...	75	06	...
May	Kumher	...	...	08	09	...	05	43	170	...	16	...	12	300	30	24
	Akhegarh	...	...	...	10	...	...	39	...	...	...	44	22	130	12	37
June	Kumher	...	11	25	20	300	35	105	327	175	365	127	121	2260	184	538
	Akhegarh	...	...	09	...	500	50	221	190	476	295	111	291	2363	197	213
July	Kumher	...	1505	870	295	1700	220	694	1154	527	504	2230	735	11156	930	985
	Akhegarh	...	1740	1230	260	500	263	504	981	431	650	704	1030	6624	802	604
August	Kumher	...	1300	478	2052	495	1018	1155	372	1463	764	520	855	11483	957	1183
	Akhegarh	...	1360	680	1395	400	764	1070	602	1103	524	392	305	9475	790	532
September	Kumher	...	255	280	15	270	830	686	770	551	50	12	335	4519	351	44
	Akhegarh	...	109	523	...	400	1321	854	543	737	...	76	498	4903	468	...
Total six months	Kumher	...	3851	1673	2193	2850	2124	2688	2793	2726	1757	2025	2038	29578	2465	2764
	Akhegarh	...	2144	2444	1665	3990	2417	2688	2018	2887	1500	1387	2232	26579	2215	1386

Appendix A.

Rainfall return for Bhartpur and Nagar.

Year.	April.	May.	June.	July.	August.	September.	Six monthly Total.	October.	November.	December.	January.	February.	March.	Six monthly total.	Total year.
BHARTPUR.															
1886-87	...	'34	2'45	11'14	5'47	1'78	21'18	'30	...	...	'25	...	'73	1'27	22'45
1887-88	1'05	15'88	14'85	6'15	38'83	...	...	...	'50	...	'25	'75	30'58
1888-89	...	'05	'35	6'30	5'70	4'65	17'05	'25	'20	...	'80	'35	'15	1'75	18'80
1889-90	...	'10	'15	1'08	5'45	11'22	...	18'00	...	...	'45	'60	...	1'05	19'05
Total four years	...	'15	'40	5'83	38'77	37'24	12'58	95'06	'55	'20	...	2	9'5	1'12	4'82
Average four years	...	'4	'12	1'46	9'59	9'31	3'14	23'76	'14	'50	...	'5	'24	'28	1'21
1890-91	7'15	6'55	6'70	2'50	22'90	...	...	'15	...	...	'30	...	23'35
1891-92	...	'35	'25	3'59	15'31	14'45	33'95	1'07	...	...	'30	...	1'95	...	37'36
1892-93	...	'86	'56	12'19	14'96	5'93	34'90	...	...	'94	'30	'10	...	...	36'24
1893-94	...	1'72	3'45	17'42	4'58	3'37	30'54	'25	'40	...	1	1'04	1'02	...	34'25
1894-95	...	'37	4'47	6'10	12'09	5'39	28'42	'08	'06	1'80	1'93	...	'10	...	32'19
1895-96	...	'10	4'88	8'63	5'90	'80	20'31	...	...	'23	1'46	'12	'50	...	22'62
1896-97	2'45	8'88	1'43	'72	13'48	...	'64	'62	'16	...	...	...	14'90
1897-98	...	'03	1'18	9'18	11'22	3'13	24'74	...	...	...	...	...	...	...	25'38
1898-99	...	1'75	4'15	14'74	2'61	1'5	24'30	...	...	1'5	...	...	...	1'05	25'35
Total nine years	...	'10	5'08	28'94	87'98	74'80	37'34	233'54	1'40	1'10	4'79	4'95	1'26	3'87	17'37
Average nine years	...	'01	'56	3'22	9'70	8'31	4'15	25'95	'16	'12	'53	'55	'14	'43	1'53
Total thirteen years	...	'25	5'37	24'77	126'05	112'04	49'92	328'60	1'95	1'30	4'79	6'95	2'21	4'99	22'1
Average thirteen years	...	'2	'43	2'08	9'69	8'62	3'84	25'28	'15	'10	'35	'54	'17	'39	1'70
NAGAR.															
12 years' average of Gopalgarh ...	'7	'14	1'48	6'54	8'03	4'99	31'25	'60	'13	'47	'58	'23	'37	2'38	23'63
15 years' average of Govindgarh...	'08	'35	2'09	6'81	6'13	4'03	11'43	'53	'17	'35	'50	'38	'08	2'01	21'46
Average two parganas	...	'05	'25	1'78	6'67	7'08	4'51	20'34	'56	'15	'41	'54	'26	'23	2'19

* For Nagar, the average of Gopalgarh and Govindgarh is taken.

APPENDIX B.

**Showing crop experiments—Tahsils Kumber and Akhegarh and
Bharatpur and Nagar.**

Crop.	Tahsil.	Year.	CHANI.		SAIRABA.						BARANI.		BHUR.			
			No. of experiments.	Yield.	HAL.		SABIR.		BARISHI.		No.	Yield.	No.	Yield.		
					No.	Yield.	No.	Yield.	No.	Yield.						
		Sambat.														
Cotton	Kumher	1954														
		1955									2	1'8				
	Akhgarh	1954														
		1955														
Jawar	Kumher	1954														
		1955									60	3'9				
	Akhgarh	1954	2	3'3								3	4'4			
		1955										15	2'8			
Bajra	Kumher	1954														
		1955										44	3'7			
	Akhgarh	1954														
		1955										7	3'2			
Til	Kumher	1954														
		1955										6	1'7			
	Akhgarh	1954	2	2'4									3	1'1		
		1955										1	1'6			
Masina	Kumher	1954														
		1955										8	2'3			
	Akhgarh	1954											5	'8		
		1955										8	1'8			
Wheat	Kumher	1954	32	7'3												
		1955	32	6'4												
	Akhgarh	1954	16	7												
		1955	19	9'2												
Barley	Kumher	1954	39	9'4												
		1955	73	7'8												
	Akhgarh	1954	21	8'2												
		1955	34	9'3												
Gram	Kumher	1954														
		1955											17	5'4		
	Akhgarh	1954												16	2'6	
		1955												11	4'2	
Bejar	Kumher	1954														
		1955												1	3'2	
	Akhgarh	1954														
		1955												6	6'1	
Gochhi	Kumher	1954														
		1955												1	6'2	
	Akhgarh	1954														
		1955														
Gojra	Kumher	1954	4	8'8												

Appendix B.

(B) Statement of crop experiment :—Bhartpur and Nagar.

Crop.	Tahsil.	Sambat.	CHAHIL.		SAIRABA.						BARANI.		BARANI.		REMARKS.
			No. of experiments made.	Average produce in mans.	HAL.		SADIK.		BARISHI.		Number.	Produce.	Number.	Produce.	
					No. of experiments.	Produce.	Number.	Produce.	Number.	Produce.					
Jawar	Bhartpur	1954	2	3'2	3	3'2	...	...	...	...	6	1'35	...	...
		1955	...	...	...	...	...	...	...	...	17	1'4	...	...
	Nagar	1954	...	...	...	...	...	...	1	1'5	10	2'62	2	2'4	
		1955	...	...	3	2'35	...	...	...	...	9	1'6	...	...
Bajra	Bhartpur	1954	...	...	...	...	...	...	...	...	...	...	...	...
		1955	...	...	...	...	...	...	...	...	20	1'05	...	...
	Nagar	1954	...	...	...	...	...	...	...	...	...	...	3	2'45	
		1955	...	...	...	...	...	...	...	...	18	1'8	...	...
Wheat	Bhartpur	1954	18	7'07	5	8'5	...	...	...	...	...	...	...	...
		1955	21	7'63	1	6'25	...	...	...	...	...	...	...	...
	Nagar	1954	23	6'17	2	8'6	...	...	...	...	...	...	...	...
		1955	9	3'97	...	...	...	...	...	...	...	...	...	...
Barley	Bhartpur	1954	5	9'47	...	...	...	...	...	...	...	...	...	...
		1955	22	7'45	...	...	...	...	...	...	...	...	...	...
	Nagar	1954	29	6'88	3	6'9	...	...	...	...	...	...	...	...
		1955	24	5'22	...	...	...	...	...	...	...	...	...	...
Gram	Bhartpur	1954	...	...	1	4	...	...	1	2'4	3	4'5	...	...
		1955	...	...	3	5'07	...	...	...	...	1	2'6	...	...
	Nagar	1954	...	...	3	3'38	...	...	...	...	14	3'58	...	...
		1955	...	...	2	1'85	...	...	...	...	...	...	...	...
Bejar	Bhartpur	1954	...	...	3	5'5	...	...	...	...	2	5'45	...	...
		1955	...	...	...	...	...	...	...	...	...	...	...	...
	Nagar	1954	2	3'75	...	...	...	...	...	...	1	2'9	...	...
		1955	...	...	...	...	...	...	...	...	...	...	...	...
Gochal	Bhartpur	1854	...	...	1	7'2	...	...	...	...	...	...	...	...
		1955	...	...	1	4'8	...	...	...	...	...	...	...	...
	Naga	1954	...	...	...	...	...	...	...	...	...	...	...	...
		1955	...	...	...	...	...	...	...	...	...	...	...	...
Gojra	Bhartpur	1954	4	5'2	...	...	...	...	...	...	...	...	...	...
		1955	9	7'7	...	...	...	...	...	...	...	...	...	...
	Nagar	1954	7	6	...	...	...	...	...	...	...	...	...	...
Sarson	Bhartpur	1954	...	...	...	...	...	...	...	...	...	...	...	...
	Nagar	1954	...	...	3	1'5	...	...	...	...	1	1'7	...	...
Cotton	Bhartpur	1954	2	2'7	...	...	...	...	...	...	...	...	...	...
	Nagar	1954	...	...	...	...	...	...	...	...	1	2'8	...	...
Til	Bhartpur	1954	...	...	...	...	...	...	...	...	...	...	...	...
	Nagar	1954	...	...	1	1'25	...	...	...	...	1	1'2	...	...
Opium Seed	Bhartpur	1954	...	...	...	...	...	...	...	...	...	...	...	...
	Nagar	1954	1	2'5	...	...	...	...	...	...	...	...	...	...
Masina	Bhartpur	1954	...	...	...	...	...	...	...	...	...	...	...	...
		1954	...	...	...	...	...	...	...	...	...	...	2	'5	
	Nagar	1955	...	...	...	...	...	...	...	...	2	4'35	...	...

APPENDIX C.

Statement showing produce estimate, Tahsil Akhegarh.

Appendix C.

Statement showing produce estimate Tahsil Akhegarh.

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26				
		KHARIF.												RABI.																	
		Soils.		Details.		Cotton.	Bajra.	Jawar.	Masina.	Gawar, chari.	Til.	Tabacco.	Vegetables.	Others.	Total.	Wheat.	Barley.	Gram.	Bejar.	Gochul.	Gojra.	Sarson.	Tobacco.	Vegetables.	Zira, (cumin seeds).	Carrots.	Others.	Total.	Total of both crops.		
CHAHIL.	PRESENT.	Irrigated	Area	...	...	5,270	3	23	4	...	3	8	87	7	5,404	4,300	14,566	109	67	...	136	111	420	80	272	556	21	21,438	26,842	
			Rate	...	...	3½	5	3½	2½	...	2	...	...	...	...	...	7½	9	7	8	...	8	2	...	...	...	...	...	...	...
			Produce	...	...	18,445	15	81	10	...	4	...	...	...	...	...	32,250	1,31,094	763	536	...	1,088	223	...	...	...	...	...	...	...
		Unirrigated	Area	...	...	...	2,854	71	6	58	23	...	...	11	8	3,031	...	...	4	...	...	...	...	...	...	...	...	...	4	3,035
			Rate	2	2½	3	2½	...	2	3
			Produce	7,135	213	15	...	46	12
	Former	Area	...	...	123	3,662	1,825	379	370	127	...	...	4	43	6,533	...	1	1,340	15	...	...	...	321	...	...	...	1	...	1,578	8,111
		Rate	...	...	...	2	2½	3	2½	...	3	...	...	...	...	...	...	4	3	3½	...	...	...	2	...	...	...	...	...	...
		Produce	...	...	...	246	9,155	5,478	948	...	254	...	...	...	...	...	...	4	4,020	53	...	...	...	442	...	...	...	...	...	...

[illegible]

Appendix C.

Statement showing produce estimate, Tahsil Kumbhar.

Sols.	Details.	Kharif.												Rabi.												REMARKS.
		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
CHAHIL.	Present.	Irrigated.	Cotton.	Bayra.	Jawar.	Masina.	Gawar charri.	Til.	Tobacco.	Cane.	Vegetables.	Others.	Total.	Wheat.	Barley.	Gram.	Saron.	Tobacco.	Vegetables.	Zira (common seed).	Others.	Total.	Total of both crops.			
			Area	2	3	5	...	...	21	3	33	13	70	9142	14,615	433	1,588	147	282	75	9	26,001	36,170		
			Rate	...	...	2 1/2	...	...	...	...	...	...	6	7	7	2	...	...	...	...	...	...	...	...
	Unirrigated.		Produce	...	...	...	...	...	21	3	33	13	...	54,852	102,305	3,031	2,776	147	282	75	9	...	...	
			Area	...	...	...	...	...	15	...	3	9	1,230	...	...	...	...	...	...	...	...	...	...	1,230	
			Rate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Former		Produce	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			Area	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15,236
			Rate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			Produce	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			Area	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
			Rate	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...