ASSESSMENT REPORT

OF THE FOUR CENTRAL TAHSILS OF BHARTPUR

Kumher, Akhegarh, Bhartpur, Nagar.

BHARTPUR STATE.

(1898-99)

BY

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ASSESSMENT REPORT

OF THE FOUR CENTRAL TAHSILS OF BHARTPUR—

KUMHER, AKHEGARH, BHARTPUR, NAGAR.

CHAPTER I.

Introductory.

1. In September 1898 I submitted proposals for the assessment of the four northern tahsils of Bhartpur, Gopalgarh, Pahari, Kama, and Dig, and at the same time explained the general scheme of operations which I proposed to follow in the settlement of the State as a whole. The Government of India in their letter No. 677-I. A., dated 11th March 1899, expressed a general approval of the settlement and of the assessment proposals, the financial result of which in the northern tahsils is a new demand of Rs. 7,28,000, giving a total enhancement of Rs. 87,675 and a net increase (after abolishing irregular cesses and other miscellaneous items of demand) of Rs. 75,271 or 11.5 per cent., on the existing Jama Rs. 6,42,418.

The new assessments were to have been introduced from *Rabi* 1899, but owing to the harvests being much below the average, and the inconvenience of introducing a new demand in the middle of the financial and agricultural year, they have with the sanction of the Political Agent and Council been deferred till the coming *Kharif*.

The present report deals with the four central tahsils—Kumher, Akhegarh, Bhartpur and Nagar, leaving the four southern tahsils—Oochain, Rupbas, Biyana and Bhusawar to be dealt with next year in order to complete the revenue settlement of the State. In the introduction to last year's report I described at some length the past revenue system of the State and explained the principles on which the present operations are being conducted as regards the State, the village communities or proprietary bodies, and the various classes of cultivators, also the form of the new records and the measures taken to improve the Local Patwari and Kanungo agency. I will not therefore refer to these points except incidentally in the present report, which deals purely with the re-assessment, but in next year's report a special chapter will be devoted to the other matters connected with the settlement.

Explanation of the system of record and re-assessment pursued.

2. The system pursued in the re-assessment of these tahsils does not differ from that employed in the northern. The first step is an accurate field-to-field survey to show the existing total and cultivated area with all necessary details. This was effected by having the village maps, prepared in 1888-90 for the re-assessment of the latter year, carefully checked on the ground by the local Patwaris under the supervision of a small but well-trained settlement establishment imported chiefly from the Punjab, and amended according to the conditions found to exist in the year 1897-98 which, being a fair average year, was here as in the northern tahsils taken as the basis of the new assessment. At the same time a complete and accurate record of all proprietary and cultivating rights in the land was for the first time prepared and attested holding by holding in the presence of the Zamindars by the Munsarim of the circle, the Sadar Munsarim in charge of the tahsil, and finally by the Deputy Collector in charge of the operations. This attestation being the first serious attempt to ascertain and define the rights in the land in Bhartpur naturally brought to light innumerable disputes and discrepancies owing to errors or omissions in the old, incomplete, and unattested records. In each village a register of such disputes was prepared, and orders passed on every case after a summary local enquiry by the Deputy Collector subject to an appeal to me. This register of disputes will form part of the new record and will be invaluable for reference in the event of future litigation. For the more

important cases separate files have been prepared, and a judicial enquiry made, the results of which have also been incorporated in the new records. For claims by tenants to occupancy rights a separate register has been prepared for each village and orders similarly passed by the Deputy Collectors In this way all rights in the land have been ascertained, all disputes disposed of, and a correct up to date record prepared, which besides its intrinsic value as a record of rights is also indispensable to furnish the data for assessment.

Of the four tahsils now under consideration Kumher and Akhegarh are in the charge of M Hira Singh, Deputy Collector, an experienced settlement official borrowed from the Punjab Government in 1897, while Bhartpur and Nagar are in charge of M. Mahmud Hussain, the Revenue Superintendent of the State who has been in the State service since 1894. After these officers had completed the village to village attestation, prepared the assessment statistics, and made notes for re-assessment based on a careful local inspection of the soil and harvests, I made a systematic tour of each tahsil in the months of October-November 1898 and February-March 1899 accompanied by the Deputy Collector and Tahsildar, during which I personally inspected every estate—except one in Kumher and 5 or 6 in Bhartpur which I hope to see before giving out the assessment —made notes as to the crops, the soil, irrigation, etc., and with the aid of the assessment statistics and by local enquiry, endeavoured to ascertain all I could as to the working of the past and present assessments, the present condition of the people, the amount and causes of the revenue arrears, the sufficiency of cultivators to work the land, the scale of cash rents and all matters affecting the prosperity and revenue paying capacity of the estate. At the same time I made a rough estimate of the future assessment, and of the amount of the arrears to be realised and remitted. Having thus obtained some knowledge of every estate at first hand and supplemented this with the information derived from the Deputy Collector and Tahsildar, I discussed the assessment statistics of the tahsil as a whole with the Deputy Collector, settled the *data* for re-assessment *viz.*, the average outturn, scale of prices, of cash rents, allowances to be made for fodder crops, failure of crops and menials' dues, and based on these *data* a theoretical estimate of what a fair assessment should be. This estimate was checked with the results of our village to village inspections and the working of past assessments, and thus we arrived at what was considered to be a fair working assessment for each tahsil.

The absence of any report as to the previous assessments, none of which since Sir Henry Lawrence's summary settlement of 1855-57 (see introduction to last year's report) was made on any system, has made the re-assessment in Bhartpur much more difficult than in Alwar, where there is the carefully made regular settlement of 1872-76 as a standard of comparison. Here, as in Alwar, my work has however been much facilitated by the two Deputy Collectors furnishing me with assessment reports for their tahsils. These have been prepared after an exemplar which I gave them, and supplemented by my own observations and the rather scanty information which I have been able to glean from the files in the Agency Office they furnish the basis of the present report.

Position and boundaries of the four central tahsils.

3. A reference to the map attached will explain the position and boundaries of the four central tahsils.

Kumher, Akhegarh, and Bhartpur are in one compact block and really form the centre of the State lying intermediate between the Ruparel river which plays so prominent a part in the agriculture of the four northern tahsils, and the Banganga which directly influences the four southern Both the Ruparel and Banganga are torrential streams, which are in flow for only 4 or 5 months during and shortly after the rains. In seasons of heavy rainfall the Ruparel floods extend from Dig (paragraph 15 of last year's report) through Kumher to Bhartpur city, while the Banganga floods are annually spread over the southern portion of Bhartpur by means of the Ajan *band*, and also affect Pathena and a few villages on the south-west of Akhegarh. These three tahsils form a level alluvial plain with a soil which is generally sweet and fertile, but the subsoil water is often brackish or bitter. This plain which begins in Katumbar in Alwar and slopes east to the Jumna is known as the *Kater*, a name the origin of which I cannot trace.

The small Nagar tahsil is separated from the other three. It is cut off from Kumher on the west by the intervention of a strip of the Katumbar tahsil of Alwar—a few miles in width. Ethnologically and geographically it belongs to the Mewat or Meo country, the eastern portion naturally attaching itself to Gopalgarh, while the western stretches out in a long narrow neck or promontory into Alwar territory and lies between Govindgarh on the north, Lachmangarh and Katumbar on the south.

All four tahsils touch foreign territory. Kumher on the east is bounded by the cis-Jumna portion of Muttra, and has five villages—Nangla, Umra, Bad, Bhainsa and Nangla Bahora—situated as *enclaves* in Muttra; Bhartpur on the east runs with the Karaoli or Fattehpur Sikri tahsil of Agra. To it belong three detached villages enclosed in British territory—Shamaspur in Muttra, and Dharampur and Kirai in Agra. Akhegarh on the west touches Jaipur for a few miles and the Katumbar tahsil of Alwar, while Nagar as already stated is bounded on three sides by the Govindgarh, Lachmangarh and Katumbar tahsils of Alwar.

Leading statistics.

4. Before examining in more detail the physical conditions of each tahsil, a synopsis of the leading statistics of each may be given. The standard of measurement is the Raj *bigah* which is the square of the local chain—120 feet in length—and is thus equal to 1,936 square yards, or two-fifths of the statute acre so that 1,600 square bigahs are equal to a square mile.

Tahsil.	Detail.	Number of villages.	Total area.	Cultivated area.	Jama	Jama with abwabs	Population in 1897-98.	Population per square mile: Total.	Population per square mile: Cultivated.	Remarks.
Kumher	Khalsa	82½	232,662	139,694	1,35,743	1,49,745	54,969	286	504	
	State property	7	14,789	.	...	...		...	..	
	Mafi and Jagir	29½	59,147	35,388	..	..	..			
	Total	119	306,598	175,082	1,53,743	1,49,745	54,969	...		
Akhegarh	Khalsa	72	177,576	135,150	1,30,673	1,61,802	37, 45	305	428	
	State property	1	456	...	..	..	...	.	..	
	Mafi and Jagir	10	16,437	13,337	...	..	...	.	..	
	Total	83	194,469	178,493	130,678	1,61,802	37,245	...	...	
Bhartpur	Khalsa	124½	246,517	128,467	1,43,884	1,71,556	(a 43,042	215	441	(a) Excluding population of Bhartpur City 67,553.
	Chauth	1	2,853	1 267	...	...	67,553 city	...	...	
	State property	5	29,105	..	...	...	...	...	...	
	Mafi, Inam, Jagir.	22½	46,548	28,483	...	.	.	.	...	
	Total ...	153	325,023	158,217	1,43,884	1,71,556	(b 1,11,195	..	...	
Nagar	Khalsa	80	134,116	99,848	89,668	1,05,369	25,870	302	405	
	Mafi and Jagir	1	3,095	2,432	...	...	...	...		
	Total ...	81	137,211	1,02,280	89,668	1,05,369	25,88	...	...	
Gopalgarh tehsil...	Khalsa	358½	790,871	493,165	5,38,973	5,68,472	2,29,27	...	...	
	Chauth	1	2,853	1,864	.	.	...	...	...	
	State property	14	44,350	...	...	...	..	...	...	
	Mafi, Inam and Jagir.	82½	125,327	79,640	...	...	...	...	...	
	Total ...	436	963,301	574,079	5,08,973	5,68,472	(a 187,161 (b 2,89,270	...	...	(b) Including population of Bhartpur City.

•Thus the tract has a total area of 602 square miles, of which only 359 or less than 60 per cent. are cultivated. The incidence of the population per square mile is 641 on total and 380 on cultivated area, or if the large city of Bhartpur—with a population of 67,553 which is almost entirely non-agricultural—be excluded, the incidence is 268 on total and 450 on cultivated area. The incidence of the land revenue is Rs. 2-4-0 per cultivated acre or including cesses and miscellaneous demands Rs. 2-10-0, and the incidence per head of population (excluding Bhartpur city) is Rs 3-2-0. These figures are rather lower than in the northern tahsils (paragraph 5 of last year's report) and compares as follows with the eastern tahsils of Alwar, and the British districts of Agra and Muttra and Gurgaon, and the Punjab figures for 1898.

Country.	Per acre of cultivation.	Incidence excluding cesses per head of population.
	Rs. A. P.	Rs. A. P.
Bhartpur, central tahsils (a) By old demand	2 4 0	3 2 0
Bhartpur, central tahsils (b) By revised demand	2 8 6	3 9 0
Alwar, eastern tahsils (1898)	2 12 6	4 6 0
„ Katumbar (1899)	2 12 0	4 11 0
Muttra, Cis-Jumna (1879)	1 14 8	1 10 6
Agra, Karaoli (1879)	2 5 6	1 10 6
Gurgaon (1898)	1 5 6	1 13 1
Punjab (1898)	1 2 0	1 5 1

Thus while the incidence per cultivated acre is intermediate between that of the Cis-Jumna tahsils of Muttra, and the Karaoli tahsil of Agra, the incidence per head of population is almost double. This shows that the population is sparse compared with adjoining British Districts. Compared with adjoining tracts in Alwar, however, the incidence per acre and per head is low. The large area of waste land in all the tahsils shows that population has not yet begun to outstrip the means of subsistence, and that they suffer from a want rather than from a *plethora* of agricultural population. This want is particularly felt in Akhegarh and in the southern portions of Bhartpur. The chief physical and agricultural features of each tahsil will now be considered separately.

KUMHER.

General descriptions of the Kumher tahsil.

(a) Physical features

5 The Kumher tahsil is a level tract sloping almost imperceptibly to the Jumna on the east. Its uniformity is unbroken save by a few sandhills in Nangla Phut and Dhanwara south-west of Kumher town, in the vicinity of which and also around the town of Kumher the land is light sandy *bhur*. Otherwise the soil is a rather light loam, fertile and easily worked, except where damaged by the well water which is more bitter here than in any tahsil of the State.

(b) Salt manufacture.

Kumher with Dig and Bhartpur was formerly the centre of the salt manufacture and up to the suppression of the trade in 1879, under the agreement with the British Government the outturn of salt in these three tahsils averaged for the 10 years 1859-60—1868-69 over 44,000 tons per annum, *viz*, Kumher 10,000, Bhartpur 20,000, Dig 14,000 (Administration Report, 1868 69) from which the British Government derived an annual income of 33½ lakhs in the form of custom duty and the State an income of 2½ to 3 lakhs. On the abolition of the salt trade Government awarded Rs. 2,26,000 as compensation to the persons engaged in the trade, and Rs. 1,50,000 per annum to the State for the loss of its revenues.

The salt tahsils however suffered heavily by the stoppage of the trade, the loss of the capital invested in it, and the dispersion of the thousands of persons engaged in the manufacture.

The salt was usually manufactured from the brine of well water by evaporation. These salt wells and salt fields or mounds (*Agar*) are found all over the tahsil but chiefly in the centre on both sides of the road from Bhartpur to Dig passing through the town of Kumher. According to local opinion the sub-soil water has become more saline since the stoppage of the salt manufacture as the extraction of brine by the salt wells has ceased.

(c) Saltness of the well water.

However this may be, at present only one-fourth of the irrigation wells are sweet, about one-fourth are more or less brackish, and one-half are bitter or saline. The sweet wells are generally confined to the vicinity of tanks, to the old valleys of the Ruparel entering the tahsil from Dig and Muttra, and to the natural depressions through which the drainage from the west and south finds its way east towards the Jumna. Wells are very numerous and 29 per cent. of the cultivation is returned as *chahi*, but owing to the peculiar system of agriculture necessitated by the effects of brackish or bitter well water on the soil, over one-third of the *chahi* area will be usually found lying fallow, or growing only *barani* crops. Water is everywhere fairly accessible and abundant. The depth ranges from 60 feet on the west of the tahsil adjoining Katumbar to 14 feet on the east where we approach the Jumna. The average for the whole tahsil is for masonry wells 33 feet to the water and 17 feet of water, and for *Kacha* wells 27 feet to the water and 10 feet of water.

Kacha wells are a great feature in the agriculture of this tahsil. They are not sunk so deep as masonry wells, and receive the surface drainage by percolation. Hence they are not so saline as the masonry wells, which have to be sunk to the spring level. They are most numerous on the east of the tahsil, where water is near the surface, and here they rarely last more than a year or two; for as the water level recedes owing to the working, the well collapses of itself, or the appearance of the bitter sub-soil water with its injurious qualities causes it to be abandoned in favour of a new site. The cultivation on brackish or bitter wells is restricted to grain crops in the *rabi*, cotton, maize, tobacco vegetables or root crops cannot ordinarily be raised on them. The grain crops—wheat and barley—are if possible, sown with the moisture of the rainfall as they then germinate quickly and uniformly. If sown with the saline well water, the sprouting is tardy and unequal giving the crop a patchy appearance. Without rain after germination, the crops are apt to be stunted and run to ear prematurely, but given a few timely showers they recover wonderfully, and the yield at least of grain is often superior to that on sweet wells. The evil qualities of bitter wells are most active under a high temperature, and become less with the approach of the cold weather. Hence, when not sown with the rainfall the spring crops are sown very late.

(d) Natural divisions.

As regards soil and agricultural conditions the tahsil which—excluding the five villages in Muttra—has a breadth of 30 miles, falls into three natural divisions.

(1) Western.

The western portion is a dry level plain similar to Akhegarh on the south or the Alwar tahsil of Katumbar on the west. The water level is deep, the water generally bitter, and *kacha* wells are scarce. The soil is a reddish loam in which *kharif* crops, *jawar*, *til*, *bajra* and even *barani* cotton thrive, but it receives no drainage from any side, nor are the fields enclosed to hold up the rain water. The soil is therefore neither cool nor retentive of moisture, so that *rabi barani* crops—gram and oilseeds—are very little grown. A few villages on the south benefit or suffer now and again from the flood water from Raisis in Akhegarh which enters the tahsil at Bhataoli, and runs along a natural depression through Banni Ajauw, Si, into the Heylak Rund and thence into the old cut from the Ruparel known as Home's canal. In these villages water is generally sweet and some gram is grown in the *rabi*. This part of the tahsil is generally bare of trees. The estates are large and owned chiefly by Sinsinwars and other Jats, of moderate industry, but often insufficient in numbers. The wells are usually found in a

cluster round the village site or tank, and as the water is generally injurious to the land if continuously applied, half the well area is irrigated and half left fallow or sown with *barani* crops in rotation. The villages on the south suffer a good deal from the depredations of wild animals and of wild cattle from the Heylak and Bhataoli Runds, but the latter pest is now being steadily reduced.

(2) Central portion.

The central portion of the tahsil lies around Kumher town on both sides of the Dig-Bhartpur road, extending east to west from Pangaur to Asthawan, and north to south from Dhamrer on the Dig to Nangla Manji on the Bhartpur boundary. This was the great seat of the salt manufacture, and was then one of the most busy and prosperous parts of the State, but it has now a forlorn and depressed appearance, with large areas of land lying waste or deserted owing to bad soil, bad water, want of hands, and the inroads of the wild cattle from the Heylak and Saketra Runds on the south, and the Auw and Mandhera Runds on the north. Since the abolition of the salt trade population has become sparse, and the jungle has steadily encroached on the cultivation. Many estates have completely broken down, several are managed now in whole or part direct by the tahsil (*Kham*), and many of the remainder are only kept going by the direct interference of the Tahsildar, and the levy of grazing dues on the large areas of waste. The village sites have a forlorn and desolate appearance aggravated by the belts of dismal *farrash* trees which alone thrive in the ungenerous soil. The Zamindars too are a poor lot, weak and spiritless Lodhas (formerly salt-workers) listless Brahmins, or useless Faujdars. The soil on the north is in many places injured by *kallar*, and on the south-west close to Kumher runs into *bhur*. The water is bitter or brackish throughout except along the eastern side where there is a natural depression through which in 1866-67 Lieutenant Home, the State Engineer, cut the channel known as Home's canal—to bring the Ruparel floods from Dahr Kho near Dig to the Moti Jhil in Bhartpur (paragraph 15 of last year's report). This channel has not brought down the Ruparel floods since 1874, but it receives the local drainage, and there is some good lowlying land along its banks in Pangaur, Gangarsoli and Kumher. It formerly had a dam at Damrer where it enters the tahsil, and is now sometimes dammed at Nangla Jodh Singh where it leaves it crossing the Bhartpur-Dig road. Here about 222 bigahs were irrigated last year, and here it also receives the drainage from the western portion of the tahsils and forms swamps before passing into the Bhartpur tahsil.

This depressed tract has in the last few years shown some signs of reviving, as the wild cattle pest is being got rid of, and the condition of the villages is receiving more attention from the State. What is chiefly required, however, is an influx of new hands to take up the abandoned lands or shares held *Kham* and extend cultivation. I am endeavouring to arrange this, and have already had some success.

(3) Eastern portion.

The eastern portion of the tahsil adjoining Muttra has quite a different character from the rest. It contains 29 estates owned chiefly by Kunthel Jats of exceptional industry and activity, and pays nearly half of the total Jama. The soil is generally a whitish loam like the eastern part of Dig, fairly stiff, sweet, cool and retentive of moisture, and suitable for all the ordinary crops. Water is near the surface and fairly abundant so that *kacha* wells are sunk in great numbers. The water is generally brackish or bitter and to obviate its evil effects the Zamindars have adopted an admirable system of agriculture and rotation of crops. A *rabi* crop, wheat or barley, is first sown and irrigated. This is followed by a *kharif barani* crop, generally *jawar*, which absorbs from the soil some of the salt induced by irrigation. Thus an irrigated and unirrigated crop are raised in one year. The next year the well is left unworked and the land remains fallow, and in the third year the same rotation is followed. Thus the irrigation shifts from one well to another, and in any particular *rabi* only about half of the wells will be found at work, the lands of the remaining half being left fallow or at the most having grown a dry crop in the previous *kharif*. This system saves the well land from deterioration, and the respite from croppings secures a splendid yield. The spring crops—largely wheat mixed with *sarson*—thrive wonderfully, especially if sown with rain-moisture which the cultivators are careful to retain by ploughing the land before and during the rains and then rolling it, as in the Punjab to prevent loss of moisture by evaporation.

In *barani* land *jawar* in the *kharif* and gram in the *rabi* are chiefly grown. The estates are large, well populated and highly cultivated, while the demand for land is rendered more keen by the competition of tenants from Muttra. A few estates on the eastern border from Ghunsara to Santarak are crossed by that branch of the Ruparel which leaves the Kama tahsil at Barsana in Muttra, and after a devious course re-enters Bhartpur at this point. But this branch like Home's canal has not brought down the Ruparel floods since 1874, though it forms a well-marked depression with exceptionally fertile land and sweet water.

The five villages in Muttra are similar in character to the above tract, but are nearer the Jumna and water is very plentiful owing to the canal irrigation in adjoining Muttra villages. The Bhartpur villages would be glad to take water on the ordinary conditions, but owing to there being no surplus this has hitherto been refused to them. One village, Bad, extends right down to the Jumna *Khadir*, but owing to the retreat of the river towards the eastern bank is no longer inundated.

(*e*) Communications

The tahsil is very well served in the way of communications. The south side is crossed by the Agra Bandikui Railway with a station at Heylak. The isolated villages of Bad and Bhainsa are traversed by the Achnera-Muttra branch, and by a metalled road; while the tahsil itself is intersected from north to south by the two excellent metalled roads from Bhartpur and Sewar to Dig.

(*f*) Rainfall

Kumher enjoys a good rainfall. Owing to the vagaries of the local rain-gauge, the actual figures for Kumher cannot be traced, but Bhartpur 10 miles to the south and Dig 12 miles to the north have each an average of 27 inches, and this may be assumed to be the average for Kumher.

(*g*) Kinds of soil

There is no *sairaba* or inundated land worth counting, 29 per cent. of the cultivated area is *chahi* and 71 per cent. *barani*. The area of *bhur* is only 2 per cent. of the whole. The tahsil has still a very large area of waste land nearly all of which is culturable. There has been a considerable extension of cultivation since the re-assessment of 1890, and as the tahsil has on the whole a good soil and a good rainfall, it only requires more labour and industry to make good the losses caused by the famine of 1877-78 and the abolition of the salt trade in 1879.

AKHEGARH

General description of Akhegarh.

6. The Akhegarh tahsil consists of two separate groups of villages. The main group lies south of Katumbar and the western portion of Kumher, with which it has much in common. It contains 70 estates and is divided almost equally north and south by the Agra Bandikui Railway running due east to west, with an important station at Nadbai. This is in the centre of the tahsil, the most populous place in it, and would now be a far more suitable headquarters than Akhegarh which is off the railway line and on the western extremity of the tahsil adjoining Alwar. In fact Nadbai was the headquarters in Moghul times, but the Bhartpur Rulers shifted the headquarters to Akhegarh on the Alwar boundary to form a bulwark against the aggressions of that State.

(*a*) Isolated group of 13 estates on south-west

The smaller group consists of 13 estates lying on the extreme west of the State adjoining Jaipur and Alwar, and is separated from the rest of the tahsil by Katumbar in Alwar. This group contains the only hills in the tahsil, *viz.*, the Alipur ridge running from the Alwar border due south through six Bhartpur villages into Jaipur where it meets the Banganga river. The highest point is 1,357 feet at Alipur. The land on the west side is very sandy *bhur*, that on the east side benefits a little from the hill drainage which improves the *chahi* land and forms a small area of *sairaba barishi* in a few villages. Two villages of the group, *viz.*, Pathena and Jaroti (really 10 estates grouped into one) touch the Banganga, and benefit from its vicinity by having a water-supply plentiful and sweet. In the remainder of these 13 estates the majority of the wells are sweet.

The rest of the tahsil is, like Katumbar and the west of Kumher, a level plain sloping very gently towards the east. The portion north of the railway is exactly similar as regards agricultural conditions to the western portion of Kumher except that sweet wells are more numerous. The land is a fairly good and easily cultivated loam, which grows excellent crops of cotton, jawar and bajra in the *kharif*, while the wells grow barley and some wheat in the *rabi*, but, as there are no depressions or *dahrs* to retain the drainage water and the winter rains are slight and precarious, hardly any gram is grown. The land in the villages south of the railway is lighter though sweet, and *bhur* is found in several villages especially along the Bhusawar border.

(*b*) **Main group of 70 estates.**

A natural depression runs throughout the villages from Sandoli on the Katumbar border through Tilchera, Baroli, Pipri, Kharo Meo, Nadbai, Khasganj, Khera Deki, Bheylora, Mahrampur, Raises to Bhataoli in Kumher (see Kumher). Through this the floods from Katumbar in Alwar formerly found their way, and the inundations were very fertilising in the villages mentioned. Owing to the extension and improvement of the irrigation dams at Samunchi, Kherli and other places in Katumbar, and probably also to the deficient rainfall, these floods of recent years have been interrupted, and the depression receives only the local drainage Even this however is of considerable benefit, as the land close to the depression is kept moist and fertile with sweet wells and an abundant water-supply. *Kacha* wells also abound in it though they are rare elsewhere in the tahsil. The villages north of the railway formerly were benefitted occasionally by the surplus water from the Galakhera *band* in Katumbar, but for many years Katumbar has not received enough for its own needs and any surplus is held up by the embankment of the road from Kherli station to Katumbar. I doubt if these floods were ever more than occasional spills, but of course the Zamindars enlarge on the advantages they formerly derived from them, in order to exaggerate the loss suffered from this cessation.

(*c*) **Natural irrigation from nalas and the Banganga**

Besides Pathena and Jaroti a few villages on the south of the tahsil have been inundated a few times in the present generation from the Banganga, and it might be possible to irrigate several villages by cutting a canal from Thalchabi in Bhusawar where the Banganga takes a sharp turn to the south. In Akhegarh as in Kumher the *sairaba* area is insignificant—less than one per cent. of the whole and agriculture is therefore dependent on wells and the rainfall

The *chahi* area is 27 per cent. of the whole. Water is less bitter than in Kumher—over 60 per cent. of the wells being sweet, and the proportion of *chahi* land which lies fallow or grows only *barani* crops is therefore less than in Kumher: but the water level is deeper and the supply less abundant The water level ranges from 58 feet on the west to 14 feet in the low lands in drainage channels, and for masonry wells the average for the tahsil is 39 feet to the spring level, and 12 feet of water, for *kacha* wells 41 feet to the spring level and 9 feet of water. The continued drought of recent years has considerably reduced the water-supply. This and the great depth account for the fewness of *kacha* wells as compared with the Kumher.

(*d*). **Well irrigation**

The rainfall too, which other things being the same, diminishes as we go west from the Jumna-Ganges valley, is less than in Kumher—the average being 24·21 inches. The light soil of this tahsil however requires rather gentle and frequent showers than heavy downpours, and though the monsoon rains of 1898 were less than 15 inches, the crop except cotton was a good average one. The winter rains are slight and uncertain, and little *rabi* crops are raised except on the wells.

(*e*) **Rainfall**

The system of agriculture pursued is the same as in the western portion of Kumher. The rotation of crops and irrigation practised in the east of Kumher is not followed, and hence the *chahi* land on bitter wells is apt to deteriorate from continuous irrigation. The estates

(*f*). **System of agriculture and character of the Zamindars.**

are generally large in size and often weak in hands. The proprietary bodies are rather mixed and wanting in cohesion and solidarity owing to (1) the superimposition of *mafidars* and *Inamis* (generally of the Sinsinwar or ruling tribe) on the old communities, who either absorbed the antecedent rights of the Zamindars, or received a share of property on resumption of the grant and (2) the collapse of a great number of villages in the famine of 1877-78, when whole estates or shares in them were sold up by the State for arrears or transferred to outsiders. Faujdars and Brahmins hold over half of the estates and neither are good agriculturists. Some of the former are so-called Thakurs of the "*Solah Kotris*" *i.e.*, descendants of the sons of Raja Badan Singh. These still resent the partial resumption of their *mafi* lands by the late Maharaja and refuse to pay the Khalsa Jama without coercion. The pure Jats are the best agriculturists but hold only one-fourth of the villages. The tahsil as a whole though cultivation has developed and there is still abundance of culturable land never seems to have rallied from the effects of over assessment and famine. The village communities are weak, many estates are still in difficulties, the revenue though now moderate enough is always in arrears, and there is a general lack of spirit and energy.

BHARTPUR.

7. The Bhartpur tahsil presents more difficulties and complications in the way of assessment than any other portion of the State, and it is therefore necessary to describe its features at some length. It is known generally as the Deorhi tahsil, the revenues of the *Khalsa* estates being assigned for the maintenance of the ladies of the royal household. Up to 1866 various estates in different tahsils were set apart for this purpose, but in that year the Political Agent Captain Walter, with a view to administrative convenience and better management made an adjustment of boundaries by which the Bhartpur *pargana* with 145 estates valued at Rs. 2,02,141 was constituted the Deorhi tahsil. This was placed under the supervision of the Superintendent of the Deorhi, and the revenues were credited not to the State but to the Deorhi or palace. This system is still pursued though the Superintendent has now been replaced by a Tahsildar directly responsible to the administration, and result is that the revenue administration of this tahsil has been even worse than the rest of the State. The Deorhi officials have always tried to squeeze the last farthing out of the people, who had never any security and no inducement to improve. Oppression on one side begot craft and concealment on the other—the only weapons the people could use in their own defence. The demoralisation gradually spread, and was aggravated by the damage done by the wild cattle—which have made this tract their home—and the insecurity caused by the annual floods from the Banganga, which being left uncontrolled and undirected changed whole tracts of what had once been rich cultivation into unhealthy swamps. Thus the population diminished in numbers and strength, and the area of cultivation steadily decreased. The improved administration of the last 4 or 5 years has already wrought a change for the better, but the Zamindars even now in good years endeavour to keep back the revenue and cheat the State, and it will take many years more of good administration to wean them from the bad habits which a long course of oppression and misgovernment forced them into, and to raise them materially and morally to the level even of their brethren in other tahsils.

(a) Its formation and administration by Deorhi officials.

In its physical features the tahsil resembles the central and eastern portions of Kumher with this great difference that it is considerably affected on the south by the inundations of the Banganga which spread over 39 villages, and to a lesser extent on the north-west and centre by the floods of the Ruparel extending over 14 villages. Hence the texture of the soil is changed in places from loam to a hard clay. Water is generally more plentiful—indeed much of the area on the south is swamped regularly in seasons of heavy rain, the spring level is nearer, the climate less healthy and the agricultural population with certain exceptions inferior in industry and energy. Bhartpur has two detached villages, Karai and Dharampur in Agra, and Shamaspur in Muttra. The latter two though intersected by the Jumna canal are not allowed to irrigate therefrom. One Agra village, Mahi, is an *enclave* in Bhartpur.

(b) Physical features.

(c) Natural division (1) North-east.

The block of estates on the north-east between the Govardhan road and the railway line from Bhartpur to Agra—about one-fourth of the whole—lie beyond the range of the Ruparel or Banganga inundations and are similar in soil and agriculture to the eastern portion of Kumher though not perhaps quite so good. The villages on the east border adjoining Agra have a good deal of *bhur*. This is however the best part of the tahsil with a clean sweet soil nearly all under the plough, suitable for *kharif* and *rabi* crops, and an industrious and fairly thriving population—generally Jats.

(2) South-west.

The west and south west of the tahsil on both sides of the Haleyna or Jaipur road comprises about 40 estates, which are also unaffected by the inundations but these are inferior in every respect to the northern villages The soil is in places injured by *kallar*, and in places *bhur*. The latter is chiefly found on both sides of the Madhoni ridge, the only eminence in the tahsil, the highest point of which is 725 feet above sea level. The well water is often extremely bitter. Much land has gone out of cultivation in some villages owing to the weakness or desertion of the owners, or the ravages of the wild cattle, which have their home in the Bansi and Heylak Runds and the surrounding jungle. In fact this tract with its indifferent soil and bitter wells has few elements of prosperity though it would be considerably improved by the extension of the canal from Haleyna, which would fertilise the soil, raise the water level and improve the wells.

The rest of the tahsil, *i e*, the north-west, centre and south including about 70 estates is all affected directly or indirectly by the floods of the Ruparel and Banganga.

(3) North-west and centre flooded by the Ruparel.

The branch of the Ruparel known as Home's canal after its course through Kumher as already described enters this tahsil on the north-west at Nangla Jit Singh, and fills the *band* of Bhandur (restored in 1897 at a cost of Rs. 2,800) from which 1,486 bighas were irrigated last year in four villages. Thence reinforced by the drainage from the west through the Heylak Rund (see Kumher) and from the waste lands on the north it runs south into the Moti Jhil *band* close to Bhartpur city (repaired in 1896 at a cost of Rs. 3,100) which last year irrigated 200 bighas.

From the Moti Jhil the water is passed on by the natural flow to the Nuh *band* (restored in 1897 at a cost of Rs. 4,500) from which 782 bighas were irrigated last year in 10 villages, and by a recently constructed channel (made at a cost of Rs. 1,700) to the Gol *band* a few miles west of Bhartpur (improved in 1897 at a cost of Rs. 4,000) from which about 500 bigahs were irrigated in 1897-98. The famous moat of the Bhartpur Fort is also filled from the Moti Jhil. The supply in all these *bands* is very dependent on the Ruparel floods which have been very deficient since 1896. In addition to the area shown as irrigated a considerable area of waste is also inundated, but has remained uncultivated from want of labour or other reasons. The tail end of the Ruparel irrigation in the Nuh *band* is joined by the surplus inundations of the Banganga from the south brought off by the Jatoli drain (constructed in 1895 96 at a cost of Rs 4,100) which also fills the tanks near the city, and any excess in the Nuh *band* runs due west into the Agra district to join the Jumna.

(4) South flooded by the Banganga.

This leads to the consideration of the more extensive and important inundations from the Banganga on the south-west. These first spread over the Oochain tahsil south of Bhartpur where they are partly taken off by the Chureti *band* (in Oochain) and the Oochain canal running north to Sewar in Bhartpur, while the greater volume passes east to the Ajan *band*. This canal which was commenced in 1896 is 1½ miles long and has a bed width of 20 feet. It cost Rs. 10,000. The canal after its course of 1½ miles is run for a distance of 6½ miles along the Sewar-Oochain road, which has been raised and embanked (at a cost of Rs. 22,500) to act as a training and distributary reservoir. At the same time subsidiary dams have been made in Sukhaoli and Sheorana at a cost of Rs.

672 and Rs. 200 respectively, while the old Sewar *band* where the canal comes to an end has been restored and improved at a cost of Rs. 7,000 and connected with the great Ajan *band*, so that the inundations which formerly escaped between the two and caused much damage in the vicinity of the city by swamping, are now controlled and utilised. These works have proved extremely beneficial to the people and will in the long run be very remunerative to the State. Last year the total area irrigated from them was over 25,000 bigahs, but most of this was in the Oochain tahsil. Eight villages in Bhartpur, including Sewar, were irrigated.

The Banganga inundations which run east into the Ajan *band* are much greater than those described, but from want of proper regulation, and from the failure of the people to utilise them, their results have not hitherto been so beneficial. This *band* which after the Sikri *band* in Gopalgarh is the most important irrigation work in the State is (including the Sewar extension) 12 miles long, is provided with 34 sluices, and irrigates 39 villages. It was originally constructed 50 years ago by Maharaja Ranjit Singh, but under the late Maharaja it fell into neglect and disrepair. The bank used to be breached annually, large areas of land being swamped by the floods, which made *kharif* cultivation impossible and on the subsidence of which the land was left too moist or too hard for *rabi* sowings. The Zamindars therefore, many of whom are Gujars who make their living by keeping milch cattle and selling milk and *ghi* in the city, had almost ceased to cultivate especially since the famine of 1877-78, and the depredations of the wild cattle further discouraged industry. Since the reorganisation of the State Public Works Department in 1895 by Mr. Devenish, the Executive Engineer, the improvement of this fine work has been steadily pursued, Rs. 16,500 have been spent on repairing breaches and strengthening the embankment, Rs. 2,500 on subsidiary channels to fill the Bhartpur tanks. The *band* has not since been breached, and the Zamindars have gradually begun to work the land, which had become a sea of dense jungle and *gandar* grass. In 1896-97 over 5,000 bigahs were cultivated, in 1897-98, 6,500 bigahs, and in 1898-99 about 8,000 bigahs, but this by no means represents the land actually flooded which with proper arrangements should all be under cultivation. At least 10,000 bigahs are still inundated which have not yet been brought under cultivation. The measures taken for the breaking up of this and other culturable waste in this tahsil will be described later.

The villages *within* the Ajan *band* generally have a good soil and sweet water, but they are notoriously unhealthy owing to water-logging. *Kharif* crops cannot be grown, population is sparse and the land undeveloped. From the Ajan *band* the floods are passed by the numerous sluices (1) north towards Bhartpur, filling the Atal *band* close to the city from which there was formerly no irrigation as the waters were not run off in time for ploughing but which watered 700 bigahs in 1897-98 and 207 bigahs in 1898-99; and (2) east into the Kibla Deo *Rund* where a wire fence enclosure containing 16,000 bigahs was made a few years ago to restrain the wild cattle. Most of the country on this side of the *band* south of the Agra road has hitherto been more or less water-logged every year and the uncultivated portion is overgrown with a dense jungle of reeds and coarse grass which renders reclamation costly. To relieve this swamping the Jataoli drain already referred to has been constructed to run off the water into the Bhartpur tanks and the Nuh *band*, while the Bhanera drain has been constructed at a cost of Rs. 2,500 to drain the swamps on the eastern side by discharging the water into the natural channel which runs from Khemran through Chaksana into the Karaoli tahsil of Agra forming a large lagoon or marsh near the boundary and ultimately emptying itself into the Khari Nadi (from the southern tahsils of Bhartpur) near Fatehpur Sikri.

All these villages lying in a triangle formed by the Ajan *band*, the railway line from Bhartpur to Agra, and the Agra boundary—and divided almost equally by the Bhartpur-Fatehpur Sikri road, have a black clayey soil, stiff and difficult to work but very fertile and well repaying the labour of cultivation. The well water close to the *band* is sweet—also on the north from Bhartpur to Ikran, but further east is generally bitter, and in some villages, *e.g.*, Khemran, I have tasted water as salt as the sea. Most of the land is still uncultivated and the annual inundations instead of being a blessing have hitherto owing to mismanagement by the State and the want of energy in the people been a curse.

(*d*) Well irrigation.

The nature of the well water will be gathered from the fact that in the days of the salt trade over 20,000 tons of salt were manufactured annually from the brine of the wells in this tahsil. About one-third of the wells are recorded as sweet—these are generally in the low *sairaba* lands—and are dependent for their sweetness on the annual inundations; while nearly half are decidedly bitter. Owing to this cause only about 60 per cent., of the area returned as *chahi* is actually irrigated within the year. The drinking water of Bhartpur city is notoriously bad, and this is one of the reasons of its unhealthiness. Water is however everywhere near and generally plentiful. In villages influenced by the Banganga floods the average is 13 feet to the water level and 20 feet of water, in the Ruparel villages the figures are almost the same, while in the Bangar or *barani* tracts on the north-east and west the average is 25 feet to the water and 15 feet of water. *Kacha* wells are very numerous in these villages, but they last as in Kumher only for one or two years.

(*e*) Rainfall and soils.

The tahsil also enjoys a good rainfall. The average at Bhartpur city for the last 13 years is 26·98 inches, almost the same as that of Agra 26·45 inches (page 438, Gazetteer). The stiffish clay or saline lands of the centre, south and west of the tahsil, require a heavier rainfall than the lighter soils found in the north-east, and in the Kumher and Akhegarh tahsils. The worst land is met with around Bhartpur city, and especially between Bhartpur and Sewar. This is a coarse cold sour clay with a strong dash of *Kallar*, and soon runs to jungle. It has a neglected and desolate look, as the subsoil water is very bitter, and it can only be cultivated if rains or floods are favourable. It has however great strength and with careful cultivation and abundant irrigation from *bands* or sweet wells can be made very productive. The *kikar* and *nim* are the only trees which flourish here. In fact the surroundings of Bhartpur itself would give a visitor the impression that it is one of the most sterile instead of being one of the most fertile State in Rajputana.

(*f*) Communications.

The tahsil is exceptionally well off as regards communications. The Rajputana-Malwa Railway from Bandikui to Agra passes right through the heart of it for a distance of 18 miles with stations at Bhartpur and Ikran—6 miles to the east. Excellent metalled roads connect the capital with Dig, Agra and Muttra. There is also a good metalled road to Sewar, 5 miles to the south-west—whither the late Maharaja for reasons of health transferred his residence—and thence to Dig, while there are fairly good unmetalled roads leading to Fatehpur Sikri and Jaipur.

In spite of the advantages the tahsil possesses in a good rainfall, a soil which with proper cultivation could be very productive, abundant inundations, numerous wells, excellent communications, and a large city furnishing a good market for grain, and a steady demand for fodder and garden crops and other agricultural produce, it is lamentable to find that only about half of the *Khalsa* area (excluding State Runds) is now under cultivation. The reasons—fiscal mismanagement, abolition of the salt trade, neglect of the irrigation dams, brackish or bitter well water, weakness or want of industry in the agricultural population largely composed of idle or pastoral Gujars, lazy Brahmins, and listless Sinsinwars—whom State doles or *mafis* have taught not to look to their own industry for their livelihood—have been partially given.

Damage to cultivation in Bhartpur, Kumher, Oochain and parts of Dig and Akhegarh by wild cattle.

8. A more serious impediment to agricultural development is to be found in the damage done by the wild cattle. They have had so much to say to the depressed condition of Bhartpur and part of Kumher, and the return of prosperity to these tracts as well as to parts of Akhegarh, Dig and Oochain, is so dependent on the wild cattle nuisance being effectively stamped out, that I must explain the matter in some detail.

(*a*) Their origin and multiplication.

Local tradition ascribes the origin of this plague to Khem Karan, a Sogariya Jat—the robber chief of Bhartpur who was removed by Surai Mal in 1722 A. D.

The jungles around Bhartpur were then even more dense than now, and were infested with wild animals. A famous devotee Sri Nagji lived here on the site of what is now the temple of Bihariji in the Fort. Khem Karan whose home was in Sewar used to bring his cattle to graze in the Bhartpur jungles and succeeded in winning the favour of the sage, whose blessing protected him and his cattle from the wild animals. The sage's favour encouraged him to a more daring career. He put himself at the head of a band of robbers who raided and plundered with such success that his fame spread to Delhi. The charms of pastoral life were gradually forgotten in the excitement of a more active career. Khem Karan's cattle were left to roam at will over the jungles, where they increased, multiplied, and gradually reverted to the wild type, forming the nucleus of the thousands of wild cattle which the State is now endeavouring to bring under restraint and control. Khem Karan whose raids were bought off by the Delhi Court by the formal grant of a *jagir* eventually fell a victim to the jealousy of the Sinsinwar Jat chief, the great Suraj Mal, who got him poisoned and absorbed his possessions, but he left a legacy of mischief which has been a thorn in the side of Suraj Mal's descendants, and a cause of incalculable damage to their subjects.

The number of the cattle was probably increased by tame cattle being let loose on religious grounds, but till the present generation the cattle seem to have found sufficient pasture and shelter in the dense jungle (*ghanna*) close to Bhartpur and did not roam over the adjoining villages. During the minority of the late Maharaja 1853-69, they began to invade the adjoining cultivation, and attempts were made to confine them by establishing small enclosures. These precautions were however abandoned during the reign of late Maharaja who on religious grounds showed the strongest prejudices against any interference with them.

(*b*) Causes of their spreading over a large area.

Between 1877 and 1883, most of the dense jungle in which the wild cattle had their refuge was leased for cultivation. The lessees contented themselves with felling and selling the timber, and this had the effect of dispersing the animals over the neighbouring villages. At the same time the famine of 1877-78 threw enormous areas of land around Bhartpur out of cultivation, and the wild cattle gradually spread over these new pastures, and effectively prevented all attempts at reclaiming. In these retreats they remained during the day, and after sunset sallied forth in herds in different directions to forage among the crops, returning sated at day break. It is a notorious fact that when the crops are on the ground, the cattle disdain natural pasture.

(*c*) Effects of wild cattle on cultivation in Bhartpur

Their depredations caused more and more land to be abandoned, as the unfortunate Zamindars were prohibited from taking any effective measures to check them, and had to content themselves with surrounding their fields with mud walls at great labour and expense, and maintaining a constant watch over their crops. Hence they gradually restricted their cultivation to the area which they could effectively fence in and protect, and devoted the rest of their land to grazing. Meanwhile though the tract affected—nearly one-fourth of the whole State—was extending, while the revenue was suffering and the villages becoming depopulated, the Maharaja obstinately refused to take any action, till the extension of the evil to the adjoining British districts of Agra and Muttra, aroused the complaints of the British authorities.

The Political Agent writes in the report for 1878-79 : "For years past complaints have come from the civil authorities of Agra, about ravages committed on cultivation by the wild cattle of Bhartpur. Various expedients were adopted to prevent the cattle wandering beyond the precincts of the State, but were attended with indifferent success. It was then the North-West Provinces authorities decided to protect the crops, by means of shikaris, who were authorised to destroy all animals found on the Agra side of the boundary line. At length the religious instincts of the Maharaja and his Minister being fully roused by the threatened destruction of the sacred animals, a hedge or stockade, 19 miles in length, was constructed to retain the wild cattle within the State preserves. This was one of the relief works inaugurated by the Darbar in the famine. The average height of this huge fence at four different points was found to be 10 feet and the average breadth 17 feet. The work was completed in six months, and cost it is said about a lakh and-a-half

of rupees. The Magistrate of Agra who was asked for his opinion on the work wrote that Tahsildars, Zamindars and Patwaris all state that the wall answers the purpose for which it was built and effecutually keeps in the wild cattle."

The relief however only was temporary, the enclosure fence was neglected and fell into disrepair, and the wild cattle began to spread as before over Agra and Muttra. In fact neither the Maharaja nor his Ministers ever had any heart in the project for restraining them.

(*d*) **Extention of the evil to British districts.**

The Government of the North-West Provinces invoking the interference of the Supreme Government in 1889, pointed out that owing to the incursions of the wild cattle from Bhartpur, the cultivated area of the 33 border villages of Agra and Muttra had fallen off since 1876 from 42,972 to 25,312 acres, the recorded rent roll from Rs. 85,575 to Rs. 61,475, while the revenue had been already reduced by Rs 9,000 and a further reduction of Rs. 10,000 would be necessary unless the damage was effectively stopped. From these figures it may be inferred how enormous was the loss suffered nearer home.

The Maharaja's reply was that the British villagers might deal as they pleased with the wild cattle straying out to their lands, but he still refused to take any remedial measures in his own territory or allow his people to take them and disclaimed all further responsibility. Government however insisted on the matters being taken up, and in 1892 at the instance of Captain Herbert, Political Agent, the Maharaja issued orders that the wild cattle should be confined in enclosures, and after the death of Maharaja Jaswant Singh in 1893, the Durbar in 1894 publicly authorised the Zamindars to catch and tame them. The former measure was begun in a half-hearted way, merely to report progress, and as regards the latter the villagers while publicly informed that they might catch and tame the cattle were privately warned that they had better not attempt anything of the kind.

(*e*) **Erection of a wire fence to protect Agra and Muttra.**

Meantime the Government of the North-West Provinces for the protection of its border villages constructed a barbed wire fence, 41 miles in length, along the Bhartpur boundary with Agra and Muttra at a cost of Rs. 1,08,920 which the Government of India decided should be paid by Bhartpur, but it was finally agreed in June 1894 that Bhartpur should be let off with a moiety of the cost provided that the Darbar took such further measures as would lead to an absolute abatement of the nuisance. The wire fence appears to have afforded an effectual protection to Agra and Muttra as no further claim was made, but by limiting the range of the wild herds it aggravated the evil in Bhartpur.

(*f*) **Action taken to cope with the evil in Bhurtpur.**

In the Administration Report of 1895-96 the Political Agent, Colonel Lock, writes that the experiments in segregation begun in 1892 had no success—not more than 200 animals having been confined, and adds that:

"Each and all in the State are against any measure of protection that may be proposed, most from ignorance or inertness and a few from stupidity, natural or assumed."

The direct administration of the State since 1895 by the Political Agent and Council has however given an opportunity of coping successfully with the evil. In 1896 the Executive Engineer, Mr. Devenish, submitted a scheme for the construction of a great enclosure—containing over ten square miles—surrounded by a barbed wire fence 16 miles round, in the *Ghanna* or jungle near Bhartpur, which is the favourite haunt of most of the herds, into which the cattle were to be gradually driven, segregated, and then domesticated. This scheme was accepted, and the enclosure was completed in June 1897, at a cost of over Rs. 20,000. As a complement to this, 12 subsidiary and temporary enclosures were constructed in the outlying Runds or jungles where herds congregated. Into these they were first driven by trained cowherds and given fodder and water to tempt them to return and allow themselves to be handled. After some time they were roped and transferred in carts to the main enclosure.

(*g*) **Creation of a separate wild cattle department—now under His Highness the Maharaja.**

At the end of 1896 a separate department was formed for dealing with the wild cattle under a Superintendent imported from Mysore. He made a census of the herds south of the railway in February 1897 when their number was found to be

about 4,500. He estimatedthe herds north of the railway to be equal in number, but this I believe to be an exaggeration. Owing to various causes—chief among which was the want of co-operation by the local notables and officials, little progress was made in the first year. In November 1897 His Highness the Maharaja was given a general control over the operations, and it is due chiefly to his influence in overcoming local opposition and his zeal in pushing on the work—often at considerable personal labour and discomfort—that the result since then have been so successful. In August 1898 the Superintendent, Anant Ram, died and was succeeded by one of the State Sirdars, Thakur Kallian Singh, whose management of the work, under the Maharaja's orders, has been most effective.

(*h*) **Progress up to date.**

The most important step is to confine and segregate the wild cattle, and thereafter to domesticate and utilise them—the oxen for draught purposes, the cows for milching. The following statement will show the progress made in both respects up to date, also the cost of the operations.

Period.	No. of cattle captured.	Cost.	No. of cattle tamed and sold.	Price.
		Rs.		Rs.
1897-98	1,832	23,900	224	1,864
1898-99	1,475	39,572		
April 1899	118	...	42	366
Total ...	3,425	63,472	266	2,230

The number of cattle at large is estimated to be 1,340 and His Highness the Maharaja and the Superintendent are confident that all or nearly all of these will be captured or confined within the present year. Since writing the above I have received information that during May and June 480 more have been captured, reducing the number still at large to less than 1,000. Thus the success of the first step in the remedy—segregation—has been assured, though continued vigilance will be necessary to secure that by accident or design the animals are not allowed to break out of the enclosure; while as regards the second step—the training and domestication of the captured cattle—a good beginning has been made. The scheme has been carried out so far in the face of the open or secret opposition of the conservative element of the State for as Colonel Lock wrote in 1896: "There is not a single Hindu of the upper classes in the Bhartpur State that does not place the interest of the cattle above those of the cultivator." If the interests of the latter, which of course coincide with the financial interests and prosperity of the State, are to be protected, care must be taken that a groundless religious prejudice does not prevent the work from being now carried to a successful completion, nor cause it to be hereafter undone. Fortunately there is less risk of this now that His Highness the Maharaja has taken a personal initiative in the matter.

(*i*) **Consequent improvement in agriculture.**

Though the expense of the operations has been and will for sometime be considerable, the cost will be repaid to the State over and over again in the returning prosperity of the people and the increased revenue from land restored to cultivation. Indications of this are already evident: within the last three years the cultivated area in Bhartpur and Kumher has increased by over 30,000 bighas, and as a result of the special measures now introduced for the more speedy development of waste lands, which will be referred to in Chapter III a much more rapid increase may be relied upon in the present and next few years. Kumher and the parts of Akhegarh, Dig and Oochain which have hitherto suffered from the wild cattle, will of course share in the benefits, but Bhartpur which has been the greatest loser will also be the chief gainer.

9. From the above remarks it will, I think, be understood that the Bhartpur tahsil though still much depressed has many elements of prosperity which the capture of the wild cattle, the improvement of the irrigation system, and the arrangements made for the settlement of waste lands will help to develop. At present 32 per cent. of the area is *chahi*, 14 per cent. *sairaba*, and 54 per cent., including 4 per cent. of *bhur*, is *barani*. Irrigation is therefore more fully developed than in any of the other tahsils.

General remarks on Bhartpur tahsil.

NAGAR.

10. The Nagar tahsil is the smallest and most highly cultivated of the four under consideration. It is detached from the remaining three tahsils, and geographically belongs to the four northern tahsils, being a natural appendage of Gopalgarh, and lying for the most part in the Mewat. In fact one-third of the estates are owned by Meos The tahsil is very irregular in shape, the western portionprojecting in the form of a peninsula for a length of 12 miles, with width of 1 to 4 miles, into Alwar. This projection, together with 8 estates on the south lying along the Katumbar border and west of a line drawn due south from Nagar, forms the Bangar circle with 32 estates, while the rest of the tahsil, *viz.*, the east, centre and north with 49 estates is known as the *dahri* or *sairaba* circle, as it was all at one time and is still to a small extent affected by the Ruparel floods and the Sikri *band*.

(a) Situation and natural divisions.

The Bangar villages are rather high lying, with a clean light soil (degenerating into *bhur* in 4 villages on the west boundary) which is fairly productive even with a light rainfall. It is similar in quality to the adjoining circle II of Govindgarh in Alwar. The well water is generally sweet, and fairly abundant, the average for masonry well being 43 feet to the water level and 18 feet of water, and for *kacha* wells 25 feet and 8 feet respectively. There are 9 or 10 villages on the south east of this tract from Kherli to Chak Chilwa in which the water-supply has become much reduced by the drought of recent years, and the quality also has become brackish.

(b) Bangar tract.

These Bangar villages as a rule are well cultivated and fairly prosperous. They stand a drought better than the rest of the tahsil and have probably a smaller rainfall, but they have been straitened by the deficient rains of late years.

The Dahri tract appears to have been once inundated from the Ruparel through the Hazari *band* in Alwar, like the adjoining Circle I of Govindgarh with which it has many features in common. The soil is a stiffish loam, of considerable natural fertility, but needing a good rainfall or copious irrigation for its working. Since the removal of the Hazari *band* about 60 years ago, the Ruparel floods have practically ceased, and though the soil here as in Govindgarh still shows signs of their fertilising influence the water level has sunk considerably, the wells have become more and more brackish, the water-supply has become insufficient in many villages and in some 10 around Sandraoli—on the south-west—several wells have had to be abandoned altogether. The average for masonry wells in this tract is 33 feet to the water and 14 of water and for *kacha* wells the figures are 22 and 13.

(c) Dahri tract influenced by the Ruparel

The villages along the north boundary adjoining the Ruparel-irrigated tract in Gopalgarh are the best, as the land is low-lying and moist, and 4 or 5 villages lying between Akbarpur and Nagar occasionally receive a spill from the tail end of the Ruparel. One branch of this as described in paragraph 15 of last year's report runs due east from the Sikri into the Kakra *band*. This fine masonry embankment is thrown across the opening between the low hills in Dig and the Rasiya-Puncheri hill in Nagar. The latter is the only eminence in the tahsil and rises to a height of 1,065 feet, covering an area of 330 bigahs. By means of this *band* Sajawalpur—an *inam* village—and part of Puncheri are irrigated. The *band* was raised and extended in 1896-97 at a cost of Rs. 8,500, but it only fills if the Ruparel is in high floods or if the Sikri *band* is breached, as happened in 1898. The area thus affected by the Ruparel floods is inconsiderable and in 1896 and 1897 a bolder scheme for improving the irrigation of Nagar was carried out.

(d) Present irrigation from the Ruparel

(e). Nagar canal from the Sikri *band*.

The Sikri *band* and channel which formerly stopped short in Gopalgarh, about a mile from the Nagar boundary were continued south-east to Nagar at a cost of Rs. 27,400. The new channel has a length of 7 miles and an initial width of 14 feet gradually narrowing to 6 feet at the tail. In 1897 this channel irrigated about 2,000 bigahs in 6 villages of Nagar and considerably improved the water-supply. In 1898 however owing to a breach in the Sikri *band* through which the water escaped due east, and possibly to the floods being low, this channel did not fill well, and only 800 bigahs were irrigated in 5 villages. No doubt the advantages direct and indirect of extending the Ruparel irrigation to Nagar are considerable, but it must be remembered that the northern tahsils—Gopalgarh, Pahari, Kama and Dig—have the first claim on the water, as their lands have always been assessed at *sairaba* rates while Nagar has not, and it is therefore only entitled to a supply when the wants of these tahsils have been satisfied. As the *sairaba* irrigation in this tahsil is new, unsettled and uncertain, I propose to assess it as heretofore at *barani* rates, leaving the water advantage to be separately levied year by year on any land which may be actually irrigated.

(f) Soil classification and rainfall.

For the whole tahsil at present 12 per cent. of the area is *chahi*, 2 per cent. *sairaba*, and 86 per cent. (including 3 per cent *bhur*) is *barani* Over half the wells are brackish or bitter, so the cultivation is almost entirely dependent on the rainfall. Exact statistics as to this are not forthcoming, as there was no raingauge at the tahsil head-quarters till last year. We are however in possession of statistics for Gopalgarh—16 miles due north—the average of which for the 12 years ending 1897-98 is 23·63 inches, and of Govindgarh—8 miles to the west—the average of which for the last 15 years is 21·44. I think we may safely take the mean of these tahsils—22·53—as representing the average rainfall at Nagar. This agrees fairly closely with the average for Akhegarh—14 miles due south—which is 24·3 inches. Last year, 1898-99, the actual fall at Nagar was only 13·82 inches and the rainfall is more uncertain than in the eastern tahsils.

(g) Communications.

Nagar is the only one of the four tahsils which is not in direct contact with the railway It cannot however be said to be very isolated as the head-quarters is only 16 miles from Nadbai station, and the western portion is only about 20 miles from Alwar city. It is connected with Alwar on the west and Dig on the east by what was once a good metalled road, but this has in both States been allowed to fall into shocking disrepair. I may here remark that Nagar in future will be a place of much more importance than at present. The large Gopalgarh tahsil has just been broken up, the northern portion—about one-third of the whole—with 47 estates having been amalgamated with Pahari while the remaining two-thirds with 92 estates has been thrown into Nagar, which thus becomes one of the largest tahsils in the State with a Jama approaching 3 lakhs. This makes the improvement of communications by the repair of the metalled road to Dig all the more necessary

(h). General conditions.

The Nagar tahsil in spite of the small area protected by irrigation may now be considered a fairly prosperous one. It has improved steadily since the assessment was put on a more reasonable footing in 1890. Cultivation has considerably expanded, and there have been practically no arrears since. It has escaped the ravages of the wild cattle, and except close to the Rasiya Rund the crops suffer little injury from wild animals. The proprietors are chiefly Meos and Gujars. The former are exceedingly industrious and their villages are highly cultivated and generally prosperous. The Gujars are here second-class agriculturists and true to their pastoral traditions they have kept a lot of land for grazing, but the fear that the surplus waste will be leased to outsiders for cultivation has now given an impetus to agriculture.

Rainfall. (Appendix A.)

11. Allusion has been made to the average rainfall in the remarks on each tahsil, but the rainfall is so important an element in the agriculture of these tahsils in which the *barani* crops are directly, and the *chahi* and *sairaba* crops indirectly dependent on its amount and distribution, that a more detailed analysis will be useful.

Statistics of the rain registered at Bhartpur, Kumher, and Akhegarh are available from 1st April 1886, but for Kumher the figures are wanting for 1892 and 1893, and those for the remaining years are so obviously wrong that I have discarded them altogther, and as the rainfall of Kumher must be the mean of that of Dig, 11 miles due north, and of Bhartpur, 10 miles south east, and the averages of these two stations are practically identical, I have assumed that the figures for Kumher are the same as those of Dig. For Nagar no statistics are available before last year, and I have, as already explained, taken the mean of Gopalgarh and of Govindgarh in Alwar.

Detailed figures of the monthly and annual rainfall and of the average for the 13 years ending March 1898 are given in Appendix A. The average monthly and annual rainfall is shown in the following table:—

Tahsil.	April.	May.	June.	July.	August.	September.	Total of 6 months.	October.	November.	December.	January.	February.	March.	Total of 6 months.	Total of year.	Remarks.
Kumher	·12	·30	1·84	9·30	9·57	3·51	24·64	·19	·04	·60	·66	·74	·20	2·43	27·07	
Akhegarh	·06	·12	1·97	8·02	7·90	4·08	22·15	·23	·17	·37	·67	·44	·28	2·06	24·21	
Bhartpur	·02	·43	2·68	9·69	8·62	3·84	25·28	·15	·10	·35	·54	·17	·39	1·70	26·98	
Nagar	·05	·25	1·78	6·67	7·08	4·51	20·34	·56	·19	·41	·54	·26	·23	2·19	22·53	

The average rainfall in the tract therefore ranges from 27 inches in Bhartpur and Kumher on the east which are only 24 miles from the Jamna, to 24·21 inches in Akhegarh which is 28 miles due west of Bhartpur, and 22·53 in Nagar which is 16 miles due west of Dig. The rainfall steadily decreases as we go west from the Jamna till the Alwar hills are reached which have again the effect of increasing it.

As the period on which the averages are calculated—13 years—is rather a short one, and I also wished to test the accuracy of the returns by comparison with adjoining tracts, I obtained from the Meteorological Office the averages for Bhartpur city and the adjoining tracts of Muttra and Bhartpur based on his returns. The result is as follows:—

Muttra.	Agra Observatory.	Fatehpur Sikri.	Bhartpur city.
26·48	29·12	25·82	26·24

The figures, allowance being made for local conditions, agree so nearly with those deduced from the local records as to show that the latter are reliable, and that the averages I have taken are justified.

It will be seen that over 90 per cent. of the rainfall is registered within the 6 months April to September, and that the total of the 6 cold weather months is under 2½ inches in all the tahsils. The cold weather rains of December, January and February which are of most consequence for the spring crop range from one to two inches. Given a good monsoon rainfall this amount if timely and well distributed is sufficient to mature the *barani* spring crop. These rains are however extremely uncertain. Within the last 13 years they have fallen short of half an inch five times in Bhartpur and Akhegarh, and four times in Kumher which signifies that in these years any *barani* crops that were sown must have failed completely, the *sairaba* crops must have been very poor and the *chahi*

crops which, particularly on bitter wells, require a few good showers to promote the growth, must have been much reduced in outturn. The monsoon rains average from 20 to 25 inches in the different tahsils, and are fairly regular, which fact coupled with the uncertainty of the winter rains explains the great predominance of autumn crops on *barani* lands. The following table shows the years when the total rainfall has varied considerably from the normal, *i e.*, exceeded 30 or fell short of 20 inches.

Year.	Kumher.	Akhegarh.	Bhartpur.	Nagar.
1886-87	....	.....	.....	...
1887-88	33·82	33 49	39 58	Not known.
1888 89	18 03	.....	18 80	
1889-90	.....	16 90	.....	
1890-91	30·50	.....	.....	
1891-92	.....	.....	37·36	
1892-93	31·26	.....	36 24	
1893 94	.....	.....	34 25	
1894-95	.....	31·32	32 19	
1895 96	18 34	15 51	.....	
1896-97	.....	17 86	14 90	
1897 98	.....	.....	.....	
1898-99	.....	14 55	.....	13·82

Thus in Kumher the rainfall has been very deficient twice in the last 13 years, and has been three times in excess; in Akhegarh four times very short and twice in excess; in Bhartpur only twice in considerable defect and five times excessive. For Nagar we have no returns up to last year, but are safe in assuming that conditions have been much the same as in Akhegarh. In no tahsil has the rainfall ever exceeded 40 or fallen short of 13 inches. The following table shows the rainfall in the famine year 1877-78 at Bhartpur and Akhegah as far as statistics are available :—

Tahsil.	April.	May	June	July.	August.	September.	October	November.	December.	January.	February	March.	Total.
Bhartpur	05	43	·97	3 51	10	1 80	8 20	05	1 13	35	08	..	16·69
Akhegarh	3	1 4	8	8	not	known							

It appears that at least at Bhartpur, it was not so much the deficiency as the bad distribution of the rainfall that caused the famine. In the six hot weather months only 6 inches were recorded against an average of 25, causing a general failure of the *kharif*, while the fall in the 6 cold weather months was over 10 inches, but the people were so impoverished and emaciated by the failure of their chief harvest that they had neither the means nor the energy to take full advantage of this exceptional fall by sowing a large area of spring crops.

On the whole this tract, as well as the State generally, enjoys a good and fairly regular rainfall, and in this respect is more secure against famine or scarcity than most parts of Rajputana.

The distress owing to the poor rainfall bad harvests, and high price of 1895-96 and 1896-97 never rose to famine pitch, and its effects were almost obliterated by a single year of good average harvests 1897-98. The last year 1898-99 has however been unfavourable one, and all tahsils require a few years of good rainfall to set the people well on their legs again.

Wells.

(*a*). Wells and chahi area at last settlement and now.

12. The leading feature of well irrigation have been described in the remarks on each tahsil. Wells protect 29 per cent. of the cultivation in Kumher, 27 per cent. in Akhegarh, 32 per cent. in Bhartpur and only 12 per cent. in Nagar. The following statement compares the number of *khalsa* wells (including one *chauth* village in Bhartpur) working at last settlement and now:—

Tahsil.	Details.	MASONRY WELLS.			Total wells.	Out of working.	KACHA WELLS.		Dhenkilis.	CHAHI.		
		Working during the year.		Worked in rotation.			Working in the year.	Working in rotation.		Total.	Irrigated in the year.	Dhen
		Wells.	Laos.	Wells.								
Kumher	Last settlement	857	1,304	62	899	165	766	69	685	41,038	28,101	
	Now 1897-98	827	813	139	966	163	714	480	580	40,310	25,720	
	1898-99	...	...	...	...	...	...	...	...	42,143	26,468	
Akhegarh	Last settlement	975	1,456	43	1,018	92	129	138	1	40,788	34,165	
	Now 1897-98	893	1,348	101	994	146	170	17	2	35,129	26,506	
	1898-99	...	...	...	...	...	...	...	...	32,814	24,976	
Bhartpur	Last settlement	936	1,560	...	936	380	572	...	253	36,665	27,441	
	Now 1897-98	817	1,350	211	1,028	340	526	...	389	40,919	24,677	
	1898-99	...	...	...	...	...	...	...	...	42,538	28,427	
Nagar	Last settlement	491	603	...	481	175½	78	...	13	13,607	10,407	
	Now	458	845	67	525	140½	114	114	24	12,158	9,853	

From this it appears that while the total number of masonry wells, excluding those which have been abandoned (*uftada*), has increased by 67 in Kumher, by 92 in Bhartpur, and by 47 in Nagar, and has decreased only in Akhegarh by 24; still the number of masonry wells actually at work within the year 1897-98 was slightly less than the number at work in 1890 when the last settlement was made in Kumher and Nagar and considerably less in Akhegarh and Bhartpur. The number of *kacha* wells actually at work is also less than at last settlement in Kumher and Bhartpur, greater in Akhegarh and Nagar, where however the number of such wells is inconsiderable. The total *chahi* area has decreased slightly in Kumher and Nagar, risen considerably in Bhartpur and fallen off considerably in Akhegarh, while the area actually irrigated within the year shows a decrease which is very marked in all tahsils but Nagar.

(*b*). Causes of decrease in area irrigated.

The main causes of this decline in the efficiency of well irrigation will be understood from the remarks made about the character of the well irrigation, *viz.*, the recent drought has (1) reduced the water-supply and irrigating capacity of the wells and even caused some to be abandoned; (2) increased the saline qualities of the waters and thus caused the Zamindars to abandon or contract the irrigation, or to work the wells only in alternate years. In the Punjab and other provinces where the water-supply is sweet and abundant a year of drought shows a great extension of well irrigation, whereas in this tract with its bitter wells and short supply the reverse is the case, and a year of drought at once re-acts on the well

irrigation, which requires a good rainfall to keep the supply sweet and plentiful. In order to further verify these conclusions I have had statistics of the total and irrigated area (*chahi*) prepared for the year 1898-99.

This shows a further decrease in the masonry wells at work owing to the causes stated, but in Kumher and Bhartpur where *kacha* wells can be sunk in great numbers, the loss has been more than made good by this resource, and the total and actually irrigated *chahi* area show an increase on 1897-98, while in Akhegarh where the area in which *kacha* wells can be sunk is very limited, the total *chahi* and irrigated area show a still further diminution.

(c) Classification of wells and chahi area by quality of the water.

The following table shows the classification of wells in each tahsil according to the quality of the well water. I have also endeavoured to show the total area actually irrigated within the year from each class of wells, also the area irrigated by masonry and *kacha* wells —

Detail.	Kumher.		Akhegarh		Bhartpur.		Nagar.		Remarks.
	No	Area	No.	Area	No	Area	No	Area.	
Sweet — Masonry	240	6,410	518	16,077	309	6,670	195	3,947	For Kumher and Akhegarh the figures refer to *Kachcha* wells only. In Bhartpur and Nagar *mafi* wells are also included.
Sweet — *Kacha*	168		131		257		77		
Brackish — Masonry	189	7,009	120	3,544	200	6,172	84	1,983	
Brackish — *Kacha*	353		13		152		10		
Bitter — Masonry	370	12,239	185	4,562	433	15,933	192	4,105	
Bitter — *Kacha*	890		35		215		27		
Oily bitter — Masonry	16	415	64	1,426	..		..		
Oily bitter — *Kacha*	3		1		..				
Total — Masonry	827	17,073	893	24,463	942	28,749	471	9,191	In Kumher 443 bighas irrigated from 50 Dhenkris of which 344 are sweet and 236 brackish.
Total — Lacs	1,113	..	1,148		1,541	...	561	..	
Total — Kacha	714	8,505	170	2,047	624	7,185	113	944	
Total — Lacs	.	.		...	731	..	114	...	
Grand total	1,541	25,163	1,063	26,508	1,676	28,834	583	10,135	

The result brought out by these figures is that in Kumher and Bhartpur only one-fourth of the area irrigated is attached to sweet wells, about one-fourth to brackish wells, while in Kumher a little under and in Bhartpur a little over half is attached to bitter or oily bitter wells. In Kumher one-third and in Bhartpur one-fourth of the irrigation is from *kacha* wells. In Akhegarh on the other hand 64 per cent of the *chahi* area is irrigated by sweet wells, and the proportion irrigated from *kacha* wells in this tahsil is less than 8 per cent of the total. In Nagar two fifths of the *chahi* is attached to sweet, two-fifths to bitter and one-fifth to brackish wells, and less than one-tenth is irrigated from *kacha* wells.

(d) Average area irrigated per lao.

The average area irrigated per lao for masonry and *kacha* wells is as follows —

Tahsil.	Masonry.	*Kacha.*
Kumher	16	11
Akhegarh	18	12
Bhartpur	14	10
Nagar	16	8

So that for masonry *laos* it varies from 5½ to 7 acres, for *kacha* from 3 to 5. In the adjoining British districts of Gurgaon and Muttra the average at last settlement was in each case about 8 acres, and in the Katumbar Tahsil adjoining Akhegarh and Nagar the average has worked out as 9 acres. This shows that there need be no apprehension that the irrigated area as opposed to the total *chahi* area has been overestimated. As a general rule the sweeter the water the larger the area irrigated. On bitter wells only *rabi* grain crops are sown, while sweet wells grow in addition *zira* (cummin), some cotton, vegetables, etc.

(e) Proportion of irrigated to total chahi area.

A comparison of the figures in paragraph 12 (*a*) shows that in 1897-98 65 per cent. of the total *chahi* area was irrigated in Kumher, 76 per cent. in Akhegarh, only 60 per cent. in Bhartpur (though in 1898-99 it rose to 66 per cent.), and 81 per cent. in Nagar. Except in the case of Nagar these figures coincide with the greater or less proportion of brackish and bitter wells in each tahsil, the effects of which have already been described.

(f) Takavi advances for wells.

The following table shows the extent to which new wells have been made since the settlement of 1890 with *takavi* advances. For Bhartpur and Nagar the total advances since 1877 are also shown.

Tahsil.	Advanced.	Recovered.	Balance.	Wells constructed	Repaired.	Total advance since 1877.
Kumher	7,957	7,195	762	42	8	...
Akhegarh	6,321	5,367	954	34	...	...
Bhartpur	3,955	3,109	846	...	...	20,603
Nagar	7,808	7,106	702	...	...	8,127
Total ...	26,041	22,777	3,264	...	...	...

In Bhartpur 43 and in Nagar 23 new wells have been brought into working since 1890, but it is not known how many of these have been aided by *takavi* grants. The advances in these tahsils have been more liberal than in the northern tahsils.

Remarks on the Takavi system.

13. But throughout the State generally the *takavi* system has not been worked as freely as it should. In this respect Bhartpur might well borrow a leaf from Alwar where a liberal and judicious *takavi* expenditure within the last 30 years has contributed immensely to the prosperity of the State and the improvement of its revenues, and where this year alone a lakh of rupees is devoted to the purpose. The *takavi* advances in Bhartpur are given free of interest but hitherto have not been popular with the people (1) because there is often uncertainty whether the money may not be thrown away owing to the well water turning out bitter, and (2) the system of realisation has been harsh, the first instalment being recovered from the harvest in which the advance is given. The State has now made an important concession in the latter respect, as under the new rules the realisation will not begin for 1½ years after the advance has been made and will be spread over a period of 3 years or 6 harvests. These changes will, it is hoped, make the system more popular, and if at the same time a substantial sum of *takavi* is allotted in each year's budget, distributed over tahsils according to the circumstances of each, and the tahsildars made responsible for utilising these grants to the best advantage, a steady increase in wells and in the *chahi* area may be counted upon

The remarks as to the construction and cost of wells in last year's report apply also in these tahsils.

Climate, trees, communications, etc.

14. Communications have been described under the different tahsils. They are excellent on the whole, and the only suggestion I can offer for their improvement is the repair of the Dig-Nagar road.

All tahsils are rather bare of trees, but the metalled roads leading from Bhartpur to Agra, Muttra, and Dig are fairly well shaded by roadside trees The Executive Engineer has in recent years taken up the question of arboriculture, and by working it in connection with the extension of *band* irrigation the results promise to be successful.

The climate of Bhartpur itself and of the surrounding country which is annually waterlogged is notoriously unhealthy, especially for a few months after the rains ; but the improvement of the irrigation system and the extension of cultivation will probably bring about some improvement. The rest of the tract is fairly healthy though if monsoon rains are heavy it suffers in the autumn months from malaria followed in the winter by pneumonia. There are dispensaries at Bhartpur, Kumher and Akhegarh, but hitherto they have not from want of a competent staff and proper supervision been very effective in coping with disease. The recent appointment of an Agency Surgeon will probably bring about a decided improvement.

Assessment Circles.

15. The natural divisions of each tahsil have already been described They might have been made the basis for a division into assessment circles, but this would involve an enormous increase in the statistical work with which neither my establishment nor myself could cope. Such a division is the less necessary as the tahsils are all small, the number of villages ranging from 81 in Nagar to 153 in Bhartpur, and the classification of soils and system of statistics adopted supplemented by the inspection notes made by myself and the Deputy Collectors will, I hope, enable us to give full consideration to the exceptional or abnormal features of any estate. I have been over all tahsils but Akhegarh two years running, and the Deputy Collectors' local knowledge is of course more intimate than mine.

Classification of soils and proposed system of assessing *sairaba* lands.

16. I have in these tahsils adhered to the classification of soils described in paragraph 29 of last year's report which experience has proved adequate to meet all requirements. The soils are—

I, II	Chahi permanent.	(*a*) *Hal* or irrigated within the year 1897-98. (*b*) *Sahika* not irrigated within the year but to be irrigated in rotation.
III	Chahi temporary, *i.e.*, irrigated within the year from temporary sources *dewlis* and *lacha* wells not permanently worked.	
IV	Sairaba	(*a*) *Hal* or inundated usually and within the year
V	„	(*b*) *Salika* not inundated within the year, but inundated within the last 4 years.
VI	„	(*c*) *Barisat* benefitted by hill drainage.
VII, VIII	Barani, which is subdivided into	(*a*) ordinary *Barani* (*b*) *Bhur*.

For all these classes separate rates will be framed in each tahsil. The following table shows in the form of percentages the proportion which each class bears to the total cultivation at last settlement and now (1897-98).

Tahsil.	Detail.	CHAHI.				SAIRABA.				BARANI.			Grand Total.
		Permanent.											
		Hal.	Sahika.	Temporary.	Total.	Hal.	Sahika.	Barabi.	Total.	Baraui.	Bhur.	Total.	
Kumher	1896-97 ...	24	11	...	35	...	...	...	...	65	...	65	100
	1897-98 ...	18	10	1	29	...	...	...	...	69	2	71	,,
	1898-99 ...	17	11	2	30	...	...	...	...	69	1	70	,,
Akhegarh	1896-97 ...	29	6	...	35	...	...	...	...	62	3	65	,,
	1897-98 ...	21	6	...	27	...	...	...	...	68	5	73	,,
	1898-99 ...	20	6	...	26	...	...	...	...	69	5	74	,,
Bhartpur	1896-97 Khalsa ...	23	5	1	28	4	1	...	5	64	3	67	,,
	Mafi ...	27	9	...	36	9	1	...	10	54	...	54	,,
	Total ...	25	8	1	34	7	1	...	8	57	1	58	,,
	1897-98 Khalsa ...	18	12	1	31	12	3	...	15	51	3	54	,,
	Mafi ...	17	13	...	30	6	3	...	9	60	1	61	,,
	Total ...	18	13	1	32	11	3	...	14	52	2	54	,,
Nagar ...	1896-97 ...	13	3	...	16	...	...	...	...	84	...	84	,,
	1897-98 ...	10	3	...	13	2	...	...	2	83	3	86	,,

The decrease in the total and irrigated (*hal*) *chahi* areas has already been explained. In so far as it is due to the wells having run low from drought, the cause is temporary and will be removed by a few years of good rainfall. The *sairaba* area is as before, practically *nil* in Kumher and Akhegarh where there are no irrigation dams. In Nagar 2 per cent. of the area is now *sairaba*, but this will be disregarded for assessment purposes (see paragraph 10) and treated as *barani*. In Bhartpur the works carried out in recent years by the State Engineer have brought about a great increase in the *sairaba* area which in *khalsa* lands alone has risen from 10 to 15 per cent. and in *khalsa* and *mafi* combined from 8 to 14 per cent. At last settlement the then *sairaba* lands in this tahsil were assessed at *sairaba* rates which were intermediate between *chahi* and *barani* rates, and land which has since then been newly irrigated from State *lands* pays a separate water rate of 8 annas per bigah on *chahi* and 1 per bigah on other land.

For the reasons given in paragraphs 164 and 165 of last year's report which after discussion were accepted by the Political Agent and Council as well as by the Executive Engineer (paragraph 8 of Political Agent's letter No. 4336-G., dated the 4th November 1898) I propose to follow the same system in the present settlement of the Bhartpur tahsil, as the *sairaba* irrigation is now fairly secure and is more likely in this tahsil to increase than to diminish. I shall therefore impose a fixed assessment on the *sairaba*—the rates varying of course as the *sairaba* is—

(1) *hal* or regularly inundated; or

(2) *sabika* or occasionally inundated, leaving all future extension of irrigation from State *bands* on lands not at present *sairaba* to be taken account of by the levy of a separate water rate, the amount of which is a matter for future discussion with the Darbar and Executive Engineer. The area of *sairaba barishi* in these tahsils is insignificant as there are few hills of any size and the hill drainage is therefore of little account.

The *barani* area has increased relatively and absolutely in each tahsil owing partly to the contraction of the *chahi*, partly to the breaking up of new lands. I have not thought it necessary here as in Alwar to classify the *barani* into *chiknot*, *mattiyar*, etc. The people themselves do not recognise such divisions, and owing to the level nature of the tract the *barani* is generally fairly uniform in quality in each tahsil—usually a good loam. The only exception is in the case of the *bhur* or very sandy lands found here and there close to hills or along natural ridges. This has been shown as a separate class. The area is not large in any tahsil—2 per cent. of the cultivation in Kumher, 5 per cent. in Akhegarh, 2 per cent. in Bhartpur and 3 per cent. in Nagar—but its presence will have an important bearing on the assessment of individual villages.

CHAPTER II.

POLITICAL AND FISCAL HISTROY.

Rise of the Jat power in Dig and Bhartpur.

17. The rise of the Bhartpur State and the main facts in its history have been described in Chapter II of the report on the northern tahsils, while the fiscal history of the State as a whole has been briefly summarised in the Introduction to that report. Under Moghul rule these central tahsils were attached to the *Suba* or province of Agra. In the beginning of the 18th century the Sinsinwar Jats under Churaman spreading from their strongholds of Thun and Sinsini in Dig, gradually occupied Kumher and Nagar expelling from the latter the old Khanzada chief who had long held the country as a *jagir* from the Moghuls.

At the same time the Sogariya Jats under their chief Rustam and his son Khem Karan established themselves in Bhartpur where they built a mud fort. The two bodies of marauding Jats frequently combined under Churaman and Khem Karan. Their position on the line of communications from Delhi to Agra and Gwalior on one side, and to Jaipur and Ajmir on the other enabled them to sucessfully harass the Imperial forces, and about 1716 so redoutable had they become that the Emperor Farukh Siyar endeavoured to conciliate them. To Churaman he gave the title of Raja Bahadur with a *jagir* of the five *parganas* of Nagar, Katumbar (now in Alwar), Nadbai (now Akhegarh), Heylak (now in Bhartpur) and Kumher and Auw (now Kumher and Dig); while Khem Karan received the 5 *parganas* of Bhartpur, Ikran (in Bhartpur), Rupbas, Mala and Baroli (Agra). Badan Singh who succeeded Churaman was proclaimed Raja of Dig in 1722 on condition of paying tribute to Delhi, this event marking the first foundation of the State on a legal basis. He begun the present fort and palace of Kumher which were completed by his son Suraj Mal, while one of his sons Akhe Singh built the fort at Akhegarh. The rival Jat Chief Khem Karan at Bhartpur stood in the way of the extension of the Sinsinwar fortunes which were now reaching their zenith under Badan Singh and his still more successful son Suraj Mal. Bhartpur was taken by a night attack in 1733, Khem Karan was removed by poison or according to some killed in the siege, and his possessions incorporated with those of the Dig Raja. Suraj Mal at once began the present large fort and wall round the city, and in course of time Bhartpur owing to its strength as a fortress became the capital of the Jat chief though Dig long remained their favourite residence. The main events

Tahsil.	Detail.	CHAHI.				SAIRABA.				BARANI.			Grand Total.
		PERMANENT.											
		Hal.	Sahika.	Temporary.	Total.	Hal.	Sahika.	Barabi.	Total.	Baraui.	Bhur.	Total.	
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since then were related in last year's report. As regards these tahsils the local events worth n[illegible]ling are :—

(1) [illegible] 1754 Malhar Rao Holkar and Jai Apa Sindhia, acting nominally on behalf of the Emperor, but really with the view of levying tribute for themselves, advanced on Bhartpur. They demanded 20 lakhs, and on this being refused by Suraj Mal laid siege to Kumher, but at the very outset of the operations Khandu Rao, the son of Holkar, and Jatabai, the son of Sindhia, were slain, and the Mahrattas raised the siege and retired. The place where Khandu Rao was killed in Gangarsoli, 3 miles north of Kumher is marked by a cenotaph erected by his widow, which is still maintained by the Indore State.

(2) At Rasia Hill in Nagar Raja Partab Singh of Alwar was surprised in 1779 by the Moghul forces under Najaf Khan, and compelled to fly for his life.

Leading Agricultural tribes.

18. The fiscal history of these four tahsils may be introduced by a sketch of the leading agricultural tribes. The following table, extracted from statement VII, shows the number of villages with total and cultivated area held by each.

Detail.	Tribe.	Kumher.			Akhegarh.			Bhartpur.			Nagar.			Total.		
		Number of villages.	Total area.	Cultivated.	Number of villages.	Total area.	Cultivated.	Number of villages.	Total area.	Cultivated.	Number of villages.	Total area	Cultivated.	Number of villages.	Total area.	Cultivated.
Hindu ...	Jat Sinsinwar ...	59	88,923	60,619	31	53,239	38,368	18	65,816	45,096	6½	6,910	5,794	114½	214,888	149,877
	Other Jats	23	72,308	47,874	20	55,138	43,651	58	85,737	50,958	6	14,147	10,878	107	227,330	153,361
	Rajputs	1 (a)	...	...	5 (a)	...	...	...	...	...	5½	10,985	8,957	5½	10,985	8,957
	Brahmins	12	23,015	10,317	14	23,674	17,339	29	43,136	21,680	4½	10,592	7,686	59½	100,417	57,022
	Gujars	5	8,257	4,220	3	7,639	5,098	14	3,988	7,845	29	49,651	35,112	51	89,535	52,273
	Lochas	7	9,805	3,435	...	...	...	...	...	...	...	...	...	7	9,805	3,435
	State property ...	7	30,389	5,578	1	1,600	16	10	48,252	5,108	1	1,574	...	19	81,915	10,702
	Miscellaneous Hindus	4	...	...	11½	...	...	21	41,431	21,806	½	4,485	3,112	37 1/16	45,916	24,918
	,, Musalmans	2	14,754	7,651	2½	36,739	21,686	...	...	...	...	...	...	4½	51,493	29,337
Musalmans	Meos	...	...	...	...	...	...	...	...	...	27	34,218	28,145	27	34,218	28,145
	Maikana	...	...	...	...	...	...	3	10,72[illegible]	5,724	...	...	...	3	10,719	5,724
	Abadi, etc. ...	...	...	...	...	...	...	...	5,844	...	...	1,635	...	...	7,479	...
	Total ...	119	247,451	139,694	83	178,029	125,156	153	325,023	158,217 (b)	81	134,197	99,684	436	888,700	522,751

A general account of these tribes was given in paragraphs 50-55 of the report on the northern tahsils, and need not be repeated here. Of the 10 estates shown in Bhartpur as State property, 6 are State Runds and 4 are estates held *kham*.

(a) Included in miscellaneous. (b) Khalsa and mafi.

Musalman tribes hold only 34½ estates or less than one-twelfth of the whole. They are unimportant agriculturally except in Nagar where the Meos hold one-third of the estates and one-fourth of the area.

The most important tribes politically and agriculturally are (1) Jats of the Sinsinwar or ruling family and (2) other Jats—each of which hold about one-fourth of the total number of estates. Many of their villages are held wholly or partly in *Inam*—subject to the payment of certain cesses, and the furnishing of so many guns, *i.e.*, men for military service—an obligation which is now generally commuted for a money payment of one rupee per gun per month. The origin of these tenures and the position of the holders were described in paragraphs 51 and 52 of last year's report. The Sinsinwar Jats not having to look mainly to their own labour for their means of livelihood are now generally inferior in industry to other Jats. Of the latter the best are the Kunthel Jats of the eastern portion of Kumher, and the Sogariya Jats who hold the north-east of Bhartpur.

Brahmins and Gujars each hold about one-eighth of the total number of estates. Both, with the exception of the Ahwasi Brahmins who are industrious, are inferior agriculturists, as is shown by the large proportion of their lands still left uncultivated. In the case of the Brahmins this is due mainly to indolence, in the case of Gujars also to their pastoral habits.

Rajputs whether Hindu or Mahomedans are very few in these tahsils. Lodhas own seven estates in Kumher in which salt was formerly produced. Since the stoppage of the salt trade they have fallen on evil days and have not the energy nor the endurance to make a living by agriculture. Their villages are always depressed and badly cultivated. There are no really first rate cultivators amongst the agricultural tribes like the Ahirs, Mallis and most of the Jats in Alwar.

I would classify them agriculturally as follows :—

Good cultivators	Other Jats, Meos.
Fair	Sinsinwar Jats.
Bad	Gujars, Brahmins, Lodhas and all others.

Thus nearly half the tract is in the hands of inferior, while one-fourth is held by fair and one-fourth by good agriculturists. The distribution over the different tahsils is fairly uniform, but Kumher and Nagar have perhaps a slight advantage over the other two. The difference is however less due to fundamental causes than to the varying results produced by famine, scarcity, and other events connected with the fiscal history to which I now return.

Famine and drought.

19. The famines of Sambat 1869 (A. D. 1813-14) 1894 (1837-38), 1917 (1860-61), 1925 (1868-69) and 1934 (1877-78) have been described for the State as a whole in paragraphs 57—64 of last year's report. All except the latter two are so remote in time that their effects have long passed away, and these will be referred to in connection with the working of the settlements in the terms of which they took place.

Revenue system prior to the summary settlement.

20. The Bhartpur State in 1853, on the death of Maharaja Balwant Singh, came under the direct administration of a Political Agent and Council which continued till Maharaja Jaswant Singh came of age, in 1869. The revenue system prior to 1853 was described in Sir H. Lawrence's words in last year's report, and seems to have been unusually oppressive even for a Native State. The most active agent in raising the assessments and harassing the people by oppressive exactions was the Dewan Har Sevak. Under Maharaja Balwant Singh his tyranny reached such a pitch that the Meos of Nagar and Gopalgarh rose in open rebellion, and in 1844 to the number of ten thousand surrounded the Dewan and his minions who were only rescued by the approach of a Durbar Regiment. In 1853 the Dewan's Naib while endeavouring to collect the revenue of Semla in Nagar was shot at and two of his party including a Gujar Risaldar killed. The Dewan at once arrived on the scene with a strong force of cavalry and artillery intending to take a

terrible vengeance, but the people had fled to their brethren in Alwar territory. The whole village was outlawed, and for two years remained in the occupation of the State troops.

Summary settlement by Sir H. Lawrence and Captain Nixon.

21. This was one of the incidents which impressed on Sir H. Lawrence, the Agent to the Governor-General, the necessity of giving relief to the people by a summary settlement, and as the Political Agent was dilatory in taking up the question, Sir H. Lawrence himself marched down from Abu in the middle of the hot weather of 1855, encamped at Semla, reinstated the outlawed Meos, and after making a tour of the disturbed *parganas* proceeded to Dig, where he himself made a summary settlement of Gopalgarh Kama and Pahari, reducing the demand from 4,98,417 to 4,27,569 or by 14·75 per cent. He left his assistant, Captain Nixon, to carry out the summary settlement of the remaining eleven *parganas* on the same lines, and at the same time begin operations for a regular settlement in connection with which a Revenue Survey of the State was at the same time undertaken by the Survey Department. Captain Nixon appears to have carried out the summary assessment promptly and successfully. His proposals were submitted for the confirmation of the Agent to the Governor-General, but unfortunately I have been unable to obtain them from either the Bhartpur Agency or the Abu office. The only information I can obtain about them is a passing reference in Sir H. Lawrence's report on Bhartpur affairs, dated 4th March 1857, where he says :

"His reductions were even greater than mine, and in *pergana* Bhusawar especially where the Political Agent had been deceived into the idea that the reports of distress were fictitious and got up by the tahsildar, etc., his reductions exceeded by one-tenth the average of the last 10 years' Jama."

From the same source I gather that the reductions for the whole State were about 3½ lakhs, on the previous demand, showing how crushing the latter must have been, and Sir H. Lawrence anticipated that the regular settlement which was to last till the Maharaja came of age, would show the necessity of a still further reduction.*

Subsequent short term assessments.

22. The proceedings of the regular settlement in which a margin of from 30 to 50 per cent. of the profits was to be left to the zamindars, were unfortunately interrupted by the mutiny and never resumed.

From the summary settlement up to date the revenue administration has been carried on by a series of frequent and short-lived makeshift assessments, none of which since the summary settlement has been based on anything approaching a regular system, or made by an official possessing any special acquaintance with revenue or settlement work.

These assessments have been—

(1) Summary settlement, 1855-56—1857-58.
(2) 3 years' settlement, 1858-59—1861-62.
(3) 6 years' settlement, 1862-63—1867-68 continued to 1872-73.
(4) 10 years' settlement, 1873-74— 882-83.
(5) Revision of settlement in northern tahsils, 1883-84.
(6) 15 years' settlement, 1890-91.

The methods employed in these re-assessments—for no attempt was made to prepare a record of rights,—their financial results and working for the State as a whole were described in the introduction to last year's report. There is absolutely nothing on record to show the principles on which they were made, and the very laborious enquiries by the Deputy Collectors and myself have elicited only very meagre information as to their working.

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* I have since obtained some old files from the Abu office about the earlier settlements, but too late for reference in this report.

23. I give below the figures showing the demand, realisations, balances of the different settlements of the four tahsils under consideration as far as I have been able to collect them :—

Alterations of demand at the various re-assessments.

Period.		Kumher.			Akhegarh.			Bhartpur.			Nagar.			Total.		
		Demand.	Incidence.	Balance.	Demand.	Incidence.	Balance.	Demand.	Incidence.	Balance.	Demand.	Incidence.	Balance.	Demand.	Incidence.	Balance.
			Rs. a. p.			Rs. a. p.			Rs. a. p.			Rs. a. p.				
	1854-55 ...	...	...	...	...	...	...	1,63,302	...	...	56,847	...	...	2,20,049	...	...
Summary settlement.	1855-56 ...	1,43,274	1 0 2	...	78,373	1 0 3	...	1,03,710	...	...	68,002	0 12 1	...	3,93,359	...	...
3 years, settlement.	1858-59 ... or 1859-60 ...	... 1,50,934	... ...	... ..	... 78,634	... ...	... ...	1,48,053 ...	... ...	... ...	73,871 ...	... ...	... ...	2,21,924 2,29,568	... ...	... ...
6 years' settlement.	1861-62 ... 1862-63 ...	... 1,54,142	... ...	... ...	... 96,461	... ...	... ...	1,21,429 1,64,492	... ...	... ...	75,717 78,625	... ...	... ...	1,97,146 4,93,720	... Total up to 1890	...
Formation of Bhartpur Tahsil.	1866-67 ..	...	...	...	...	...	...	2,02,141	...	13,23,427	...	...	3,53,965	2,02,141	...	23,36,680 ...
Revision of 6 years' settlement.	1868-69 ... 1871-72 ...	1,60,720 1,72,560	... ...	1,472 2,784	96,461 1,07,604	... ...	31,775 ...	1,59,667 1,75,526	... ...	... ...	... 86,453	... ...	... ...	4,16,848 5,42,543	... ...	... ...
10 years' settlement.	1873-74 ...	1,84,999	...	2,854	1,26,604	...	...	1,79,227	...	...	93,294	...	...	5,84,124	...	...
Revision settlement.	1882-83 ...	1,24,076	1 8 1	3,53,178	1,29,619	1 3 4	1,69,083	1,71,010	...	...	89,519	1 1 4	...	5,14,324	...	...
15 years' settlement.	1890-91 ... or 1891-92 ..	1,34,672 ...	1 2 2 ...	3,84,659 ...	1,37,118 ...	1 2 7 ...	2,96,784 ...	1,45,157 ...	1 7 0 ...	... 1,33,656	... 90,007	... 0 14 0	... 897	4,16,947 90,007	... Total since 1890	... 2,41,391
	1897-98 ...	1,35,743	1 0 5	4,30,717	1,38,869	1 1 9	3,28,055	1,43,884	1 1 7	...	...	...	...	4,18,496	...	...
	1898-99 ...	1,35,336	...	4,36,166	1,39,905	1 1 9	3,29,971	1,47,341	...	14,57,082	90,056	...	3,54,862	5,12,638	...	25,78,071

The 3 years', 6 years' and 15 years' settlements were brought into working a year earlier or later in the different tahsils as shown in column 2. The demand in each case represents the *Khalsa* or land revenue demand excluding cesses, while the balance represents the total arrears including cesses.

In Kumher and Akhegarh the arrears are shown in a cumulative form, the entries opposite any year representing the total arrears up to that year. Thus up to the 10 years' settlement of 1873-74 the arrears in Kumher and Akhegarh were only Rs. 2,784 and Rs. 31,775 respectively. In Nagar up to the re-assessment of 1871-72 there were no arrears at all. For the Bhartpur or Deorhi tahsil which was administered till recently directly by the Palace, no proper details of the arrears are forthcoming, but here too from the remarks and statistics in the annual reports it appears that the arrears down to 1871-72 were not considerable.

Enhancement of the assessment during the minority, 1853-69.

24. If we take the total for the whole tract we find that the demand of the summary settlement was Rs. 3,93,559. At the 3 years' settlement the assessment was increased slightly in Kumher, Akhegarh and Nagar, and very largely in Bhartpur, the figures for which are not however very reliable. The total for the four tahsils was Rs. 4,51 492, an increase of about 15 per cent. on the summary settlement, whereas Sir H. Lawrence had counted on a further decrease on the expiry of the latter. The six years' settlement increased the demand slightly in Kumher and Nagar, but considerably in Akhegarh and Bhartpur, the total for 1862-63 being Rs. 4,93,720, an increase of a lakh of rupees or over 25 per cent. on the summary settlement 6 years before. The demand was modified in 1866-67 by the re-constitution of the Deorhi tahsil which raised the Jama of Bhartpur from Rs. 1,64,492 to Rs. 2,02,141. This was, however, again reduced to Rs. 1,59,667 in 1868-69, and in the latter year owing to the expiry of the 6 years' settlement a slight enhancement was taken in Kumher pending the re-assessment. Otherwise no change was made till the Political Agent made over the administration to the Maharaja in 1869, at which time the Jama of these 4 tahsils stood at Rs. 4,95,442.

Condition of the people at the end of the minority.

25. All these short term settlements were made during the administration of the Political Agent, and on the whole appear to have worked well. In the 13 years since the summary settlement there had been a great increase in cultivation, the Darbar had advanced as *Takavi* Rs. 1,80,338 throughout the State with which no less than 1,984 new wells had been constructed. Several new irrigation dams had been constructed and old ones repaired by Lieutenant Home, R.E., the State Engineer, who also carried out the drainage of extensive swamps. Hence the people had prospered and were able to pay the increased demand without much difficulty. The Agent to the Governor General writing in June 1867 says :—

"The Government of this principality is beyond all comparison more just, more liberal and more popular than that of any other chiefship in Rajputana. The people are well disposed and contented and look forward with pleasure to the days now not far distant when the Government will be made over to the young Maharaja."

These tahsils shared in the general prosperity, which appears to have received only a temporary check from the drought of 1868.

In 1868-69 the monsoon rains at Bhartpur (the only raingauge station at the time) were very deficient, *viz.* :—

April.	May.	June.	July.	August.	September.	Total.
1·31	·34	1·07	5·57	·84	·58	9·71

and owing to their early cessation the autumn crop was much below the average. The Political Agent writes :—

"Judging from what I saw around me at Bhartpur, I was afraid there would be hardly any *Kharif* crop at all, but other *parganas* were more favourably treated, and in some, where rain had fallen at a time when most required, the outturn was very good. There was little difficulty in collecting the revenue although in some districts it was necessary to put off the collections in full until the spring crop was ripe for cutting."

Fortunately the winter rains were good and well timed (1·90 inches at Bhartpur) and a fairly good spring crop was reaped though gram was much damaged by hail. The Political Agent estimated that it would not be necessary

to remit more than Rs. 50,000, but in the absence of an Annual Report for 1869-70 when the administration was made over to the late Maharaja, I have not been able to ascertain how far this forecast was correct.

The Political Agent continues :—

"On the whole I think we may congratulate ourselves on having fared better throughout this trying time than many of our neighbours. The revenue for the spring crop is being collected without the least trouble."

Re-assessments under His Highness the late Maharaja.

26. During the last year of the minority, preparations had been begun for a regular settlement to last 20 or 30 years, but the work was interrupted by the bad seasons of 1868-69, and the old assessments were continued till 1871-72 when pending the re-assessment a considerable temporary enhancement—about 10 to 12 per cent. in each tahsil—was taken, raising the demand from Rs. 4,95,442 to Rs. 5,42,543.

The ten years' settlement.

27. Then followed the 10 years' settlement, the character of which has been described in paras. 11 and 12 of the introduction to last year's report. It raised the demand for the whole state as compared with the 6 years' settlement by over 3¼ lakhs, and the demand in these tahsils to Rs. 5,84,124, an increase of over Rs. 90,000 on the six years' settlement. I have so far been unable to trace the synoptical tables showing the results by tahsils submitted by the Political Agent with his letter No. 165, dated 28th February 1874, but the figures given above show that the enhancement as compared with the 6 years' settlement—10 years before—was about 22 per cent. in Kumher, 12 per cent. in Akhegarh, 10 per cent. in Bhartpur (the figures for which are not however reliable) and about 23 per cent. in Nagar. The new assessment came into force from the year 1873-74, and though undoubtedly excessive appears to have been paid fairly promptly and punctually up to the end of the year 1876-77 as the seasons meantime continued to be favourable. Then came the terrible famine of 1877-78, the stoppage in 1878-79 of the salt trade which had been one of the main pillars of the prosperity of Kumher and Bhartpur; and these two causes combined to bring about a collapse of the agricultural community, which threw it back into the condition from which it had been rescued in 1853, and from which these tahsils have never completely rallied.

Famine of 1877-78.

28. The effects of the famine on the whole State were described in paragraphs 59—61 of last year's report. For this tract they made themselves especially felt in (1) the decrease in the cultivated area and revenue receipts, (2) the decline of the agricultural population owing to desertion and death, (3) the loss of cattle, (4) the transfer and abandonment of estates and holdings.

The deficiency of the rainfall has been referred to in paragraph 11. Its immediate effect was to reduce the cultivated area by one-half or more in these tahsils in the year 1877-78, and owing to the desertion or breakdown of the agriculturists, the loss of cattle by starvation, the continuance of unfavourable seasons, and the incursions of the wild cattle, the abandoned land was only gradually restored to cultivation and some of it is even now jungle. Hence with crippled resources the zamindars were quite unable to meet the reveune demand, which was pitched so high that it could only be paid in a prosperous year. The State gave no relief worthy of the name by suspending or remitting revenue or reducing the demand, but attempted to collect all it could, thus increasing the panic among the people and leading to further desertions of the agriculturists. The remaining zamindars unable to bear the extra burden thrust on them, struggled on for a time and then broke down in great numbers and resigned or abandoned their holdings which the State had to take under its own management or transfer to outsiders.

Effects of the famine on revenue collections from 1877-78 to 1881-82.

29. The following table shows as far as statistics are available, the demand and realisations for (1) 1876-77 the year preceding the famine, (2) the famine year and (3) the four years following down to 1882-83 when the ten years' assessment

was found to be an absolutely impossible one under the altered conditions of the agricultural community and steps were taken to relieve them by a revised assessment.

Year.	Kumher.		Akhegarh.			Bharthpur.		Nagar.		Total.	
	Demand.	Balance.	Demand.	Balance.	Area cultivated.	Demand.	Balance.	Demand.	Balance.	Demand.	Balance.
1876-77	.....	.....	.....	.....	.....	1,66,921	10,830	93,394	442	2,60,315	11,272
1877-78	1,85,025	63,533	1,27,139	15,022	44,382	1,61,307	13,383	93,944	46,801	5,67,315	2,38,739
1878-79	1,92,430	54,419	1,27,975	24,074	89,253	1,70,115	30,140	93,944	46,913	5,84,464	1,45,546
1879-80	1,82,911	33,194	1,29,974	18,255	97,841	1,72,704	16,861	93,944	25,425	5,79,533	93,735
1880-81	1,94,983	1,08,731	1,29,885	29,037	98,403	1,73,064	89,841	93,944	51,276	5,91,876	2,68,885
1881-82	1,96,619	81,722	1,29,100	15,467	1,04,980	1,62,624	36,330	93,944	28,988	5,82,287	1,62,507
Total of 5 years ...	9,51,968	3,41,599	6,44,073	91,855	4,34,759	8,39,714	1,76,555	4,69,720	1,99,403	29,05,475	8,09,412
Average ...	1,90,394	68,320	1,28,815	18,371	86,952	1,67,943	35,311	93,944	39,881	5,81,096	1,61,883

These figures show that for the 5 years beginning 1877-78 only 72 per cent. of the demand was realised for the whole tract and 28 per cent. remained in arrears, the proportion of arrears to total demand being Kumher 36 per cent., Akhegarh 14 per cent., Bhartpur 21 per cent. and Nagar 42 per cent.

In Akhegarh the incidence of the demand for the whole period was Rs. 1-7-9 per cultivated bigah, or about 3-12-0 per acre, and of the collections about 1-4-6 or over Rs. 3 per acre. This is decidedly high for a tract with so small a proportion of irrigation. For the other tahsils, I have been unable to obtain statistics of the annual cultivation for this period. The whole period was one of distress and difficulty, but the year 1880-81 was almost as disastrous as 1877-78, and coming on the top of a series of bad years the arrears were even greater. In no tahsil except Akhegarh was even half the demand realised.

Drought of 1880-81.

30. The Political Agent in the annual report writes :

"The rainfall for the year—12·9 inches—was much below the average and the crops suffered severely. The loss was most felt in the Gopalgarh, Dig and Deorhi *parganas*, where the outturn was not more than half the average, but throughout the State generally fully three-eighths of the crops were lost. The disastrous effects of the frequent recurrence of bad seasons within the last 5 years has been made painfully evident by the census, the results of which when compared with those of the census taken in 1867 show that the State has lost by famine, emigration and other causes about Rs. 14 per cent. of its population."

The population of the State had decreased from 7,43,710 in 1868 to 6,45,540 in 1881.

Revised assessment of 1882-83 in certain tahsils, and revenue collections down to 1890.

31. The 10 years' settlement of 1873-74 marks the beginning of the decline of this State as regards agriculture, revenue, population, and general prosperity, and this decline aggravated by a harsh and short sighted administration lasted almost without interruption for nearly 20 years. On its expiry in 1882-83 the former demand was revised and considerably reduced in the Dig *Nizamat*—then embracing the five tahsils of Gopalgarh, Pahari, Kama, Dig and Kumher which were supposed to have suffered most from the famine. In these the demand was reduced by about Rs. 1,20,000, a much needed relief. Unfortunately no consideration was shown to the remaining *parganas* though they were equally in need of relief. The old assessments were still maintained and the State did its best to collect them ; but the people demoralised by a succession of bad years and a bad revenue administration made little attempt to meet their liabilities, the abandoned lands still remained

uncultivated, and the arrears of revenue exceeded even the figures of the years immediately succeeding the famine, as the following table shows :

1	2	3	4	5	6	7	8	9	10	11	12	13
	KUMHER.			AKHEGARH.			BHARTPUR.		NAGAR.		TOTAL.	
Year.	Demand.	Balance.	Area cultivated	Demand.	Balance.	Area cultivated.	Demand.	Balance.	Demand.	Balance	Demand.	Balance.
1882-83	124,076	3,627	82,487	129,619	14,928	107,250	171,010	38,065	96,996	22,275	521,701	78,895
1883-84	124,690	70,038	68,769	129,045	31,525	98,571	180,627	104,538	96,910	58,894	531,342	264,995
1884-85	127,195	3,050	99,309	129,905	8,369	107,828	203,155	67,316	94,407	10,055	554,662	88,790
1885-86	127,530	2,825	103,249	130,322	13,443	107,753	204,844	90,722	93,748	18,769	556,444	125,759
1886-87	125,405	3,727	105,678	134,721	23,909	106,085	203,891	114,677	93,987	20,507	558,004	142,820
1887-88	129,269	4,882	101,844	138,063	26,892	105,536	225,181	128,920	93,993	15,533	586,506	176,227
1888-89	129,281	2,754	106,987	134,936	11,065	104,961	226,077	118,214	96,212	1,791	596,506	133,814
1889-90	127,499	9,137	107,597	135,109	10,493	108,118	226,417	119,411	96,617	12,335	585,642	151,476
1890-91	New Settlement			...	...	...	227,024	115,227	New Settlement		227,024	115,227
Total	1,014,945	100,140	775,919	1,061,720	140,624	846,102	1,868,256	897,080	762,870	160,159	4,707,831	1,298,003
Average	126,868	12,518	96,980	132,815	17,578	105,763	207,568	99,675	95,359	20,020	562,610	149,971

As compared with 1881-82, the demand of 1882-83 was reduced by over Rs. 72,009 in Kumher, it remained stationary in Akhegarh where the subsequent increase appears to have been due to resumption of *mafis* or leases of *kham* estates. In Nagar the old demand appears to have been slightly and in Bhartpur considerably increased. I am unable to explain the steady increase of the demand in Bhartpur from Rs. 1,71,000 in 1882-83 to Rs. 2,27,024 in 1890-91 except on the assumption that this unfortunate tahsil was even more mismanaged than the rest under the Deorhi which altered the demand at its pleasure. Part of the increase is due to the giving out of the waste lands near Bhartpur,—Srinagar, etc., for cultivation. The lessees never got beyond the stage of cutting and felling the timber and then threw up the lease, but the amount is still included in the demand so that the arrears for this single estate total up to Rs. 1,31,821.

In this as the preceding cycle only 72 per cent. of the demand was collected and 28 per cent. remained in arrears which for these four tahsils amounted to the enormous total of Rs. 12,98,005. The arrears were least in Kumher—10 per cent. of the total demand—as considerable relief had been given by the reduction of the demand in 1882-83. They were 13 per cent. in Akhegarh and 21 per cent. in Nagar where no relief had been given, while in Bhartpur where as explained in paragraphs 7—10, agricultural deterioration was increasing apace, and the demand was being with incredible stupidity enhanced every year, the arrears for these 9 years amounted to Rs. 8,98,070 or 48 per cent. of the total demand.

The statistics of annual cultivation in Kumher and Akhegarh show that the former made steady and the latter very slow progress towards recovery. For the whole period the incidence in Kumher of the demand and collections per cultivated bigah was Rs. 1-5-0 and Rs. 1-3-0 respectively and in Akhegarh Rs. 1-4-3 and Rs. 1-1-6. The latter is considerably lighter than for the period ending 1881-82.

32. The development of all four tahsils received another decided check from the drought of 1883-84, when only 14·95 inches of rain or about half the normal amount fell at Bhartpur. The Political Agent writes in his Annual Report :

Drought of 1883-84.

"The *kharif* crop was partially and in some places entirely lost, and this deficiency has not been made good as was the case last year by the excellence of the *rabi* crops which in their turn have suffered from the want of the usual cold weather rain. The gram crop has specially failed. On the failure of the *kharif* crop being ascertained, the Darbar came forward and by making considerable *Takavi* advances to enable the people to purchase cattle and dig *kacha* wells did much to relieve the distress and to prevent the people from quitting the territory. In some places however the people did leave in considerable numbers though the general exodus was not on the scale that might have been expected in seasons of scarcity. *The inhabitants of Bhurtpur are especially pressed owing to their having no longer the manufacture of salt to turn to,* on which they could in former times always depend for their livelihood. The cattle have as is always the case suffered greatly from the effects of the scanty rainfall. Should the rains of 1884 not be abundant and well timed widespread suffering must be anticipated."

The drought fell particularly heavily on the central and northern districts, and completed the wreck of many communities which had been shaken but not overthrown by the famine of all 1877-78. In all tahsils but Akhegarh less than half the demand was realised and the arrears for the four tahsils in this single year exceeded Rs. 2½ lakhs. The Political Agent in the above report states that the Darbar had informed him in writing of the remission of Rs. 13,95,350 of old arrears, and the intention to make still further remissions, but I have hitherto been unable to find any trace of such remissions.

The central tahsils therefore on the whole judging by the revenue collections show no return of prosperity in this period. The average annual arrears were less than in the preceding period in Kumher and Nagar, about the same in Akhegarh and immensely greater in Bhartpur.

33. Meantime the Darbar was making preparations for a complete resettlement and reassessment of the state for a term of 15 years. The manner in which this was conducted is described in paragraphs 15 and 16 of the Introduction to last year's report.

Settlement of 1890-91.

In Kumher, Akhegarh and Nagar it came into working from *kharif* 1890, in Bhartpur from *kharif* 1891. The following table summarises the information I have been able to gather as to its financial results and working :—

Years.	Kumher.			Akhegarh.			Bhartpur.			Nagar.			Total.		
	Demand.	Balance.	Area cultivated.	Demand.	Balance.	Area cultivated.	Demand.	Balance.	Area cultivated.	Demand.	Balance.	Area cultivated.	Demand.	Balance.	Area cultivated.
1890-91 ...	134,672	4,424	...	137,118	1,779	...	...	...	...	89,585	...	...	361,375	6,273	...
1891-92 ...	134,810	3,763	122,394	138,659	1,227	122,730	145,844	9,909	101,019	89,585	...	82,740	508,898	14,899	428,883
1892-93 ...	132,950	3,170	127,588	138,831	7,648	133,276	145,550	9,770	108,907	89,684	...	90,692	507,015	20,588	460,453
1893-94 ...	130,764	2,510	133,018	139,063	3,083	128,616	146,492	13,861	113,029	89,720	...	90,847	506,039	19,454	465,510
1894-95 ...	132,410	2,318	137,304	139,297	3,111	130,139	145,798	13,147	112,538	89,879	...	91,250	507,384	18,576	471,231
1895-96 ...	77,659	5,190	118,665	79,213	5,385	113,331	68,438	8,578	103,786	89,957	942	81,207	315,266	20,095	418,987
Half year.															
1896-97 ...	135,380	13,679	121,841	136,022	22,816	120,097	146,493	55,122	68,006	89,957	236	83,254	507,852	90,853	393,198
1897-98 ...	135,743	4,491	142,769	138,839	11,927	130,198	143,884	25,684	129,734	90,007	...	99,848	508,473	42,102	502,549
1898-99 ...	135,336	3,512	144,633	139,005	8,742	129,288	147,341	12,108	134,800	90,056	...	91,285	512,638	23,362	500,006
Total ...	1,149,734	41,127	1,048,210	1,186,946	65,718	1,007,675	1,089,840	148,179	852,819	808,430	1,178	711,123	4,234,940	256,202	3,640,827
Average ...	135,026	4,839	131,026	139,641	7,731	125,960	145,312	19,757	109,227	89,825	131	88,890	509,803	32,458	467,603
8½ years. ...	...	...	...	...	...	...	(7½ years)		...	9 years		...	...	...	...

Comparing the demand with that of the previous period it appears that the new settlement gave an enhancement of about Rs. 7,000 in Kumher, of Rs. 2,000 in Akhegarh, while the *jama* of Bhartpur was reduced from Rs. 227,024 to Rs. 145,344 or by over 40 per cent. and that of Nagar from Rs. 96,617 to Rs. 89,585, *i.e.*, by Rs. 7,022 or over 7 per cent. Some complication has been introduced by the alteration of the financial year in 1895-96. Prior to then it had agreed with the revenue or agricultural year which takes account of the collections of a *kharif* followed by a *rabi* harvest. But in 1895, the financial year, as in British India, was made to begin from 1st April, causing a dislocation of the annual accounts which instead of representing a *kharif* crop followed by a *rabi*, now show the results for a *rabi* crop followed by a *kharif*. To work in the new system, the *kharif* crop of 1895 was treated as a separate year and a new start made from *rabi* 1896. Hence the table represents the demand and balances for 8½ years in Kumher and Akhegarh, 7½ years in Bhartpur, and 9 complete years in Nagar where the accounts still follow the agricultural year. The figures for cultivation on the other hand are for the agricultural year—*kharif* and *rabi*. The divorce between the revenue and agricultural statistics is attended by so many inconveniences that the Darbar has now decided to return to the old system, and from *kharif* 1899 the agricultural and financial agricultural years will again coincide.

Financial results and working of 1890 settlement

34. The assessment of 1890-91 has been the most moderate since the 6 years' settlement of 1862-63, and under it all the tahsils have shown some signs of reviving prosperity. Of the total revenue demand from 1890-91 to 1898-99, about 94 per cent. has been realised and only 6 per cent. has remained uncollected. The arrears in Nagar have been practically *nil*, in Kumher they average 3·5 per cent. of the demand, in Akhegarh 5·5 per cent. and in Bhartpur nearly 14 per cent. In Kumher and Akhegarh the arrears represent the amount *now* due after subsequent realisations, while in Bhartpur and Nagar they represent the amount that remained unpaid in the year of the demand. If subsequent realisations are taken into account the arrears in these two tahsils since 1890-91 are, Bhartpur Rs. 1,33,656 or a little over 12 per cent., Nagar Rs. 897. The statistics of annual cultivation show for Kumher and Akhegarh a considerable expansion as compared with the previous period 1882-83—1889-90, which in Kumher has been steadily maintained and is still progressing. In Akhegarh the expansion has not been so great but is still substantial. In Kumher the average annual demand for revenue alone for the period fell at the rate of Rs. 1-0-6 and the average collections at the rate of Re. 1 per bigah cultivated or Rs. 2-8-0 per acre, which with 33 per cent. of the area irrigated cannot be considered excessive. In Akhegarh the average incidence of the demand is Rs. 1-1-9 per bigah and of the collections Rs. 1-0-9 which as the irrigated area is only 27 per cent. is slightly heavier than in Kumher. In both tahsils however the incidence both of demand and collections is much lighter than in the preceding period. In Bhartpur the incidence of the demand for the whole period has been Rs. 1-5-3 and of the collections Rs. 1-2-6 per cultivated bigah, the incidence being heavier in this tahsil as the great increase of cultivation has taken place only within the last few years. Seeing that 31 per cent. of the cultivation in this tahsil is *chahi* and 15 per cent. *sairaba* the incidence is not excessive. In Nagar owing to the steady increase of cultivation the incidence of the demand and collections averages only Rs. 1-0-2 per cultivated bigah, but only 12 per cent. of the cultivated area is irrigated.

Harvests and collections since 1890.

35. The years 1890-91 to 1894-95 were generally years of good or average rainfall and fair or abundant harvests, cultivation continued to expand in all tahsils, and the revenue was fairly well collected except in Bhartpur, where even the enormous reduction in the assessment was not sufficient to relieve a demoralised and impoverished people. From 1895-96 began a series of lean years which, with the exception of 1897-98, has continued up to date.

The rainfall of 1895-96 was much below the average in all tahsils (see paragraph 11), *viz.* :—

Kumher.	Akhegarh.	Bhartpur.
18·34.	13·51.	22·62.

Hence there was a great contraction in *kharif* sowings. The fall in September was less than an inch in all tahsils, and there was a general failure of the crop sown. For the same reason the *rabi* sowings were much reduced, and as the winter rains were less than an inch in all tahsils but Bhartpur the outturn of the small area sown was much below average. Hence there was difficulty in collecting the revenue. The arrears increased in Kumher and Akhegarh (the figures of demand and arrears shown in the above table are for the *kharif* crop of 1895 only) and even in Nagar, which had a clean balance sheet for the previous 5 years, there were Rs. 942 arrears in the *kharif*.

In the next year 1896-97 the rainfall was very poor in Akhegarh (17·86), Bhartpur (14·90) and Nagar but adequate in Kumher. The cropped area increased slightly as compared with 1895-96 in Kumher, Akhegarh and Nagar, but remained far below that of any other year since 1890-91. In Bhartpur where the failure of rains was most marked the area fell from 105,786 bighas in 1895-96 to 68,006. The September rains were every where less than an inch, and the *kharif* crop was a bad one except in Akhegarh. The winter rains were generally good, and the *rabi* crop was a fair one except in Bhartpur where owing to the poor rainfall and the failure of the Banganga floods, the area sown for the *rabi* was only 40 per cent of the average. There was increased difficulty in collecting the revenue and of the demand for *rabi-kharif* 1896, 9·5 per cent. remained in arrears in Kumber, 17 per cent. in Akhegarh, 37 per cent. in Bhartpur, and only a trifling sum of Rs. 226 in Nagar. The arrears would have been even larger were it not that the high prices helped the zamindars to hold their ground, but as it was there was considerable distress. Several of the weaker cultivators in these tahsils threw up their holdings, and though the scarcity was not considered severe enough to warrant the introduction of the Finance Code the State had to start relief works to assist the distressed.

Fortunately the year 1897-98 was one of moderate and well distributed rainfall, *viz.* —

Kumher.	Akhegarh.	Bhartpur.
24·30	24 53·	25·28.

and this enabled the people to increase their cultivation to a pitch higher than in any previous year since the famine. The rains continued well into September thereby securing the *kharif* and allowing a large area to be sown for the *rabi*. The winter rains though abnormally heavy in all tahsils but Bhartpur, were too late to be of much benefit to *barani* or *sairaba* lands the produce on which was poor, but the *chahi* crops were good and the year may be classed as a good average one. The arrears for the financial year *rabi* and *kharif* 1897 were *nil* in Nagar, comparatively little in Kumher, and very heavy in Akhegarh and Bhartpur.

The improvement in agricultural conditions was however retarded by another check in 1898-99. The monsoon rains of 1898 were good in Kumher and Bhartpur but deficient in Akhegarh and Nagar. The area cropped within the year therefore continued to increase in the two former tahsils, but dropped slightly in Akhegarh, and considerably in Nagar. In these two tahsils the total falls for the year were 14·53 and 13·82 respectively. Except in Bhartpur the rains ceased in August, and the outturn of the *kharif* was below average except on the lighter soils. The winter rains also failed in Akhegarh and Nagar, so that the *barani* crops came to nought, and the outturn on *chahi* lands was much reduced.

The revenue collections of the financial year covered by *rabi-kharif* 1898 show a great improvement on the two preceding years, the arrears being *nil* in Nagar, less than 2 per cent. in Kumher, 6 per cent. in Akhegarh and 9 per cent. in Bhartpur. Under the circumstances it is satisfactory that the recovery which began in 1890-91 has been so well maintained, and that it was only temporarily arrested by the scarcity which has prevailed since 1895. The improvement in the Nagar Tahsil is especially remarkable. From 1882-83 to 1890-91 it was

in a worse plight than Bhartpur has been in since 1890-91. Since the latter year Nagar has prospered and paid its way even in bad years, and this makes me sanguine that Bhartpur—given a good settlement and a moderate assessment—will make equally rapid progress. Fortunately the present year 1899-1900 has opened well for the whole tract. During June over 12 inches of rain has fallen at Bhartpur, and an unusually large area has been sown for the *kharif*. Kumher, Akhegarh and Nagar have received over 10 inches up to date (15th July) and prospects are at present very promising.

Arrears since 1890.

36. The large amount of arrears since 1890 in all tahsils but Nagar, even under the present moderate assessment is an ugly feature which requires further explanation. Nearly half of the arrears is in each case due to the two disastrous years 1895-96 and 1896-97 when it was impossible to collect even a light Jama without causing serious hardship. The balance in my opinion is in part due to the fact that several villages of which details will be given later have become so distressed owing to the break-down or desertion of the shareholders that they can not even pay a moderate Jama. Some of these have come under *kham* management and are leased out annually for sums much below the fixed demand, the difference being shown as arrears. Another cause is the weakness of the revenue administration. The tahsildars on the one side and the zamindars on the other have become so accustomed to the accumulation of arrears, that even in good years the former unless kept up to their work from above, do not take sufficient pains to exact, nor the latter to discharge their full obligations. In some cases there is even reason to believe that the arrears are partly the result of collusion between the tahsildars and the revenue-payers, but I doubt if this influence is now much at work. The more careful supervision of recent years has produced improved results as regards the collections from solvent villages, and for the insolvent or *kham* estates arrangements are being made to strengthen the proprietary bodies by the introduction of new blood, which will I trust enable them to meet their obligations.

Old arrears collected since 1890.

37. As a set off against the arrears that have arisen since 1890-91 must be reckoned the payments made in liquidation of the old arrears prior to 1890-91 either by lump sums or a percentage on the revenue. These and the arrears since 1890-91, are shown in the following table :

Particulars.	Kumher.	Akhegarh.	Bhartpur.	Nagar.
Arrears since 1890-91	−41,127	−65,712	−1,33,656	−897
Old arrears collected	+14,735	+28,421	+33,644	+26,033
Difference	−26,392	−37,291	−1,00,012	+25,136

So that if we deduct the payments towards old arrears from the recent arrears, the amount of the latter represents only 2 per cent. of the demand since 1890-91 in Kumher, 2·5 per cent. in Akhegarh, and 7 per cent. in Bhartpur; while in Nagar not only are the new arrears liquidated but a sum of Rs 25,136 or over Rs. 3,000 per annum has gone towards paying off the old arrears.

Total arrears up to date and proposals for their disposal.

38. The total arrears for revenue and cesses—deducting amounts realised up to date—now due in each tahsil are shown below for the different settlements as far as possible :

Serial number.	Period.	Kumher.	Akhegarh.	Bhartpur.	Nagar.	Total.
		Rs.	Rs.	Rs.	Rs.	Rs.
1	Prior to 1877-78 ...	10,784	31,770	2,49,792	4,403	2,96,749
2	„ 1877-78 to 1881-82 ...	2,84,103	91,865	1,76,555	1,89,403	7,41,926
3	„ 1882-83—1890-91 ...	10,142	1,40,624	8,97,080	1,60,159	12,98,005
4	„ 1890-91—1898-99 ...	41,127	65,712	1,33,655	897	2,41,391
	Total ...	4,36,156	3,29,971	14,57,082	3,54,862	25,78,071

I cannot owing to the absence of clear and correct accounts vouch for the absolute accuracy of the figures, especially for the Bhartpur tahsil, but for the last year the Deputy Collector and myself have left no stone unturned to get a correct statement of the arrears from the tahsils and Sadar Revenue office, and these figures are probably substantially correct. They show that up to the famine year, the arrears were inconsiderable except in the Bhartpur tahsil. The great bulk of the arrears in each tahsil is for the 13 years 1877-78—1890-91 and are due to over assessment combined with the break-down caused by the famine, and other incidents such as the stoppage of the salt trade, the damage done by the wild cattle, etc.

For the four tahsils the arrears total up to nearly 26 lakhs or about half of the total land-revenue balances of the state, and the single Bhartpur tahsil alone accounts for more than one-fourth of the total for the State.

It would be unjust and impolitic to keep the agricultural community burdened by this dead weight of arrears which are due almost entirely to causes beyond their control. In last year's report (paragraph 19 introduction) I proposed generally that the old arrears prior to 1890-91 should be remitted and the Political Agent and Council gave a general assent to this proposal. That assent no doubt applies to the arrears in these tahsils, but as the amount of the arrears in these tahsils and the causes of them were not then so fully investigated, I now propose that specific sanction be accorded to the remission of the arrears prior to 1890-91, and in Bhartpur prior to 1891-92 (the year when the new settlement was introduced) of which the total amount is Rs. 23,36,680. The facts justifying such a remission need not be further enforced I think.

As regards the arrears subsequent to last settlement Rs. 2,41,391 I shall make proposals as to the amount to which they should and can be realised, and the method of realisation in Chapter IX when dealing with the proposed assessment.

Other arrears due.

39. In addition to the arrears of land revenue and cesses, the agricultural communities are liable jointly or individually for arrears on other accounts such as Takavi advanced by the state for construction of salt wells at the time of the salt trade, grazing dues, etc. etc. The amount of these is as follows :

Tahsil.	Prior to 1890-91.			Since 1890-91.			Total.	Remarks.
	Salt.	Others.	Total.	Salt.	Others.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Kumher	6,296	41,565	47,861	...	4,048	4,048	51,909	
Akhegarh	...	11,603	11,603	...	9,306	9,306	20,909	
Bhartpur	11,641	1,79,624	1,91,265	...	4,995	4,995	1,96,260	
Nagar	...	5,935	5,935	...	294	294	6,229	
Total ...	17,937	2,38,727	2,56,664	...	18,643	18,643	2,75,307	

I do not know enough of the nature or origin of these arrears to venture any proposal regarding them, but the great majority of them are probably for various reasons now irrecoverable. A special Committee is I understand at present engaged in their investigation. It is very desirable that the question how far they are to be realised and how far remitted should be promptly disposed of. In so far as the amounts to be realised are to be paid by the zamindars, that payment must come out of the produce of the land, and it is therefore most important in fixing the new land-revenue demand to know to what other demands the people are liable.

I have dealt at what may seem unnecessary length on the old assessments because not only do they illustrate the fiscal history of the tract, but they are also a valuable guide to its revenue-paying capacity.

Desertion of estates and holdings owing to distress.

40. To complete the survey of the fiscal history it is necessary to show the extent to which estates or holdings have been deserted or transferred owing to agricultural distress.

This will appear from the following table :

Tahsil.	Number of villages affected.	1877-78.				1878-79 UP TO DATE.				TOTAL.			
		No. of deserters.	Holdings.	Area.	Jama.	No of deserters.	Holdings.	Area	Jama.	No. of deserters.	Holdings	Area.	Jama.
Kumher ...	98	1,365	537	29,763	21,578	1,024	480	19,909	14,421	2,389	1,017	49,672	35,999
Akhegarh ...	69	548	143	19,805	15,277	603	224	21,705	16,746	1,151	367	41,510	32,023
Bhartpur ...	114	745	244	8,002	...	927	348	13,077	...	1,672	592	21,079	...
Nagar ...	70	936	239	10,420	...	669	33	17,307	...	1,605	272	27,727	...

The figures bring into bold relief the effects of the famine of 1877-78 and of the subsequent droughts of 1883-84 and 1895-96 in breaking down the village communities. In Kumher and Akhegarh owners of one-fourth of the area deserted or abandoned their holdings; in Nagar the area so abandoned comes to about one-fifth, and in Bhartpur to one-tenth.

The number of owners shown as having deserted or disappeared is equal to nearly one-third of the present number in Kumher, over one-fourth in Akhegarh, one-sixth in Bhartpur, and one-third in Nagar, and as no tahsil was densely populated even before the famine, it can be imagined how serious were the effects of such a loss of agricultural labour. The above figures do not show the desertions of tenants which were probably as numerous as those of owners.

The desertions in Kumher were most numerous in the famine year which coincided with the abolition of the salt manufacture. In the other tahsils the subsequent desertions have exceeded those of the famine year. In Nagar the drought of 1883-84 and in Akhegarh and Bhartpur the droughts of that year and of 1896-97 were the chief causes.

Transfer of estates made by the State.

41. In Kumher three whole estates—Nanjla Baji, Sainth and Nangla Maithna, —and shares in ten, in which the owners, broke down or refused responsibility, were transferred by the state to outsiders. The area of these is 8,767 bigahs with a Jama of Rs 3,332. In tahsil Akhegarh the interference of the state was even more marked. No less than 9 whole estates and shares in 29 were sold up for arrears, but the purchasers rarely paid more than a small fine (*nazarana*) on entry, and accepted liability for the revenue. In four estates shares comprising an area of 243 bigahs paying 242 were transferred with the consent of the owners, and in three, transfer of shares with an area of 352 bigahs paying Rs. 371 was carried out by the State.

I am not in possession of details for Nagar and Bhartpur to show to what extent estates or shares in them were sold up for arrears or transferred by the State; but in Nagar such transfers were comparatively rare as the village communities being fairly strong and cohesive generally took up the shares of the deserters. In Bhartpur on the other hand such transfers were more numerous than even in Akhegarh, and the continued depression of many estates makes it still necessary for the State to intervene and, in the interests of its revenue, to transfer to outsiders' shares in insolvent estates.

Estates which have come under direct management (Kham).

In addition to the desertion and transfer of estates and holdings, the effects of famine, drought, and revenue mismanagement in this tract also show themselves in the large number of estates which have come under direct management owing to the desertion or break down of the owners, their refusal to accept liability for the revenue assessed, or the inability of the State to find lessees willing to take up resumed lands at fixed Jama. In Kumher six whole estates,—Kumher Sainti, Bansroli, Jurehra, Nangla Sawai Ram and Maroda—and shares varying from one-third to over one-half in seven estates—Sarsai, Bhatpura, Pahua, Pachgain, Dhanwara, Jandhila, Papraira—are at present held *kham* from the above causes. The total area is 17,773 bigahs, of which 7,046 were cultivated in 1890-91, and 7,256 bigahs last year.

The Jama assessed in 1890 was Rs. 9,731, but this has fallen year by year to Rs. 7,872, and the arrears since 1890 amount to Rs. 9,321. So that the *kham* management cannot be said to have been a success. I am now endeavouring to make arrangements by which the proprietary rights of the old owners will be restored, or where they have disappeared will be conferred on the present lessees where fit or transferred to other enterprising agriculturists, the recognised owners in each case excepting responsibility for the new assessment. In this way through the efforts of the Deputy Collector, Munshi Hira Singh, permanent arrangements have now been made for all estates except (1) Kumher, which will be kept State property, but the present cultivators will be given the option of paying as rent a fixed assessment for the term of settlement, (2) Pachgain, (3) Jhandela (4) Maroda, but all of these cases will probably be disposed of on similar lines before the new assessment is given out.

In Akhegarh the large areas resumed in the three *mafi* estate of Hasanpur, Gadoli and Pathena have hitherto been managed *kham*, as the former mafidars or their heirs, resenting the resumption refused to assume liability. The total area so held is now 5,496 bigahs including 3,594 cultivated which in 1890 was assessed at Rs. 9,684 but under *kham* management the Jama has decreased yearly and last year was only Rs. 7,345, while the arrears since 1890 amount to Rs. 13,014. In Hasanpura and Gadnoli the former mafidars have now agreed if the proprietary right is granted to them to accept responsibility, and a similar arrangement has just been made in Pathena. The peculiar case of this large estate will be referred to latter on. Shares of $\frac{1}{4}$ and $\frac{3}{64}$ in the two estates of Milkipur and Baroli Ran—which are still held *kham*—have yet to be arranged for. There are also some estates in Akhegarh in which shares of deserting owners are now unclaimed (*lawwaris*). In these too permanent arrangements for the grant of the property subject to revenue liability will be made before the new assessment is announced. There are eight such estates in all, *viz.*:—(1) Arazi Bhikar (half share), (2) Nangla Bhawila ($\frac{1}{8}$), (3) Nawalpura (all), (4) Basiya (all), (5) Kabai ($\frac{3}{20}$), (6) Tilchera ($\frac{1}{6}$), (7) Jaroli ($\frac{1}{4}$), (8) Salimpura ($\frac{1}{2}$). Permanent arrangements for the ownership and revenue liability have already been made in all but (1), (2), (5), (6) and (8), and in these also I hope to conclude them very soon.

In Bhartpur 4 whole estates—Bhartpur Khas, Srinagar, Ajan, and Nangla Dharm Singh—and shares in Kaproli ($\frac{3}{4}$), Pilwa ($\frac{1}{4}$), Simpni ($\frac{1}{20}$), Taharki ($\frac{1}{4}$) are at present held *kham*. Bhartpur Khas will like Kumher remain State property as no one is entitled to the *biswadari*, but the cultivators will be given fixity of tenure subject to the payment of the fixed assessment. The area of Srinagar has for the most part been included in the wild cattle enclosure and the remainder will be kept as a State grazing ground for the convenience of the city cattle, excepting such plots as are at present leased for cultivation. Nangla Dharm Singh has

with the sanction of the Darbar been already allotted to the heirs of the former *mafidars* and founders of the village.

The *kham* management in the remaining villages is due to the complete disappearance or insufficiency of the old owners, and in connection with the scheme for breaking up the waste lands which will be described in Chapter III, I have now made arrangements for the allotment of these lands to new cultivators who when they have settled on the land and complied with certain conditions will be recognised as owners. Up to this date (6th July) all the cases have been settled on these lines except that of Ajan, where a $\frac{7}{16}$ share still remains to be allotted.

In Nagar no estate or share in an estate is held *kham*.

Remarks on the kham system.

43. The prevalence of the *kham* system in the other tahsils or in any tract where village communities exist is an evidence of gross revenue mismanagement, demoralising to the people subject to it and ruinous to the financial interests of the State. It is a favourite device of weak or corrupt Tahsildars and is often suggested by the revenue subordinates to whom it offers opportunities for feathering their own nests. In the northern tahsils where the zamindars are more sturdy and independent it is non-existent, and I hope the arrangements now being made will stamp it out in these tahsils and that the revenue authorities of the State will in future do all they can to discourage its revival.

Decrease of population.

44. The decrease of population owing to famine, etc., has been alluded to more than once. The following table shows for each tahsil the population at various times since the first complete census in 1867. The figures for 1897-98 are the result of a special census made during settlement operations, but in Bhartpur no new enumeration was made for the city for which the population of 1891 has been assumed.

Tahsil.	1867.	1881.	1891.	1897-98.	Remarks.
Kumher	69,587	45,382	50,705	54,969	
Akhegarh	51,294	46,974	44,349	37,245	
Bhartpur (a) city	61,448	66,163	67,553	66,553	
Bhartpur (b) without	80,420	41,430	42,609	43,642	
Bhartpur Total ...	1,41,868	1,07,593	1,10,162	1,11,195	
Nagar	29,567	25,268	23,943	25,870	
Total ...	2,92,316	2,25,215	2,29,159	2,29,279	
Total of State	7,43,710	6,45,540	6,40,303	...	

These figures show that while between 1867, when the State was at the zenith of its prosperity, and 1881 the population of the whole State declined by nearly a lakh, or over 13 per cent., that of these four tahsils showed a decrease of 67,101 or 23 per cent. As compared with 1881 the population of Nagar and Bhartpur (rural) shows a light increase in 1897-98, Kumher an improvement of 20 per cent., while Akhegarh if the figures are to be trusted has fallen off enormously.

The enormous decrease between 1867 and 1881 is of course due to the famine and the cessation of the salt in 1877-78 and a terrible epidemic of cholera which devastated these tahsils in 1879. Bhartpur and Kumher are the only towns with a population exceeding 5,000. The population of the former has risen slowly but steadily since 1869; but Kumher shows a marked and melancholy decline, the figures being 1867—13,236, 1881—7,306, 1891—6,661. Since 1881 the recovery has been very slow for this tract, the increase being only 2 per cent., while for the whole State, the census of 1891 showed that the population had still

further decreased by 5,000 since 1881. Local authorities say that the population of 1881 was wilfully exaggerated to conceal the depopulation caused by the famine. I believe the census made by the settlement establishment in 1898 to have been an accurate one, but the result of the census of 1901 will be awaited with much interest as they will show clearly what progress has been made since 1891. There has I think been a considerable improvement within the last few years owing to the return of old and the settlement of new cultivators.

General remarks on the fiscal history.

45. All the salient points of the fiscal history have now been touched upon, and the result is a melancholy picture. Whether we look to population, realisations of land-revenue, or area cultivated, these tahsils and the State generally are in a much worse position now than they were 30 years ago. The steady progress which Bhartpur had made under the careful administration during the minority of 1853—69 has been undone by the subsequent calamities which overtook the State, and which the administration so far from alleviating aggravated in two ways, actively—by imposing a crushing assessment, and passively—by not lightening the burden when the people were no longer equal to it, and looking on with folded arms while their condition sunk from bad to worse. The poet who wrote

"How small, of all the evils men endure,
The part that laws or kings can cause or cure"

could have had no knowledge of the power for good or evil of the patriarchal despotism of the east.

CHAPTER III.

GENERAL STATISTICS.

Classification of estates according to tenures.

46. The following table shows the classification of estates in each tahsil according to the ordinary tenures:—

Tahsil.	State property.	Zamindari.		Pattidari.		Bhayachara.			Total.	Remarks.
		Pure.	Joint.	Perfect.	Imperfect.	Perfect.	Imperfect.	Mixed.		
Kumher ... Khalsa	7	...	12	23	23	8	16	...	89	
Mafi	...	...	3	8	17	1	1	...	30	
Total ...	7	...	15	31	40	9	17	...	119	
Akhegarh ... Khalsa	1	...	8	6	54	4	...	...	73	
Mafi	...	...	1	1	8	...	...	...	10	
Total ...	1	...	9	7	62	4	...	...	83	
Bhartpur	10	4	39	4	31	1	38	26	153	
Nagar	...	2	37	...	13	...	22	7	81	
Grand Total ...	18	6	100	42	146	14	77	33	436	

The nature of the different tenures was discussed in paragraphs 76—78 of last year's report. In Kumher and Akhegarh the *pattidari* form is the most common, in Nagar the joint *zamindari*, while in Bhartpur all forms are found in almost equal numbers. As already explained the natural tendency of ownership in village communities to gradually develope from the joint or *zamindari* to the *pattidari* system of separate shares, and from the *pattidari* to the *bhayachara* system in which shares are lost sight of, and possession alone is looked to, has been arrested in Bhartpur by historical causes. Of these the most important are :—

(1) Nearly all the estates held by the Sinsinwar Jats and many of those held by other Jats and Gujars, were on the foundation of the State allotted to them in a sort of feudal tenure, subject to their furnishing so many guns, *i.e.*, fighting men, for service, and they naturally distributed the property in the same shares as the obligation for service. These shares continued to be looked on as the measure of right even after the resumption of the revenue-free grant.

(2) The State during the famine of 1877-78, and at other times has, in its own supposed interests, insisted on the principle of joint liability even where the zamindars among themselves had come to measure their property by possession. Thus when a shareholder broke down or deserted, and no single individual was as a rule willing to come forward to assume the rights and liabilities, the State insisted on the whole community assuming them, the result of which was to re-establish the joint *zamindari* tenure where it had given way to some other form.

Methods of distributing the revenue.

47. The methods of distributing the revenue in these tahsils are very haphazard. The matter is left to the discretion of the Tahsildars in communication with the lambardars and Patwaris and often changes from year to year. The following table shows the various methods of distribution employed in 1897-98 :—

No.	Method.	Kumher.	Akhegarh.	Bhartpur.	Nagar.	Total.
1	By shares ancestral, customary, etc.	38	62	27	...	127
2	By *khewat* of last settlement	2	6	...	...	8
3	Soil rates on different classes of land—*chahi, barani*, etc.	6	10	14	81	111
4	All-round rates on all cultivation, including sometimes a rate on *banjar*...	36	...	94	...	130
5	All round rates on total area	...	...	11	...	11
6	*Mafi, inam* and State property	37	5	7	...	49
	Total ...	119	83	153	81	436

Taking the four tahsils together, distribution by shares, by soil rates on cultivation, and by an all-round rate on cultivation are almost equally common. In only eight villages is the distribution fixed at last settlement adhered to. The method of distributing the revenue assessed is almost as important to the revenue-payer as the amount fixed. The present system in these tahsils is often unequal and unjust, and has been almost as frequent a cause of the impoverishment and breakdown of the zamindars as over-assessment. The distribution by shares irrespective of differences in soil and well-water is particularly oppressive in the case of

these shareholders in whose lands the well water is bitter, and an all-round rate on all cultivation presses heavily on those whose area of *chahi* or *sairaba* is small in proportion to the size of their holdings. Most villages in each tahsil include the new fallow (*jadid*) in the *bachh*, charging it with a rate lower than that on *barani*. While many also impose a rate on culturable land (*banjar*) in order to catch those shareholders who have let their land run out of cultivation or keep it for grazing. This will be borne in mind in fixing the new assessment and the method of distribution.

The present system leaves both the shareholders and the tenants—unless the latter hold under a written lease—in the dark as to the liability until the demand for the harvest after being sanctioned by the Tahsildar—who decides what amount of arrears is to be levied, what is to be allowed for village expenses, owner's profits etc.—is formulated by the Patwari and lambardars. The drawbacks of such a system are obvious, and the zamindars are now generally in favour of a distribution which shall be fixed for the term of settlement, and shall be based generally on actual possession and on differential soil rates for the varying classes of land.

Size of estates.

48. The average land-revenue demand for *khalsa* villages is at present in round numbers :—

Kumher, Rs. 1,600; Akhegarh, Rs. 1,950; Bhartpur, Rs. 1,150; Nagar Rs. 1,125. Akhegarh and Kumher are, therefore, tahsils of large and Bhartpur and Nagar tahsils of moderate sized estates.

In Akhegarh 13 estates pay over Rs. 3,000 and three—Boroli, Nadbai, and Kabai—pay over Rs. 5,000. In Kumher fifteen estates pay over Rs. 3,000, and seven—Bhadera, Awar, Ajan, Ghunsara, Takha, Rára, Santarak—over Rs. 5,000, but the average is lowered by the great number of petty estates in the the centre of the tahsil—many of them resumed *mafi* grants.

In Nagar only four estates pay over Rs. 3,000 and one over Rs. 5,000, *viz.*, Nagar town Rs. 6,000 ; while in Bhartpur six pay over Rs. 3,000 and two over Rs. 5,000 ; Jagina assessed at Rs. 11,044, being the only village in the tract which pays over Rs. 10,000.

The various questions connected with *mafi*, *jagir* and *inam* villages will be discussed in Chapter IX. They have all been surveyed, and records of rights have been prepared for them. Their statistics have been shown separately in the statements, and, unless where the contrary is stated, the statistics throughout this report refer to *khalsa* villages alone.

Cultivating-occupancy (statement V).

49. The following table shows the cultivating occupancy in each tahsil for the year 1897-98 :—

Detail.	Kumher.		Akhegarh.		Bhartpur.		Nagar.	
	Area.	Per cent.	Area.	Per cent.	Area.	Per cent.	Area.	Per cent.
1. Total cultivated area	139,694	100	125,156	100	129,734	100	99,848	100
2. Area cultivated by owners as such	59,587	43	49,220	39	45,914	36	42,304	42·5
3. Area held by privileged tenants. (a) occupancy tenants ...	2,967	2	2,707	2	4,206	3	14,096	14
4. Area held by privileged tenants. (b) tenants free of rent ...	1,542	1	3,651	3	2,669	2	3,455	3·5
5. Area held by privileged tenants. (c) tenants at favourable rents ...	8,529	6·5	771	·5	...	...	31	...
Total (of 3, 4, and 5) ...	13,038	9·5	7,129	5·5	6,875	5	17,582	17·5

Detail.	Kumher.		Akhegarh.		Bhartpur.		Nagar.	
	Area.	Per cent.	Area.	Per cent.	Area.	Per cent.	Area.	Per cent.
6. Area held by tenants-at-will paying (a) rents in kind	25	...	38	...	...	...	8	...
7. Area held by tenants-at-will paying (b) owners' rates	32,717	23·5	8,105	6·5	37,260	29	31,898	32
8. Area held by tenants-at-will paying (c) other cash rents	34,327	24	60,664	49	39,685	30	8,056	8
Total under cash rents	67,044	47·5	68,769	55·5	76,945	59	39,954	40
Number of owners	5,671	...	3,979	...	5,883	...	2,164	...
Number of holdings	2,795	...	928	...	3,137	...	1,410	...
Average area per proprietary holding	30	...	134	...	41	...	71	...
„ „ „ proprietor	25	...	31	...	22	...	46	...
„ „ „ tenancy holding	10	...	16	...	11	...	9	...
„ „ „ tenant	8	...	11	...	12	...	12	...

Proportion cultivated by the owners themselves.

50. The area cultivated by the owners as such is about two-fifths of the whole, ranging from 36 per cent. in Bhartpur to 43 per cent. in Kumher, where the proprietary bodies are strongest in number. In this respect these tahsils are weaker than the northern, where more than half the cultivation is carried on by the owner's themselves.

The extent to which owners who, having only small holdings, cultivate as tenants in their own or other villages should also be taken into account, and I have had this point specially enquired into with the following result :—

No.	Particulars.	Kumher.	Akhegarh.	Bhartpur.	Nagar.
1	Number of owners who cultivate as tenants.	2,312	930	...	555
2	Area so cultivated	18,581	7,426	5,442	3,128
3	Percentage of total cultivation	13	6	4	3

Adding this, we find that proprietors cultivate altogether 56 per cent. of the total area in Kumher, 45 per cent. in Akhegarh, 40 per cent. in Bhartpur and 45·5 per cent. in Nagar, but even so the proportion is considerably lower than in adjoining British districts, *e.g.*, Gurgaon, where owners as such hold over 50 per cent. of the cultivation. The reason is of course to be found in the weakness of the proprietary bodies. The average area of cultivation per owner varies from 22 bigahs or 9 acres in Bhartpur to 46 bigahs or 19 acres in Nagar, and for a tract with no big landlords and held exclusively by tribal bodies or village communities this is decidedly high.

In the Punjab in the same year, 1897-98, the average area of cultivation per owner was 7½ acres, and in the adjoining district of Gurgaon 9 acres.

Reasons for small area held by occupancy tenants.

51. The area held by occupancy-tenants is very small—under 3 per cent. in all tahsils but Nagar, where it amounts to 14 per cent. In the three northern or Mewat tahsils of Gopalgarh, Pahari, and Kama the area held in occupancy tenure ranges from 11 to 20 per cent. of the total, and Nagar, as already remarked, approximates in agricultural conditions to the Mewat, where owing to the greater density and energy of the population, and also to the influence of British ideas and the competition of British tenants from Gurgaon, the demand for land is considerable and tenant-right has a recognised market value. Hence in these three tahsils we had last year to deal with nearly 8,000 claims to occupancy rights. In the central (excluding Nagar) and southern tahsils, on the other hand, the tenants, though encouraged to bring forward their claims to occupancy-rights, have shown little disposition to do so. In fact, as was the case in the Punjab at the first regular settlements 45 years ago, the owners are often more willing to concede than the tenants to accept the occupancy or protected status. The movement among tenants in the northern tahsils, to which it spread from British territory, to have their undefined and customary status now defined, is in these tahsils confined to the villages along the east boundary adjoining Agra and Muttra, where land has a higher value. Elsewhere the cultivators have as yet only dimly appreciated the advantages of the occupancy status, while they still with the memory of past over-assessments fresh in their minds, shrink from undertaking the responsibility for the land-revenue incident to it. Hence the number of claims for occupancy rights in these tahsils has been comparatively few, *viz.* :—

Kumher	...	...	...	...	745
Akhegarh	...	...	...	...	314
Bhartpur	...	...	...	...	1,316
Nagar	...	...	...	..	1,711
				Total ...	4,086

and the area in which occupancy rights have been allotted is, except in Nagar, comparatively small. Other reasons for this indifference are (1) many of the old tenants who if they had kept a grip of their holdings would now be entitled to occupancy rights, broke down or disappeared in the famine year, (2) those tenants who remained or who returned owing to the harshness of the revenue system preferred to cultivate from year to year, being afraid to obtain any permanent rights with the corresponding liabilities in the land, (3) in estates held in shares the owners—especially in Akhegarh—give written leases to the tenants and alter the rent from year to year, (4) the orders passed by the State soon after the famine that the owners should not realise from the tenants more than they paid to the State, though not regularly enforced, gave the tenants a protection against enhancement, (5) a large proportion of the tenants still pay at owner's rates.

I am inclined to think that when the new assessments are given out, the relative position of owner and tenant defined, and the right of the former to exact from a non-protected tenant a rent up to 50 per cent. in excess of the State demand—the limit fixed last year by the Durbar at my suggestion—clearly recognized, many tenants who have now held back will bring forward their claim to occupancy rights. In fact, I have had numerous cases in which tenants, who at the beginning of the operations distinctly disclaimed any such right, have subsequently come forward to assert it.

Area held free of or at favourable rents.

52. The area held by tenants free of rent. ranges from 1 per cent. in Kumher to 3·5 per cent. in Nagar. This is partly in the occupation of village menials, Brahmins, *purohits*, and *chaukidars* on condition of village service.

The area held by tenants at favourable rates is inconsiderable, except in Kumher—6·5 per cent.—where the owners of many of the depressed villages have leased out holdings to tenants at less than the village rates.

53. Excluding the area cultivated by owners and the above-mentioned classes of tenants, the proportion of the area held by tenants-at-will is 47·5 per cent. in Kumher, 55·5 per cent. in Akhegarh, 59 per cent. in Bhartpur and 40 per cent. in Nagar. Rents in kind are practically non-existent, and all this area pays cash rents, which are (1) at owner's rates or (2) at other rates. In Kumher and Bhartpur the areas held under (1) and (2) are almost equal, in Akhegarh only 6·5 per cent. is held at owner's rates and 49 per cent. at other rates, while in Nagar the reverse is the case—32 per cent. being held at owner's rates and 8 per cent. only at other rates.

Area held by other tenants.

The reasons for the lowness of the rents, and the large area held at owner's rates, are those given in paragraphs 83—85 of last year's report. The subject will be again referred to in Chapter VII. In Kumher and Akhegarh, and probably also in Bhartpur and Nagar, there are many cultivators who possess no ploughs or plough-oxen of their own, and who work small holdings by hiring these from their neighbours. The number of such tenants and the area worked by them is :—

Tahsil.	No. of tenants.	Area.
Kumher	1,671	9,780
Akhegarh	2,495	14,985

These tenants are generally village menials with no capital, but the large area held by them, especially in Akhegarh, is an evidence of the weakness of the cultivating body.

54. The cultivators are of all classes—Jats, Brahmins, Gujars, Meos, Malis, Thakurs, Kolis and Chamars, but the latter are probably the most numerous, and the large proportion of the area in the hands of menials—a weak class and always quick to succumb in seasons of trial—is a decided element of weakness in the agriculture.

Classes of cultivators.

In most estates some of the area is in the hands of non-resident tenants. I have statistics only for Bhartpur and Nagar where the total area held by such tenants is 8,962, and 9,893 *bigahs*, or 7·5 per cent. and 10 per cent., respectively. Where the competition for land is small, and it is necessary to attract outside tenants these are allowed to hold at lower rates than village tenants. This is the most frequent phenomenon. But in the east of Bhartpur and Kumher, where holdings are small, cultivators numerous, and many tenants from Muttra compete for the land, the tenants from outside generally pay a higher rent than those who are resident. This, as will be seen in Chapter VII, is the only part of the tract where competitive rents are found.

55. There are no *istamrari* (permanently-settled) estates or plots in any tahsil, and only three villages are held under the favourable assessment known as *chauth*. This is not, however, the form of *chauth* found in Dig (paragraph 86 of last year's report) under which the State takes one-fourth and remits three-fourths of the rental or net assets. Here the State takes three-fourths and remits one-fourth of the assessment. The villages are :—

Chauth and other favourable assessments.

(1) Karemna in Kumher. One-fourth of Rs. 471, the total assessment, or Rs. 118 is remitted in favour of the Sinsinwar owners, and this sum is allowed to them from the treasury after deducting Rs. 36 as commutation for the service of three guns and Rs. 4 for other cesses, leaving a balance of Rs. 78. The same method of calculation will be followed in the new assessment.

(2) Ajan in Kumher. This is a large estate held by Kunthel Jats and now assessed at Rs. 7,500. Formerly when the assessment was only Rs. 2,000, one-fourth, or Rs. 500, was remitted in favour of the owners, and this has been maintained as a fixed sum payable from the treasury. The owners are in return liable for the service

of 12 guns, which is commuted by a deduction of Re. 1 per gun per month or Rs. 144 per annum, but for the last 12 years, owing to disputes as to the shares the amount has not been disbursed.

(3) Marwara in Bhartpur. This estate is owned by Jats and Brahmins, who receive a remission of one-fourth on the *jama,* Rs. 1,125, after a deduction of 10 per cent. The present amount is Rs. 253, and they are in return liable for the service of 10 guns. For the last 2 years the amount has been attached for payment of arrears of land-revenue.

In Akhegarh and Nagar there are no *chauth* or otherwise favourably assessed estates. As the three estates referred to will be assessed in the ordinary way and the remission calculated as before, they have been treated as *khalsa* in all the returns.

Gradual resumption of revenue free tenures.

56. Besides the villages at present held in *mafi* or *inam*, (paragraph 4) of which further details will be given in Chapter IX, Part II, many of the estates—now *khalsa*—held by Sinsinwars, other Jats, and Gujars in Kumher, Akhegarh and Bhartpur were formerly held in *inam*. The ancestors of the present owners helped by their swords to form the Bhartpur State in the middle of last century, and were generally rewarded by the grant of the lands they already held or of the lands conquered from others, revenue-free on condition of military service, each such estate having to furnish a fixed *quota* of guns or fighting men. Such grants were lavishly made by the earlier rulers, Churáman, Badan Singh, Suraj Mul and Jawahir Singh, in the days when the Jat conquests were rapidly extending the boundaries of the State, *i.e.*, up to about A.D. 1770. When their power began to decline under Ranjit Singh and his successors, and the State was being gradually reduced to its present limits by the rise of the Alwar State on the west, and the inroads of the Moghuls and Mahrattas on the east, the Bhartpur Chiefs endeavoured to recoup themselves for the lost territories by squeezing a larger revenue out of those which were left to them, and for over 100 years their efforts have been constantly directed to the resumption of the revenue-free tenures granted by their predecessors. At first the obligation of *chauth* or payment of one-fourth of the rental—probably borrowed from the Mahrattas—was imposed by Rani Kishori the widow of Suraj Mul. During the reign of Ranjit Singh (1777—1805) a great number of revenue-free grants were resumed under one pretext or another. The dispute as to the succession in 1825 between Balwant Singh on one side, Durjan Sal and Madho Singh on the other, gave a further pretext for resuming the grants held by the partisans of the latter. This dispute is locally known as the *Madhogardi*, and many of the villages date the resumption of their grants to this event. The burning of the palaces at Kumher was another cause. It is said that the *inamis* on guard were directed by the State to burn a corpse, and resenting this outrage on their dignity set fire to the palaces—an act which led to the resumption of many *inams* in Kumher.

The same system was steadily pursued by the late Maharaja, who by what is known as the *nath* rule, on the death of an *inami*, invariably resumed the grant unless male heirs of the body were forthcoming. Another favourite device was to resume the *jagir* or *inam* and give the holder a post in the State bringing in an equal income. Thus the revenue-free area has been steadily reduced and is perhaps less than in any State in Rajputana. For this reason and also owing to the absence of any rule of primogeniture, there are hardly any large *jagirdars*. The most important are (1) Faujdar Debi Singh, Member of Council, who holds the large *jagir* of Balabgarh in Bhusawar, which was, however, temporarily attached by the late Maharaja in liquidation of a debt and is still managed by the State, and (2) the Thakurs of Pathena in Akhegarh, whose grant was temporarily resumed by the Maharaja in 1886 under circumstances which must be narrated as they have a bearing on the assessment of that tahsil.

Rebellion of Pathena Thakurs in 1886 and resumption of the *jagir*.

57. These Thakurs are the descendants of one Sardul, a Jadu Rajput, who was adopted by Atmal, brother of Churaman, and thus became a Sinsinwar. He left 14 sons, who gave rise to the 14 houses or families, who till recently held the two large estates of Pathena and Jaroti, about

12,000 bigahs, on the south-west of Akhegarh adjoining the Banganga and Jaipur territory in *jagir*, first from Jaipur and afterwards from Bhartpur. They built a fort and a town which after the traditional Jat fashion they surrounded with a mud wall. For long they were the most trusted adherents of the Bhartpur Durbar. About 60 years ago some of the grant was confiscated by Maharaja Balwant Singh owing to their disputes with one another. When Maharaja Jaswant Singh in 1884 imposed the *dami* or *patwar*-cess in revenue-free villages, they stubbornly refused to pay it as being an encroachment on their rights, and it is said attacked the officials sent by the State to enforce compliance. The Maharaja, having previously obtained the sanction of Government to the use of force to compel his contumacious subjects to submission, issued several proclamations calling on the Pathena people to submit. As these produced no effect, a considerable force of all arms was sent against them on 20th November 1886. The State artillery was brought to bear on the fort. The Thakurs replied ineffectually with a few old guns. After two days' bombardment the fort was demolished and the town set on fire. The Thakurs unable to make further resistance fled in all directions. Fifty-two were killed, 111 arrested and sentenced to various terms of imprisonment. The Maharaja on 9th December 1886 passed orders confiscating the *jagirs* of Pathena for a year, with the exception of the shares already resumed for failure of heirs and certain shares which were maintained in favour of some Thakurs who had not participated in the rebellion. The remission, though nominally only for a year, has lasted and was probably meant to last for a much longer term.

In 1887 and following years many of the absconding Thakurs encouraged by the promise of pardon returned, and after they had made submission separate orders were passed in each case for the restoration of their shares, but in many cases the lands restored were different from those held prior to the resumption, and till these complications are cleared up the exact area restored cannot be determined, but it appears that in Pathena out of a total area of 9,168 bigahs the present *mafi* area, *i.e.*, what escaped confiscation and what was subsequently restored by the Maharaja, is about 4,500 bigahs. The balance represents (1) area resumed prior to 1886 for failure of heirs which will of course remain *khalsa*, (2) area resumed in 1886 but not yet restored. The Dewan and Political Agent in 1897 sanctioned the restoration of (2) to the former *mafidars* or the heirs of their bodies, but on condition (*a*) that the income realised by the State up to that date should not be refunded, (*b*) that the Thakurs should pay up the balance due from them up to the date of restoration. I am now endeavouring to clear up these and the other various entanglements in the case which is full of complications, but which I hope to settle before giving out the new assessments. Meantime till the *khalsa* and *mafi* areas have been separated, I have treated the whole estate in the returns of last and present settlement as *khalsa*.

Pathena also embraced the adjoining estate of Jaroti, which is a congeries of 10 estates—*nanglas* or hamlets—each really a separate estate, but combined into one for convenience, held generally by Mina cultivators. The total area is 2,745 bigahs. This was also included in the resumption of 1886, and during or after the settlement of 1890-91, the *theka* or lease was given to the cultivators on payment of Rs. 450 *nazarana* which amounted to a recognition of their proprietary rights. The rights of the occupiers will now be maintained, but as regards the *jagir*, the same rule will apply as in Pathena. The area still under resumption is about 900 bigahs, but pending the disposal of the case all the area is treated as if *khalsa* both at last settlement and now. The facts of the case have been narrated at some length, as it has been a thorn in the side of the administration for the last thirteen years, and attempts may be made hereafter to interfere with the settlement now arrived at. Since writing the above, I have obtained figures which show I believe fairly correctly, the area which after giving effect to the orders of 1897 will be *khalsa* and *mafi* in each estate, *viz.*:—

	Khalsa.		Mafi.			
	Total.	Cultivated.	Total.	Cultivated.	Total.	Cultivated.
Pathena	2,315	1,113	6,910	3,710	9,225	4,823
Jaroti	629	477	2,116	1,554	2,745	2,031
Total	2,944	1,590	9,026	5,264	11,970	6,854

58. The following table shows for each tahsil the details of land sold and mortgaged (*a*) to agriculturists, (*b*) to non-agriculturists, prior to and subsequent to the settlement of 1890-91 : —

Sales and mortgages.

Tahsil.	Detail.	MORTGAGES.								SALES.							
		To Zamindars.				To money-lenders.				To Zamindars.				To money-lenders.			
		Area.	Cultivated.	Amount.	Rate per bigah.	Area.	Cultivated.	Amount.	Rate per bigah.	Area.	Cultivated.	Amount.	Rate per bigah.	Area.	Cultivated.	Amount.	Rate per bigha.
				Rs.	Rs.			Rs.	Rs.			Rs.	Rs.			Rs.	Rs.
Kumher	1855-90	19,076	15,954	1,23,576	8	4,320	3,378	17,554	5	8,363	5,160	14,528	3	2,156	804	2,590	3
	1891-98	2,613	2,486	17,431	7	1,125	989	5,613	6	2,482	1,441	1,721	1	260	163	448	3
	Total	21,689	18,440	1,41,007	8	5,445	4,367	23,167	5	10,845	6,601	16,249	2	2,416	967	3,038	3
	Percentage	9	13	...	...	2·5	3	...	...	4·5	5	...	...	1	·5	...	...
Akhegarh	1855-90	2,692	2,261	7,495	3	269	220	992	5	15,906	11,492	13,561	1	15,861	11,011	7,606	1
	1891-98	981	821	1,227	2	687	763	552	1	2,621	1,764	3,295	2	3,217	2,272	1,769	1
	Total	3,673	3,082	8,722	3	956	983	1,544	2	18,527	13,256	16,856	1	19,078	13,283	9,375	1
	Percentage	2	3·5	...	...	·5	1	...	...	11	10·5	...	...	11	10·5	...	...
Bhartpur	1855-90	8,693	4,860	96,233	20	4,583	3,171	21,934	7	7,063	3,729	14,294	4	2,983	1,995	4,951	3
	1891-98	5,000	3,936	35,052	6	663	657	6,963	11	2,725	1,341	4,487	3	3,019	1,319	2,917	2
	Total	13,693	8,796	1,31,285	14	5,246	3,828	28,897	8	9,788	5,070	18,781	4	6,002	3,314	7,868	2
	Percentage	5·5	7	...	...	3	3	...	...	4	4	...	...	2·5	2·5	...	...
Nagar	1855-90	1,275	1,058	3,644	3	274	271	831	3	1,088	1,469	3,630	2	27	25	60	2
	1891-98	920	905	4,341	5	264	263	767	3	1,057	770	1,008	1	407	311	536	2
	Total	2,195	1,963	7,985	4	538	534	1,598	3	3,045	2,239	4,638	2	434	336	596	2
	Percentage	1·5	2	...	...	·5	·5	...	...	2	2	...	...	·5	·5	...	...

Expressed in the form of percentages on total and cultivated area, the areas sold and mortgaged come out as follows :—

Tahsil.	Detail.	Mortgages.		Sales.		Total of sales and mortgages.	
		Total area.	Cultivated area.	Total area.	Cultivated area.	Total area.	Cultivated area.
Kumher	Zamindars	9	13	4·5	5	13·5	18
	Money-lenders	2·5	3	1	·5	3·5	3·5
	Total ...	11·5	16	5·5	5·5	17	21·5
Akhegarh	Zamindars	2	2·5	11	10·5	13	13
	Money-lenders	·5	1	11	10·5	11·5	11·5
	Total ...	2·5	3·5	22	21	24·5	24·5
Bhartpur	Zamindars	5·5	7	4	4	9·5	11
	Money-lenders	2	3	2·5	2·5	4·5	5·5
	Total ...	7·5	10	6·5	6·5	14	16·5
Nagar	Zamindars	1·5	2	2	2	3·5	4
	Money-lenders	·5	·5	·5	·5	1	1
	Total ...	2	2·5	2·5	2·5	4·5	5

The figures establish the fact that in all tahsils but Nagar alienations have been much more frequent than in the northern tahsils. As the proportions of the total and cultivated area nearly agree we may consider the latter alone.

Analysis of the figures by tahsils.

59. In Kumher 21·5 per cent. or over one-fifth of the total cultivated area has been alienated—5·5 per cent. sold and 16 per cent. mortgaged—for a sum equal to one and-a-half years' revenue. About one-sixth of this or 3·5 per cent. has passed to non-agriculturists.

In Akhegarh 24·5 per cent. or almost one-fourth has been transferred—21 per cent. sold and 3·5 per cent. mortgaged—for a trifling sum of about Rs. 35,000 or one-fourth of one year's demand. Nearly half of this has passed to non-agriculturists.

In Bhartpur 16·5 per cent. or about one-sixth of the cultivated area has changed hands—6·5 per cent. by sale and 10 per cent. by mortgage—for a sum equal to one and one-fourth years' revenue demand, and one-third of the area transferred has passed to non-agriculturists.

In Nagar only 5 per cent. or one-twentieth of the area has been sold and mortgaged for less than Rs. 5,000—the areas sold and mortgaged are nearly equal and only one-fifth has gone to non-agriculturists.

For the whole tract 9 per cent. of the total and cultivated area has been sold, 7 per cent. of the total and nearly 9 per cent. of the cultivated area mortgaged, so that a little over one-sixth of the cultivated area has been alienated,—36 per cent. of the sales and 22 per cent. of the mortgages having been to non-agriculturists.