

back of the house, and gardens within the compound wall. It is not possible to estimate the amount of land bearing crops, but the greater part of it grows cucumbers or spices, and miscellaneous herbs or fruits or pulses for home consumption.

Maize is often grown, and so are plantains, *bael*, etc., while in the out-lying plots *chana* and *kultha* are often to be found. I estimate that of 1,14,000 acres shown under this head at least half must actually grow some sort of crop.

Garden produce and fruit-bearing orchards, represents mango groves, plantations of plantains, *pulang*, jack fruit, toddy palm, and other trees, and gardens where such are distinguished from homestead. Probably of the 51,000 acres about 40,000 represent groves of mango and other trees, which at 25 trees to the acre would give a total of a million trees in the Province besides the isolated trees on raiyati holdings, or on homestead lands or along the roads.

Under yams are included the true yam or *khamba alu* and the commoner *khandamul* or sweet potato. About 3,500 acres are shown under this head, but this is exclusive of the areas included under homesteads in column 27 (Appendix F).

Baigun or *Brinjal* (*solanum melongena*) is the most popular and widespread of Orissa vegetables. The area shown under this head in the *Khasras* is only 2,800 acres, but there must be quite another 10,000 acres included under columns 27 and 29.

Others in column 30 includes chiefly various kinds of melons, pumpkins, and cucumbers grown on the sand-covered banks of rivers, and a small area under onions and *saru* (*colocaria antiquorum*). Much of the area under these crops is however, included in homestead land.

127. Maps Nos. VI to VIII show the differences in the proportion of land in each local area growing *sarad* and *biali* rice, and it will be observed that there is a very great variation in the figures for the different districts :—

		PERCENTAGE ON NETT CROPPED AREA OF—				
District.		Early rice.	Winter rice.	Spring rice.	Twice-cropped land.	Homestead land.
Cuttack	....	13	70	2	14	5
Balasore	....	1	91	....	1	5
Puri (Sadar Sub-division)	....	6	78	4	10	3
Khurda	....	....	85	....	3	2
Orissa		6	80	1	8	5

It will be seen that Cuttack and Puri Sadar subdivision contain far more twice-cropped and *biali* land than Balasore. Khurda grows practically no *biali* or *dahua*, there being but a small area of *jheels* suitable for the latter, while the people seem to have an aversion to sowing early rice and prefer the more risky but more prolific *chhota laghu*. It is likely that the twice cropped area in Balasore is underestimated owing to collusion between amins and proprietors, but it is a fact that there is far less *biali* or *rabi* grown than in the other districts partly owing to the difference in the soil, and partly to the greater laziness of the inhabitants.

I now proceed to give some account of the cultivation of the principal crops mentioned in the preceding paragraphs.

128. The staple crop of Orissa is rice (*oryza sativa*) called in Uriya *dhan*. It is grown on 87 per cent. of the total cultivated area viz, on 85 per cent. in Cuttack, on 92 per cent. in Balasore, and on 88 per cent. in Puri, and the distribution within each of these districts may be seen from maps Nos. VI to VIII. In very few villages is less than half of the arable land under rice and it is common to find more than nine-tenths growing this cereal in some form.

The varieties of paddy are very numerous, but they all fall under one of three heads according to the season at which they are sown and reaped.

Biali or autumn rice is the earliest crop and is reaped in August and September.

Sarad or winter rice is sown in June-July and harvested between October and January.

Dahua or spring rice is sown after the floods have subsided and harvested in March-April.

The winter rice is subdivided according to the amount of water it requires into *guru* or heavy and *laghu* or light varieties and the latter again into small, medium and large*. The following table will show the principle heads of the classification.

Dhan ...	<i>Biali.</i>	...	{ <i>Satika</i> ...	...	...	A large number of varieties known by various names as <i>champa</i> , <i>kantakuli</i> , <i>nudia</i> etc., etc., see Appendix H. to Mr. Kingsford's report on Balasore.
			{ <i>Bara.</i>			
	{ <i>Sarad†</i>	...	{ <i>Laghu.</i> ...	{ <i>Chota laghu.</i>		
	{ <i>Dahua.</i>		{ <i>Guru.</i>	{ <i>Majhla laghu.</i>	{ <i>Bara laghu.</i>	

129. The earliest of all the rices is the *satika* variety of the *biali* said to ripen within sixty days of its sowing, while the heavier qualities take a month longer.

These kinds of paddy are always grown on the higher lands of the village and for preference in a light loamy soil, the best yield being from crops raised on the *kala* lands and in favourable years on the *pal* lands also.

The land is ploughed several times as early as possible after February, and then is harrowed and left to mellow in the sun, and with the first rain in June the seed is sown broadcast at the rate of about 30 seers to a maund per acre, manure having been previously spread over the field. Three days later the seed is ploughed in and the land harrowed; a second harrowing is given a fortnight later and the plants are thinned out.

After this the crop requires weeding two or three times, and in August or September is ready to be cut. The reaping is done by men and women with a sickle, and only a few inches of stubble are left on the ground.

Biali rice if on high land may be followed by pulses, generally *kulthi* or *birhi*, and on alluvial or homestead lands by mustard, linseed, or *harar*. In rich and irrigated soil or in very favourable seasons *laghu* paddy is also transplanted into the fields from which the *biali* has been cut. The total area shown in the crop statements under *biali* is 166,900 acres, viz, Cuttack, 128,000; Balasore, 9,200; Puri 29,700.

It is more precarious than the *sarad* crop, being injuriously affected by drought in June and July, but on the other hand, where the *sarad* is spoiled by want of rain in September and October, there may be a bumper crop of *biali*.

It is curious how much more popular this crop is with the cultivators of Cuttack and Puri sadder than in Khurda or Balasore, more than three-fourths of the total *biali* area lying in Cuttack.

130. While the autumn rice is always sown broadcast, the winter varieties may be either transplanted or sown at once where they are to grow. As the latter is by far the more popular method I shall describe it first.

The lightest of the *laghu* varieties differ but little from *biali*, while the *bara laghu* pass with no very marked line of division into *guru*, but as a rule the *laghu* paddy is grown in moderately low lands, which are wet, or under six inches to a foot of water, pretty continuously from June to October, and likes a fairly stiff soil (*matal*). The crop having been harvested in December the land will either grow a crop of *mung* or millet, or lie fallow until April or May, when it is ploughed as often as the weather and the resources of the cultivator permit, and manure consisting of little heaps of cowdung and refuse is spread over the surface. The number of ploughings depends on the quality of the soil and its elevation, high lands requiring more ploughing than low. Something depends also on the quality of the rice to be grown, the finer varieties needing more careful preparation of the soil. The seed, about 30 to 40 seers to the acre, is sown in the end of May or beginning of June if the weather is favourable, and germinates within fifteen days. Ordinarily it is sown dry, but if the sowing is delayed or there is a superabundance of water, it is first steeped so as to induce partial germination and to prevent it from floating. About a month after sowing, if there is sufficient water in the

* *Chota laghu*, *majhla laghu* and *Bara laghu*.

† In Balasore the best known divisions of *Sarad* are *esu*, *nabakanda* and *guru*.

field, the plough is passed over it so as to thin out the seedlings, now six inches to a foot high. Those that are uprooted and left floating in the water are replaced by hand and grow again readily. This operation, known as "*biushan*" is considered to be of great importance, and it is thought most unfortunate if for want of water it has to be delayed until August.

As soon as the young plants have re-established themselves after this violent disturbance, the harrow is passed over them so as to press them into the mud. This is called the *kala mahi*. A week or ten days later weeding begins, and at the same time any irregularity in the interspacing of the plants is corrected.

Sometimes only one weeding suffices, but good cultivators prefer to have a second weeding a fortnight later. The plants flower in October or November and the wild paddy (*balunga*) left over from the dropped grains of previous harvests is picked out.

For the first year or two this self-sown paddy is reaped with the rest, but it soon deteriorates and becomes known as '*rashi*', the grain of which is liable to drop from the ear before harvesting, and the degeneration continues until the plant resembles wild paddy. It has therefore to be separated every two years, and this is often possible by sowing red after white varieties, as they are readily distinguished by the colour of the lower part of the stem and of the girule (*kanta*). Sometimes, too, transplanting is resorted to finally eradicate the *balunga*.

When the ears are full and ripened and before the grain begins to get dry and drop the harvesting begins. Sometimes the standing paddy is first laid low with a bamboo to prevent the grain being scattered by the wind; then the reapers come and with the *dao* or sickle cut off the stalks close to the ground. The cut paddy lies for a few days and then is gathered into larger sheaves which are carried to the homestead by cart or *bunghi* and there stacked.

The cultivation of the *Guru* varieties is almost the same, but as they are grown in the heavy clay lands that retain two to four feet of water, less careful ploughing is necessary and manure is more sparingly given, if at all. In very low lands (*jalapat*) no refinements of cultivation are possible, and the seed once sown is, if the land is still dry, ploughed over and harrowed, and if the rains have begun, only pressed in with the harrow and then left, the depth of water being regulated so far as possible by means of the *oils* of the field. The harvesting is done a month later than that of the *laghu* varieties, *i. e.*, in January, and as a rule only the ears are cut, the straw being too sodden to be of value.

131. Transplantation is an unpopular system of cultivation, as it involves more labour and the transplanted seedlings are very delicate for the first month and liable to injury by flood and still more by drought; and a very careful enquiry made by Mr. Arnott, Executive Engineer of the Mahanadi Division, showed only 4 per cent. of the cultivated area to grow transplanted rice. It is, however, admitted that, when successful, transplantation gives a larger yield, and it is resorted to for fields (especially when irrigated) that grow a *sarad* after the *biali* crop, to get rid of the wild paddy, to avoid the risk of loss by early floods, and to replace the loss of the broadcasted crop, if such occurs before the end of July.

The nursery is generally a field near the village well manured and fenced in to keep off jackals and other animals. The seeds may be sown either dry or wet. If the former method be adopted, the field is ploughed while dry as often as possible—not less than five or six times—and the soil carefully pulverised and weeded. Before sowing a little sand is sprinkled on it and the seed scattered and ploughed in. It is then carefully watered until the plants come up.

In the wet method the land must be flooded and then ploughed up until it is of the consistency of a thick gruel. The seeds are soaked for twelve hours in an earthen jar or *handi* and then partially dried in a basket covered with straw, and in this condition are sown broadcast on the sticky surface of the field. In four or five days the plants show themselves and water is then gradually admitted.

When a month old the seedlings are ready to be transplanted into the rice field which has been prepared by ploughing and manuring as for broadcasted paddy, and is once again ploughed and harrowed before the young plants are ready. The seedlings, 6 inches to 18 inches high, are arranged in bunches of three to four and six to nine inches are left between each bunch. The roots are

carefully imbedded to the depth of a couple of inches; they are then left and require no further attention beyond a good weeding and a copious supply of water.

The earlier the transplanting is done the better the results, and the middle of June to the middle of July is considered the proper time; but the operation often goes on for a month later.

132. *Dalua* is a coarse variety of paddy grown on lands too heavily inundated to yield *sarad*, and especially in the shallow water round the edges of *jhils* and water-courses. The soil is generally clayey and often saline, for it is a peculiarity of this crop that it is but little affected by the superabundance of saltpetre.

A nursery is selected in a corner of a tank or a drain, and the depth of water is regulated by means of little walls of mud. It is ploughed once or twice and levelled; the seed having been previously steeped for twenty-four hours in an earthen vessel, is placed in a basket and covered with straw for two or three days until it begins to germinate: it is then sown very thickly in the seed bed. The land is prepared to receive it by ploughing in the water until the whole becomes one pulpy mass with an inch or two of water over it. In this the seedlings, when about a foot high, are imbedded, and require to be plentifully supplied with water until they flower. In March or April the crop ripens and is harvested.

Only 36,000 acres are shown in the *khassras* as growing *dalua*, but of recent years there has been a tendency to extent its cultivation in inundated areas with the aid of water supplied by the Irrigation Officers through canalised channels. There is but little *dalua* in Balasore or in Khurda subdivision, and it is only in the low lying lands of north eastern Cuttack and in the heavily-flooded Parganas of Purbaduai and Oldhar in Puri that it forms a staple crop. After the Brahmini floods of 1894 a large area was sown with *dalua* rice in the Bayang Pargana of Balasore, and it is likely to come into favour in the south of the District.

133. Two methods of threshing the paddy are followed, the former generally for *biali* and *laghu* paddy, the latter for *sarad* and for *dalua*.

The rice is, in the former case, cut three to six inches from the ground and carried to the threshing floor (*khala*), where it is stacked. A plank is then fixed so as to form an inclined plane about three feet high at the upper end. The thresher stands at the head of this plank, and holding a bundle of paddy with the ears away from him strikes it on the plank until the grain falls out on the threshing floor, from which it is afterwards collected.

In the other method, the paddy which has been cut with only a few inches of stalk is spread on the threshing floor and trodden by bullocks yoked to the pole in the centre.

134. The winnowing is done by means of a flat basket (*kula*) in which the grain is placed. The basket is lifted by the operator with both hands above his head and shaken from right to left and left to right with a slight vertical motion, so that as the man steps backwards the light and worthless refuse (*achara*) is left suspended in the air and blown away by the breeze. After this has been done for a few minutes the grain is well fanned to blow away the remaining dust and then placed on the top of the heap of paddy ready to be stored.

135. Paddy is generally stored in bamboo baskets (*doli*) plastered over with mud and dung. Often also in pits dug in the yard of the house. Mahajans use small storehouses of mud and wood raised two or three feet from the ground and capable of holding 500 to 1,000 maunds.

Clean rice.

136. Rice is prepared from paddy in two ways, viz.:—

- (a) By drying the paddy in the sun, and then crushing it in the *dhenki*. This is known as *atap* rice;
- (b) By boiling the paddy, and then drying it in the sun and crushing it in the *dhenki*. This is what is generally eaten, being known as *sidha* rice.

The outer husk of the paddy which is thus removed is called *tunsa* and is used for fuel, whereas the fragments of husks and the outer shell covering the

grains of rice go by the name of *kunda*, and form a favourite fodder with cattle. Three seers of paddy would yield about quarter seer of *tunsa* and the same quantity of *kunda*.

The work is usually done by women on contract, and 10 *gaunis* of clean dry rice are returned for every 25 *gaunis* of paddy, or sometimes of every 22. This, however, leaves a large margin of profit to the operator, even allowing for the difference in the specific gravity of rice and paddy; and in the returns of the Public Works Department the ratio rice to dry paddy is taken at two-thirds. This result has been verified by experiments made by Mr. Maude and Babu Jamini Mohan Das, but is perhaps rather high, and for the purpose of the calculations in this report, I have taken the proportion of rice to paddy as 5 to 8, the accepted ratio of the Agricultural Department.

137. Mr. N. N. Banerjei takes the average outturn per acre as 15 to 20 maunds of paddy, which closely corresponds to popular estimate. Roughly, the people classify rice lands as first, second, and third class, according as they are capable of producing 3, 2, or 1 *bharan* of paddy. Now a *bharan* is generally about 8 Cuttack maunds, and the area of first class land is certainly no less than that of third class so we may take the popular average at 2 *bharans* or 16 maunds, equal to 10 maunds, (Cuttack weight) of rice; which is approximately correct.

The results of the last ten years' experiments by officers of the Public Works Department give an average outturn of 19.72 maunds of paddy on irrigated and 15.59 maunds on unirrigated land. The results of crop experiments of 1895-98 by officers of the Settlement and district staffs gave an average for irrigated land of 1,996 lbs. and for unirrigated of 2,003 lbs. per acre.

Comparing these with the provisional estimate in 1891,§ we get the following :—

						WEIGHT OF CLEAN RICE IN LBS. PER ACRE.	
						Irrigated.	Unirrigated.
						Mds.	Mds.
Irrigation Department, 1885-96	....	....	....	....	....	1,014	802
Estimate submitted to Government of India by Director of the Department of Land Records and Agriculture	....	....	....	....	....	1,045	902
Settlement and District experiments of 1895-98	....	....	....	....	....	1,247	1,252
Average	....	....	....	....	....	1,102	985

This is equivalent to about 13½ standard maunds per acre for irrigated and 12 maunds per acre for unirrigated lands †.

An examination of the returns does not discover satisfactory evidence of any superiority in the yield of transplanted rice over that of broadcast. The outturn of straw varies from 20 to 50 maunds, and may be taken on an average at 25 maunds.

Biali is generally estimated to yield two-thirds of the weight of grain obtained from winter rice, or say 8 maunds of cleaned rice to the acre and about 18 maunds of straw.

Dalua was found by the Inundation Committee to give the largest yield of all, but so much of the field is taken up by the mud walls for regulating the water that I take the outturn per acre as equal to that of *biali*.

The bye products obtained in the threshing and husking of paddy are the outer husks or *tunsa* used for fuel and the bran or *kunda* which is a good cattle food.

138. *Mandia*, the *marua* of Bihar, is an upland cereal with a small reddish grain, like a mustard seed. It is grown on high, light, and inferior soils on which *biali* rice would hardly succeed.

Mandia. ‡

* See also paragraph 109.

§ Department of Land Records and Agriculture to Government, No. 356A, dated 3rd March, 1898.

† Standard maunds of 822 lbs.

‡ *Eleusine corocana*.

Sometimes it is sown broadcast in May; more often it is first sown in seed beds and transplanted in June when the seedlings are six inches to a foot high. The transplanting requires to be rapidly done, as the plants cannot be left out of the ground long. The crop ripens in August-September and yields about 6 to 8 maunds of seed to the acre. This is ground into flour and eaten in cakes or with rice by lower classes. It is said to have the merit of producing such a feeling of satiety that after one full meal a man does not feel inclined to eat again for twenty-four hours.

It requires good rain in June and July, and is liable to be damaged by caterpillars.

This is, perhaps, the commonest cereal after rice in Puri and in Cuttack, in which districts it is grown on some 58,000 acres, and is generally followed by a crop of *kultha*. In Balasore it is rare. Another variety, known as *kakari mandia*, so called because it is supposed to derive sufficient moisture from the dew, is grown as a *rabi* crop on riverside lands, but is less common. It is a late crop, being sown in February and reaped in April, and if the rain is deficient, requires artificial irrigation.

139. *China* is a millet grown as a *rabi* crop on *biali* and *laghu* lands. It is a delicate plant requiring a good rich loam and abundant water. The field selected is generally near a watercourse, and, as soon as the previous crop has been harvested, is ploughed and harrowed three or four times. The *china* is mixed with sand and sown broadcast, and in eight or nine days the plants spring up. Should rain fail, it requires constant irrigation. In three months it is ready to cut, and in a good season may produce 8 maunds per acre; but the crop is very uncertain, and Mr. N. N. Banerjei puts the average at only 3 maunds. It is eaten like rice, and also cooked with milk, but is not common enough to be of great value as a food-grain. The *milan khasra* only shows some 500 acres, but this must be below the mark.

140. Wheat, locally known as *gahama*, is grown to a very small extent on upland fields after rice, and generally on loamy or silt-covered soil. It is sown broadcast in October-November, and reaped in April; and is as a rule left to grow up in the meantime as best it may.

Probably 500 acres, chiefly in the Jaipur Subdivision of Cuttack, are sown with this cereal, but only some 300 acres are recorded in the *khasra*.

141. Barley, or *jaba*, is grown on light sandy lands especially in areas exposed to inundation. It is sown broadcast about the 1st of November and is reaped in March. The grain is boiled and eaten whole or made into flour and is said to be very 'cooling'.

Over 500 acres are shown in the *milan khasra* as under barley, and the figure may be taken as approximately correct.

142. *Kultha* is at once the commonest and the least valued of the pulses. It is grown on poor lands after *mandia* or autumn rice or on yet higher and more sandy lands which produce no other crop.

The land requires to be ploughed three to six times and harrowed. The seed is then sown broadcast and the *mahi* again passed over it. In February or March the plants are plucked by hand and carried to the threshing floor, where the grain is trodden out by cattle.

Mr. Nathan put the average outturn at 25 to 40 *gownis* or 2½ to 4 maunds, and Mr. N. N. Banerjei at 3½ maunds per acre; but the actual cuttings made (25) give an average of over 10 maunds. We may safely put it at 8 maunds on an average, which is not far off Mr. Arnott's estimate of 100 *gaunis*. It sells at 20 to 30 Cuttack seers per rupee. It is an excellent food for cattle and horses, and in times of scarcity it is boiled and eaten, with or without rice, by the poorer classes, and in 1896-97 it formed the only food of the people in some villages. Its distribution is very general throughout the Province, and I estimate that it is grown on about 80,000 acres.

143. *Birhi* is a more valuable crop than *kulthi* and is grown by preference after *biali* rice where the land is rich enough. The difference is very marked, for while *biali-birhi* lands are rented at about Rs. 3-2 to Rs. 4-12 per acre, *biali-kulthu* lands rarely pay more than Rs. 2-8 and *mandia kulthu* not more than Rs. 1-9 per acre.

The cultivation is much the same as for *kultha* which in external habit it resembles, but it grows more luxuriantly and is less affected by weeds, drought, etc.; it requires a good light loamy soil and a fair amount of rain up to the time of flowering in November; after that it wants fine weather. It is plucked in January and the grain is trodden out by cattle.

The yield is about 8 maunds of small round seed in a good year. This is the average of the experiments made. Mr. Arnott's estimate is 6 maunds; Mr. N. N. Banerjei's, 3 maunds. It is given to cattle and eaten as a pulse (*dal*) and sells at 18 to 24 seers to the rupee. It is found chiefly in the inundated tracts in Cuttack and Puri, and is liable to be eaten up by insects if the weather in November be wet and cloudy. Probably there are some 40,000 acres under this crop.

144. *Muga* or *mung* is the commonest *rabi* crop grown on *sarad* lands. *Muga* (*Phaseolus mungo*). There are three main varieties, the *dhara* or *sauri muga* having a light yellow grain, *kara muga* with a dark grain, and *jhai muga* with a whitish grain. The first two are the more valuable, and are sown on *light laghu* or good *biali* land and sometimes mixed with *birhi*. *Jhai muga* is grown on clayey soils after *sarad* rice.

After the preceding crop has been reaped the land is ploughed two or three times and the seeds sown broadcast. It is ready by February or April, according to the time of sowing, and is either plucked or cut with a sickle and taken to the threshing floor. It is trodden out by cattle, and yields 5 to 8 maunds. This is the pulse most largely consumed by the better classes in Orissa; it is not so general in its distribution as *birhi* and *kultha*, being found chiefly in the inundated area and is commonest in south Cuttack and Puri. It may be grown on 20,000 to 30,000 acres in favourable years.

145. *Harar* is a pulse of which two varieties are found in Orissa, the *chaita harar*, also called *pala*, which is sown in *Assin* and harvested in *Chaitra*, and the *deo* or *nali harar* sown in *Jaistha* and harvested in *Magh* or *Pous*. The first variety is the more common, and is grown generally on riverside lands after *biali* paddy. It is sown broadcast or in drills, and is often mixed with *birhi* or *kultha*, which are plucked before the *harar* has attained its full growth. Oftener, however, it is sown by itself, the yield of *kultha* and *birhi* when thus grown being very poor. It flowers in February when the plant is 2 feet to 4 feet high. In April the plant is cut down and the seed beaten out like paddy. The stems are afterwards used for cattle fodder and fuel. The yield is, in a good year, from 8 to 15 maunds* of grain. It is eaten as a pulse, but is said to be very heating. *Deo* or *nali harar* is a variety with a red grain sown on homestead lands in June-July and harvested in December. Its cultivation is the same as that of the *chaita harar*. *Chaita harar* is most largely grown in the Brahmini basin where in the scarcity of 1896-97 it was in many village the only crop that stood between the people and starvation, and is common on the borderland of Cuttack and Puri. The autumn variety is found in western and central Cuttack and in the Puri district. I think that not less than 60,000 acres is annually planted with *harar*.

146. Of the oilseeds, one of the most important is the castor-oil bean, *gaba* or *jara*, grown on about 2,600 acres. Oilseeds-caster.

It is of two varieties, *bai jara*, sown in May and gathered in February or March, and *chuijara*, sown in October and gathered in March. It is a peculiarity of this plant that it will grow on land deeply covered with sand, and it is usually to be found in sandy fields along the banks of rivers, or on homestead lands. If grown in a loamy soil it is sown in drills, but if in deep sand, holes must be made with a dibble until moisture is reached, when the seed is placed at the bottom. It is a prolific bearer, yielding from 100 to 200 *gaunis*, but is liable to be destroyed by caterpillars and insects. The oil is expressed in the common Indian oil mill worked by man or bullock, and the weight of oil obtained is about one-fourth of that of the beans, or from 1 to 2 maunds per acre. It is used by the poorer classes for cooking and for the anointing of their bodies.

147. Mustard (*sarishu*) is one of the most valued of the *rabi* crops and is grown on rich loamy soils after *biali* rice. It is commonest in South Cuttack, and the area under Mustard and Rape.

* Mr. N. N. Banerjei gives 4 maunds; Mr. Arnott 100 to 160 *gaunis*. The latter is nearer the mark.

it is probably over 2,000 acres. For this crop the soil requires to be carefully prepared, and in October the seed is sown broadcast at about 5 or 6 seers per acre. It requires careful weeding and a fairly dry season, and will yield 6 to 8 maunds of seed, worth about Rs. 30. The oil is used for anointing the body and by the well-to-do for cooking.

148. Linseed (*pisi* or *tisi*.) is grown after *biali* on light loamy soils. It is recorded as cultivated in about 3,500 acres, but is often found mixed with *kulthi* or *dhania* (coriander seed).

Linseed.

149. *Til*, locally known as *khasa* or *rasi*, is grown on fairly stiff soils sometimes as a *rabi* but more often as a *biali* crop. The total area recorded under it is only 1,100 acres.

Til

150. Sugarcane, or *akhu*, is grown generally on lands near the village and within easy reach of canal irrigation. Mr. Arnott states that it cannot be grown on ordinary rice land, but requires a loamy (*dorosha*) soil.

Sugarcane.

The field is prepared by manuring at the rate of 500 basketfuls to the acre and ploughing some thirty times in January and February. Cuttings, known as *dhangira*, are then planted in furrows about 10 inches apart and covered over with earth. When the cuttings have been planted and covered over, the field is irrigated, and the irrigation repeated every two days until the shoots sprout, which takes from fifteen to twenty days. The soil is then loosened and oilcake and mustard oil applied to the roots; the process is repeated after a fortnight and twice more at intervals of a month, the land being irrigated so as to keep it continually moist, sometimes even every two days in the hot weather.

After the fourth application of oilcake, which takes place in May or June, the soil is loosened by pulling a plough through and the land thoroughly weeded. The stems are then wrapped in sugarcane leaves, and ten days later are tied up in a form known as *paholia* from its supposed likeness to a fishing basket. In August another thorough weeding is necessary, and after this the leaves are bound together and the plants tied together in fours to give them more power of resisting a storm. In December the canes are cut down and the juice is extracted. The mills in use are very primitive the commonest being the *kolhua* which is like the oil mill. The *khai* is a better mill, in which the canes are pressed between rollers, horizontal or vertical, turned by hand or by bullocks. The use of the Behea presses is rare. The juice is boiled down in little pans over an ordinary fire in a *chula* and poured off into jars. Sometimes it is refined by the addition of the lime or ashes.

Mr. Arnott takes the cost of cultivation at Rs. 218 per acre, Mr. N. N. Banerjei at Rs. 80 to Rs. 160, while in Balasore Mr. Kingsford estimates the cost (excluding the raiyat's own labour, manure, etc.) at Rs. 67 per acre. The estimates of outturn are equally variable, Mr. Arnott giving the value of the yield at Rs. 300 to Rs. 350 and Mr. N. N. Banerjei at Rs. 80 to Rs. 200. Experiments give an average yield of some 50 maunds of molasses, worth about Rs. 250 per acre.

151. *Kapa*, or cotton, is a crop that is said to be less largely cultivated than in former years, and is now shown in our records as occupying 2,300 acres or $\frac{1}{1000}$ of the cropped area. It is grown generally on homestead lands (*kala*) irrigable from a tank or canal or on rich alluvial soil by the riverside (*pal*).

Cotton.

The soil is carefully ploughed and harrowed in September and kept moist with the help, if necessary, of irrigation until the middle of October, when the seeds are sown in drills and covered over lightly with earth. Before being sown the seed is steeped in water and mixed with cowdung so as to start germination.

The land requires to be kept moist but not wet, and the plant should flower in February and the pods should be ready to gather in April or May.

The outturn is taken at about a maund of cleaned cotton per acre * worth about Rs. 20.

152. The cultivation of *nalita* or jute is at present confined almost entirely to the irrigated area in Central Cuttack and Jajpur and to a few Parganas on the Mahanadi. Mr. N. N. Banerjei states that the area under this crop is decreasing, but this does

Jute.

* Mr. N. N. Banerjei's report, page 88.

not appear to be the general opinion, and I think that jute is likely to supplant cotton in many places. The present area under jute is shown in our returns as 900 acres. It is most commonly grown on homestead land, but sometimes also on riverside (*pal*) land, where an extra rent has generally to be paid for permission to cultivate it. The seed is sown about May and in June or July the plants have to be thinned out, and later again when the plants are about three feet high the leaves are plucked off, leaving a few at the very top.

In October the plants are ready to cut and are afterwards steeped in water for ten or twelve days until fermentation sets in. The fibres are then drawn out, or the pith beaten out against a platform.

153. The tobacco plant, commonly called *dhuanpatra* or 'smoke leaf' is one of the most valuable crops grown in the Province. It is shown in the crop statements as grown on 3,400 acres, but in favourable seasons the area planted with it is much larger, and it is on this crop that many villages in southern Cuttack, especially in the Parganas of Saibir, Deogaon, and Sailo, depend for the payment of the rent.

It requires both a rich loamy soil and a plentiful supply of water, and is only raised on the rich silt-covered lands, on the banks of rivers and in the depressions of the big flooded *pats*. A mixture of sand and silt is not unfavourable to its growth, but the finest leaves are obtained on a sandy subsoil with a covering of nearly a couple of inches of pure silt.

The seed is sown in beds about the middle of September, and when about six inches high the seedlings are transplanted. The field to receive them has been carefully prepared by repeated ploughings until the soil is of the consistency of fine powder, slightly moist. In this holes are made and the seedlings carefully planted one in each hole, and have to be watered daily for the next three days and three times more on alternate days in the next week. After this, all withered or spoiled plants have to be removed, and the field is watered about once a week for the next month. When the flower-bearing shoot appears it is broken off and a week later the plant reaches maturity. It is cut off at the root and left for a couple of days in the field; the plants are then dried by alternate exposure to the sun and compression in heaps under a mat.

When dry the plants are tied into bundles and placed on dry straw.

The following account of the cost and profits of tobacco cultivation is taken from the report of Babu Jotindra Mohan Sinha who settled rents in the chief tobacco growing area in Cuttack.

				No. of Plants,
Cultivation in this Pargana—				
The produce of one <i>gunt</i> (.04 acre) tobacco land	....	....	....	4,096*
Deduct wastage	....	....	....	512
Net produce				3,584

These would make upon an average 100 *mentas* † or bundles, the unit of calculation.

2 <i>Mentas</i>	=	1 <i>Joda</i> (couple)
100 <i>Jodas</i>	=	1 <i>Balad</i> or bullock load

The wholesale price of one *balad* varies from Rs. 20 to Rs. 10. The retail price of *menta* varies from one to two annas; so the retail minimum price of 100 *mentas* = 100 annas = Rs. 6-4. The wholesale price of 100 *mentas* = 50 *joras* = Rs. 6 nearly.

So the price of 100 *mentas*, the produce of one *gunt*, may be taken to be Rs. 6, and that of one *man* = 6X25 = Rs. 150. But the price of the produce of one *man* first class *sarad* land taking it to be on an average of 4 *bharans* paddy (at the rate of 16 *gownis* in the rupee) = Rs. 5X4 = Rs. 20 only.

* As a rule 16 plants cover one *Padika*. The number covering a *gunt* = (16X4)X(16X4) = 4,096. Two plants per *padika* are generally deducted for wastage, which therefore amounts to (2X4) (16X4) = 512.

† *Menta* = a thin piece of dry bamboo one cubit long, on which the tobacco plants are stuck. The number of plants required to make up a *Menta* depends up on the size of plants, Generally 30 to 40 plants to make up a *menta*. Here 36 plants are taken as a convenient mean.

The cost of cultivation of one *gunt* of tobacco land amounts to Rs. 2
 The rate of rent varies from Rs. 1-8 to As. 4 per *gunt* let us take Rs. 1.
 So the total cost per *gunt* = Rs. 2+1 = Rs. 3.
 The nett profit per *gunt* = Rs. 6 - Rs. 3 = Rs. 3.
 The nett profit per *man* = Rs. 3 × 25 = Rs. 75.

It is, however, not possible for one man to cultivate more than 6 *gunts* at a time. People having larger areas fit for tobacco sub-let them to neighbours or to the people of other villages in the Pargana.

154. *Pan*, piper betel, is the climbing vine, the leaves of which are used to wrap up the *supari* or areaca-nut chewed by natives of all ranks and castes.

It is an extremely valuable crop, requiring most careful cultivation, and for the most part is grown only by the Barajis, the Baruis of Bengal, who have immigrated in comparatively recent times. In some Parganas, however, I have found *Khandaits*, and indeed all castes but Brahmins, cultivating *pan*. The finest *pan* is raised at Barkud in the Kujang Estate; but there are also valuable gardens in Kodinda close to Cuttack, in Sungra, in Parganas Jajpur and Tisania in Lembai, close to Puri town; also in Sunhaut, Dhamnagar, Bisalkhand, and Bhograia of Balasore.

The total area covered by the gardens is recorded in our papers as 500 acres, but this excludes the permanently-settled estates.

The *pan* garden or *baraj* is formed by heaping up a mound of earth and carefully levelling it. Then the garden is enclosed in trellis work cage about five or six feet high to shield it from the direct rays of the sun. The plants are propagated by cuttings from the tops of old vines which are planted in rows about three feet apart, leaving a couple of inches between each cutting. They are covered with damp straw until they take root, and as soon as they begin to climb a reed called *inkar* is planted beside each and the vine trained to it by ties of *jana* grass.

In six months to a year the plants yield the first crop of leaves, and thereafter about two pairs of leaves every year; the leaves are plucked from the bottom, and every year a further layer of earth is placed over the roots until the plant withers or gets too old, which is at the end of about six years when, it is removed and a fresh cutting planted. In fifteen to twenty years the garden has grown to an unmanageable height and is abandoned, and after lying fallow for a couple of years the earth is used for building other gardens.

The plant requires watering daily in the hot weather, and every two or three days in the cold weather. It is said to suffer from too much rain, and is easily damaged by storms. It is sometimes attacked by the *dauli*, a small white larva, and a black larva, the *kalamukhi* also by insects, such as the *ankulia pokha*.

To the cultivation of *pan* two accessories needed are water and *inkar*. The former is generally to be found in the pond formed by the excavation of earth for the garden. The *inkar* reed is generally grown close by.

The size of a *pan* garden is generally 1,2 or 3 *gunts* and the rent from As. 8 to Rs. 2 per *gunt*; I have found it as high even as Rs. 3 per *gunt*. It is sometimes held on a lease for a fixed period, requiring the rent to be paid, whether *pan* is grown or not, and such are the terms on which *thani* raiyats held under their last settlement *pattas*. More often the lease is for the term of the garden, and the rent is fixed at so much a *gunt* as ascertained by measurement. *Inkar* land is sometimes paid for separately at Rs. 3-2 to Rs. 6-4 per acre but is often allowed rent-free with the garden.

† The details are as follows :—

	Rs.	P.	A.
Ploughing harrowing six times, man with one plough half day each, time As. 6 + As. 3...	0	9	0
Transplantation, watering, &c, two men one day ...	0	4	0
Watering twice after transplantation, one man one day ...	0	2	0
Purning &c. ...	0	6	0
Cutting, sewing &c, two men one day ...	0	4	0
Price of seeding ...	0	2	0
Curing, &c. ...	0	5	0
Total ...	2	0	0

The following account of the expenses and profits of *pan* cultivation in Balasore is taken from a note by Mr. Kingsford and shows the expense incurred during the first year, and incidentally the nature and sequence of the processes undertaken :—

The figures given are for 1 *gunt* or .08 acres of land.

January to February (*Magh*).

Materials—				Rs. A. P.	
Purchase of bamboos	....	....	....	5 5 0	
Ditto of <i>inkar</i> reeds	....	....	....	6 12 0	
Ditto of <i>bona</i> (thatch)	....	....	....	2 8 0	
Ditto of <i>nai</i> (twine)	....	....	....	1 0 0	
Ditto of thatch	....	....	....	1 0 0	
Ditto of 2½ maunds of manure	....	....	....	2 8 0	
Labour—					
For raising ground	....	....	....	3 0 0	
Cost of labour for erecting <i>tatti</i> , thatch, and supports	....	....	....	9 6 0	
For making ridges	....	....	....	1 2 0	Rs. A. P.
					32 9 0

February to March (*Phalgun*).

Labour—					
Cutting grafts	....	....	....	0 6 0	
Transplanting grafts	....	....	....	1 2 0	
Covering grafts with straw	....	....	....	0 2 0	
Watering twice a day for the month	....	....	....	3 12 0	
					5 6 0
					37 15 0

March and April (*Chait*).

Labour—					
Watering once a day	....	....	....	1 14 0	
Removing straw and putting earth to roots	....	....	....	0 6 0	
					2 4 0
					40 3 0

April and May (*Baisakh*).

Materials—					
Forty bundles <i>inkar</i>	....	....	....	10 0 0	
One load <i>jana</i> (a kind of grass used for tying the plants to the <i>inkar</i> reeds)	....	....	....	1 0 0	
Manure (applied twice)	....	....	....	0 12 0	
					11 12 0
Labour—					51 15 0
Watering once every four days	....	....	....	0 12 0	
Coolies labour for tying up the plants	....	....	....	3 2 0	
					3 14 0
					55 13 0

May to June (*Jaista*).

Labour—					
Coolies for bringing earth and water	....	....	....	0 14 0	
					0 14 0
					56 11 0

June to October (*Asar* to *Kartik*).

Material—					
Manure (twice a month), 12½ <i>ma'ns</i>	....	....	....	12 8 0	
					12 8 0
Labour—					69 3 0
Coolies for applying earth and manure twice a month	....	....	....	3 8 0	
Coolies for reparing ridges	....	....	....	1 8 0	
Do. for tending plants	....	....	....	3 12 0	
					8 12 0
Carried over	....	....	....		77 15 0

		Rs. A. P.	Rs. A. P.
	Brought Forward October to January.		77 15 0
Coolie's labour	....	2 9 0	<u>2 9 0</u>
			80 8 0
Rent	....	1 8 0	<u>1 8 0</u>
			82 0 0
Material—			
Baskets and pots for one year	....	3 0 0	<u>3 0 0</u>
Total cost for first year is, therefore	....	....	85 0 0

Of this amount, Rs. 47-13 is the cost of material and rent, and the remainder (Rs. 37-3) is the cost of labour. The subsequent yearly expenditure amounts to Rs. 50, of which Rs. 25 represents cost of manuring, rent, and repairs and Rs. 25 cost of labour. Assuming the cultivator to own an *inkar* plantation, the cost will be considerably reduced. The total expenditure during the life of a garden will accordingly be as follows:—

Cost during the first year	....	Rs. 85
Cost during the subsequent 17 years, viz., $17 \times \text{Rs. } 50$	....	850
Total	Rs.	<u>935</u>

To turn to the income, in the first place there are 25 rows of plants per *gunt*. The number of plants in each row is 240, and there are, therefore, 6,000 plants per *gunt*. The plant is a creeper with a single stem, from which leaves are thrown out in pairs and at regular intervals. It is therefore easy to gauge the number of leaves fit for plucking every month, and this number may be taken as four. The annual outturn of leaves per *gunt* is therefore $6,000 \times 4 \times 12 = 2,88,000$.

It has been noted that the wholesale price, except in the rainy season, is 1,000 leaves per rupee. In the rains the price falls to 2,000. If the average monthly price be taken as 1,500 (our estimate is somewhat under the mark), the value of the yearly outturn of leaves will then amount to Rs. $\frac{288,000}{1,500} = \text{Rs. } 192$. This estimate takes into consideration liability to ordinary damage.

The outturn during the first year, i. e., for two-and-a-half months from November to January, will be $2\frac{1}{2} \times 6,000 \times 4 = 60,000$, value Rs. 40.

The income for the eighteen years is therefore—

First year	...	Rs. 40
Second to eighteenth year, $17 \times \text{Rs. } 192 =$	....	<u>3,264</u>
		3,304
Deduct—Total expenditure.	....	<u>935</u>
Total profit		<u>2,369</u>

Which represents an annual income of Rs. 131-10-0 for the eighteen years.

Moreover, this income represents the cost of management (or wages of the *entrepreneur*) only, since expenditure includes the wages of coolie labour. If, as usually happens, the labour is done by the cultivator himself with small occasional assistance from outside, his profit will be larger. Even if we assume that he simply undertakes the duty of management, his profits must be looked upon as extremely high. I have, however, considered this matter with a view of showing that the rent is quite disproportionate to the profit, and that the Baraji stands in a most favourable position compared with that of the ordinary cultivator of *sarad* lands.

The measures locally in use for *pan* gardens are —

26 muthas	=	1 aur.
4 aurs	=	1 ganda.
5 gandas	=	1 buri.
10 buris	=	1 gunt.
25 gunts	=	1 man.

The *gunt* = .08 of an acre, or twice the size of a standard *gunt* and the man = 2 acres.

155. The cultivation of the brinjal (*Solanum melongena*) locally known as *baigun*, is very general in Orissa, and it is the most important of the garden crops, though the varieties grown are said to be inferior. Seeds are sown in beds of good garden soil at about 11 seers to the acre in June or July, and are covered over with damp straw to promote germination. After eight days the straw is removed and the plants lightly sprinkled with water, and the watering is continued every fourth day for a month or six weeks. The plants are then 6 to 8 inches high and are transplanted. They are placed either in furrows or in small circular pits, the distance from plant to plant being $1\frac{1}{2}$ to 2 feet. After planting they have to be carefully watered until they take root, when the earth is loosened and weeds cleared away. Eight days later the plants are earthed up and left alone, they bear fruit from September to January and the later varieties, from December to March.

The cost of cultivation Mr. Arnott estimates at Rs. 27 per acre, and the selling value of the produce at Rs. 50.

They are liable to be damaged by red ants and by worms (*mandi pokha*). As a preventive ashes are used.

156. The *saru* or caladium (*colocaria antiquorum*) produces a tuber which is very largely eaten by the people. It is grown on rich loamy soils, and often on the banks of rivers. The seed requires to be first prepared by being placed on damp straw and manure. It is sown in furrows on well-manured land in March, and is then irrigated, and the watering continued thereafter every few days. The soil also requires to be periodically loosened and oilcake applied to the roots.

In June the furrows are filled up and a month later the plant comes to maturity.

An alternative and commoner method of propagation is from tubers which are planted in the furrows and watered as in the case of seedlings.

Other varieties of the *saru* are sown or planted as late as May and do not become mature until September.

Mr. Arnott estimates the cost of cultivation at Rs. 43 per acre and the produce at 43 maunds worth at Re. 1-15 per maund, Rs. 80.

157. Cucumbers (*kakuri*) of many kinds are grown all over the Province in homestead lands and may be seen climbing over the roofs of the houses in every well-to-do village. When grown as a field crop they generally follow potatoes, onions, or *saru*.

The seeds are wrapped in a peice of cloth and steeped in water for twelve hours; they are then placed in damp straw and covered over with ashes for two days, until they begin to germinate. They are then sown in little circular hollows (*manda*) about three feet apart, two seeds being placed in each *manda*.

They have to be watered regularly, and when the plants begin to grow and send out creepers the *mandas* are joined up by ridges, along which the fruit is produced.

Cucumbers may be grown both as a *biali* and as a *rabi* crop.

158. Several varieties of gourds (*lau*) are grown, and nearly every cultivator has a plant in his homestead, but on a larger scale they are raised for the market on sandy lands by the riverside.

Holes are dug in the sand two or three feet wide and of the same depth, and filled at the bottom with loose earth and cowdung ashes. In this, about October, the seed is sown. The plants germinate rapidly, and send out creepers over the surrounding sand: in November-December they flower, and the fruit is ready for consumption in December or January.

159. Some account of the value of the crops grown in Orrissa will be found in a later Chapter (Chapter VIII, paragraph 178) on the material condition of the people.

CHAPTER VII

HISTORY OF PRICES.

160. No attempt is made to do more than give a history of prices of common rice and some comparison between the price of paddy now and sixty years ago. We can find no earlier list than that given on page 1 of Mr. Toynbee's History, where the averages for 1811 to 1817, expressed in standard seers, are—

	Seers.		Seers.
For <i>usnu</i> rice	49	For paddy	118

The above figures are taken from returns of police *darogas*. Mr. Robert Cornish, in a note on prices in the Balasore District, also tells us in that in 1804 rice sold at 65 seers, but forced sales to Government in that year were made at 57 seers.

Mr. Cornish also found information as to the following years :—

	Seers.		Seers.
1815	78	1823	58
1816	88	1824	57

In 1828 the price was 48 seers, while in 1831, after the storm-wave, there was a rise up to 32 seers.

The later figures ascertained by Mr. Cornish are to be found separately treated under the Balasore figures.

The following sources of information have been referred to for compilation of information on the subject of prices :—

For Puri—

- (1) Mr. Nathan's and Mr. Walsh's reports.
- (2) Mr. W. C. Taylor's Khurda Rate Reports.
- (3) Mr. H. McPherson's report on the Settlement of Puri (Sadar Subdivision).

For Cuttack—

- (4) Mr. Growse's notes of 1896

For Balasore—

- (5) Mr. Cornish's note of 1893.
- (6) Mr. Maddox's No. 869 of 23rd May, 1895.

For the Province—

- (7) The *Calcutta Gazette* and Government of India returns.

I am indebted to Babu Jamini Mohan Das for a valuable discussion as to the value of the various sources of information. A great deal of what he has written has been reproduced below.

161. The Puri report compares the prices in all the three districts.

Puri Completion Report—Puri.

For Puri we have—(1) prices of paddy compiled from various sources; (2) average prices of rice from 1861-97, compiled from monthly lists of current prices--and (3) average export (apparently whole sale) prices of rice from 1877-1897.

Up to 1893 the figures in (2) agree exactly with the prices shown in the Manual of the Government of India and both have evidently been taken from the same source. The subsequent prices agree with the prices compiled by me from the *Calcutta Gazette*.

I do not see any reason to doubt the correctness of these prices.

The prices of paddy in (1) are, however, manifestly too low, and should not therefore be relied upon. The popular ratio between rice and paddy is two-thirds.

except where husking is done at home by the women of the house, when half and half is the expected outturn. The Government of Bengal has accepted $\frac{25}{40}$, which is very nearly equal to two-thirds. Making the most liberal allowance for cost of husking, the quantity of paddy which can be purchased for a rupee should not much exceed double the quantity of rice which can be purchased for the same price. It will be seen that this is very nearly the ratio between rice and paddy in the table of prices given at page 100 of Mr. Toynbee's History of Orissa, Appendix II, and the prices for 1894-97 given by the Kanungos of Cuttack and shown in the table of Cuttack prices in the Puri reports, e. g., in Mr. Toynbee's History, the average price of *usna* rice, expressed in standard seers, is 49 seers per rupee, while that of paddy in the same measure is 118 seers.

The ratio between the prices of paddy and rice in Puri, however, differs very widely from this ratio, the average of paddy in each decade exceeding three times the average of rice. The inference which naturally follows is that the prices shown are not averages of bazar prices ruling throughout the year, but favourable prices obtained either by advances of money or at the reaping season. In the former case the interest of the money advanced should be taken into account, and in the latter case it would be unfair to make such prices the basis for determining the fairness of rent or the material condition of the people, as the people at large cannot always afford to purchase all the food-grain they require at the most favourable season of the year. The whole sale export prices (3) should not, for the same reason be relied upon.

162. The only reliable prices available for the district of Puri are therefore the average shown in the manual of the Government of India. Prices of paddy have been given for a few years only, and all of them would not stand the test referred to above. They may therefore be neglected.

The prices of rice from 1836 to 1857 have been compiled from the Collector's statements of 4th and 27th July 1896, averages having been struck at various figures shown in those statements. But some of those figures appear to be so obviously wrong that they should not be included to affect the average, which would be more correct without them.

In the two statements furnished by the Collector, it is necessary to reject the figures for many years in the early period, whether on account of the measure in which the quantity is expressed, or on account of special prices being recorded for scarcity, or for lack of information as to the time at which the prices were recorded, or because a contract rate was fixed for many years which included years of famine. The following figures supplied by Mr. Growse, the Collector of Cuttack, are accepted as forming a safe basis for Cuttack figures as to prices of common rice, 1836-46 :—

	1836	1837	1838	1839	1840	1941	1842	1843	1844	1845	1846	Average.
1	2	3	4	5	6	7	8	9	10	11	12	13
	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.
Magistrate's No. 9 of 6th January 1842.	...	24 2 $\frac{3}{4}$	47 11	45 6 $\frac{1}{4}$	20 14 $\frac{1}{4}$	26 9 $\frac{1}{4}$	...	...	...	...	...	32 15
Magistrate's Contingent Bill Jail charges.	...	...	...	...	...	...	...	...	36 12	48 9	52 8	46 0
Records of Kinu Sau, merchant of Cuttack Town.	36 12	24 15	47 13	51 2	22 8	22 8	40 0	...	...	46 10	...	37 0

From 1847-60 the figures given by Mr. Growse may be accepted for Cuttack. They are as follows :—

	1847	1848	1849	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860	Ave- rage.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s. CH.	s.
Magistrate's Contingent Register, Jail Chrges.	61 11	61 11	63 14	74 14	77 14	61 13	56 2	48 1	...	...	...	...	...	...	63
Prices current, office Copies in Cuttack Collectorate.	...	...	...	...	...	...	...	...	...	...	32 6	32 0	...	...	32
Do. of Prices at Brahmanbar hat.	...	...	...	...	...	...	...	...	53 0	49 10	38 3	42 0	...	...	46
Do. of prices current at Patamundai and Chandannagar hats.	...	...	...	...	...	...	...	...	...	...	30 0	...	...	...	30
Do. of prices current at Thana hat, pargana Tiran.	...	...	...	...	...	...	...	...	75 0	36 0	36 0	...	...	...	49

For 1861 and later periods the lists published by the Government of India are taken.

163. Turning to Balasore, we have a very valuable note by Mr. R. Cornish.

Balasore—Mr. R. Cornish's note. The figures which I had collected are for paddy, so that it is not possible to make use of them.

Mr. Cornish gives us the following prices :—

Seers.	Seers.
1804 65	1847 54 (average).
1815 78	1848 60 (jail contract).
1816 88	1849 63 (jail contract for 1850).
1828 48	1850 } 59 (average).
1831 32 (after the storm-wave).	1851 } 59 (average).
1832 27	1852 } 59 (average).
1833 30 (average).	1853 } 59 (average).
1834 30	1852 36
1835 71	1853 48
1836 45 (average).	1855 } 47 (average).
1839 35	1856 } 47 (average).
1840 40	1857 } 47 (average).
1842 68	1858 25.5 } Returns of Collector to
1843 50 (jail contract).	1859 28.3 } Famine Commissioner.
1844 72	1860 23.9 }
1845 60	

For 1837, 1838, 1841, 1846, 1854 Mr. Cornish has no figures.

From 1861 onwards the prices published by the Government of India may be accepted as fairly reliable. The prices in each District are checked by those ruling in the other two since the great famine. Owing to the great improvement in communications, prices have moved very nearly within the same proportion from year to year. From 1894-98 these figures must be supplemented by figures published in the *Calcutta Gazette*.

The figures which are recorded below are, therefore, mainly derived from the printed notes of the Collectors of Cuttack and Balasore.

Averages worked out from the statistics compiled from the *Calcutta Gazette* agree very nearly with the Government of India figures, which were probably compiled from the same source.

164. From the above-mentioned sources we obtain the following information:—

Statement showing the average price of common rice in Orissa.

Year.	Annual average price in seers (of 80 tolas) per rupee.	Decennial average.	Year	Annual average price in seers (of 80 tolas) per rupee.	Decennial average.
1836	 43.13		1867	 16.37	
1837	 24.56		1868	 31.27	
1838	 47.75		1869	 24.14	
1839	 48.85		1870	 29.71	
1840	 21.16		1871	 29.66	
1841	 24.50	43.20 and 48.14 excluding 1837 and 1840.	1872	 28.47	26.87
1842	 54.00		1873	 32.43	
1843	 50.00		1874	 24.37	
1844	 54.37		1875	 35.61	
1845	 53.75		1876	 26.72	
1846	 52.50		1877	 17.65	
1847	 57.87		1878	 13.70	
1848	 59.56		1879	 15.69	
1849	 61.94		1880	 20.59	
1850	 67.19		1881	 30.38	
1851	 68.89	57.94	1882	 29.98	21.26
1852	 54.75		1883	 26.70	
1853	 55.19		1884	 19.86	
1854	 53.81		1885	 18.34	
1855	 53.50		1886	 19.77	
1856	 44.94		1887	 22.09	
1857	 40.56		1878	 20.99	
1858	 31.25		1889	 17.08	
1859	 28.31		1890	 1.68	
1860	 23.87		1891	 18.57	
1861	 33.18		1892	 13.39	
1862	 32.84	28.58	1893	 14.78	18.28
1863	 30.29		1894	 15.68	
1864	 33.87		1895	 21.63	
1865	 21.90		1896	 18.40	
1866	 9.76		1897	 11.87	
			1898	 14.84	

*1836-60 compiled from the printed notes of the Collectors of Balasore and Cuttack. 1861-93 compiled from the prices published by the Government of India. 1894-98. compiled from the *Calcutta Gazette*.

Averages for 15 years :—

1837-51	...	...	49.77
1852-66	...	...	42.67
1867-81	...	...	24.85
1882-66	...	...	19.79

165. As I have already shown, it is very difficult to get authentic information regarding prices of paddy. Mr. Nathan and Mr. Walsh obtained information in Puri from certain *maths* and private persons, and I obtained information from zamindars and others in Balasore for about sixty years. I give the following extract from Messrs. Nathan and Walsh's figures and my own to show that our figures justified almost

the same enhancement on the ground of rise in prices, though they obtained figures in the south of the Province, and mine were obtained from the north :—

	Period.	Price of paddy per maund in seers of 80 tolas. Rs.	Period.	Price of paddy per maund in seers of 80 tolas Rs.	Per- centage of increase in prices.
I. Mr. Nathan's and Mr. Walsh's figures for Puri	1836-45	0.18	1883-92	0.60	233
II. Mr. Maddox's figures for Balasore	-do-	0.29	1885-94	0.92	217

The enhancement on the ground of rise in prices is worked out by Mr. W. C. Macpherson as follows :—

I. 1:2. 55 as 100:255; or 155 per cent.

II. 1:2. 45 as 100:245; or, 145 per cent.

As regards the price of paddy between 1836 and 1845, I may add that Mr. W. C. Taylor's average price given in Khurda Selections, Volume II, page 114, exactly agrees with mine.

It will be seen by the comparison made in paragraph 43 of my covering report to Mr. J. Taylor's report on the Settlement of Khurda that in Khurda prices throughout the country have ruled higher than in the Puri Sadar sub-division. This is probably due to the large export by road and to the frequency of the Ganjam famines.

166. In accordance with Circular No. 10 of 12th February, 1898, issued by me to Assistant Settlement Officers, Chakla Kanungos were summoned before them with the registers in which prices had been recorded by the Kanungos under Board's Circular No. 6 of June, 1888. The original registers having been produced, extracts for prices from 1887 to 1896 were recorded, signed, sealed, and attested by the Kanungos in the Assistant Settlement Officer's presence, and after counter-signature by the Assistant Settlement Officers have been sent to headquarters. These returns have been bound in registers and are to be made over to the Collector of each District. It is hoped that at a future Settlement these lists may give evidence of prices in local areas.

The general results are recorded as follows :—

Statement showing the price of Common rice from 1887 to 1896 in seers (80 tolas) to the rupee.

NAME OF OFFICER.	Name of Chakla	AVERAGE FOR DECK-NNIAL PERIOD (1-87 To 1896).																																				
		1187.			1888.			1889.			1890.			1891.			1892.			1893.			1894.			1895.			1896.									
		January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35				
DISTRICT CUTTACK.																																						
Babu Hira Lal Banerji	Kendrapara.	26	25	25	29	26	25	21	16	18	24	21	24	26	21	18	17	17	17	17	17	17	17	12	12	24	24	26	26	25	18	23	20	20				
James taylor, Esq.	.....	24	21	21	25	29	19	21	16	21	22	18	20	21	18	17	16	12	13	16	13	13	17	12	14	20	20	21	25	18	15	21	17	17				
Babu Gobind Chandra Das Gupta.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....				
Babu Nabin Chandra Kar.	{ Barchana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....				
Babu Beni Madhav Chatterji.	{ Baruan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....				
Maulivi M. Choinud-din.	Balikuda	38	32	34	32	27	30	30	25	30	30	25	25	30	25	30	25	25	20	16	16	12	20	19	13	12	22	25	25	30	30	25	27	23	16			
Babu Sriram Chandra Bose.	Biribati	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....				
Babu Jagabandhu Ghose.	Jagatsingpur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....				
Babu Phomindranath Mukherjee.	Gopalpur.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....				
Jaganath Dutta	Sonpur.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....				
Babu shyama Charan Sen.	Pandalo.	26	21	23	25	21	25	32	26	29	30	23	29	24	21	24	13	11	15	17	16	21	19	13	17	21	18	26	26	21	17	23	19	23				

		1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	AVERAGE FOR DECEN- NIAL PERIOD (1887 to 1896).																									
NAME OF OFFICER.	Name of Chakla.	January. June	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September. January.	June. September.	January. June.	September.																									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35			
DISTRICT CUTTACK—Concl'd.																																					
Babu Shyama Charan Sen.	Tirtol														24		14	16	13	16	20		14	15	23	22	26	20	24	20	22	18	20				
Babu Satis Chandra Guha.	Tendakura															12	12	24	15	15	15	17	13	13	11	20	20	22	30	25	16	22	19	16			
Babu Amritasikher Mukherjee.	Nayagaon																						14	15	24	24	26	11	11	11	16	15	18				
Babu Debendra Prasad Ray.	Jagatsing- pur							16	20	21	20	20	21	20	16	17	13	14	13	15	12	15	12	13	24	24	24	23	21	20	24	19	19				
Babu Jamini Mohan Das.	Jajpur	29	25	29	26	26	26	21	17	18	22	16	17	21	14	16	21	16	16	17	18	16	26	12	11	21	20	22	26	24	16	22	19	19			
Babu Khlitish Chandra Sarkar.	Tirtol																12	14	16	13	16	20	14	16	24	22	26	29	24	20	18	17	18				
Babu Hiralal Banerjee.	Tendakura																						18	11	20	20	22	30	25	16	22	19	16				
Babu Jatindra Mohan Sinha.	Bahugram	34	34	40	34	34	40	34	34	53	53	52	40	53	53	53	35	33	32	40	35	32	38	21	20	40	35	43	49	39	35	41	47	38			
Babu Beni Madhab Chatterjee.	Jaganatha- pur							33	30	23	18	17	23	24	18	22	26	24	20	20	12	14	24	13	14	21	16	14	23	26	30	30	22	21	23	19	21
Babu Jamin Mohan Dass.	Patamundal									29	21	21	27	23	26	26	26	24	21	14	13	21	18	18	19	12	12	21	24	24	26	28	21	25	22	21	
Babu Sriram Ch. Bose	Chandol ... Anantapur															21	18	22	18	12	14	16	16	16	17	11	13	20	16	16	16	15	18	15	16		
DISTRICT BALASORE.																																					
Babu Debendra- natha Bose.	Kamarda	34	24	29	30	30	29	22	20	16	24	19	20	24	20	20	20	16	14	16	15	14	21	17	15	24	23	23	26	26	18	24	22	20			
Babu Harakrishna Mohanty.	Bhadrak							32	26	24	20	21	21	21	20	17	23	21	16	20	13	15	16	15	16	22	10 to 15	15	22	25	27	30	24	18	23	20	19
Babu Akhoy Kumar San	Dolesahi	32	26	26	26	23	26	24	13	18	18	19	17	24	21	21	21	14	14	16	16	16	11	13	13	22	22	25	32	25	21	23	20	20			
	Dhamnagar																							12	21	21	26	26	25	22	16	16	20				
	Agarpara	30	30	30	30	26	23	25	20	20	23	22	20	24	19	19	21	15	14	16	16	15	20	15	16	23	24	32	32	28	28	24	21	22			
	Chandball	28	26	24	24	24	24	21	19	19	19	19	19	21	20	16	16	22	12	14	16	13	14	12	10	20	20	20	20	20	16	20	19	17			
Babu Abhay Prasad Das.	Basudebpur	27	23	27	20	16	26	21	21	13	27	23	22	21	14	23	18	16	18	17	15	16	21	23	14	32	25	29	13	12	25	22	19	22			
	Balasore																							14	12	16	20	20	19	28	16	16	20	20			
DISTRICT PURI—SUBDIVISION.																																					
H. McPherson, Esq., I. C. S.	Pipli	26	22	21	26	24	21	21	12	18	25	21	21	21	17	17	12	11	12	11	17	18	16	12	21	21	21	24	26	24	18	21	18	18			
	Nagpur	26	26	24	24	24	21	26	18	16	24	21	18	24	24	21	14	12	11	17	13	13	14	14	23	26	26	34	26	18	23	20	20				
	Kotdes	26	21	24	21	21	18	24	17	17	26	20	23	23	21	14	12	11	16	12	17	20	25	26	29	25	26	20	25	17	23	20	20				
	Kakatpur	33	28	21	21	17	27	21	16	16	21	13	21	23	23	23	13	8	12	16	12	12	20	14	14	21	24	24	26	26	17	22	19	19			
	Rahang	22	21	21	21	18	18	12	16	21	20	21	21	20	17	16		11	14	14	14	17	13	14	21	21	21	26	21	18	18	16	17				
	Kanuas																						16	16	21	24	24	28	24	18	16	21	19				
	Gope	26	25	21	21	25	18	24	12	16	24	18	18	17	21	21	14	16	11	17	16	17	21	16	13	21	22	24	29	24	17	21	21	18			
	Bramgir										22	22	22	23	23	23	15	15	16	16	16	16	16	16	16	23	23	23	20	20	20	19	19	19			
DISTRICT PURI—KHURDA SUBDIVISION.																																					
James Taylor, Esq.	Banpur					40			27		40			41			22			32		33				44			38			36					
	Genkia					42			31		47			41			31			33		34				48			43			39					
	Dandimal					47			37		43			44			29			30		28				45			44			39					
	Begunia					41			31		48			45			30			32		32				51			18			40					
	Kkurda					41			32		44			14			24			30		30				43			44			37					

167. A list of wholesale prices prevalent in the mufassal between the years 1811 and 1817 is given in Appendix III, at page 100 of Mr. Toynbee's History of Orissa, and it will be interesting to compare it with present prices as given in Appendix O to this report. This is done for a few of the commoner articles of merchandise in the following table :-

Name of article.	Average of 1811 to 1817 per standard maund.	Price in 1899 (average per standrd maund).
	Rs. A. P.	Rs. A. P.
Birhi	0 15 6	2 4 6
Harar	1 14 6	2 12 0
Salt	3 4 0	3 10 0
Ghi	15 0 0	33 0 0
	43 0 0	16 0 0*
Cotton yarn	to	
	85 0 0	40 0 0
Sugar	8 8 0	4 12 0†
		8 8 0†
Betelnuts	7 0 0	7 0 0
Tobacco	5 0 0	15 0 0
Lamp Oil	9 10 0	5 0 0
Cocoanut oil	21 8 0	15 8 0

* Foreign.

† Molasses.

‡ Refined White.

This list shows a great rise in the price of agricultural produce, pulse, ghee, and tobacco; while cotton yarn and oil have cheapened, and there is but little change in sugar, salt, or in the betelnut which every Uriya chews. Thus the cultivating classes gain both on the better price they get for their surplus produce and the smaller price paid for their imported luxuries.

CHAPTER VIII.

MATERIAL CONDITION.

168. Abul Fazl considered the Uriya to be very effeminate, and early writers such as Stirling and Ker describe what they term the intellectual dulness of the Uriyas. The character of the Uriya. Stirling concludes his remarks by saying :—

“In justice, however, to the bulk of the agricultural population, it must be said that the raiyats of Cuttack are extremely industrious, though they work with little spirit or intelligence and altogether the Oorias of the plains, whatever their faults, are certainly the most mild, quiet, inoffensive, and easily managed people in the Company’s provinces.”

He also mentions—

“The Balasore bearers, in whom the virtues of fidelity and honesty (according to their own conceptions of those qualities) are conspicuous”.

These early impressions have never been eradicated and to this day Orissa is by general consent the Boeotia of Eastern India.

This low opinion of the Uriya is not wholly without justification, but it is equally certain that there is much to be said on the other side and the following criticism taken from paragraph 34 of the report of the Famine Commissioners of 1866 holds good to the present day :—

“The people of Orissa are also separate and distinct, of a character and language peculiar to themselves. Their personal character has been a subject of much discussion during our enquiry and opinions are much divided about it. The Oriyals are, we should say, physically somewhat larger boned and not so slight looking as the average Bengali though they would be at a disadvantage compared with other Indian races. Their features are on the whole good, and both features and language indicate that they are to a great degree Aryan in race. Most of them are very Hindu in religion and have much caste prejudice. The truth respecting their character is probably to be found between the two extremes of opinion. They seem to be certainly less quick and pushing than the Bengalis, and the higher classes have had much less education, it may almost be said no education; in fact, they are altogether more Boeotian. On the other hand, we do not see reason to believe that they are in their own way less industrious, they have a certain intelligence of their own, and are thought to be less skilled in fraud and in some respects more reliable. They come freely to Calcutta for service, and may be said to bear a good character there. In short, those who are accustomed to them and have become habituated to their obstinate and prejudiced ways, generally like them; those who are not accustomed to them cannot endure them. The well known Uriya bearer, so common in the European domestic service of Lower Bengal, is probably a very fair type of his country men.”

The labouring classes and the lower castes of cultivators are somewhat stupid; but for that matter the peasant of Bihar or of Western Bengal is but little, if at all, cleverer, and physically is certainly inferior. The Brahmans are obstinate and bigoted, but they are of a refined and intellectual type, and the Mahantis of the Mahanadi valley have quite as high a reputation for acuteness as the Lalas of Bihar. In our work we have had no difficulty in finding hundreds of vernacular knowing muharrirs, writing a good Uriya hand, fair arithmeticians, and for the most part careful and not unintelligent. Some of these men have shown considerable ability and a most creditable capacity for methodical work, and have been found perfectly reliable.

Even, however, among the literate class, the want of enterprise, the slowness, and the hopeless conservatism are in marked contrast to the versatility and quickness of their Bengali cousins. An Uriya can hardly be made to hurry himself, and he regards absence without leave and disregard for orders as the most venial of offences. He would as a rule far rather make Rs. 12 a month by a moderate amount of work than half as much again by staying over time. The same love of ease and dislike of hard work permeates all classes. When times were hard and numbers of agriculturists were driven to do earth-work on the railway, they might easily have earned four annas or more a day, but as a rule they would only make two annas or three annas, and then would go home for a rest two days in the week.

There is no doubt that the last century of unrest and oppression by the Moghuls and specially by the Mahrattas, before the British accession, made some permanent effect in the Uriya character. To sow year after year without knowing by whom the fruits would be gathered, to be continually harried and plundered must necessarily discourage thrift and promote improvidence. For this reason it seems to me that in his own country at any rate the Uriya is not disposed to be a hard worker. Outside Orissa, as domestic servants, chuprassies, and coolies, the Uriyas have a reputation for good work, which may in part be accounted for by the natural selection of the best of the young men as emigrants and their natural fitness for the duties in which they are commonly engaged, and in part also to the unfitness of the Bengali.

We find the Uriya cultivating the lands of well-to-do Bengalis, who themselves are engaged in the jute trade or in selling dairy products in Calcutta. We find them as carpenters, making doors, boxes and tables, as pullers of punkhas, as dockyard labourers, as *palki* beareas, and generally in most kinds of labour requiring more physical than mental capacity.

Generally speaking, the people are kindly and good humoured, remarkably law-abiding, and given only to the committing of the pettiest of crimes. A contractor, employing large numbers of labourers from all parts of the country, put the difference between the Uriya and the up-country man in these terms: "If I give an advance to an up-country man, he will first think how he can cheat me out of part of it. If he gets a chance, he will decamp with the money; if not, he will try to get inferior work passed. The Uriya on the other hand will, sooner or later, work off the value of the advance, but without the slightest consideration for the time within which the work should have been completed."

Physically, the men of the better castes are well-made, with good shoulders and straight backs. Except among the Brahmans and the naturalised Bengalis, infant marriage is unknown, and the last census showed only 1.93 per cent. of girls under ten to be married. In most castes widows may re-marry, and even among Brahmans and Karans do not lead the hard life that they do elsewhere.

169. The consequence of this marriage system is seen in the rapid development of the population, which in 1872 was returned at 30,34,690, and in 1891 had increased to 38,77,294, or by 28 per cent. At a moderate estimate, the population must in the last eight years have increased by 8 per cent. and may be taken at 42,00,000, viz :—

		Males.	Females.	Total.
Cuttack.	....	1,020,000	1,080,000	2,100,000
Balasore.	....	520,000	560,000	1,080,000
Puri	....	510,000	510,000	1,020,000

Of these we may take to be Hindus 4,090,000; to be Mahomedans 98,000; to be Christians 4,000; leaving 8,000 to be divided between Parsis and other denominations.

170. The following table, showing the distribution of the people according to their occupation, has been prepared from the census returns, making due allowance for the increase of population :—

Name of District.		Class A. Government.	Class B. Pasture and Agriculture.	Class C. Personal service.	Class D. Preparation and supply of Materials.	Class E. Commerce, Transport and Storage.	Class F. Professional.	Class G. Indefinite and Independent.
Cuttack	...	37,000	1,126,000	125,000	378,000	46,000	67,000	334,000
Balasore	...	10,000	826,000	22,000	95,000	10,000	16,000	100,000
Puri	...	18,000	561,000	44,000	200,000	12,000	43,000	147,000
Total	...	60,000	2,513,000	191,000	668,000	68,000	126,000	581,000

These figures are but an approximation, but they are not likely to be far out. The most striking feature of them is the very much larger proportion of the population returned as agricultural in Balasore than in the other two districts, and the smaller number of persons engaged in manufacture, such as weavers and brass founders. In Balasore it is to be noted the culturable area is still comparatively more extensive than in the other districts.

171. As to education it may be assumed that the Karans and Kayesths, who form about 4 per cent. of the people, can all read and write, and so can all those in classes A and F, and most of class E. The census returns showed the proportion of literate persons and pupils as altogether 6·7 per cent. of the population, and with the impulse given to reading and writing by the settlement it is probable that the percentage is increasing fast.

The census figures of 1891 showed that of males between the ages of 19 and 46, 85 per cent. were married, 4 per cent. widowed, and 11 per cent. unmarried, and of women between the ages of 15 and 49 only 3 per cent. were unmarried, 77 per cent. married and 20 per cent. widows.

172. It is very difficult indeed to get any accurate understanding of the material prosperity of the people at large. Enquiries at once put the villager on his guard, and he makes such answers as he thinks will conduce to his gain, without any great regard for the truth. The general opinion of the officers who have for years worked among the people and gained their confidence is that 80 per cent. of the rural population are more or less permanently indebted to the *mahajan*, proprietary tenureholder, or zamindar. The remainder are themselves landed proprietors, or have other means of maintenance than agriculture. It does not, however, follow that because the villager is in debt and has no capital or savings to meet the strain of a bad season that he is very much to be pitied. The *mahajan* is almost always a local man, and generally the tenant cultivates the fields over which the *mahajan* has a lien. Again, the proprietary tenureholders are local men, and frequently have stocks of grain. Advances of grain for food and seed are not infrequently given by zamindars, especially in times of scarcity, and are repaid by return of the principal with 25 per cent. interest when there is a sufficient crop. Such conditions, however, become oppressive when for two years in succession there is scarcity. The Uriya cultivator is content with very little and that he generally gets. A full meal of rice once a day, taken with a little salt, some pulse or vegetables, and perhaps fish, suffices him, and he eats cold in the morning what is left over from his evening repast. Animal food is a luxury, but well-to-do men eat a little mutton and goat's flesh, and all classes eat game whenever they have the luck to kill any. The poorest classes take to supplement their rice boiled *kutthi* and *mandia* cakes, and find a substitute for vegetables in the many herbs and grasses that grow wild, and it is very few indeed who cannot fill their bellies with food which, if not appetising, is certainly satisfying. If the harvest fails or supplies run short, the cultivator finds in the *mahajan* a banker always ready to advance money on good security, and able and willing to tide him over hard times, provided there is no abnormal general distress; and the history of the floods and drought of 1896 shows that the agricultural community can withstand very serious calamities if the bad season is followed by a good harvest in the next year.

Indeed, the increase of population is in itself a sufficient proof that the people are habitually maintained above the level of the minimum standard of comfort compatible with the health and reproductive power of the species.

For a further investigation of this subject I propose first to consider the wealth of the country as a whole and the sufficiency of its food supply. Then to discuss the condition of the several classes of persons in the country; and lastly to give some account of the natural calamities to which Orissa is subject and of the possible remedies.

The Wealth of Orissa.

173. The wealth of Orissa may be said to consist of —

- | | |
|-------------------------------|-------------------|
| (1) 1st agricultural product. | (3) Fisheries. |
| (2) 1st live-stock. | (4) Manufactures. |
| (5) Forest and mines. | |

Of these the last two are but of small importance, and I will deal with them first.

174. The most important manufacture is that of which 162,551 maunds were manufactured in 1897-98 and 195,000 maunds in 1896-97. The Coast Railway, which brings cheaper salt from Madras, threatens to ruin this industry.

Manufactures.

The only other article manufactured for export is the silver filligree work of Cuttack, which is highly prized everywhere, but it does not give occupation to any but a very insignificant portion of the urban population.

Brass and bell-metal utensils and ornaments, coarse cotton cloth and certain other articles manufactured for local consumption supply nearly all the wants of the people, who require very few such articles of foreign manufacture.

The artisans who manufacture these articles form in fact a component part of the village organisation, some of them still holding service lands for their work.

175. There are extensive stretches of forests along the sea-board and the western boundary of the Regulation Districts, which can supply all the firewood required; but the difficulty of communication is so great that except in the big towns the people generally use dried cowdung as fuel. Large quantities of bamboos and wood are annually brought down from the western hills in the Tributary Estates for building purposes.

There are reserved and protected forests under the Forest Department in the Khurda Government Estate.

176. Minerals in Orissa are the property of Government, but there are at present no mines, and it is not likely that any will be opened in the near future. (See the discussion regarding the terms of the *Kabuliyat*, Appendix A, and paragraph 262.)

Sandstone, laterite, and rubble are quarried from the hills in the western border, but only for local consumption. Coal has to be imported.

177. The nature of the crops grown and the method of cultivation has been discussed in Chapter VI, and the question to be here considered is the sufficiency of the food-stocks and the margin available for purchases.

178. By far the most important article of food in the Province is rice, which, with a comparatively smaller quantity of pulse (*Dal*) and vegetables (and among the well-to-do class some fish and flesh), forms the daily meal of the Uriya.*

The first difficulty in estimating the food stocks and their sufficiency is to ascertain the outturn per acre and the area cropped; the second, to find the average consumption per head. The area we may take from the statements of cropped areas prepared in the course of the settlement proceedings,† making an addition on account of the areas excluded from settlement. For Kujang, Kanika, and Banki correct figures are to be had; in other unsurveyed estates I have assumed half the total area as under rice.

The outturn of rice I estimate at $13\frac{1}{2}$ maunds (standard weight) for irrigated, and 12 maund per $\frac{1}{4}$ for unirrigated land. From the latter figure some further deductions have to be made for losses by flood and drought. The Commissioners who enquired into the difficulties connected with the Orissa Canals estimated the average annual loss from drought at one-twelfth and that from flood at one-tenth of the total crop. These figures agree with my own conclusions, and I would accept them, applying the loss from drought to the whole unirrigated area, but that from floods to one half only, as about half the unirrigated area is safe from inundation.

The average produce of an acre of unirrigated rice land, good years and bad, is therefore $12 \left(1 - \frac{1}{12} - \frac{1}{2} \times \frac{1}{10} \right)$ maunds = $10\frac{2}{5}$ maunds. This is for the winter rice only. For *biaki* and *dahut* rice and the millets I take the average outturn of food-grain at about 8 maunds, and for the pulses and other *rabi* crops 5 maunds per acre.§

These figures are a little lower than those assumed by the Collector in his report on the failure of crops in 1896, when calculations were made on an average yield of 11 maunds of winter rice, $9\frac{1}{2}$ maunds of autumn rice, 10 maunds of spring

* See Appendix O.

† See Appendix F.

‡ Vide paragraph 137 and 109.

§ Probably it is more in most years, but I have adopted this figure in deference to the low estimates of Mr. Nathan and Mr. N. N. Banerji.

rice, and 9 of *rabi* food-grains per acre; but if the losses in abnormally bad years are to be taken into account in striking an average, I do not think my estimate can be very far wrong.

As to consumption, the Famine Code allows 12 *chataks* of rice and 2 of *dal* for an adult male labourer, half of this for a child, and for a women 10 *chataks* of rice and 2 of *dal*.

In the Behar famine of 1874, 12 *chataks* of all food-grains for an adult, and two-thirds of this for a child was the allowance, and the Jail Code gives a figure intermediate between these two estimates.

Sir Antony MacDonnell took the average consumption of the agricultural population at three-fourth of a seer per head, and in 1874 Mr. Commissioner Ravenshaw * put the average consumption in Orissa at half a seer per day for every man, woman and child, and Mr. N. N. Banerjei gives half to three-fourths of a seer of rice as the consumption of an adult Uriya †. We may, I think, assume that the consumption for adults is not more 12 *chataks* of rice a head, and that for children 6 *chataks* a head, giving an average of 10 *chataks* a head, besides fish, vegetables and green food.

In famine time the people will live on much less‡, but in an ordinary season this is a safe average for Orissa.

The following statement shows the estimated area under the principal food-crops and the estimated outturn :—

Crop.	District.		Area cropped in acre.	Estimated out- turn in Maunds =82.14 lbs.
<i>Biali rice</i>	Cuttack	....	135,000	1,080,000
	Balasore	....	10,000	80,000
	Puri	....	40,000	320,000
<i>Sarad rice</i>	Cuttack.	{ Irrigated	185,000	....
		{ Unirrigated	815,000	10,974,000
	Balasore	....	850,000	8,840,000
<i>Dahua rice</i>	Puri	....	650,000	6,000,000§
	Cuttack	....	17,000	136,000
	Balasore	....	1,000	8,000
<i>Mandia</i>	Puri	....	6,000	48,000
	Cuttack	....	30,000	240,000
	Balasore	....	Nil	....
<i>Other food- grains</i>	Puri	....	15,000	120,000
	Cuttack	....	170,000	850,000
	Balasore	....	12,000	60,000
	Puri	....	65,000	325,000
Total food-grains			3,001,000	29,081,000
<i>Sugarcane</i>	Cuttack	....	1,000	....
	Balasore	....	500	....
	Puri	....	3,000	....
<i>Oilseeds</i>	Cuttack	....	8,000	....
	Balasore	....	500	....
	Puri	....	9,000	....
<i>Other cropped areas</i>	Cuttack	....	50,000	....
	Balasore	....	30,000	....
	Puri	....	30,000	....

179. Taking the population at 4,200,000 and their average consumption of food-grains at 10 *chataks* per head, the average requirements of the Province are $4,200,000 \times 365 \times \frac{10}{16 \times 40}$ or 23,703,000 maunds of rice per annum. To this we must add some 2,500,000 maunds of seed, bringing up the total to about 262 lakhs of maunds. This leaves

* Note on Col. Gulliver's memorandum printed at page 68 of Selections from Correspondence on Orissa Canals,

† Page 31 of Agriculture of District of Cuttack.

‡ Famine Commissioner's report, paragraph 86, Part III. They take 1 lb. of rice as sufficient.

§ Owing to the great inferiority of much of the Puri land, I have taken the outturn at about a maund per acre less than the other districts.

an available surplus of 29 lakhs of maunds. This is clearly a little high, for the actual exports by sea in 1897-98 came to 26 lakhs of maunds, and it must be remembered that the estimate is for the average of a cycle of years, including those of scarcity, and that in a year of plenty like the last both production and consumption are much above the estimate. Probably in such a year 40 to 50 lakhs of maunds should be added to the normal outturn, of which 25 lakhs above the average were eaten and as much more went into reserve.

Anyhow, the figures show that in any ordinary year there must be a considerable excess of production over consumption, and that, on the average of a number of years, the outturn of food-grains after allowing for the amount required for seed leaves nearly three-fourths of a seer per head.

180. To the plain meal of rice and pulse there are nearly always added some vegetables. Fish and vegetable curries form a favourite dish, and spices are used to season and add flavour. The vegetables most largely grown are —

<i>Baigun</i> or Brinjal.	Yams.	Gourds and Pumpkins.
<i>Saru</i> or Caladium.	Radishes.	Plantain.
Onions.	Cucumber.	

The latter, though perhaps strictly a fruit, is more eaten as a vegetable, and with the *baigun* forms the basis of most of the vegetable curries.

None of these vegetables are exported, as they are generally inferior in quality and barely suffice for the wants of the people. Potatoes have recently been introduced and are grown with some success near Cuttack, but are not much eaten outside the town.

Spices, turmeric, chilli, coriander, mustard and ginger are used largely in cooking and the supply is not equal to the demand, so that there is a considerable import, especially of the more valuable kinds.

181. The principal fruits found in Orissa are the mango, jack, papaya, custard apple, pineapple, plantain, cocoanut, and palmyra palms. The *bael*, the cashew nut, the wild plum, and other fruits are also found, but are of less importance.

Mangoes form a very valuable addition to the food of the people in a good year such as 1897, when they certainly helped to keep the Province going until the *biali* harvest was reaped. The quality is inferior to that of the mangoes of Malda or Bombay, and the outturn very precarious.

Pineapples are grown in many villages, but are not plentiful enough to form a very valuable article of food. Plantains are grown in the gardens of many well-to-do persons, but are most used as a vegetable. The cocoanuts form a very valuable crop, of which there is a considerable export, and are eaten both while young and when fully ripe. The fruit of the palmyra tree is usually eaten young, when the kernel or *talsaj* is considered a great delicacy. When mature, however, it forms a useful article of food boiled with a little rice flour, and numbers of persons are said to have lived on it in the famine of 1866. Except of cocoanuts, there is no balance of any fruit available for export.

182. Spinach (*Sag*) is a very common article of food in Orissa, and a portion of the homestead called *saghari* is invariably set apart for growing it. A little *sag* fried in oil often takes the place of *dal* and curry. The following varieties are ordinarily grown in *baris*—

- (1) *Neutia*.
- (2) *Kosala*.
- (3) *Bathua*.
- (4) *Khara*.
- (5) *Piranga*.
- (6) *Poi*.

The following varieties which grow wild are also largely consumed—

- (1) *Puruni*.
- (2) *Paunsapansia*.
- (3) *Kanseri*.
- (4) *Moti*.
- (5) *Kanta neutia*.
- (6) *Suni sunia*.
- (7) *Kalama*.
- (8) *Gaicha*.
- (9) *Pitagahama*.
- (10) *Madaranga*.

Puruni, *madaranga*, *moti*, and *kalama* (water herb) are in times of severe scarcity boiled and eaten with a little salt. *Puruni* and *kalama* are very rare, but the country contains a sufficient supply of *madaranga* and *moti* to keep alive about 2 per cent. or 40,000 persons for about eight months from *Kartick* to *Jaishtha*. But these herbs should not be regarded as a food reserve for human beings, as on failure of straw they must take its place as fodder for cattle.

The following roots are eaten ordinarily by the low caste people and in times of scarcity by more respectable people—

- (1) *Bano Ola*.
- (2) *Tunga Alu*.
- (3) *Sankhu Alu*.
- (4) *Koraba*.
- (5) *Pitamasia*.
- (6) *Surkuti*.
- (7) *Koi Munda*.
- (8) *Mar Murua*.
- (9) *Bhuin Kakharu*.

These are available almost throughout the country.

183. Fish abound in the tanks and rivers, and are eaten by all classes and castes. The chief supply is derived from the Chilka Lake and the larger rivers, in which numbers of fish are caught and either eaten fresh or preserved by drying in the sun. This dried fish, or *sukwa*, is highly odoriferous, and not likely to be appreciated by foreigners until some better mode of curing is adopted; but it is much eaten by boatmen, carters, *et hoc genus omne*.

In the rains fish get into the rice-fields and are caught by the boys as the waters subside, and form a welcome addition to the family meal of those who cannot afford to buy such luxuries.

It is very difficult to estimate the value of the fish eaten, but the minimum consumption per house must be a rupee's worth a year, which would give the value at 10 lakhs.

184. After food-grains, cattle form the principal wealth of the people. Large herds are grazed during the hot weather on the *palanda* lands of Kujang and Kanika and the other estates near the coast, and in the rains are driven off to the jungles of Khurda and other high tracts; their flesh is but rarely eaten even by Mahomedans, but milk and ghi are consumed in the country by well-to-do persons.

Unfortunately, there are no complete statistics of the number of cattle in the Province or of the number exported for sale, but a considerable number are known to be sold every year.

Sheep and goats are met with everywhere in considerable numbers. The goats are kept both for their milk and their flesh, which is eaten by Hindus except by Brahmins and Baishanabs; a good many are also exported for sale.

From Survey returns for eleven Parganas in Cuttack, I find that in an area of 243 square miles containing 45,800 houses there were 46,400 bullocks, 46,300 cows, 700 buffaloes, 3,200 goats, 3,600 sheep, besides small numbers of other domestic animals. There are in this area 18,200 ploughs. We may take it then that there are nearly 200 plough cattle, and rather more of other cattle to the square mile: say for the Province 1,000,000 plough cattle, and as many cows

besides 200,000 sheep, goats, and pigs. Their value is difficult to estimate : at half a seer of milk a day a cow's yield should be worth Rs. 6 per annum; the value of the calves may be set off against the cost of feeding. Sheep and goats must bring a profit of at least Rs. 2 each per annum.

185. I think it has been made clear that the Province produces much more than is sufficient to feed it, and we are in a position to make an estimate of its wealth, excluding interest on capital and value of labour.

				Rs.
Value of food—grains less amount for seed at Rs. 2—4 per maund.	...	...	...	6,50,00,000
Oilseeds and other agricultural produce	...	...	...	50,00,000
Live stock and dairy produce (excluding value of purely agricultural cattle)	...	...	...	60,00,000
Salt	...	...	...	4,00,000
Fish	...	...	...	10,00,000
Manufactures, etc.	...	...	...	10,00,000
		Total	...	8,74,00,000

or Rs. 22 per head of the population.

Now out of this we must first deduct the amount consumed as food or used for clothing, etc., and the balance must suffice to pay the taxes and the price of all articles imported from abroad, besides leaving a surplus for remittances to absentee proprietors. We must assume that this balance is all exported.

The taxation of Orissa is roughly as follows :—

			Rs.
Land Revenue	....	....	24,00,000
Excise	....	....	6,60,000
Stamps	....	....	5,00,005
Registration	....	....	40,000
Road Cess	....	....	1,35,000
Public Works Cess	....	....	1,35,00
Municipal taxes	....	....	1,15,000
Income tax	....	....	60,000
Water Rate	....	....	3,15,000
Dak Cess	....	....	20,000
	Total	....	<u>43,80,000</u>

Imports by sea in 1897-98 were valued at 82½ lakhs, but this includes railway material which being deducted leaves 78 lakhs as against 67 lakhs in the previous year. To this we must add imports by road, river, rail and canal, and I think we may take the total imports of the Division at 80 lakhs of rupees.

The remittances to absentee landlords who spend their money in Calcutta cannot be placed at less than 2 lakhs. The value of the exports by sea in 1897-98 were returned at 96½ lakhs and we may safely add another 3½ lakhs for grain, cattle, and other produce exported by rail or road. The total exports will then stand at 100 lakhs, of which 80 lakhs are for food-grain, 5 lakhs for hides, and the rest made up of various articles of minor importance.

There is thus a large apparent surplus of expenditure over income, which may in part be accounted for by the remittances of emigrants.

The census table show that there are about 72,000 Uriyas living out of Orissa, and most of these are in service earning good pay and remitting money by money-order or *hundis*. Taking their savings at Rs. 40 per head, the total amount would be nearly 28 lakhs, and I think the remittances may be put down as 20 lakhs. The postal returns show 27 lakhs of money-orders received and most of this is from other districts, so that the above estimate is not excessive.

Even so, the accounts will not balance; but the reason is that the equation is by no means so simple as it appears. A great deal of the money collected as taxes finds its way back into the pockets of the people as wages of employees and labourers, so that no accurate adjustment can be expected, but I believe that these estimates, rough as they are, give a fair idea of the income and expenditure of the Province as a whole.

186. The estimate given in paragraph 170 shows that very nearly 60 per cent.* of the population is engaged in agriculture, and I propose first to deal with their condition.

Size of agricultural holdings.		The number of holdings, as recorded in the Settlement paper, is as following :—		
District.		Number.	Area in acres.	Average area of a holding.
Cuttack	....	650,600	822,500	1.26
Puri	....	204,400	373,300	1.82
Balasore	....	376,600	692,600	1.80
Total	....	1,231,600	1,888,400	1.53

Sometimes, however, it occurs that one man holds land in more than one village, and enquiries made in 26 agricultural villages† show that out of 100 heads of families, 56 hold over 2 acres each, 30 hold 2 acres or less, and 14 have only homesteads.

The last are, for the most part, labourers; the 30 are artisans, weavers, and others who combine agriculture with their proper pursuits. It is all a question of degree, but the figures bear out the estimate above given that about 60 per cent. depend chiefly on agriculture.

The average holding of the agriculturist works out to 3.23 acres, and of the whole population to 2.21 acres per head of a family.

These villages were selected with care, and much trouble was taken in compiling the figures, but I fear they are still below the mark.‡

Taking the number of persons in each family at five and the cultivated area of the Province at 4,930 square miles (viz., Cuttack 2,200, Balasore 1,460, Puri 1,270), the average area of cultivated land per family is a little over $3\frac{1}{2}$ acres per family, which would give about 5 acres to the agriculturists.

187. Let us, however, see what is the condition of the Uriya, supposing him to hold 3 acres of rice land and quarter of an acre of homestead. Taking the land to be unirrigated and all to grow *sarad* rice, the outturn would be, according to my estimate 57.2 maunds of paddy, besides straw about 75 maunds. Setting aside 3 maunds of paddy for seed, the cultivator will get 33 maunds 35 seers of clean rice.

His family will consist of himself, his wife, one grown up and two small children, requiring altogether four adults' rations or 40 *chataks* of rice a day. They will, therefore, eat in the year at least $22\frac{3}{4}$ maunds, leaving only 11 maunds 5 seers for all expenditure. He will, in his own compound, grow all the vegetables he uses, and with the straw and chaff can keep a pair of bullocks. He can do all his own ploughing, but will require some help, for which, and his other expenses, the following estimate has been made by Babu J. M. Das, an officer intimately acquainted with Uriya peasant life§.

	Rs.	A.
1. For weeding, 30 labourers besides himself, at one anna six pies each.	2	13
2. For reaping, binding, and carrying to the threshing floor, 24 paid labourers at two annas each besides himself and <i>badla</i> labourers or labourers working in exchange for his own labour.	3	0
3. Rent	10	2
4. Carpenters and blacksmiths for repairing agricultural implements (18 seers of rice)	1	2
5. Chaukidar (8 seers of rice at 2 <i>gaunis</i> of paddy per acre)	0	8
6. Washerman and barber	1	0
7. Salt and oil	5	0
8. Spices, betelnut, tobacco, etc.	2	0
9. Fish <i>dal</i> (pulses) and other petty expenses.	3	0
10. Cloth	7	0
Total	35	9

* 57 per cent. was the recent estimate of the Secretary of State for the whole of India.

† Five groups in five Thanas of Cuttack.

‡ Similar figures compiled in Balasore gave an average of $3\frac{1}{2}$ acres per tenant.

§ Mr. Nathan in his note on Kotdesh puts the cost per acre at from Rs. 7 to Rs. 9, including, however, the value of the man's own labour and that of his cattle. Mr. N. N. Banerjee puts the cost at Rs. 9.9 for broadcast and Rs. 10 for transplanted rice (excluding rent and seed).

The value of the rice left over after feeding the family is only Rs. 24-6, so there is a deficit of Rs. 11-3, equal to another 5 maunds of rice. If the land were wholly irrigated, there would be an additional margin of 4½ maunds, so that the expenses and receipts would nearly balance, and we may, I think, take it that quarter of an acre of homestead with 3 acres of irrigated, or 3½ of unirrigated land would just support the ordinary agricultural family of five on a subsistence allowance of food. *

Expenses such as marriages and a bad season would have to be met from other sources such as the son's earnings as a labourer, and in a bad season the raiyat would inevitably become indebted to the *mahajan*, and would in all probability never again be clear of debt.

188. In his report on Balasore, † Mr. Kingsford has arrived at some-what different conclusions to those given in the preceding paragraphs. Starting with an estimated outturn of 14 maunds ‡ of paddy to the acre, he finds that after paying their rents, the cultivating classes have left 8,198,300 maunds which, divided over 143,535 families, gives an average to each of 57 maunds, the whole of which will be required for food, according to the following estimate §.

"If the family consists of three adults and two children, one of whom is an infant, the following will be the details of their consumption of rice annually :—

"(1) Rice for four persons at 10 *chataks* per head daily amounts to 2½ seers per day, 75 seers per month, and 22½ maunds per annum.

"(2) The infant will consume cakes of rice flour to the amount of 2 seers a month and 24 seers per annum.

"(3) *Arua*, or rice husked and unboiled, will be required for festivals at 5 seers per month, or 60 seers per annum.

"(4) *Khai*, fried rice, sometimes seasoned with sugar. The monthly consumption will be 2 seers and the annual 24.

"(5) Rice for making gifts, also 24 seers annually.

"The total annual consumption of rice is, therefore, 25 maunds and 32 seers, which, at the conversion of 22 of paddy to 10 of rice, amounts to 57 maunds. As the paddy is husked by the women of the family, the yield of rice is likely, in fact, to be somewhat greater, and may leave a balance of a few maunds, of which two will be disposed of as the perquisites of the village washerman, barber, carpenter, blacksmith, and chaukidar."

The total expenses of the family Mr. Kingsford estimates as follows :— ¶

"For a family of five, three adults and two children, in ordinary circumstances, the annual expenditure of which particulars have not already been given, may be thus stated :—

	Rs.	A.	P.
"(a) Living—			
Paddy to be husked by the women of the family, 57 maunds	Nil.		
<i>Dal</i> from his own <i>bari</i> , or obtained in exchange for some of the rice which would otherwise be consumed	Nil.		
Condiments, etc., at Rs. 2-2 per month.	25	8	0
"(b) Thatching —			
Straw from his own field	Nil.		
Labour, his own	Nil.		
Bamboos and twine	0	10	0
"(c) Clothing.	9	1	0
"(d) Miscellaneous	1	14	9
Barber, Washerman and Chaukidar — One maund of paddy	Nil.		
"(e) Comforts and luxury—			
Ornaments, average for the year	1	5	0
Utensils	0	8	0
Stimulants	2	8	0
Total	41	6	0

* See Mr. N. N. Banerjee's report, page 37. He makes out that even with 10 *mans* of land a raiyat has to meet an annual deficit of Rs. 17, but this cannot be correct with 10 *mans* a man is well off.

† Report on Settlement of Balasore, Part V.

‡ That is, on the whole cultivated areas.

§ Balasore report, paragraph 199.

¶ Balasore report, paragraph 200.

		Rs.	A.	P.
(f) Agricultural—				
Rent, already deducted from the produce	....	Nil.		
<i>Abwabs</i>	....	2	8	0
Seed grain, 32 seers per acre	....	2	12	0
Manure, not purchased	....	Nil.		
Labour, his own or that which others supply him in return				
for his own		Nil.		
Total	....	46	10	0
Repairs of implements—1 maund of paddy to the Carpenter and Smith.				
		Nil.		
Total	....	46	10	0

The deficit of Rs. 46-10 Mr. Kingsford proposes to meet by assuming one of the children to earn two annas a day by labour or Rs. 34 per annum, and other members of the family a few rupees by odd jobs, which, with sale of garden produce, may make up an income of Rs. 40 to Rs. 50.

I doubt whether the equation is correctly worked out, but the estimate may be taken as a very fair picture of the expenses of a family depending partly on agriculture, say three acres, and having some additional means of sustenance such as remittances by a grown-up son gone into service, or a profession such as that of a potter.

The large item for condiments and spices must, however, be reduced by the produce of the homestead; the payments to village servants are rather too large for a small holding, and in Cuttack the large payments for "*abwabs*" and stimulants could be considerably reduced.

The most interesting point of the estimate is that no allowance is made for expenses of cultivation, the whole being put down as the labour of the family, while in most estimates we find large payments for labour. As the number of labourers is less than a quarter that of the cultivators, and many of the former are tillers of zamindar's *nijchas* or employed by Brahmans and Karans, it is clear that the small cultivator cannot employ much outside labour, and for such as he does he pays in the form of his own labour.

The conclusion I come to is that if he has less than 3 acres of average land, a man must earn something by labour or by cultivating a few *gunths** of sugarcane or other valuable crop.

With 3 to 4 acres of land a man can live and support a family in an ordinary year, but with no margin for luxuries or comforts; with 5 acres or more he is fairly well off.

In the Government estate of Khurda I found 4 acres to be the average area of the cultivator's *jote* (see paragraph 50 of my covering report).

189. If we except well-to-do raiyats holding themselves 8 or 10 acres or more of land, there are very few cultivators not in debt to the *mahajan*. Enquiries made by the Assistant Settlement Officers have not resulted in much definite information, but it appears to be well established that the petty cultivator pays away as rent and interest the whole of his crop, except what is left to him for subsistence allowance, and has almost always to borrow again before the next harvest is ripe. In a good year he will pay his debts and rent in full in January or February and have enough to carry him on throughout the year if he has no unusual charges to meet, but he will probably seize the opportunity to marry off a son or daughter which may leave him indebted to the extent of Rs. 50 for which he will probably execute a mortgage on his land or a portion of it.

In bad years payment of rent and loans will not leave the cultivator enough to eat, and he will probably borrow again in June or July enough to carry him on to the end of the year. Most of the money, or rather grain, lending in Orissa is in the hands of zamindars or proprietary tenure holders, and they are by no means hard creditors. Very occasionally a bad tenant gets sold up, but as a rule the zamindar knows that it is to his interest to keep his raiyat going, and will supply him on the usual terms with the necessary grain, even though there be

* 25 *gunts* = 1 *man*, see paragraph 124.

a large accumulated debt. As security he nearly always requires a bond (*tamsuk*) pledging the land, but these are not often used, and sometimes even particulars of the land and of the consideration are not filled in.

The only matter in which I have known raiyats to show any providence is that of preserving grain for seed, and several instances were brought to my notice in 1897 where the cultivator, though reduced to great straits for food, getting practically no rice to eat, refused to touch his little seed-store.

Grain loans,

190. Agricultural loans * are most commonly made in the form of grain or of cash to be repaid in grain.

Sometimes raiyats lend grain to one another, but more often they apply to their *mahajan*, who is as a rule their zamindar. The commonest of all loans is one of grain for food and seed advanced in May and June or July or later, and repayable in kind in the following December. These loans are generally known as *sawai*, implying that one-fourth more than the amount lent is to be repaid, or as *panchpai*, which has the same meaning. Often, however, a yet higher interest is taken by *mahajans*; half as much again as was borrowed (*derdhi*), or even twice as much (*dwigun*) have to be repaid at harvest time.

Cash loans.

191. The raiyat requires very often to borrow money in order to meet the *kist* of rent due in November before the winter rice is ripe. This he must obtain from a *mahajan* on the "*Karhia*" system, *i. e.*, he will in February repay the loan in grain at the market rate then current, with two *gaunis* (about 8 seers or 20 per cent.) as interest. Opinions differ very much as to the extent to which such borrowing is resorted to. Mr. Nathan, whose intimate acquaintance with the Kotdes estate is unrivalled, reported † that in Puri the raiyat does not pay his rent through the agency of the *mahajan*, while Babu Jamini Mohan Das in Jajpur stated that the great majority of raiyats have to borrow for paying the *kist* that falls due in November.

I take it that much depends on the season and much also on the punctuality with which the zamindar realises his rents; some allowance also must be made for the nature of the country, and in Puri and south Cuttack a comparatively larger area is under *biali* rice and *mandia* than in northern Cuttack and Balasore.

Ordinary money loans (*karja*) are made at monthly interest of half an anna per rupee per month. Sometimes an anna per rupee is charged or even more, and if the sum be large and the security good, the rates may be as low as 12 per cent per annum.

If the sum is not very petty, repayment is secured by a bond with or without a surety. Loans on simple mortgage (*rahan bandhak*) usually bear interest at 6 pies per rupee per month. In the case of a usufructuary mortgage (*dakhal bandhak*) no interest is charged, but the *mahajan* obtains possession until such time as the debt is repaid.

Conclusions as to position
of agricultural population.

192. In spite of their indebtedness, and of the liability of the crops to injury by extremes of drought and flood, it is still the case as it was thirty years ago that in times of real scarcity the agricultural classes have more resources than any other, and I can quote as true of Orissa at this day the words of the Commissioners who visited the Province in 1867 ‡ :—

"Still more remarkable than in the North-Western Provinces (as noticed in such striking terms by Colonel Smith) was the advantage possessed by all the classes having any sort of rights in the land. In this instance, not only they had better means and better credit than the labouring classes, but being to a considerable extent in the habit of keeping grain for home consumption, those who had crops of some kind were better provided than the nonagricultural classes when grain was not to be bought."

Indeed, land is yet more valuable now than it was then, owing to the greater freedom of transfer. A revenue free property fetches Rs. 100 to Rs. 150 an acre, and tenant-right with fixity of rent Rs. 40 to Rs. 80 per acre.

* See N. N. Banerjee's Agriculture of the district of Cuttack, Page 38.

† Mr. Nathan to Settlement Officer, No. 238, dated 24th February. 1893.

‡ Report on Famine of 1866, Paragraph 77.

Condition * of non-agricultural classes or classes who depend for their subsistence either wholly or chiefly on means other than agriculture.

193. These may be divided into—

- (1) Artisan or skilled labourers.
- (2) Unskilled labourers.
- (3) Others.

The wages given to classes (1) and (2) by the Public Works Department during the thirty years 1869-99 may be taken as fairly representative of the prices of such labour. A carpenter or a blacksmith now gets from 7 to 8 annas per diem, an ordinary male day-labourer gets from 2½ to 3 annas, a woman gets 2 annas, and a boy gets from 1½ to 2 annas per diem. In the last few years there has been a decided rise in the earnings of these classes owing to the great demand for labour on the Bengal-Nagpur Railway. These are wages which a labourer can get away from his home. In his own native village a skilled labourer gets from 4 to 6 annas and an adult unskilled labourer from 1½ to 2 annas per diem according to the demand for labour. For making and repairing agricultural implements carpenters and blacksmiths are always paid in kind, the annual payment averaging about 9 seers of rice from each client. When paid in kind, the day labourer gets varying quantities of paddy equivalent to 2 to 2½ seers of rice. There are two other classes of unskilled labourers—(1) the *kuthia* or *halia* who is engaged by the year and paid daily in kind and (2) the *chakria*, who is also engaged by the year but paid in cash. The following table shows the wages ordinarily given to these two classes of labourers:—

Name of Subdivision.	Kuthia or Halia						Chakria.	
	Rice given daily (paddy converted into rice.)		Loans without interest.	Cloth.		Other allowances, if any.	Annual cash wages with food.	Cloth.
	Quantity.	Value.		Number and description.	Value.			
1	2	3	4	5	6	7	8	9
	S. CH.	A. P.	Rs.	Gamcha	As.		Rs.	Rs. A.
1. Cuttack	1 12	1 8	3 to 5	...	...	.50 acre of land as jagir and 65 seers of paddy at the end of the year besides the daily wages.	12 to 15	2 Pieces of dhoti 1 8 1 gamcha 0 6 1 Winter cloth 1 0 Total ... 1 14
2. Jajpur	1 5 1 to 10	1 3 1 to 7	Re. 1 and 40 seers of paddy	1	5	.50 of an acre of land as jagir and 40 seers of paddy at the end of the year besides daily wages.	12 to 18	2 pieces of cloth 1 4 2 gamchas 0 7 1 Winter Sheet 9 14 Total ... 2 9
3. Kendra para	2 0	1 10	3 to 5	...	...	.40 of an acre of land as jagir.	9 to 18	2 Pieces of Cloth 1 6 2 gamchas 0 10 1 Winter Cloth 1 0 Total ... 3 0
4. Puri	2 0	1 10	15 to 20	...	...	{ .50 of an acre as jagir land.	18 to 24	2 Pieces of Cloth 1 8 2 gamchas 0 12 1 Winter Cloth 1 0 Total ... 3 4
5. Khurda	2 0	1 10	15 to 20	...	...			
6. Balasore	1 10	1 7	5 to 10	1	5	.50 acres of land as jagir.	18 to 24	Ditto
7. Bhadrak	1 10	1 7	5 to 10	1	5	Ditto	12 to 18	2 pieces of Cloth 1 4 2 gamchas 0 7 1 Winter sheet 0 14 Total... 2 9

* This is taken from a note by Babu Jaminī Mohan Das, Deputy Collector and Assistant Settlement Officer.

An artisan with a family of five earning seven annas a day does not spend more than five annas a day, and he is thus able to lay by something which enables him in time to invest his savings in land, the great ambition of every man in Orissa. There is hardly any really skilled artisan who has not, if he is a man of the mufasal, some land and if a man of the town, some money-lending. I do not here include the village artisans who, never going out of the village, form part of the village organisation and are indirectly supported by agriculture. The most helpless class among the artisans are the weavers, who, living from hand to mouth with a scanty income, and having little or no connection with cultivation, seriously, suffer in famine.

The lot of the day-labourers is rather hard in Orissa, as it is in many other parts of India. Spending what he earns from day to day, he has very little to pawn or sell in times of distress, and is therefore the first to succumb, unless constantly watched and provided with work within his easy reach. No labourer cares to go to a distant work leaving his family uncared for with the prospect of only earning enough for himself. Unlike the Behari, the Uriya never moves with his family, and this peculiar characteristic of the Uriya people should be never forgotten.

The *kuthia* or *halia* is a little better off than the day-labourer in that he has a better man to look after him, who, if an old master, does not forsake him until he is himself reduced to the very last strait. In paragraph 23, Part III, of their Report, the Famine Commissioners wrote :—

“Sir H. Strachey puts it thus in the evidence from which we have already quoted: ‘During a great famine dependence, slavery and captivity are for the poor highly available’ and without going quite so far, we may say that the evolution of a body of some in some sense independent labourers for wages, increases the difficulty of abnormal seasons. We doubt if English labourers could as well resist a season in which food should be two or three times its ordinary price as do the people of India.”

The third class comprises beggars and men employed in services and professions of all kinds. Orissa is noted for its *quasi*-public charities; charitable endowments covering immense areas are scattered all over the Province, but unstinted private charity as it exists in Bengal is unknown here.

The beggars ordinarily met with belong to three castes—(1) Brahman, (2) *Jogi* and (3) *Kela*. Their number is very small, probably about $\frac{1}{2}$ per cent. the total population.

Most of the professional men, combining agriculture with their professional incomes, are fairly prosperous.

Roughly, the proportions of the various classes who live wholly or chiefly by means other than agriculture may be put down as follows :—

	Per cent.
1. Beggar	5.
2. <i>Kuthias</i> or <i>halias</i>	2.5
3. <i>Mulias</i>	5.
4. Artisans, servants, and professionals	36.
Total	44*

194. In page 171, volume II, of his History of Orissa, Sir W. W. Hunter lays down this proposition : “All wages that are paid in money have risen by more than one-third (during twenty years); all wages that are paid in kind remain the same.”

Measured by the quantity of grain which is given, it is quite true to say that there has been no increase in wages in kind during the last twenty years; nay, during the last forty years : but a little calculation will show that their money valuation has increased by 90 per cent. during the last thirty years.

It is mentioned on page 93 of Mr. Toynbee's History of Orissa that in 1814 a day labourer could earn two annas per diem in town when he can now earn three annas per diem, being an increase of 50 per cent. Supposing there has been

* This leaves a residue of 56 per cent. of the population dependant upon agriculture. In a previous paragraph the estimate was 60 per cent. The difference is due to the fact that some of the agricultural castes depend in a considerable measure on service for their support.

no increase in the rate of wages in kind, the following table compares the rise in the value of the two kinds of wages :—

YEAR.	Money wages. A. P.	WAGES IN KIND.		PERCENTAGE OF INCREASE.	
		Quantity of rice. SRS.	Money value. A. P.	Money wages.	Wages in kind.
1814	2 0	2 to 2½	$\left\{ \begin{array}{l} 0 \ 10 \\ \text{to} \\ 1 \ 0 \end{array} \right\}$	....	....
1889	3 0	2 to 2¼	$\left\{ \begin{array}{l} 1 \ 10 \\ \text{to} \\ 2 \ 3 \end{array} \right\}$	50	125

Note—The money wages given in this table are town wages. In villages the wages have risen in the same proportion, and are now slightly less in value than wages in kind.

As money wages have not risen in the same proportion as the prices of the staple food-crops, the condition of town labourers has deteriorated, while that of the village labourer who receives his wages in kind has distinctly improved.

Wages in money are now slightly less in value than wages in kind, and the latter are therefore always preferred by the village labourers. In a conservative country like Oaissa custom takes a long time to change, and money wages may, therefore, lag behind wages in kind for some time to come.

It is extremely difficult to get a coolie in the mufasal for cash wages in the sowing and reaping seasons, when wages in kind are freely given.

The rise in prices has also directly benefited the cultivating raiyats who pay their rents in cash. The diagram facing paragraph 164 shows the fluctuations in prices of common rice from the date of the last Settlement to the present time.

It appears that a severe flood in 1836 and a severe drought in 1840 caused prices to rise very high in 1837 and 1840. Omitting these two exceptional years, the average of eight out of ten years following the last settlement comes to 48·14 against 18·23 during the ten years 1887-96 before expiry of the settlement, giving an increase of 163 per cent. : very nearly the same results are obtained, if instead of ten years averages are taken for fifteen years, including the high prices during both the periods.

Competitive or *pahi* rents have, during the same period, risen by 44 per cent., or 119 per cent. less than the rise in prices which, after a deduction of one-third on account of increase in the cost of cultivation, still leaves a difference of 64 per cent. in favour of the cultivator.

195. So far the condition of Orissa in an average year only has been considered, but the most difficult problem that the administration has to face is the liability of the Province to loss of crops from natural calamities.

Famines.

The rainfall in Orissa is in most years ample for its needs, the average being 62 inches per annum; * but it is precarious, and its early cessation is fatal to the rice crop. On the other hand, the channels of the numerous rivers are insufficient to carry off the great volume of water that comes down after heavy rain from the table lands of Chota-Nagpur and the Central Provinces, and the waters overflow the banks and inundate the whole country, causing mere or less injury to the standing crop. Less frequent but even more serious damage has been done by storm waves on the sea face, and though the low lands are to some extent embanked against the salt water, violent cyclones have breached the embankments and caused great loss to life and property.

It is sometimes said that the effect of these natural calamities has been aggravated by the attempts made to restrict the rivers within their channels by means of embankments, but a retrospect of the early history of the Province will, I think, show this view to be erroneous.

Historical records † show that great famines occurred in the fourteenth, fifteenth, and sixteenth centuries of our era, in the reigns of Raja Kahil Indra Deo, Raja Rai Uriya, and Raja Pestub Madra Deo. The great Bengal Famine of 1770

* See Paragraph 107.

† Paragraph 51 of Report of Commissioners on the famine of 1866.

was grievously felt in Orissa, and a few years later in 1774-75 another serious scarcity is said to have occurred. Again in the *Amli* year 1200 corresponding to 1792-93 A. D., in the time of the Mahrattas, the last great famine of the 18th century devastated the Province.

In the famine of 1769-70 Stirling says that "rice was not to be had for two seers per rupee. In 1183 (1775 A. D.) rice was hardly to be purchased in the bazar of Cuttack at ten *pans* the *Katki* seer," or 10 annas for a seer of 105 tolas. He adds that a remission of 7 lakhs of revenue was given in that year. In Mr. Toynbee's history we find that during 1803 and 1804 there was scarcity in Cuttack but not in Balasore. In 1806 there was "total failure of the rains between 17th September and 18th November."

In July 1807 there were heavy floods followed by scarcity, and 1809, 1817 and 1828 were years of bad crops and great distress.

The most serious calamity of the first half of the century was the inundation of the sea on the Balasore coast in the years 1831-32. By this a large tract of country was temporarily thrown out of cultivation and almost depopulated, and the whole agricultural system of the district greatly disorganised. In 1834-35 the country was laid waste by inundation and in 1836, 1837 and in 1842 Orissa suffered severely from drought; but the only general famine of this century comparable with that of 1770 is that of 1865-66.

Like all the greatest famines of Indian history it was due to drought, though the effect of this was aggravated by that of floods in August in the following year. More than half of the rice crop was lost, and prices rose to 5 seers to the rupee in June, 1866, and were much higher in some tracts on the Dhamra. The mortality was estimated by the Lieutenant-Governor at one-fifth, and by the Famine Commissioners at one-fourth of the whole population; and even if these estimates be somewhat high (see also paragraph 198), they are near enough to show what frightful suffering such a failure of the harvest entailed. In 1877-78 there was a famine in the neighbouring province of Madras and a partial failure of the rains in Orissa in the same year, with the result that prices rose rapidly and there was a good deal of local distress but nothing of the nature of real famine.

Again there was failure of the October rain of 1888 and 1891, followed in the latter year by heavy floods which caused a considerable loss of crops, and there being at the sametime scarcity in parts of Bengal and Behar prices rose to above 14 seers.

In 1896 there occurred in all the principal rivers a flood of great height and unprecedented duration followed by short rain in September and an almost complete failure in October. Similar causes led to scarcity and famine throughout India, and at one time there was some fear lest we might find ourselves in Orissa face to face with such an insufficiency of food stocks as there had been in 1866.

The outturn of rice was estimated at 7 to 8 annas of a normal crop and the deficit to be supplied by import was put at 10 lakhs of maunds in Cuttack alone, allowing for the stocks in hand and the outturn of *rabi* crops *. In the event, however, though there was considerable local distress, very little relief was found necessary in Balasore beyond such as was afforded by the facilities for obtaining earthwork on the railway; in Cuttack the grants by the District Board were supplemented by contributions from the Indian Famine Relief fund. In Puri in the neighbourhood of the Chilka Lake distress was more serious, but on the whole the people proved capable of supporting themselves.

196. The difference between the two years 1865-66 and 1896-97 is very striking, and seems to show a great improvement in the resources and communications of the country. The years preceding the famine of 1866 had been a most prosperous era, distinguished by a great development of the exports, * and the terrible distress that followed the drought of 1865 seemed to disprove the truth of the popular belief that the food stocks left after a good year are sufficient to meet the wants caused by a single harvest's failure †. The years 1890-95 were marked by failure

* Commissioner to Government, No. 5R. of 5th January 1897.

† Report of Commissioners of Orissa famines, paragraph 8, Part II. There was however a poor crop in 1864-65, especially in Puri.

of rain and floods in 1891-92 and heavy exports in subsequent years which might have been expected to deplete the stocks in reserve, yet not only did the Province escape famine but it exported some 30 lakhs of maunds of grain in 1896-97 and 26 lakhs in 1897-98. The following * statement compares in a tabular form the two years :—

Year	Rainfall.			Estimated outturn of harvest.	Average price of clean rice.	Highest price of clean rice. Seers.
	September.	October.	Total for the year.			
1865-66	5.20	Nil	36.30	$\frac{1}{3}$	9.36	3
1896-97	6.33	.31	53.13	$\frac{1}{2}$	11.87	9

In 1863-64 the exports from Orissa mounted to 5½ lakhs of maunds; in 1864-65 to 9½ lakhs. In 1865-66 they fell to 62,000 maunds, and in the following year were practically nil, while from May to November 1866, 2½ lakhs of maunds were imported. On the other hand, in 1896-97 exports reached their highest limit of 30 lakhs of maunds, and in the following year again there were large exports.

197. It is difficult to account for this great difference. An interesting estimate was prepared by the Collector of Cuttack of the produce and food-stocks of the district for the years 1890-96 †. He assumed the average produce at 120 lakhs of maunds of rice, which is a fairly high estimate - see paragraph 178 above - and that of other grains at 8½ lakhs of maunds, *plus* 1½ lakhs imported. The annual requirements are taken at 124 lakhs of maunds for food, *plus* 16 lakhs of maunds for grain; total 140 lakhs of maunds, or, deducting other grains, 138 lakhs of maunds of rice.

The exports averaged 11 lakhs of maunds, making an average annual deficit of 22 lakhs of maunds, for six of which the Collector accounts by imports from the Tributary Mahals, Balasore, and Khurda.

After examining the liability to error, the Collector found the stocks available for sale or export to be 10½ lakhs of maunds and the outturn of the year, 68½ lakhs of maunds, making a total of 79 lakhs of maunds, against requirements of 131 lakhs.

It is obvious that this was not the actual state of affairs, and I do not think the outturn of winter and autumn rice can have been underestimated. The *rabi* crop was, however, exceptionally good, and we may add on this account another 15 lakhs of maunds instead of 8½ mentioned by the Collector, and perhaps 5 lakhs of maunds for *dalua* (spring rice), raising supplies to 100 lakhs of maunds. Taking the consumption at 100 lakhs of maunds for food, or under half a seer a head per diem, and adding 10 lakhs of maunds for seed, we get a minimum deficit of 10 lakhs.

The exports were certainly greater than imports from the Tributary Mahals or elsewhere, and the stocks cannot have been less than of 20 lakhs of maunds at the lowest figure.

I think the error lay in underrating the stores of grain held by large raiyats and petty *lakhirajdars*. It is certainly a fact that the grain trade is in the hands of the big dealers who have agents all over the country, but officers of experience, such as Mr. Nathan, have denied that the well-to-do raiyats hypothecate their produce to grain-dealers to any great extent, and state that they take their own surplus produce to the nearest market to sell. Certainly this is the case with the petty zamindars and *lakhirajdars* and all classes who are in the habit of letting out land on produce rents; and not only do they sell the crop directly, but they are capable of holding it up in expectation of good prices. I have heard of cases where considerable stocks were found in a secret chamber of an ordinary raiyat's house, and the *Mohants* of the charitable institutions in particular are supposed to keep very large reserves.

* Report of Commissioners of Orissa famines, paragraph 8, Part II. There was however a poor crop in 1864-65, especially in Puri.

† Collector to Commissioner, No. 2860, dated 9th December, 1896.

198. It is difficult to reconcile the various estimates of the population in the early years of the century. In 1821 we learn from Mr. Stirling that the total population of the Province was 1,300,000 and that there were but 3 towns of any size,—Cuttack, Balasore and Puri,—with populations of 40,000, 10,000 and 30,000, respectively. During the settlement operations of 1840-45 an estimate was made of 2,500,000. It is hardly conceivable that there should have been an increase of 1,200,000 in twenty years, and I think Mr. Stirling's estimate must have been below the mark; the other is probably somewhat high, for in 1854 an estimate, based on the counting of houses * gave a population of but a little over 2,400,000. Just before the famine the population was estimated—chiefly from data furnished by the police—at three millions, and after it in 1867 at 2,100,000 †. In 1872 the first regular census showed the population to be 3,035,000, so that if the estimates of 1867 were correct, the population had in four years increased by 935,000, or by more than 44 per cent. This is obviously impossible, especially in days when immigration was almost unknown and the locomotion was slow and difficult. I think that the outside increase in five years, allowing for the return of those who had fled to other districts, may be put down at 20 per cent., which would give the population of 1867 at about two-and-a-half millions and make the loss of life in 1865-66 only half a million, which is not improbable.

The reliable figures as to population may be taken as :—

1843	....	....	....	2,500,000
1865	....	....	....	3,000,000
1867	....	....	....	(a) 2,500,000
1872	....	....	....	3,000,000
1881	....	....	....	3,600,000
1891	....	....	....	3,800,000
Present day	....	....	....	(a) 4,200,000

(a) Estimate.

This steady increase is in itself the most valuable evidence of the prosperity of the Province under British administration. It cannot, however, be said to be an unmixed blessing. In rather more than half a century the population has increased by 1,700,000, or 68 per cent., and in the same time cultivation has increased by about a third, and there is not much room left for further extention. The amount of land and agricultural produce available for the support of each individual has thus been reduced in the ratio of 100 to 79. The population now averages about 700 per square mile cultivated in Balasore, about 570 to the square mile of cultivation in Puri, and nearly 800 to the square mile of cultivation in Cuttack; while in some Thanas the density is much greater. So far the increase in the value of the surplus produce has gone far towards recompensing the cultivator, and a general modicum of necessities has replaced the alternate want and abundance of former years. It is, however, certain that the limit has been nearly reached, and either the increase of population must be checked or the pressure relieved by immigration, or the standard of comfort reduced to a dangerously low level.

* See paragraph 36, Famine Commissioner's report of 1866, Part I.

† Commissioner to Board, No. 501, dated 24th July. 1867.

Part III.

CHAPTER IX.

A SHORT ACCOUNT OF ANCIENT ORISSA OR ODRADESA: ITS PLACE IN ANCIENT GEOGRAPHY, ITS HISTOY, PEOPLES, AND RELIGIONS.

An attempt is made in this introduction to bring together a short history of ancient Orissa. My excuse for quoting text rather than giving references is to save the time of those who have not ready to hand the works of the authorities quoted. I desire to express my deep sense of obligation to Mr. F. E. Pargiter, I. C. S., who has very kindly revised in part the draft of this chapter.

(A) *The place of Orissa in the geography of Ancient India.*

199. In the second book of the Mahabharata is given an account of the celebration of *Rajasuya* sacrifice, which is said to have been attended by all the kings in India.

Amongst other kings (who brought gifts) were the king of the Sakas, identified as Scythians by Professor H. H. Wilson, and the Kings of Banga, Pundraka and Kalinga, identified by the same authority to be the inhabitants of Lower Bengal, Midnapore, and Ganjam.

200. Mr. F. E. Pargiter, I. C. S., in a paper on the Ancient countries in Eastern India (As. Soc. Vol. LXVI, Part I, No. 2), gives evidence to show that five kindred races inhabited East Bihar and Bengal, namely, the Angas, Vangas, Kalingas, Pundras, and Suhmas, their countries being known by the same names, and that the connection between those races was explained by an ancient legend that they were descended from five eponymous kings of the same names who were sons of the queen of Bali, who was king of the Eastern Regions. It appears that those races were at first considered barbarians by the kings of the North-West, but they become Aryanised; and the Angas, Kalingas, and Pundras were raised to the same degree of esteem which the nations of Madhya-desa (the North Western Provinces) enjoyed. He attributes their elevation to some marked change which passed over Northern India. The alteration was most marked in the estimation of the Kalingas.

201. *Kalinga*.—Mr. Pargiter quotes from the Raghu-Vamca that, after the conquest of the Vangas, Raghu conquered Kalinga. The route to Kalinga was pointed out by the kings of Utkala and it lay south of the Kapica which he identifies with the Kansai or Cossye river in Midnapore, and which Lassen had identified with the Subarnarekha river.

This passage is also quoted by Dr. Rajendralal Mitra (page 7), and would go to show that Utkala was a separate country from Kalinga. Mr. Pargiter finds that from the Kansai river southward a portion of Utkala intervened before Kalinga was reached. "The northern limit of Kalinga was approximately the Vaitarni, for the Mahabharata, describing the Pandavas' pilgrimage to all the *tirthas*, says :—After bathing at the junction of the Ganges and the sea, they travelled along the sea-coast towards the Kalingas and reached that people and the river Vaitarani at the same time. On its bank was Viraja-tirtha, the later Birajaksetra, the modern Jajpur. Kalinga therefore comprised modern Orissa about as far north as the modern town Bhadrak in the Balasore District and the sea-coast southward as far as Vizagapatam. Its limits inland are not clear. Lassen places Kalinga along the inner side of the Eastern Ghats from the Vizagapatam District south-westward as far as the Karnul District."

In support of the above we have the following from Professor Wilson's account of the travels of Hiouen Thsang :—

Kalinga, the name given by Sanskrit and classical writers and by the people of the Eastern Archipelago, to the upper part of the Coromandel Coast, usually including Orissa.

202. *Utkala and Odra*—*Odra or Udra*—After identifying Hughli, Howrah, Bankura, and Burdwan, together with the eastern portion of Midnapore (including Tamruk), as Suhma and Tamalipta, Mr. Pargiter cannot agree with Lassen in

making the territory of the Odras more or less conterminous with Orissa. The Utkalas occupied the north of the Balasore District and the south was Kalinga. "Hence, it seems impossible the Udras can have inhabited any portion of (what is now known as) Orissa."

"In the last century Orissa included the tract of country between the rivers Rupnarayan and Subarnarekha (see Bengal Administration Report, 1872-73, page 40)." So that the name has not always denoted what it simply means now. In this connection, the titles of some of our early Regulation may be studied.

After discussing and suggesting the region occupied by Paundra, with which Udra was frequently associated, he says :—

These considerations give, I think, an indication where the Udra the territory was in ancient times. The eastern part of Midnapore belonged to Tamalipta and Suhma, hence there remains only the western part of that district which no other nation appears to have occupied; and if to this be added the modern district of Manbhum, the eastern part of Singhbhum, and perhaps the southern portion of Bankura, a well-defined tract is obtained, which no other tribe appears to have owned and which bordered on Paundra. I would suggest that this must have been Udra in ancient times.

And in order to explain the present position of the Uriyas, he continues :

If this be a reasonable inference, it discloses how an insignificant early tribe developed and spread during the confusion which prevailed in the dark times of mediaeval Indian history. I would suggest that the Udras must have pushed southward, overrun the whole of Orissa and Ganjam, and driven the Kalingas downward into the Vizagapatam district, till their further course was checked by the Dravidian powers on the south; then they must have turned westward and forced their way round in to the Southern portion of Chhattisgarh.

Utkala—The Utkalas were well known, though not mentioned often in the Mahabharat. They are linked with the Mekalas (Bhisma-p., ix 348; Drona-p. iv. 122; Ramay. Kisk.-k. xli. 14), and with the Mekalas and Kalingas (Karna-p., xxii, 882). The position of Kalinga has been explained. The Mekalas inhabited the Mekal hills in the west and north of Chhattisgarh. The Utkalas must therefore have occupied an intermediate position. From the passage quoted from the Raghu-Vamca with reference to Kalinga, it appears the Utkala territory stretched nearly as far as the R. Kapica or Cossye in Midnapore; that passage does not mean it reached that river, for it was only after he crossed that river that Raghu had occasion to accept the guidance of the Utkal kings. From these data and the positions assigned to Paundra and Odra, it may be inferred that Utkala comprised the hilly tracts from Balasore to Lohardaga and Sarguja.

203. On this subject it would not be right to exclude the work of Dr. Rajendralal Mitra. He says :—

Odra is by far the most extensively used term for the Uriyas, and its vernacular form is Od or Ud. If this as a specific tribal designation be added to Kola, the generic name of the aborigines, we get Utkola, a Kola of the Ud class the subsequent conversions of Ut. into Ut and Kola into Kala being the results of phonetic decay or vernacular corruption,

This is, I think, speculation; the latter part of the derivation may be right (Mr. Pargiter is inclined to concur in it), but the former part is doubtful. He observes that in Sanskrit *Utkula* means a bird-catcher. We may, perhaps, ask whether this has any connection with the legend of the *fowler*, see paragraph 229.

Babu J. M. Das, an Assistant Settlement Officer, possessing great knowledge of Orissa, has doubts whether although different kings ruled Kalinga and Utkala, the peoples ever differed in race, dialect, religion or customs.

It seems very likely that the two kingdoms were welded into one during the reign of the Yabanas who were ultimately driven out by Yayati Kesari. Yayati restored the mage of Jagannath to the temple of Puri and his political capital was at Jajpur, his sway thus extending over the whole of modern Orissa.

204. To sum up, if we accept the evidence and suggestions set forth above, the area which forms the subject of this report, *i. e.*, the temporarily-settled area of the three districts, consisted in ancient time of portions of—

- (a) *Kalinga*, from Chilka Lake to the Baitarani river, *i. e.*, Puri and Cuttack.
- (b) *Utkala*, from the Baitarni river to the Subarnarekha river, *i. e.*, Balasore.
- (c) *Suhma* and *Odra*, from the Subarnarekha to the northern limit of Balasore (and onward).

Area.

The areas known as Orissa from time to time have varied very greatly.

Before 500 A. D.—From the Hooghly to about Vizagapatam, known more or less as Kalinga.

474 A. D. to 1132 A. D.—From Soro (Kansbans river in Balasore) to Ganjam, and on the east and west from the sea to Dhenkanal.

1132 A. D.—As Orissa. Extended on the south to the Vizagapatam district, probably not less than 40,000 square miles.

1590 A. D.—see Stirling's Account of Orissa, Todar Mull, and Man Singh's revenue-paying area, rather less than 14,000 square miles.

1803 A. D.—Modern Orissa. In 1828 A. D. the northern, central and southern divisions were made, and correspond nearly to the modern districts of Cuttack, Puri, and Balasore with part of Midnapore.

It may be added that Dr. Rajendralal Mitra quotes the *Ain-i-Akbari* to show that about two centuries ago Orissa consisted of "the five sircars or districts of Jelasir, Bhadrak, Cuttack, Kallendraput (Kalinga Dandiput) and Rajmahendri. The first, however, included Midnapore, Mahakami Ghat and Narainpur. The province of Orissa may therefore be said to have extended from Midnapore to Rajmahendri, the portion between the Chilka Lake and the Subarnarekha having been ceded to the Mahrattas in 1757".

(B) The soil-its formation.

205. Roughly speaking the temporarily-settled area which forms the subject of this report amounts to 5,000 square miles (Cuttack 2,300, Balasore 1,700, Puri, excluding Khurda, 1,000).

It is not too daring to say that in pre-historic times the whole of this area was washed by the sea.

In the modern Orissa, we still find a barrier of hills and forests on the west, "and a plain, level country extending from the foot of that barrier to the sea evidently of alluvial formation, the uniform surface of which is not disturbed by a single rocky elevation nor does a single stone occur between the beds of iron clay lying on the western frontier and the Ocean, if we except the curious spheroidal concretions of calcareous matter or limestone nodules which are found very generally dispersed (Stirling)." Sir William Hunter also gives us some very picturesque accounts of "Land Making." The process is still going on and may be observed in the shallowness of the Chilka lake which once was a harbour for sea-going ships and is now rarely more than 6 feet deep. Two modern and interesting proofs may also be given—

(1) The cave inscription which tells us of the sea-made origin of the caves, the sea being now 50 miles away.

(2) The increase in area of certain estates on the sea-coast, especially in the Puri District, since the last survey of sixty years ago.

206. We have evidence that systematic cultivation probably did not begin in the tract under report till some 1,500 years ago, but that the earliest cultivation was probably in 800 B. C. We find in the Mahabharata that the tribute brought by the kings of Kalinga consisted of ivory and elephants, and Professor Wilson considers that the tributes brought by each Raja are typical of the trades in which their kingdoms engaged. Hiouen Tshang (629 to 645 A. D.) travelled from Jajpur to Khandagiri through thick forests. Even in the reports of the last settlement sixty years ago damage from wild animals is a frequent cause of low assessment. The cultivated area in the 5,000 square miles has increased from 2,600 square miles in 1837 to 3,400 square miles in 1899.

In the above remarks I only wish to imply that in earliest times the sea came close to the hills, and that cultivation in Orissa is *comparatively* modern.

A geological account of Orissa may be found both in Stirling and Hunter

(C) History.

207. I do not attempt to give more than a few important dates and a brief account of the ancient peoples and their religions. Stirling and Hunter give us the early, and Mr. Toynbee the later, history.

208. *Important dates in the ancient history of Orissa.*—The earlier dates must of course be taken as approximate only.

800 B. C. (?)—The Kalinga dynasty.

477. B. C.—The receipt of the sacred tooth of Buddha by the King of Kalinga, i. e., the introduction of Buddhism. This date must, however, be reduced to a few years later, for the year of Buddha's is now fixed at 477 B. C.

250 B. C.—The pillar at Dhauli erected by King Asoka after the establishment of Buddhism.

473 A. D.—The expulsion of the Buddhists and the foundation of the line of Lion kings. The rise of Jajpur.

500 A. D.—The importation of 10,000 Brahmins from Oudh.

625 A. D.—The completion of the Bhubaneswar temple, *i. e.*, establishment of the worship of Siva.

961 A. D.—The foundation of Cuttack town.

1132 A. D.—The Ganga Vansa dynasty.

1198 A. D.—The building of the present temple at Puri, *i. e.*, the re-establishment of Vishnu. (Vishnu is said to have lived at Puri from the beginning of all time).

1203 A. D.—Afghan invasions into Bengal begin.

1282 A. D.—The completion of the Sun temple at Kanarak, dedicated to the Sun in honour of his cure of Samba, son of Krishna. (There is a temple at Lahore similarly dedicated, see Travels of Hiouen Tshang, Part I., Vol. XVII, Royal As. Soc. Journal, but the cure of Samba is supposed to have occurred on the site of the Kanarak Temple in Orissa).

1471 A. D.—Alliance with Muhammadans.

1527 A. D.—The passing away of Chaitanya.

1556 A. D.—The invasion of Kalapahar.

1568 A. D.—The sacking of Cuttack and plunder of Puri by the Muhammadan Governors of Bengal.

1574 A. D.—Daud Khan becomes King of Orissa.

1576 A. D.—Death of Daud Khan.

1578 A. D.—{ Todar Mull and Man Singh—Mogul supremacy—

1592 A. D.—{ Khurda dynasty—Survey of the Province.

1685 A. D.—English occupation of Pipli on the Subarnarekha.

1692 A. D.—English occupation of Balasore.

1742 A. D.—{ Maharatta conquest.

1751 A. D.—{ }
1803 A. D.—British conquest of Orissa.

209. *The ancient peoples of Orissa; their history.*—The history of the people is entirely bound up with that of their religion, and it is impossible to keep the two apart. The earliest legend of occupation is at Khandagiri, where sandstone rock is found. I believe that this stone is found in no other part of the temporarily-settled area except in Naraj and in the Government estate of Khurda. It is also found in Dompura and Atgarh (Tributary States). The legend says that Hanuman and his monkeys, when they were bringing stone from the Himalayas for *Rama's* bridge dropped some blocks in their flight. These blocks are the hills of Khandagiri and Udaigiri. Legends regarding giants and tanks and mounds built by giants may be found in many parts, *e. g.*, Jajpur is the centre of the navel of Gaya Asur, the head being, I believe, at Gaya (Stirling). There is a fine tank built by giants 3 miles north of Bhadrak, and in Cuttack district we have a Pargana named Asureswar.

210. From the evidence of all the authorities, (Stirling, Macpherson, Briggs, and Hunter) we are able to say that effective Hindu occupation did not begin, speaking approximately, till 473 A. D.; we may therefore try to find out what tribes inhabited Orissa before the fifth century and whence they came. The word *effective* must be inserted in view of the legendary Aryan conquest and the foundation of the kingdom of Kalinga (Hunter, Vol. I, P. 188).

211. Mr. Pargiter, in his paper already referred to, dealing with the earliest period to which the Mahabharata relates, concludes by saying that—

Magadha, Videha, Vaicali, appear to have been the outposts of Aryan conquest and colonisation. Anga, Vanga, Kalinga, Paundra, and Suhma with Tamaliptra Odra were kindred nations, which were not of Aryan stock and were not subjugated by the Aryans, but passed under Aryan influence and became Aryanised. Utkala was a congeries of Kolarain tribes occupying the hilly tracts, where they are still found. The Utkalas, being so-called aboriginal tribes, must of course have come into this region first, and their position among the hills also suggests the same inference. They must have been driven into the hills by latter invaders.

Mr. Pargiter suggests that the Kalingas, Odras, etc., must have come from the Bay of Bengal, *i. e.*, that they came from the sea, settled on the sea-coast and gradually carved out kingdoms inland. "Lastly, came the invasion of the Aryans into Eastern India. Their conquering vigour seems to have spent itself by time they subdued Videha and Magadha, for they had already passed through many generations in the plains of North India, and the enervating climate and easy conditions of life had surely, if slowly, modified the constitution which their ancestors had acquired in colder and hardier climes."

212. General Briggs, F. R. S., in a paper read before the Royal Asiatic Society in May-June 1852, appears to have been among the first to notice the uniformity of habits of all the wild tribes of India. Amongst other points he desired to establish the fact that the Hindus entered India from a foreign country and found it pre-occupied by inhabitants whom they gradually reduced to serfdom; that they introduced the Sanskrit language and municipal institutions; that in every respect, both as regards race and language, the Hindus are different from the inhabitants they found in occupation, and that the latter have a common origin. These conclusions are well established at the present day.

The Hindus. He quotes Professor Wilson's opinion that the Hindus were a northern race and fair complexioned, and that at the time of Manu the Hindus had not passed the 22nd degree of north latitude, having probably been checked by the Satpura Range. The earliest monument of the Hindus in the Deccan is of 450 A.D., and it occupied the Hindus four to five hundred years to reach Mysore. About the same time the Hindus entered Orissa in effective numbers, *i e.*, in 473 A. D., but kept to the plains, leaving in independence the inhabitants of the hills. In all cases of conquest the aborigines became serfs and outcast village watchmen. In this connection the quotations from Dr. Rajendralal Mitra, given in paragraph 217, may be read. He is of opinion that a mixed race professing forms of Aryan civilisation was already to be found in Orissa, and this is no doubt true, for Buddhism had prevailed many centuries there, and Buddhism ignored the rigid limits of caste.

Buddhism began in Bihar about five centuries before Christ and rapidly spread in all directions. It soon reached modern Orissa and was carried into Ceylon in less than a century after Buddha's death. The Buddhist thus entered Orissa from the north (see the end of paragraph 215). In the following paragraphs I do not wish to set forth more than the results of General Briggs' observations. He does not tell us of the earliest institutions of the Hindus; he does not do more than point out the difference between them and the aboriginal tribes at the time they came in contact with each other. Other writers such as Maine and Phillips may be referred to for information regarding the early Hindu village communities. I quote one short sentence from Phillips (Tagore Law Lecture 1874-75) taken from Hunter, Vol. II :—

The Hindu village had a non-Aryan predecessor in Orissa in the Khand hamlet, but that wanted the corporate life of its successor and was merely a collection of families.

Possibly these remarks may apply to all early communities.

General Briggs shows us how the aboriginal tribes must have over run the country as hunters or herdsmen, and how they have now become slaves and watchmen where they have been conquered. He enumerates eleven points of difference between these tribes and Hindus, *e. g.*, caste, marriage of widows, eating of beef, drinking liquor, eating of ready-cooked food, spilling of blood, self-created priesthood, burying of dead, patriarchal instead of municipal institutions, trial by heads of tribes instead of by courts of equals, and illiterateness. He shows further differences in moral virtues and occupations, and even quotes Herodotus in support of the distinction between the pastoral, hunting, and fishing race of India and the race who dwell in cities. Among other aboriginal races are described those which inhabit the territory between the eastern mountains "and the sea coast, having the Chilka lake for its southern, and the port of Pipli (on the Subarnarekha) for its northern boundary. This territory is occupied by the Saurahas, the Bandwaras and the Khonds". General Briggs agreed with Captain Macpherson (who made a special study of these tribes) and Stirling in saying that—

The Hindu race did not enter Uriadesa till about the year 473 A. D. nor did they attain the zenith of their power till the ninth century. They introduced their municipal form of Government as elsewhere into the plains, but the aborigines remained unsubdued and continue so till this day.

He then quotes a very large number of authorities as to the similarity of features of all the aboriginal tribes, and concludes that their features are Scythian and quite distinct from the Caucasian type. As regards language, in the beginning of the century, Sri W. Jones and Mr. W. Colebrooke divided the languages of Indian into northern and southern, the former containing nine-tenths of words of Sanskrit origin, and the latter having a separate origin. Most especially marked

is the difference between Sanskrit and Tamil. General Briggs finds that the aboriginal languages are so closely allied to the Tartaric dialects of Thibet and Bhutan that they must have a common origin, called Scythian by Professor Rask. In fact, he proves to his own satisfaction that "all the *vernacular* dialects of India owe their origin to Scythian tongues rather than to the Sanskrit of their conquerors". He concludes by endeavouring to trace the origin of the aboriginal tribes, and finds that the Assamese are Chinese, while the other tribes (including the ancient inhabitants of Orissa) are of the Thibetan branch, "probably north men of the Scythic stem".

213. In order that I may not seem to have set forth at too great length the account of the aboriginal tribes, I would call attention to the fact that, although we have now to deal with a temporarily-settled area of only 5,000 square miles, the area administered for revenue purposes by Raja Man Singh as lately as the end of the sixteenth century was 13,935 square miles. Deducting the area of the Khurda Government Estate (about 1,000 square miles) and the southern portion of the Midnapore and Singhbhum Districts, (about 1,000 square miles) some 7,000 square miles of the latter mediaeval kingdom of Orissa was and is still occupied to a very large extent by aboriginal tribes. Even in the Government Estate of Khurda we find more distinct traces of aboriginal offices and institutions than in the other temporarily-settled areas under report (cf. Captain Macpherson's Article, Vol XVII, Part I, Bengal Asiatic Journal, and Lieutenant Frye's Article in the same Volume with Mr. W. C. Taylor's Khurda Selections, and the paragraph on Khurda in Moffat Mills' Minute).

From the evidence which we have before us the aboriginal inhabitants of Orissa seem to have been the Savars and Khonds (or more properly Kandhs). The earliest known were the Kalingas of the Mahabharata, and in later days "the Suari of Pliny and the Sabaræ of Ptolemy," both these words being no doubt variants of Savar. It is well known also that a close connection exists between these tribes and the Bhuiyas.

Epochs of the history of Orissa.

214. Hunter's Orissa, Vol I, page 188, gives us an account of the next stage.

The ancient annals of Orissa divide themselves into three long chapters, one of which is wholly obliterated by time, and the other two are more or less effaced. The first begins with the legendary Aryan conquest, when one of the five sons of the northern sage hived forth from the Sanskrit pale and founded the kingdom of Kalinga, probably atleast eight centuries before Christ. The second dates from the death of Buddha, 543 B. C. (477) and consists of Ceylonese legends of the sacred tooth, and a more or less mythical account of the first settlement of Buddhism in Orissa. The third opens with the publication of Asoka's edicts, about 250 B. C., and closes with the accession of the Long-haired or Lion Dynasty in A. D. 274.

The caves at Khandagiri and Udaigiri represent says Hunter, ten centuries of human existence, in the course of which the ascetic character of Buddhism passed into the ceremonial phase, and ended in the fashionable phase. He complains that Indian literature tells us nothing about the cave dwellers of Orissa, but finds evidence from the sacred books of Ceylon to show that in 543 B. C. (477) the tooth of Buddha was received by the King of Kalinga. After this the next authentic date is 250 B. C., the date of the inscription on the Daauli Rock near Sardaipur on the Puri road. Buddhism is by this time surely established. The race which is supposed, according to the temple Palm Leaf Records to have come to Orissa between 538 and 421 B. C. and to have conquered it, are incorrectly described as Yavans (Hunter, pages 201 and 214). Hunter considers the Yavans to have been Ionian Greeks, and dates their conquest of Orissa as between 306 and 57 B. C.

Antiochus is mentioned in the inscription at Dhauli, and Antiochus Theos was in fact at the height of his fame between 261 and 246 B. C. Hunter considers that Orissa received its Buddhism from the middle valley of the Ganges, and was under its influence till 473 A. D.

The passages in Hunter, Vol. I, pages 201 and 238 may well be read in this connection.

215. Most authorities seem to agree that all the nations who have conquered Orissa came from the north, and if they were not Yavanas the enterprise and desire for

The Yavanas*.

* See also Asiatic Society Journal, Vol. LXI, Part I, pages 58-59, "Graeco-Roman influence on the civilization of India" by Mr. V.A. Smith.

conquest was inspired by the Yavanas or foreigners. It seems that Yavana is a very indistinct term, and it appears to represent nothing more than the people whose tongue meant *ya-ba* to those with whom they came in contact, in exactly the same way as *barbarian* meant the people who talked in the language of bar-bar or gibberish. I may add that Hunter sometimes seems to feel doubts about the identity of the Yavans with the Ionian Greeks, as the following passage shows :—

I hope that in my anxiety to tract the Greeks through India I have not been led to make the record more complete than the evidence will bear.

216. The general results of the information which we have, shows us that between 477 B. C. and 500 A. D. Orissa (*i. e.*, the plains of Orissa) was dominated by a people who professed the Buddhist religion, but do not resemble the Hindus of the present day in several important respects. Perhaps the most striking is the love of maritime enterprise, as shown in the port of Tamruk and in the harbour of the Chilka, and perhaps most of all in the colonisation of Java and Bali. There is no doubt that this colonisation did take place from Orissa. Bali, it may be noted, is the husband of the queen to whom the Rishi gave five sons, one of whom was Kalinga. We may add that the mode of payment of village officials and the village communities in Java are very similar to those of India (see Philips' Tagore lectures and his quotation of M. de Laveleye). It is also to be remembered that many invaders from the sea came into the country during the early part of the Christian era, *e.g.*, we have a very graphic account of the invasion of Red Arm (now considered to be a Singalese pirate) and others generally called Yavans in the Palm Leaf Records of the Puri Temple.

217. From 473 A. D. Orissa came under Aryan and Brahmanical influence, *i. e.*, from the date of the first Lion King Yayati Kesari. Buddhism lost ground steadily, and in 657 A. D. the principal temple of Bhubaneswar was completed in honour of Siva. We know also that a body of Brahmins, whose numbers were said (probably with much exaggeration) to have been 10,000 were imported from Oudh (Kanauj) about 500 A. D. By such importations and invasions the plains of Orissa came finally and permanently under Aryan influence. The development of the political relations between the tribes and their conquerors is well described by Captain S. C. Macpherson in his paper on the Religion of the Khonds. He shows us that—

The Orissa form of policy may be broadly defined to have been a despotic monarchy limited by a military aristocracy, while theocratic influences predominated. The body of territorial nobles were highly elevated in respect of rank, power, and possessions. They all bore the title of Raja. From their exclusive relations with unsubdued portions of the primitive races, enabling them to command their rude valour, they derived considerable power; and they mainly wielded the great distinctive institution of Orissa—its *Paiks*, or hereditary landed militia, an army numbering from 150,000 to 300,000 foot soldiers.

The more important of the petty principalities are possessed by families which trace their descent from the royal houses of Orissa or from the principal stocks of Rajputana. A considerable number were originally planted by the Orissa sovereigns among the hill frontier of their State dominion, for its protection from the incursions of the dispossessed races. In some quarters portions of the ancient population, where still unsubdued, formed zamindaris by inviting junior members of influential zamindari houses to become their Rajas.

Captain Macpherson goes on to show the positions which the aboriginal races occupied. In the State domain, they became serfs; in the partially cleared tracts they remained in a semi servile condition under the rules of "vettiah", or as it is now generally called *betia*, *i. e.*, labour without hire. In the more inaccessible parts they were free tenants paying rent or giving service in lieu of rent—

They have everywhere tended—and the process goes on daily by the most curious steps—to become assimilated to their conquerors in manners and religion; and the Khonds, in particular, have formed by intermixture with them new castes, many of which hold a respectable place within the pale of Hindu society.

Dr. Rajendralal Mitra speaks of the coming of Vratya or degraded Kshatriyas amongst the Uriyas at a very much earlier date. A new impulse to progress was given :—

Two such markedly dissimilar forms of humanity as the ancient aboriginal Uriya and the Hindu could not abide together without causing a ferment; the strong must have told

upon the weak, and it is to be presumed that thereupon, as in other parts of India, the history of Aryan civilisation repeated itself, driving the more obstinate and resolute from their homes to the shelter of hill-sides and forests and amalgamating, though partially, with the more docile and tractable, by admitting them into the pale of Hinduism as a servile race. The intercourse thus established led to extensive miscegenation, and the result was a mixed race who professed forms of Aryan religion tinged more or less with the ancient faith of the country.

Stirling also at great length describes the relations between the tribes and their conquerors. His picture of the feudal system is considered by Captain Macpherson to be somewhat overdrawn, but Stirling seems to have been the earliest writer on the subject, and his account of the three tracts, the Eastern and Western Rajwara and the central tract or Khaliseh, may well be perused. A curious survival of the incidents which attached to the hill and coast zamindaries still remains in the right of primogeniture. This right is still recognised in several of the best families in the old Rajwara tract, and occasionally even in the present temporarily-settled area.

218. So far I have endeavoured to show that from a nation composed of rude aborigines the Uriya people were transformed and are being transformed into an Aryan community.

At the beginning of this section I have set forth what appear to be the most important dates in the history of Orissa, and from 500 A. D. onwards the actual history of the Province may be read in the works of Stirling, Hunter, and Toynbee. The fiscal divisions and revenue administration of the Hindus and of their conquerors will be found in a later portion of the report.

To very briefly recapitulate: The aboriginal peoples appear to have been of what is known vaguely as Scythic stock. At the time of the Mahabharata they constituted a kingdom and were known as Kalingas. The kings of the Lunar dynasty asserted a vague suzerainty over them, and they were under Aryan influences which were strengthened by the ascendancy of Buddhism. It was not till the end of the fifth century that they came under effective Hindu domination, and after conquest by the Muhammedans in the end of the 16th century, and by the Mahrattas in the middle of the eighteenth, they came under British rule in the beginning of the nineteenth century.

(D)— *The people of Ancient Orissa.*

219. I give below a table of castes in Orissa arranged according to their numerical importance. The figures are taken from the census returns of 1891.

Table of Castes in Orissa (1891) arranged according to their numerical importance.

I. Upwards of a lakh—

Khandaits	....	....	600,000	10 50
Brahmans	....	....	400,000	
Chasas	....	....	430,000	
Goalas	....	....	250,000	
Pans	....	....	160,000	
Kandras	....	....	135,000	
Tanti	....	....	132,000	
Karans	....	....	123,000	
Keots	....	....	122,000	
				2,352,000

II. Less than a lakh and more than half a lakh—

Barhis	....	....	87,000	
Bandharies	....	....	76,000	
Sudras (not defined)	....	....	75,000	
Dhobas	....	....	74,000	
Bauris	....	....	69,000	
				381,000
Mohammedans	....	....		75,000

III. Thirty-nine to fifty thousand—

Goalas	....	....	47,000
Savars	....	....	44,000
Kumhars	....	....	42,000
Rarhis	....	....	41,000
Rajus	....	....	41,000
Banias	....	....	40,000
Gokhas	....	....	<u>39,000</u>
			294,000

IV. More than ten thousand—

Kamars	....	....	33,800
Kaibarttas	....	....	28,200
Sonars	....	....	26,800
Chamars	....	....	25,300
Haris	....	....	20,800
Malakaras	....	....	18,700
Rajputs	....	....	15,800
Telhis	....	....	14,500
Kansaris	....	....	13,400
Baisya	....	....	<u>11,400</u>
			208,700

V. Others — small castes—

persons described by religion, profession and nationality, about	....	....	400,000
Total, <i>nearly</i>	....	....	<u>3,750,000</u>

It would be out of place for me now to discuss fully the castes in Orissa. I should like to say enough to stimulate the interest of scholars and of others who have more leisure to study than myself. Probably the population of the three districts is now nearly four millions. I merely wish to say a few words about the Brahmans and Goalas, as two of the castes which represent the more Aryan types, the Khandaits as representing ancient Ksatriyas or warriors, the Chasas as a peaceful offshoot of the warriors, the Kandra and Pans (and Bhuiyas) as representing the rank and file of the army of which the Khandaits were chiefs, and lastly the Savars, Bauris, and Gokhas who still represent the aboriginal tribes. I hope that this very brief account of nearly three-quarters of the population may encourage further enquiries. There is especially one point on which inquiries may well be made. Every caste, whether literate or illiterate, has its different "*santak*" or caste mark which is affixed by the illiterate to documents in place of signature. Connection between castes and community of origin may perhaps be traced by further enquiry.

220. The process by which the superstitions and habits of the aboriginal tribes are superseded by Aryan customs is described in Mr. Risley's ethnological work. Illustrations of the fictions by means of which one caste or sub-caste may climb into another, and the devices by means of which non-Aryan castes have obtained the services of priests and even Brahmans to perform their ceremonies, are to be found plentifully in Orissa, and the different stages of development are perhaps more interesting (because they are more noticeable) than in almost any part of Bengal. We find in Mr. Risley's work the following:—

The Brahman who serves the Bhumij zamindar as a family priest takes a higher place than the casual Brahman who ministers to the spiritual needs of the ordinary cultivator.

As an illustration of the use of Brahmans may be mentioned the fact that the (true) karans, the most reputable caste after Brahmans in Orissa, will only employ Utkala Brahmans. The Principal step in bringing Orissa under Aryan influence was, as has been already mentioned, the importation of Brahmans from Oudh. Their attitude towards the local priests (the potatogrowers) described by Hunter is very remarkable. The number of Brahmans at present is about four lakhs. Of the castes which rank high in Orissa, as compared with the rank they obtain elsewhere, we may mention the Goalas.

The Orissa Goalas affect a high standard of ceremonial purity, and look down upon the Behar and Bengal divisions of the caste. The Mathurabasis lay stress on the duty of making occasional pilgrimages to the home of the caste at Brindaban. The Jaduparia Goalas cherish the tradition that their ancestors came to Orissa from Jadupur. (Risley).

In 1891 we find that Goalas amounted to 2½ lakhs. Thus we have two of the most respected castes in Orissa (Brahmans and Goalas), amounting to 6½ lakhs, or more than one-sixth of the entire population. In both cases traditions remain regarding their ancient homes.

Mr. Risley's account of the Chasas, Pans, Bhuiyas and Khandaits* may well be persued. Out of the present population in the three districts with which we have to deal, more than one-third, *i. e.*, 1,300,000, consist of Khandaits, Chasas, Kandras, and Pans—all descendants of the old militia. As regards the Chasas, though they number more than 427,000 in the three districts, they are said to be Orh-Khandaits, a sub-caste of Khandaits. "Jana" is found as the "*surname*" of some of the lowest Chasas in Orissa, also of Pans, also of Kandras and also Khandaits. The Kandras and Pans are well known as having formed the rank and file of the ancient militia of the Province, and the leader of the paiks was a *khandait* or swordsman *i. e.*, the wearer of the *khand* or sword.

In Orissa the Khandaits exhibit every variety of type from the high Aryan of good social position to the semi-aboriginal mongrel taken from the dregs of the people. (Risley)

The land-owning Khandaits in Orissa pretend to be Rajputs and affect strict conformity with orthodox usage. A Srestha Khandait assumes the sacred thread at the time of his marriage, a practice not uncommon among castes of dubious origin who are pressing to be counted among the number of the twice-born. The Chasa Khandaits do not wear the thread, but Brahmans will take water from their hands and they occasionally intermarry with the Karan castes.

To my mind a study of the origin of the Khandaits in Orissa would throw great light on the history of the people. In paragraph 200 above we learn that Manu says that—

The Paundrakas, Odras, and Dravidas and various well-known nations on the north and north-western confines of India were Ksatriyas and sank generally to the rank of Sudras by reason of the neglect of sacred rites and the absence of Brahmans.

This was of course written long before 437 A. D., and shows that Orissa was then occupied by a military race. There seems to be no doubt that these Ksatriyas are the ancestors of the modern Khandaits. I simply put forward my belief that they were a military race who subdued the aboriginal tribes. It is impossible to say that they were Aryans, but at least they were known as Ksatriyas, *i. e.*, a warrior tribe (see also Dr. Rajendralal Mitra, as quoted in paragraph 217).

Furthermore, as we have seen, the Khandaits recruited their army from the Kandras and Pans, while they maintained the leadership as Khandaits or Swordsmen.

Owing to community of occupation, *i. e.*, service in the army, the Khandaits, Kandras, and Pans all bore the name of Jana. In the later stages Khandaits must have become a mixed race; the lower branches depended on cultivation only and became Chasas, and the higher branches, as their military duties became lighter, have also become cultivators or proprietors of estates.

We have seen that the highest Khandaits are still regarded as Rajputs, that the wealthy may intermarry with Karans, and that many Khandaits only wear the sacred thread after their marriage. In addition to all this, Chasas are generally known as Khandaits, and the wealthiest of them actually become so.

This elasticity (if it may be called so) bears out Mr. John Beames, who says that —

The Khandaits appear to be a heterogeneous group, made up at the one end of Aryan immigrants from Upper India, and at the other of recruits from a number of indigenous non-Aryan tribes.

Mr. Risley considers the Khandaits to be "Bhuiyans of the southern tribe". He has found :—

* Khandaits	...	600,000 (In 1891).
Chasas	...	427,000
Pans	...	156,000
Kandras	...	135,000
Total	...	<u>1,318,000</u>

First, that the Khandaits of the Chota Nagpur Division who say that they immigrated from Orissa twenty generations ago, and many of them still speak Uriya, regulate their marriages by the totemistic sections characteristic of the southern Bhuiyans and call themselves Bhuiya-Paiks, *Secondly*, that among the numerous titles of Khandaits in Orissa we find the very singular names *Uttar*, *Dakkin*, and *Paschim-Kapat*, which are assumed by the Bhuiyas of Singhbhum. *Thirdly*, that as lately as 1825 (Stirling) the term Bhuiya was current as a synonym for Khandait even in Orissa, where it now seems to have fallen into disuse.

Again, speaking of Bhuiyas, Mr. Risley says :—

The main body of southern colonists furnished the tribal militia of Orissa, and have now sunk the Bhuiya in the Khandait or swordsman— a caste of admitted respectability in Orissa, and likely in course of time to transform itself into some sort of Rajput.

Another theory has been advanced as to the meaning of the name Khandait. It is suggested that Khandait may mean merely a *settler* instead of a swordsman. *Khanda* means a portion or portion of land as in Nahakhand and Bisalkhand (names of parganas) and in Khandpati. Khandait would then have a meaning analogous to Bhuiya.

In conclusion, I do not think we can accept as proved any more substantive facts than that, before the Aryans came in the fifth and sixth centuries A.D., a warrior race now known as Khandaits had already conquered Orissa. Former tradition called them Ksattriyas. Stirling, too, frequently speaks of Khetris or Khandaits as synonymous and quotes the speech of Raja Anang Bhim Deo from the Puri Temple Records to show the ancient conquerors.

By the grace of Sri Jaggannath the Ganga Vansa Princes have after conquering the Khetris and Bhuiyas added to the kingdom

Dr. Mitra, however, (see paragraph 217) distinctly calls the Khetris, Hindus. They organised an army and enrolled some of the aboriginal tribes (Pans, Kandras, and Bhuiyas) in the rank and file and some as watchmen. The Bhuiyas as a tribe or caste have disappeared from the Orissa census list. Bhuiya survives as a very honourable title retained by the lords of the mountain-border. The connection between the religion of the Bhuiyas (tribe or caste) and that of the Khonds and of the dwellers on the western border of Orissa is alluded to in paragraph 223.

In the census of 1891 nearly 6 lakhs of persons have been recorded as Khandaits (excluding 10,000 in the Tributary Estates) and more than 4½ lakhs as Chasas. If to these be added Pans and Kandras we have a total of nearly 13½ lakhs or more than a third of the population of the three districts.

The Pans, notwithstanding the strength they may have acquired by belonging to the militia have remained to this day a very low caste, and are not regarded as Hindus.

The Kandras rank somewhat higher than the Pans. I cannot find any account of the Kandras by Mr. Risley; the Pans are said to be of Dravidian origin, and Mr. Pargiter thinks they are the Parna-Savaras (leaf-wearing Savars) who are mentioned in Sanskrit books.

The professed religion of the Pans is a sort of bastard Hinduism, varying with the locality in which they happened to be settled. In Orissa and Singhbhum they incline to Vaishnavism. This veneer of Hinduism, however, has only recently been laid on, and we may discern underneath it plentiful traces of the primitive animism common to all the Dravidian tribes.

More than 156,000 Pans were found in Orissa in 1891 excluding 110,000 in the Tributary States, while Kandras in Orissa number 135,000. As regards aboriginal tribes, there are still 113,000 Bauris and Savaras in the plains of Orissa, and Gokhas make up 40,000. It is known also that the Keots are a very mixed race. They number 122,000.

221. I do not find in the literature on the subject of castes in Orissa any mention of the powers which the zamindar has of bestowing "*padita*" names but such a custom does exist and no doubt it is a very ancient one. In one case I found an elder brother Laksham Mahapatra and a younger brother Ram Jana, both living in the same village. The title of Mahapatra (Patra—a vessel, a fit and capable person, a chief) was bestowed by the zamindar.

It is true that the zamindar claimed to be a lineal descendent of Raja Man Singh, being one of the so-called Rajas of Agrapara (Tappa Pursand, Balasore), but

an enquiry showed that for services rendered the title of Mahapatra was not infrequently bestowed by the zamindar in the neighbourhood. We know, too, that in the village the zamindar is often spoken of as "Sirkar" and his *nijjote* land as *Sirkari*. We know also that the Raja of Khurda is still regarded as the fountain of honour (*cf.* Captain Macpherson). Amongst the titles bestowed by him is that of "Paharaj". The derivation of this title, given me by a great authority (Mr. R. Cornish, for many years Collector of Balasore), is as follows :—The Raja of Puri (Khurda) cannot die. On the death of one Raja and until his successor is put on the throne various chiefs are styled Raja in local areas. They bear the name of *Paharaj*, which is said to mean Raja for a "prahar". It must be added that many authorities believe that only the Zamindars of ancient lineage have powers to bestow *padita* names. Mr. James Taylor tells me that in the Tributary States of Baramba every other Pan or Hari is a "Singh", the Raja having distributed these titles for a few rupees. He tells me that in addition to the powers possessed by Government and Rajas to grant titles, an entry in the Settlement records is considered to constitute a valid claim to a title. "Many (titles) were granted at the last Settlement and during the present Settlement operations many wealthy or educated men of the lower castes have been promoted to higher castes by the grant of superior titles or surnames. With respect to the castes into which they have been received all scruples have been allayed by money payments, feasts, religious ceremonies, etc." I may add of my own experience that, among others, Government servants, honorary magistrates, and temporary muharrihs have improved their position. A few instances will suffice, *e.g.*, the substitution of Chaudhuri and of Samanta for Babu as a prefix; and of Mahapatra for Patra, or Patnaik for Naik as an affix. There is also a case of a Bengali zamindar, a Sunri, described in the Settlement papers as "Bengali" by caste. He hopes, I understand some day to be described as a Kayasth.

(E)—*The Peoples of Ancient Orissa—their Religions*

222. We have already seen that the earliest religion in Orissa was that of the aboriginal races inhabiting the forests and hills; next came Buddhism from the fifth century B. C., to the fifth century A. D. After this we find the worship of Siva, and lastly the worship of Vishnu (revived as it is said) in the twelfth century. It is, however, fairly certain that at Jajpur and elsewhere a form of Hindu religion existed before the advent of Buddhism. The number of Muhammadan converts is small, and of Christians inappreciable.

223. The best account of the religion of the Khonds is to be found in Asiatic Society, Vol. XIII, Part II, Article XII, "An account of the Religion of the Khonds in Orissa," by Captain S. C. Macpherson. He describes a "distinct theism with a subordinate demonology. The supreme being, the sole source of good, the God of light, created for himself a consort—the earth Goddess, the source of evil—and thereafter he created the earth with all it contains and man. The god of light and his rebel consort contended for superiority until the elements of good and evil became thoroughly commingled in man and throughout nature. Other deities were created by the supreme being to teach men the arts of life, etc. A god is Generally known as Pennu and a priest as Janni." Janni is probably the sacrificial priest, the *sebaist* is the Deori (called Dehri, by Captain Macpherson).

It is also noteworthy that the name of the supreme God is Boora Pennu among the Khonds, while Colonel Dalton tells us of the Bhuiyas in Chota Nagpur that "Boram is the sun, the first and greatest of Gods and the creator."

"They (the Bhuiyas) have their own priests, called Deoris."

In every village in the plains of Orissa we find a village Goddess; her priest is generally a *Bhandari* or barber, and along the western frontier we still find forest deities presided over by *Deoris* (the *Dehri* priests of the Khonds), described by Mr. Risley as *Sudhas* but really I think, a class of *Malis*. These *Deoris* wear the sacred thread in Orissa. For accounts of the human sacrifices performed by the Khonds and for early instances of the connection between Khonds and Uriyas in the matter of religion as well as political arrangements, not only is Captain Macpherson's article above referred to full of information, but the Asiatic Society's Journal, part II, Vol. XVII, Article I, "On the Uriya and Khond Population of Orissa," by Lieutenant J. P. Frye may be perused.

Mr. A. C. Sen, I. C. S., (letter No. 276 of 22nd February 1896, from the Magistrate of Puri to the Commissioner) offers some conjectures on "Early History of the District of Puri". He believes that a race of *Ods* or cultivators came from the south, spread over the plains of Orissa, drove the aboriginal into the hills (except the few fishing tribes), and with the help of Kama Brahmins colonised Orissa. I cannot find reference to the Kama Brahmins or to the *Ods* of the south in any work of authority, nor do either appear to be mentioned in any Sanskrit work. These conjectures are opposed to what Mr. Pargiter has collected from Sanskrit books in his paper but Mr. Sen derives his information from local tradition in Puri and I must allude to what he has said before introducing the very interesting information he gives us on the subject of the evolution of the religions of Orissa. Besides, we know that the kingdom of Orissa stretched down towards the Godaveri and that invasions from the south frequently appear in the palm leaf records of the Puri Temple.

It is worthy of note also (see Risley) that among the Brahmins of Orissa "unquestionable traces may be found of the totemistic beliefs which are common among the Dravidian and semi-Dravidian groups..... they may be due to the adoption by immigrant Brahmins of Dravidian beliefs and observances; or they may show that the Brahmins of Orissa are themselves Dravidians or have undergone a considerable infusion of Dravidian blood."

Mr. Sen introduces us to the Khonds and Savars inhabiting the sandstone hills of Dhauli, Khandagiri, Udaigiri, Rameswar, and Niladri. The above tribes lived in caves any worshipped forest deities, and we know that the earliest Buddhist monks found their way to these places. Not only do the village deities (*gram debati*) still exist, but we often find in the middle of cultivation rude shrines (generally a slab of stone smeared with red) still the object of adoration by the lower classes of the village community as the abode of a forest deity.

It does not appear that temples were erected to the aboriginal Gods or rather Goddesses; they were not seen, and they are even now supposed to live inside the cracks and crevices of the roots of trees and in stones. (See also Macpherson and Frye).

224. Dr. J. Stevenson, Asiatic Society's Journal, Article I, Vol. XIII, in a paper read on 21st November 1840, gives us an account of "The intermixture of Buddhism with Brahmanism in the religions of the Hindus of the Dekkan."

The Buddhists.

A reference may be made to this most interesting paper because it was one of the first of many enquiries. He describes Buddhism as "eminently a religion of reason; it rejects all that reason does not comprehend; and makes its constant appeal to (*buddhi*) the human intellect, as the supreme judge in religious things." I merely make this quotation here to show how such a religion must have influenced the superstitious Khonds and Savars in such parts of the plains of Orissa as came under the influence of the Buddhist monks.

There is, however, evidence to show that some colonisation from the north had already taken place. The Buddhists found "a priestly class already existing whom it was impossible to extirpate and unwise to ignore.....". "Doubtless the preceding waves of Aryan settlers who had from time to time made their way into Orissa formed the upper ranks of the Buddhist community." The edict of Asoka inscribed on the Dhauli rock also enjoins reverence to Brahmins. Moreover in Jaipur there are traces of the settlement of Brahmins in very early times and the alleged visit of the Pandavas to Virajathirtha (Jaipur, see paragraph 201) would show that there was an early settlement of Aryan religious ascetics in that place. As we have already seen the Buddhist religion flourished from 447 B. C. till 473 A. D. The accounts of the earliest settlements are mythical, but by 250 B. C., the date of the Asoka edicts, the religion was well established.

225. To return to Mr. Sen: he conjectures that Kama Brahmins dealt the death blow to the Buddhists. The Kamas, he says, were the first reformers of Orissa :—

The Kama Brahmins.

Originally worshippers of Lingam (the *linga*) or the male generative organ, they had probable from their study of the Vedas and the Upanishads and the philosophy of the Aryans, purified their religion from all sensual ideas and made it into a monotheistic religion of the creative energy of the deity. The most common name of their God was Mahadeva, the great god or the god of gods. They also gave to their god some of the best names yet

known to the worshippers of any religion. He was called the Parameswar, or the lord of lords; the Bhubaneswar, lord of the world; Lokenath, the lord of the people, and Biswanath, the lord of the universe. They created beautiful temples and dedicated them to their god all over the Province, selecting the most beautiful sites existing in it, with the instinct of true lovers of nature. They built villages on the most advanced sanitary principles. They excavated magnificent tanks and sank beautiful wells. They were great cultivators, and with the help of the Odas reclaimed almost the whole of the culturable waste land of the province. They were the first to make embankments and to raise roads in Orissa.

These are indeed glowing periods.

In support of Mr. Sen's story of the Kama Brahmins we may turn to

Sankara Acharjya.

Dr. Stevenson's paper already alluded to. We find that under Buddhist influence the killing of cows and other objectionable rites were prohibited, and then we find that "Brahmanism as first established, or afterwards revived, in the Mahratta country, is universally by the natives traced to Sankara Acharjya, whom they deem an avatar of Siva raised up to put down the Buddhists. He is generally supposed to have flourished at Kalapur at the commencement of the ninth century of the Christian religion". Perhaps, therefore, the disciples of Sankara Acharjya found their way into Orissa from the south, but the date is three or four centuries too late.

226. Mr. Sen's conjectures on the subject of the disappearance of Buddhism

Disappearance of Buddhism.

are still more circumstantial than the information given by Hunter or the other authorities. After showing the manner in which each succeeding religion compromises with the other, he continues :—

Even in the most elaborate caves of Udaigiri not a single figure of worship can be seen. The lingam (the *linga*) was the only idol of the first Kama temples. But in the caves of Khandagiri, separated from Udaigiri only by a slight depression, we first see the figures of Buddha in contemplation. Underneath these figures were afterwards carved figures of Thakurani, a female deity among the hill people, who was afterwards Hinduised into Sakti and Parvati. It is noteworthy that they have all been made on the model of the Buddha's figure. At the gates of the largest of these caves was afterwards added the figure of the Mahabir (the greatest hero) or Hanuman (the monkey god), another aboriginal object of worship.

227. The Buddhists were ultimately driven out to the west and built the

Derivation from Buddhism of the worship of Jagannath.

temple at Niladri in Khurda. It was here that they began to carry Buddha's tooth along a broad road or *baradanda* in solemn procession. This ceremony is admitted to be the origin of the *Rath Jatra* or car festival of Jagannath. Dr. Stevenson also writes as early as 1840 :—

To my mind, however, the most singular result of the influence of Buddhism upon Brahmanism is the transformation of two Buddhist or probably Jain devotees, a male and female, into a Hindu god and goddess. Within the precincts of the temple at Pandarpur there is no distinction of caste. Vethal, the proper name of the god, means—He who receives the ignorant; at least, so his votaries interpret it. This is another feature of Buddhism directly opposed to the Brahmanical religion.

While reflecting on this subject, it has occurred to me that many of the arguments I have used will apply also to Jagannath in Orissa and that the worship of that god, also, is derived from Buddhism, since—

1st—There is no distinction of caste within the holy territory of Jagannath.

2nd—Buddhism anciently prevailed in the Province of Orissa, as appears from the Buddhist remains still existing.

3rd—The *Rath Jatra*, just immediately preceding the *Sayana Ekadasi*, or season of sacred rest, is probably the remains of a triumphal entry, with which the sages were welcomed on returning from their peregrinations, to hold the *Wasso*.

4th—The image of Jagannath is said, and universally believed by his votaries, to contain the bones of Krishna. Now every one conversant with the opinions of the Hindus, knows that it forms no part of the Brahmanical religion to collect and adore dead men's bones. The doctrine of the *Gita* on this subject is that at death elements separate; the spirit returns to its parent spirit, the air to air, and the earth to earth. On the other hand, it is a most meritorious act among the Buddhists to collect and preserve the relics of departed saints, and the places that contain them are esteemed peculiarly holy.

288. It is worthy of note that Mr. Sen attributes the Bhubaneswar temple

Bhubaneswar.

to the Kama Brahmins, but I have again failed to identify the source from which he has drawn his information.

Hunter tells us that "from time to time great migrations of Brahmans radiated to the south ward from Hindustan, bringing with them the modern or Hindu form of the Aryan religion and imposing it upon a recently Buddhistic population." He quotes the palm leaf records of the Puri Temple to show that in A. D. 500, the founder of the Lion Kings imported 10,000 Brahmans and planted them round Jajpur. The latter became the metropolis of the priests, and Bhubaneswar the political capital of the Sivait Dynasty of Orissa (Hunter, Vol-I, page 200). Mr. Sen, however, is very emphatic on one point—

These Aryan kings were the great Sakti-worshippers, and not worshippers of Siva as Hunter wrongly supposed though like many other Hindus of old they absorbed Sivaism into their form of worship.

Mr. Sen adds as regards Bhubaneswar that in order to compromise with the "aboriginal followers of Buddha the *yoni* (*pudendum mulicbre*) was added to the lingam (the *linga*) at first only as the female energy, but afterwards as Parbati the wife of Mahadeva. From this union sprung thousands of gods and goddesses". This is very doubtful.

In the face of such progress Buddhism decayed, and Buddha's tooth was taken first to Tamruk (Tamralipta) and then to Ceylon, while the Niladri temple fell into ruins.

229. The worship of Siva does not appear to have ever been the religion of the country. Buddhism "melted not into Sivaism but into the Vishnuvite rites of Jagannath."

Siva worship.

The imported priests, "true to the orthodox instincts of Brahmanism, continue Siva worshippers to this hour; they represented no spontaneous or natural outcome of the religious cravings of the people, but an exotic of royalty which flourished upon the crown lands. While therefore the story of Jagannath is interwoven with the religious history of the Province, the annals of Siva-worship in Orissa deal with little else than the building of temples and grants of lands to the priests." From 1132 A. D. onwards the reigning dynasty were followers of Vishnu. This dynasty produced the present temple of Jagannath at Puri (1198) and the temple of Kanarak (1282) on the coast 20 miles north of Puri. An account of the worship of the Sun in Orissa is given in pages 283 to 286, Volume I, of Hunter. I cannot do better than close this account by an extract from Hunter on the present popular religion in Orissa :—

Buddhism, Sivaism, Sun-worship, each in turn became the prominent faith of the Province, and after a time gave place to some other creed. Jagannath was destined to hold a more permanent sway, and his priests, by skilfully working upon the Indian passion for pilgrimage, have for six centuries made Orissa a *terra sancta* of the Hindus. He owes his long reign to that plasticity which admits the whole Hindu pantheon within his walls, and which during six hundred years has ever instinctively accommodated itself to the changing spirit of the times. In the very act of superseding Sun-worship and Sivaism, his priests built temples to the wife of the All-Destroyer and to the Sun within his sacred courts. A truly Aryan deity, he commanded the adoration of the upper classes. At the same time he enlisted the sympathies of the low castes by the equal sacrament of the Holy Food, and by a mythology which exalted a despised fowler into the revealer of the God. By the ingenious device of successive incarnations, Vishnu has made himself the centre of a whole cycle of religious systems, and secured the adoration of many races, belonging to widely separated stages of civilisation. Without losing his own identity he assimilated the attributes of nine of the most popular gods, and his priests keep a tenth incarnation in their hands, a weapon which they may yet utilise to bring the gross superstitions of the people into accord with the theism which English education has now disseminated among the upper classes.

Jagannath has assimilated to himself a wider range of attributes than any of the gods of Rome or Greece.

While on the intellectual and spiritual side of his nature he claims to be identical with Buddha, the ninth incarnation of Vishnu, he stands forth the hero of the Warrior caste, as Rama in his seventh incarnation; and has drawn to himself the sympathies of the pastoral races, as Krishna the eighth appearance of Vishnu upon earth. Krishna, the divine Herdsman, is the incarnation which specially appeals to woodland or pastoral peoples, and which has chiefly attracted them to Vishnu-worship. These races have always ranked below the Aryans, and are now despised as aborigines or inferior castes; yet their allegiance to Vishnuism has been skilfully obtained by identifying one of their national deities with the bright Aryan God.

230. The Jain religion in Orissa does not appear to require special notice. We know that the Ganga Kings built a temple to Mahadeva on the top of Khandagiri hill and adorned it with an attenuated figure of Buddha, and that about a hundred years ago

Jains.

(according Mr. Sen) "a Cuttack merchant of the Jain sect created a Jain temple here out of the materials of the temple of Mahadeva."

231. Mahomedans and Afghans made few converts in Orissa; the last census shows about 75,000 persons described as Mahomedans. We find settlers in nearly all the large towns and hamlets along the trunk road and along some of the oldest routes into the Tributary States. The Mahomedans do not appear to have collected in large numbers except in Cuttack town. Some Parganas contain none at all. In Pargana Ambohatta (Balasore) I found one Mahomedan household, the descendants of a zamindar's *barkandaz*. The most curious instance of converts to Islam is that of the family of the Government Pleader of Balasore. All members of his family are still known as Bhuian (Bhuinhar or Bhupati). They were chief priests of the Raja of Puri and received their estate of Garpada from the Raja. For fear of the Moghul emperors they turned Mahomedans rather than lose their estate, their family residence however, is still called Uriya Sasan, and their Hindu family idols are still preserved and some religious worship goes on.

232. Christianity has not set its mark on the Province. In the famine of 1866 the missions in Orissa saved the lives of hundreds of starving orphans and adopted them. The religions of Orissa share with us many legends and miracles. Two may be mentioned by way of example. (1) The rout of Red Arm and his host (see paragraph 18) by the waters of the Chilka, which receded and stood up till they came close and then descended and drowned the impious invaders. (2) The troubling of the waters of the well at Bhubaneswar on the first day of the *Rath Jatra*. The water acquires special healing efficacy on that day, so much so that the first pot drawn sold for Rs. 500 a few years ago, the second pot for less, and so on.

No doubt the religious history of other parts of India has developed in the same way as that of Orissa-for an almost exact parallel I may refer to the Asiatic Society's Journal, Volume XIII, Article XII, "On the modern deities worshipped by the Hindus in the Dekkan," by Dr. Stevenson:—

The religion of the Hindus of the Dekkan seems to me to consist of four constituent parts: first, *pure Brahmanism* as contained in the Vedas and Puranas; second, An *ante Brahmanical* worship consisting in the adoration of painted stones, which are not acknowledged as objects of worship by the Brahmans but considered as the representatives of demons; third, *Buddhism* or that modification of it which subsists among the Jains, and under which head falls the worship of the Pandnarpur Vitthoba; fourth, A *local superstition* based on Brahmanism, and consisting of the worship of remarkable persons who have arisen in the Mahratta country in times comparatively modern.

CHAPTER X.

EARLY REVENUE SETTLEMENT.

233. Stirling in the early part of this century gives us an account of the Province. He tells us of the legend that under the sovereign at Delhi was a great kingdom held by feudal lords who were dependent on and owed service to the lord paramount. The most powerful lords of this empire were the *Gajapati*, *Aswapati*, *Chhatrapati* and *Narapati*. These lords in the course of time threw off their allegiance and became independent monarchs ruling over numerous inferior *Khetris* or *Cshetriyas* (both spellings are found in Stirling). Thus the *Gajapati* became Lord of Orissa.

A earliest accounts.

Stirling divides the Province of Orissa into three portions—

- (1) The marshy woodland tract extending along the seashore from the Black Pagoda to the Subarnarekha.
- (2) The plain and open country between this and the hills.
- (3) The hill country.

The first and third are known as the Eastern and Western Rajwara or Zamindara, that is, the country occupied by the ancient feudal chieftains, Khandaits, zamindars or poligars of Orissa, the second as the Mogulbandi or Khaliseh, or Kot, being that from which the indigenous sovereigns and Mogul conquerors of the country derived the chief part of their revenue and which at present pays a rent to the British Government of sicca Rs. 12,64,370, whilst the tribute yielded by the other extensive portion is fixed in perpetuity at the low sum of sicca Rs. 1,20,411.

In the above items the *jama* of Khurda is not included.

The rulers of the Rajwara were *Khetris* (*Kshetriyas*), or *Khandaits* (wearers of the *Khanda* or national sword), or *Bhuiyas* (*Bhupati*, lord of the soil), or *Poligars* (from *Pollam*, a fief in Telugu), or *sawants* (chief lords), or *Sevakan Arni Das* (hereditary servants holding lands); or, lastly *zamindars*.

A noticeable point appears to be that the title of *zamindarā* was applied only to the Rajwara and never to the Khaliseh.

The present location of chiefs in the hills and on the coast was, according to Stirling, made by Raja Anang Deo, who created 16 *sawants* in the twelfth century. They were placed so as to repel the attacks of the aboriginal savages. "In this point of view their situations and duties resembled much that of the Lords of the Marshes in Europe." Under these lords, who lived in *garhs* or *killas*, were military retainers—*Naiks*, *Dallais*, *Dulbehras* and *Khandaits*, holding subordinate fiefs, and under these again were the *priks*, both soldiers and cultivators.

The domains reserved for the Crown were of course the most valuable and fertile, "and it was the uniform policy of the strong Government of the Mahomedans constantly to enlarge this share by the gradual subjugation and usurpation of the lesser chiefs and princes."

234. The early Hindu rulers of Orissa recognised no middlemen between them and their subjects and every cultivator was in theory bound to pay to his sovereign a share: variously estimated at from one-twelfth to one-fourth of the gross produce of his land. The nominal proportion was one-sixth (*sastansha*) at the outside, but in fact was often more. Phillips (Tagore lectures) says:—

Hindu revenue system.

One-twelfth in prosperity and one-fourth in time of urgent necessity. We find two parties primarily interested in the land so far as its produce is concerned. These are the king and the cultivator, and there are no independent intermediate interests.

The residents of each village paid their quota through a headman (*padhan*) who, in consideration of his services in collecting the revenue, was allowed to hold free of all payment a certain share (*heta*) not exceeding one-twentieth, of the total land in cultivation, and probably also retained some part of his collections as a perquisite of his office. The village accounts were checked by the accountant (*bhot*) who was also paid by the grant of a few acres free of assessment. These

* See Lord W. Bentinck's Minute of 1833, paragraphs 6 to 10.

villages were grouped into large divisions (*khand* or *bisi*) of 10 to 50 square miles, the prototype of the modern Pargana, many of which are still known by their old Hindu names as *Nahakhand*, *Derabisi*. Over each of these divisions was an executive officer or *Khandpati* who acted as the representative of the sovereign, and with the assistance of the Divisional Accountant (*bhoimul* or *bisoi*) collected the revenue, and handed it on to the head of the district, *desadhipati*.

We find that in parts of the Deccan the same description of officers still exist and are called *Des Mukh* and *Des Pandia*, terms of precisely corresponding import (Stirling).

This was the system in the regulation provinces of the Hindu Kingdom, but along the hill borders and on the scantily populated littoral the land was held by military chiefs* who paid a tribute to their suzerain, and were independent as regards the internal administration of their properties.

235. The first regular settlement of the province was begun in A. D. 1582 by Akbar's victorious general Todar Mull and concluded in 1591 by Raja Man Singh. He for the most part left untouched the border chieftains; and Khurda, together with the estates of Lembai, Chaubiskud, Rahang and Sarai, he assigned to the Hindu prince Ram Chandra Deo and to the Temple of Jagannath, *i. e.*, the Raja of Khurda received the rank of Commander of 3,500, and under his control were placed thirty-one "zamindaris of Hindu sirdars, containing 129 *killas*" (*i. e.* thirty zamindaris and his own estate of Khurda).

To the two sons of the old independent chief Telinga Makund Deo were given the rank of Commander of 500, *i. e.*, the Raja of Sarangarh (Patia) received under his control thirty-one zamindaris (including Patia and Balunta his own property) containing 38 *Killas*, while the Raja of Aul received (including his own zamindari and *killa*) twenty-four zamindaris containing 42 *killas*.

We find in the above zamindaris several of the present Tributary States, *e. g.*, Baramba and Dhenkanal under Khurda, also Banki now a part of Cuttack and Angul; also Gumsar and Kalikote, now in the Madras Presidency.

"The more distant zamindars were separated from the control of the superior Raja and placed under seven principal zamindars or *sawants*, viz., Keonjhar, Mohurbhunj, Bishanpur, Fattiabad, Naraingarh, Kawangher, and Nag or Bagbhum." The last four are now in Midnapur.

Under these chiefs we find Ragri and Balarampur (under Kenojhur) and Nilgiri and Jamkunda (under Mohurbhanj). Ragri and Balarampur are now known as *Killajats*, *i. e.* they are in the temporarily settled area and have been separately treated in the present settlement (see paragraph (610). Nilgiri is now a Tributary State, while Jamkunda is an ordinary temporarily-settled revenue-paying estate. It may also be noted that Manbhum and Singhbhum are included under Bishanpur. A perusal of the lists given by Stirling in page 68, *et seq.*, will be found most interesting to the District Officer.

In the central and most highly cultivated portions of the present districts of Cuttack and Balasore and part of Midnapur south of the Subarnarekha, Raja Todar Mal made a detailed settlement fixing the rates of rents in every village. He confirmed in possession the hereditary Hindu officials of the Pargana (*Khand* or *Bisi*), the *Khandpatis* and *Bhoimuls* becoming *Chaudhris* and *kanungos* and being entrusted with the collection of revenue and the other rights and liabilities of zamindars for the portion of the Pargana or *taluk*† under their direct management. The village headmen he maintained under the appellation of *muqaddam* an Arabic word meaning headman, commuting their customary right to hold one acre in twenty free of assessment to a grant of a definite quantity of land‡. Where there were no hereditary headman or, where the *padhan* had been dispossessed, collections were often made through an agent (*karji*) or farmer (*sarbarakar* or *mustajir*) appointed by the *talukdar*, and many of these developed into hereditary tenure-holders with rights almost equal to these of the *muqaddams*.

236. The *talukdars* were remunerated by grants of land (*nankar*) for their support, and by deductions of 5 per cent., (*rusum*) from the gross collections of the villages

* *Khandaits* and *Bhuian*, *Sawants*, *Shebaks*.

† *Taluk*. an Arabic word that may be translated "sphere of influence. Sometimes also called *Tappa*".

‡ *Jagir*, *petrali*-ancestral.

in their charge, as well as by permission to collect what they could in the form of octroi, market dues and other extras (*sair wasiwai*). Mr. Trower * reported that under the Mahomedans the land-owners got a deduction of 10 per cent., besides one-twentieth on the total collections in the form of rent-free land. Nominally 1 in 20 was the customary deduction, but it was probably greater in the case of zamindars than in that of *chaudhris*, and less still for the *kanungos*. For the supervision of these landholders Raja Man. Singh grouped the Parganas into three *sirkars* of Cuttack, Bhadrak, and Jaleswar, each under charge of a chief executive officer called an '*Amel*' and of a checking revenue officer or *Sadar Kanungo* † with several subordinate collecting agents (*gumashta*); paid originally by a percentage on the collections.

237. The *talukdars* and superior officers were nominally appointed by the sovereign or his representative, and were so far officials that they acted jointly in making or sanctioning alienations and assignments of the land or its revenues, and were removable for bad conduct; but under the two centuries of misrule and revolt that followed Akbar's reign their hold on the land grew stronger, and the right to appoint lapsed into a purely formal custom of confirmation of the heir of the deceased officials, and even the *Amil* and the *Sadar kanungo* came to hold large estates, stepping into the shoes of dispossessed *talukdars* for whom they stood security. Their office was abolished by the Mahrattas, who appointed *Amils* and *sadar kanungos* of their own, and at the British conquest these ex-officials were found only as holders of large and valuable estates. The subdivisions of *taluks* appears also to have been allowed, for in one Pargana there were often more than one *taluk chaudhri* or *kanungo*, each being distinguished by the name of the particular landholder. So we find in the Mahratta revenue roll of Pargana Randia Orgara :—

- (1) Taluk Sadar, Kishen Persad Rai Mahashai (the Sadar kanungo).
- (2) „ Kanungo Wilayati Jasamant Rai.
- (3) „ Fakir Chaudhri.
- (4) „ Bip Charan Chaudhri.

Similarly in Pargana Khandi Bisi the Pargana registers of the Maharattas showed four taluk kanungos and one taluk chaudhri.

Stirling gives us the following summary regarding these officers of State :—

To control and superintend the local officers of the old *regime* and to maintain the principles of the old settlement inviolate, the offices of Sadar kanungo and Sadar Chaudhri were instituted by Akbar, or rather by his Dewan. The Sadar Chaudhris, Kanungos and their establishments should be carefully distinguished from the *vilaiti* or local and country chaudhris and kanungos, the officers of the former Hindu Government. Whilst the latter were all Uriyas, the newly created officers were invariably filled by natives of Bengal.

238. Besides the *talukdars*, there were also a few landholders in possession of whole Parganas. They alone were officially styled dependent Hindu sirdars or zamindars, and were generally either descendants of the old reigning princes, as in the case of the zamindar of Utikan, who was the Raja of Kanika. or the zamindar of Saibir, who was the Raja of Patia, or were border chiefs (*knandaït* or *bhuiyan*) such as those of Darpan, Madhupur, Balarampur, Chausatpara, Ambo.

Besides these two classes, a good many superior officials were appointed zamindars in return for special services. Such was Trilochan Patnaik, the Amil, who was appointed zamindar of Kotdes and the neighbouring lands.

It appears that the Mahrattas recognised sixteen of these zamindars in the Cuttack district ‡ and one in Puri. Like the *talukdars*, they all held under deeds of appointment, and though their position was more honourable, their rights and liabilities did not in any way differ from those of the Pargana officials.

It is easy to see from the foregoing account of hereditary zamindars, officials, and officially-Created Zamindars that a general fusion of rights and titles must inevitably take place.

Stirling gives the following reasons for general extension of the term "*zamindar*" in Orissa :—

* See Babu Ranga Lal Banerjee's report on the Cuttack Tenures.

† *Lit.* chief expounder of the law; he was some-times called a "*Mahashai*" = Master.

‡ Babu Ranga Lal Banerjee's Note on the Cuttack Tenures, paragraph 36.

- (1) The lack of distinction between the ancient Zamindars and the talukdars created by the Moguls with hereditary offices.
- (2) The confused and inaccurate application of the term by the zamindars.
- (3) The failure to distinguish between the inheritance and sale of an office and the inheritance and sale of the land with which that office was connected.

Whilst *talukdars* became exalted to the rank of zamindar, the proper zamindars mounted a step higher and styled themselves Rajas. Every hill and jungle zamindar of Orissa has been pleased invariably to adopt the style and title of Raja.

239. In 1742 occurred the first invasion of the Mahrattas. From 1751

Mahratta System.

A. D. Orissa became a Mahratta Province under the management of a *Subahdar*. The new conquerors made in theory no change in the fiscal organisation, but recognised the people whom they found in possession of the land without asking inconvenient questions. Orissa, the most peaceful part of their dominions, they looked upon solely as a source of revenue, and to this end appointed 32 *amils* to look after the collections, and under them distraint officers (*krok sazawal*) to squeeze the uttermost farthing out of the people. Defaulting *talukdars* they unhesitatingly dispossessed, and where they found a village headman strong enough to be independent of the Pargana official, they allowed him to pay his revenue direct into the treasury. To some

Mazkuri estates.

extent this had been the practice in the later days of the Mogul *regime*, when numerous independent estates* were created by grants to ministers † of State or for the maintenance of the Nawab's household.‡ These estates consisted generally of numerous small parcels of land in different villages, an inconvenient arrangement in many ways, but perhaps intended to give these officials an interest in touring or to provide them with a foothold in the different villages. The accounts were kept separately as direct collections (*hazur tahsil*) and were credited to the support of special departments. The origin of the *tahsilalahida* zamindaris or Parganas of Jainabad and Saidabad is peculiar. It is said that they were created for the support of Jaini Bibi and Saidi Bibi, the sisters-in-law of the Mahratta Dewan, who compelled every *talukdar* under his control to contribute their quota of land. To the category of petty separate revenue units were subsequently added the alienated estates known as *Kharidagis* and the resumed *jagirs* or torch bearers (*masalchi*) or yeomanry (*dograi*): while, as before-mentioned, the Mahrattas also accepted direct payment from many village headmen. All these estates were known as *mazkuri*, or specified, and their holders were treated as having exactly the same rights as *talukdars*, though the position was one of less dignity.

240. During the fifty years of Mahratta rule, or rather misrule, the

Mahratta extortion.

position of cultivator and payer of revenue (*malguzar*) was one of extreme difficulty. Lists of estates for farming leases were put up to auction in Nagpur and were bought sometimes by two or three persons, all of whom came to Orissa and tried to levy what they could. These persons, known as *asamis*, were responsible for the collections of revenue. The Mahratta demands knew no limit, default in payments subjected the *talukdar* to dispossession, imprisonment, and fine, and when all other means failed, the Mahratta cavalry harried the country and plundered the villages. The *talukdars*, when pressed, retaliated on the people by levying extraordinary cesses and so-called voluntary contributions, and their exactions were only limited by the fear of driving the tenantry to abandon the village and leave the land uncultivated. When the Mahratta cavalry appeared the villagers would fly to the woods driving their cattle before them, only to return when the troops had retired; and sometimes a border zamindar was strong enough to meet force with force and beat back the invader or at least compel him to accept reasonable terms.

Along the sea coast and in the mountainous regions on the west known as the Rajwara the old organisation survived unchanged. This tract included the territories of some of the feudal chieftains who ruled over the barbarous races of the hills, and the lands assigned in Todar Mal's and Raja Man Singh's settlements to

* *Mazkuri* = Specified (i. e., in the rent-roll.)

† i. e., the *nankar mahals*.

‡ i. e., *Har Nawabi, Khansamani*.

§ i. e., *bought*: they were often known as "*kharidagi bazi asamean*," i. e., "bought lands of various tenants."

the descendants of the Hindu kings. The Raja of Khurda bought some peace from the Mahrattas by the cession of his Parganas of Delang, Rahang, Serai, and Chaubiskud, and many petty rajas along the coast were reduced to the position of ordinary zamindars, but to the last the hill chieftains resisted even the Mahrattas with some success. They were periodically plundered, but it was only by a considerable show of force that the Mahrattas could compel payment, and amidst the inhospitable wilds and forests the horsemen were at a disadvantage and were as often defeated as victorious.

241. With all their extortion the Mohrattas appear to have collected annually about 11 to 12 lakhs of rupees from the Province * which is less than the estimated revenue of the Moghuls; and this was to be expected, for the very rapacity of the conquerors defeated its own intentions by discouraging thrift and throwing large areas out of cultivation.

242. Such was the state of affairs when the British Commissioners in the end of the Year 1803 A. D. found themselves confronted with the necessity of making a settlement of revenue for the Province.

* They determined to cancel all balances outstanding from the demands of former years and to base the demand for the current year on the receipts for previous payments making suitable deductions on account of *abwabs* and excessive assessments, and on account of any sums collected in advance by the Mahrattas.

For the ascertaining of the revenue due on these terms they had at their disposal the revenue rolls of the *Sadar Kanungo* of Cuttack, Narendra Ray Mahashai, and the accounts of the record-keeper, Gopal Pandit.

The zamindars officials, proprietors, and quasi-proprietors whom they found in possession were the following:—

- (1) The ancient zamindars of the *killas* estates.
- (2) Zamindars of Mogul and Mahratta creation, e. g., Kotdes and Utikan.
- (3) *Chaudhri* and *kanungo talukdars*.
- (4) *The Maskuri mugaddams*.
- (5) Village accountants, *sarbarahkars*, *karjis*.
- (6) Headmen of *patnas* known as *pursethidars*. A *patna* means primarily homestead rather than arable lands.
- (7) Holders of alienated lands (*Kharida*) originally sold under the fiction that they were waste (*banjar kharij ama*), also resumed *jagirs* and service lands.

243. The proposals of the Commissioners for the subsequent settlement of the Province were set forth in a proclamation of the 15th September 1804 which was afterwards embodied in Regulation XII of 1805, and I cannot do better than quote it her as a complete exposition of the principles and intentions of the officers who made the first settlement of Orissa:—

First.—Whereas it is the intention of the British Government to adopt at the expiration of the present *Amli* year such a plan for the settlement of the landed revenue of the province of Cuttack as may be most conducive to the prosperity of the country and to the happiness of the inhabitants; and whereas it is of the utmost consequence to the success of the measure, as well as to the interest of the zamindars, talukdars, and all others concerned, that the nature and terms thereof should be made known as early as possible, notice is hereby given :

Second.—That at the commencement of the *Amli* year 1212 (1804-1805), the sayer of every denomination will be separated from the mal or land revenue and a Settlement for the latter only concluded in all practicable cases which the zamindars or other actual proprietors of the soil (unless when disqualified by notoriously bad character or other good and sufficient cause) for a period of one year, it being understood that all zamindars and other landholders, and all candytes shall for the present, and during the pleasure of Government, continue to perform the same duties of police for the prevention of robberies, murders, and crimes of that nature, and for the preservation of peace and good order within their respective limits and to be subject to the same responsibility, as heretofore :

Third.—That at the expiration of the year 1212 another settlement will be made with the same persons (if willing to engage and they shall have conducted themselves to the

* See paragraph 54 of Mr. Ewer's Report of 1818 printed at page 22 of the Khurda Selections. (For further details see Chapter XXII, paragraph 547, etc.)

satisfaction of Government) for three years, at a fixed equal annual *jama*, which *jama* shall be formed upon a just and moderate consideration of the receipts in the year 1212 and former years.

Fourth—That at the expiration of the fourth year a new settlement will be made with the same persons (if willing to engage and they shall have conducted themselves to the satisfaction of Government) for a further period of four years, at a fixed equal annual *jama*, formed by adding to the annual rent of the preceding lease of three years, two-thirds of the nett increase of revenue during any one year of that period:

Fifth—That at the end of the lease for four years (which will be in *Umil* year 1219 i. e., 1812) a further Settlement for the period of three years will be concluded with the persons in possession (if willing to engage and they shall have conducted themselves to the satisfaction of Government) at a *jama* to be formed by adding to the annual rent of the preceding lease of four years, three-fourths of the nett increase of revenue during any one year of that period :

Sixth—That at the end of these eleven years, which will be in 1222, a permanent settlement will be concluded with the same persons (if willing to engage and they have conducted themselves to the satisfaction of Government, and if no others who have a better claim shall come forward) for such lands as may be in a sufficiently improved state of cultivation to warrant the measure, on such terms as Government shall deem fair and equitable :

Seventh—The *nankar* lands of those zamindars who may decline entering into engagements for their estates as also of those whose offers may be rejected by Government, will be subject to the payment of revenue equally with other lands in the district : but such zamindars shall for the present continue to receive in money an equivalent for what they have hitherto received as *nankar* from the Mahratta Government :

Eight—That with respect to such zamindaris as may have been mortgaged or transferred in security and possession thereof actually given to the mortgagees or securities, the settlement will be made with the person in possession of the land as the temporary representative of the proprietor, leaving the latter to obtain possession either by a private settlement of accounts or by a judicial process :

Ninth—That the settlement of such small taluks or zamindaris as may be only nominally included in large zamindaris in the *sadar jama* of which their *jama* may be comprehended, will be made separately and distinctly with the proprietor of such small estates, and they will be allowed to pay their revenue directly to the Collector or the person appointed by him to receive it; and in all cases where the revenue of a village has for upwards of five years past been paid direct to Government by the hereditary *muqadam* the settlement for such village will be made with the hereditary *muqadam* :

Tenth—That with respect to such lands as are without proprietors, or the proprietors of which decline entering into engagements, a village settlement shall be made, and a preference given to the hereditary *muqadam* of those villages to which the lands belong, but no settlement is to be made with a *muqadam* for lands not included in this *muqadumi* :

Eleventh—That in the event of neither proprietors, *muqaddams*, nor other respectable ryots being forthcoming such lands as are in that predicament will be held *khas* :

Twelfth—That all authorised abwabs are to be consolidated and incorporated with the land rent and expressed in the *Pattahs* and *Kabulyats*, that nothing but what is there expressed shall be collected from the ryots or under-renters :

Thirteenth—That all persons who may enter into engagements for the Settlement must bind themselves by written obligations to grant *pattahs* of the above description to other raiyats and under-renters :

Fourteenth—That all persons who may enter into engagements with Government must previously give security for the fulfilment thereof in an amount equal to the largest *kist* of their annual *jama* :

Fifteenth—Several of the tributary Rajas have been accustomed to furnish guards and be responsible for all robberies committed within the *Mogulbundy* lands bordering on their respective territories, and for which they have formerly been allowed to levy a tax called *Choupunny* or *Mongumkhandity* : those Rajas are to continue to furnish the usual guards and be subject to the same responsibility as heretofore; but, instead of being permitted to levy the above-mentioned tax, the said Rajas will, until further arrangements can be made, receive an equivalent in money from Government :

Sixteenth—Such being the provisions made for the preservation of the rights of the zamindars, raiyats, & C., &c., and for the effectual prevention of undue exaction, there cannot be a doubt that confidence in the protection of Government will be established amongst all ranks of people; that cultivation will be extended; and that the general prosperity of this province will rapidly increase.

It is to be observed that the proclamation admitted the distinction between Zamindars and Talukdars, * but the former at least were considered to be actual proprietors of the soil and were in 1815 A. D. to be allowed a permanent settlement. Meantime, by sections 33 and 34 of Regulation XII of 1805, the

* See also section 13, Regulation XII ; "zamindars, talukdars, farmers and other holders of land",

jama of the *Khandaiti* estates of Darpan, Sukinda, and Madhupur was fixed in perpetuity, and the quit rent (*Peshkas*) of the big estates of Al, Kujang, Kanika, Khurda, Haripur, Bishunpur, Mirichpur, and Patia, exempted from enhancement. The same regulation exempted the Tributary States from the operation of the revenue laws and provided for registration of and enquiry into all claims to hold land free of revenue.

Collections continued to be made through the Mahratta officials, but a punctuality and completeness in the payment of revenue was required to which the Uriya proprietors had never been accustomed, and nearly a third of the estates came under the direct management of the British Collectors. *

244. In Chapter XXII, paragraphs 548, &c., an attempt is made to give the revenues settled from time to time in the area which forms the subject of this report. The figures given in the concluding paragraphs of this chapter refer generally to the whole of Orissa and include the *Garhjat* States and (often) permanently-settled areas and even Khurda. The triennial settlement of 1805-8 brought an increase of Rs. 1,20,529 to the revenue; made, it must be confessed, with very little justification. The Collectors had no information as to the real assets of the estates, for the zamindars and *amils* combined to withhold all papers, and they had to proceed on a very rough estimate of quantity of land in cultivation and on the reports of interested subordinates as to the circumstances of the proprietors. Arrears rapidly accumulated, and in 1806 began the system of putting up defaulting estates for sale in Fort William, a policy that proved the ruin of many old Uriya families and allowed Bengali speculators to buy valuable properties at very low prices. In this year were sold 17 estates with a revenue of over Rs. 50,000 and in 1807 A. D. 266 estates paying over 3 lakhs as revenue came to the hammer. Among these was the Noanand estate in Balasore sold for Rs. 5,013, but again sold up in 1818 A. D. and bought by Government for Re. 1.

A drought in 1806-7 further aggravated the hardship of our revenue system, but Government blindly proposed † to anticipate by ten years the date originally fixed for the permanent settlement, and it was declared that a settlement of one year should be made for 1808-9, to be followed by another triennial settlement, and that the assessment, which should be made in the year 1812, should remain fixed for ever *if the arrangement received the approval of the Hon'ble Court of Directors*. ‡

245. The Settlement of 1808 produced a revenue of Rs. 14,38,912 (including the present Khurda Government estate, the *Garhjat* estates and the permanently-settled areas). Ninety-five per cent. of the revenue was collected with the sale for arrears of only 91 estates, bearing a *jama* of Rs. 21,410. This was a decided improvement on the previous settlement, during which the average annual sales were 142 with an average total *jama* of Rs. 1,66,213 while even by such severe measures only 94 per cent. of the demand was realised.

246. The next settlement produced a large increase of revenue and collections fell off to 84 per cent. inspite of the sale in three years of 271 estates with an annual *jama* of Rs. 2,04,482.

Meanwhile the Court of Directors had refused their sanction to the proposed permanent settlement, and a settlement for one year was made in 1812-13, to be followed by another triennial settlement §, during which enquiries were to be made with a view of ascertaining what lands were in a sufficiently advanced state to admit of a permanent settlement of their revenue.

247. The one year's settlement of 1812-13 proved a failure. It brought an increase of the demand, but the people were disheartened at the constant alterations of the revenue, and many left their estates to be held *khas* by the Collectors, who either managed them through tahsildars who embezzled the revenues, or farmed them out

* For the materials for the following paragraphs I am chiefly indebted to Mr. Toynbee's "sketch of the History of Orissa from 1803 to 1828".

† See Regulation x of 1807, modified by Regulation VI of 1808.

‡ See section 4, Regulation VI of 1808.

§ Vide Regulation I of 1813.

to speculators who rack-rented the tenants. Collections fell to 70 per cent., and the next settlement, which was for two years, added only Rs. 23,359 to the demand. Matters did not, however, improve, and only 72 per cent. could be collected, and that by

Settlement 1813-15.

selling up 108 estates with a jama of Rs. 60,172. At the close of this settlement it was extended, by Regulation III of 1815, for another two years, after which yet another settlement was to be made for three years, and a conditional promise was again given that after the expiry of this period, *i.e.*, in 1816, the zamindars of such estates as were in a sufficiently advanced condition would be given the benefit of the oft-repeated promise of a permanent settlement. The Court of Directors however, ruled otherwise, and in a despatch of the 16th June, 1815 wrote:—

There cannot in our opinion be a more indefensible proceeding than finally to decide on the rights of individuals and the interests of Government in a state of declared ignorance regarding both.

248. Accordingly, another settlement for three years was made under Regulation VI of 1816 at a slightly increased *jama* but the people had been driven to desperation by over-assessment and mismanagement, and in 1817 the country broke out in rebellion and the revenue system was temporarily disorganised.* The revolt was soon quelled, but it had served to bring home to the authorities in Calcutta the very real nature of the discontent and grievances of the Uriyas.

Mr. Ewer's Reports of 1818.

Mr. Ker was sent as Commissioner of the Division, and Mr. Ewer was appointed as special Commissioner to enquire into the State of affairs in Cuttack. His report † gives a most interesting picture of the errors into which the Government had been dragged by their greed of revenue, and by their general ignorance of the resources, wants and prejudices of the people over whom they ruled. He states, as the chief grounds of complaint of the Uriya landholding and cultivating classes, the inequality of the assessment, the severity and inelasticity of the system of realising the public dues, the selling of estates in Calcutta, whereby foreign speculators and adventurers had been induced to buy them, the hardship of having to pay revenue in the restricted silver currency and the salt tax and monopoly. The deferment of the permanent settlement had not in his opinion influenced the Uriya proprietors, though it might well have caused annoyance to speculating purchasers, and he recommended a detailed enquiry into rents and rights in land to be followed by a twenty or thirty years' settlement.

The Collector of Cuttack, Mr. Trower, had about this time reported that so far from the Province being over-assessed, the revenue was susceptible of considerable increase, and had ascribed the large arrears to the perversity of the *malguzars*. This was the accepted opinion, but Mr. Ewer, estimating the assessment at 10 annas per *bigha* of cultivated land—it must have been a good deal nearer double—writes:—†.

Perhaps the calculation attempted above may be allowed to strengthen in some measure the opinion that there is no sufficient reason to believe the district *generally speaking* over-assessed. The *jama* of Cuttack has, however, notoriously been fixed or at least augmented at hazard without any satisfactory ascertainment whatever of the real value and capabilities of the estates from which an increase has been levied, and in consequence of the defective information on which the Revenue authorities have hitherto proceeded, the unequal apportionment and distribution of the whole demand may have produced much of the evil of over-assessment, without any corresponding advantage to Government. I must here express my decided opinion that some grievances do exist connected with the Government demand from land, either of actual general excess, or of great inequality of assessment.

Such opinions could not fail to have weight, and in next three years' settlement§ the *jama* was reduced by more than a lakh of rupees and during its currency only 18 small estates were sold for arrears. Further information on this head may be found in paragraphs 548 to 552 of this report.

Regulation VII of 1822.

249. Regulation VII of 1822 marks the beginning of a new epoch in the history of the Province, for while extending for five years the existing settlement—with an increase of

* A full account of this rebellion will be found at pages 12 to 23 of Mr. Toynbee's History.

† Printed in Volume I of the Khurda Selections.

‡ Paragraphs 74 and 75 of his Report.

§ From 1818-19 to 1821-22 under Regulation XIII 1818.

Rs. 75,000 in the demand—it set forth the intention of Government to ascertain, settle and record the rights, interests, privileges and properties of all persons owning, occupying, managing, or cultivating the land, or gathering or disposing of its produce, or collecting or appropriating the rent or revenue payable on account of land, or the produce of land, or paying or receiving any cesses, contributions or perquisites to or from any person resident in, or owning, occupying or holding parcel of any village or *mahal*. This Regulation was also silent on the subject of a permanent settlement.

At the close of the five years' settlement the proprietors' engagements were extended, and no further change in the revenue of any *mahal* occurred until the completion of the detailed measurement and settlement of its lands.

No provision was at first made for the appointment of special settlement officers or for relieving Collectors of the routine duties of their offices, and the natural consequence was that up to 1831 only Taluk Delang in Puri, and Kishnanandpur, Eranch and Kakar in Cuttack, and Siari in Balasore had been settled. In that year the Board addressed twenty-one questions* to the local officers with the view of obtaining the information necessary to commencing operations more vigorously. During the next few years the large estate of Khurda and a few *mahals* in the neighbourhood of Cuttack were settled, but there was no uniformity in the system, no professional Survey, and no resumption of invalid revenue-free claims, so that in 1833 when Lord William Bentick's celebrated Minute threatened to revolutionise the whole system, the Settlement was still quite in its infancy.

250. A few remarks on the subject of this Minutes are necessary to complete my account of the settlement of Orissa. The Governor-General after reviewing the theories of the State to share in the produce of the land and the results of past settlements proceeded to record his dissent from the principle of a detailed enquiry into private rights and interests such as was enjoined by Regulation VII of 1822. He formulated the following principles, which were submitted to a Board of experts at Allahabad and were adopted by them as the groundwork of a revised settlement law :—

1. The Professional Survey to be substituted for the Native Amin establishment.
2. The assessment to be fixed on an ascertainment in the aggregate of the cultivated area of each estate, and a general acquaintance with the advantages possessed by each village as regards fertility, position, population, and any other matters which require to be taken into consideration when regulating the Government demand.
3. The appointment in detail of the assessment so fixed to be left to the village communities or the zamindars, and the preparation of the records of lands in detail to be exacted from the village accountants.
4. The exercise of judicial powers by settlement officers to be limited to cases in which the cause of action may have arisen within the period of one year, and also to be limited to matters affecting the settlement, general questions of property being left to the Courts. The above restriction should not, however, be held to apply to claims once entertained and actually pending, or to those which may have been, when preferred, postponed to the period of the settlement; the parties having already been told that their claims would then be determined by the Collector.
5. Existing institutions to be maintained and prevailing systems of village management not to be interfered with except for special reasons.
6. All parties to be secured in the enjoyment of whatever rights and privileges they may be in possession of, or establish a claim to subject to the limitations above noted, but no new rights to be created, and all cultivators who hold as mere tenants at will, to be left to make their own bargains as heretofore.
7. The Patwaris *dutter* to be put upon an efficient footing, under the superintendence and responsibility of the kanungoes and tahsildars.

These orders were sent to the Orissa officers with a view to such modifications of the law as would be necessary to give effect to them, but one and all—Mr. Commissioner Hunter, Mr. Collector Wilkinson of Puri, Mr. Collector Ricketts in Balasore, protested so strongly against the proposed changes that they were allowed to have their own way and to continue to make detailed field to field enquiries and record all rights and interests without the check of a professional survey. Mr. Wilkinson further objected so decidedly to the appointment of native Deputy Collectors on settlement that none were for the time being sent to Puri.

* Printed as an appendix to Mr. Toynbee's "History of Orissa," paragraph LXXIX.

251. In 1834 the first definite rules of practice were sanctioned and with the help of the new Deputy Collectors the settlement work was pushed on. Progress, however, was very slow, and by 1835 experience had shown the necessity of a professional survey, so from 1836 to 1843, the whole Province was surveyed and mapped on a 4-inch scale. The survey officers in turn required the preliminary demarcation of village boundaries and the appointment of a special Officer to decide boundary disputes. About the same time the resumption proceedings began, and from 1836 onwards were made *pari passu* with the settlement of the *hasilat* lands of the estates in which the tenures were included. In 1840 the resumption rules were modified in favour of the *lakhirajdars* and all previous decisions revised accordingly, without waiting for the parties to apply. In 1837 special Deputy Collectors were appointed to dispose of the resumption cases, and in 1840 a Special Commissioner, Mr. Ricketts, with the powers of a Board of Revenue, was appointed as the ultimate court of appeal in resumption cases in Orissa.

Another important advance, described by Mr. Ricketts * as "an alteration the like to which was never in so short a time attempted" was the promotion of the native Deputy Collectors from the subordinate task of making preliminary enquiries and reports to the responsible work of completing the settlement of *mahals* and making their own proposals for revenue. The experiment—for such it was—proved successful, and the native assistants amply justified the confidence placed in them, though for some time they continued to work with less rapidity and confidence than their European colleagues.

252. The procedure finally adopted for the survey and settlement from the beginning to the end of the operations was as follows:—

Procedure for Settlement.

In the first instance a special Deputy Collector was appointed in each district for the demarcation of village boundaries. His work being completed, the Survey Department measured each village, extracting the total area of cultivated, culturable and uncultivated land separately for every estate and *tahsilalahida* † within its periphery. They also prepared maps on a 4-inch scale showing the main physical features and divisions of the soil in the estates and villages under survey, i. e., *tahsilalahidas* appear as mere spots on the map without internal detail. On receipt of the revenue survey maps and measurements the native surveyors (*amins*) were sent to measure the village with the pole, ‡ which they did by starting from a fixed point and measuring the length and breadth of each field in continuous succession recording these measurements, the estimated area, the nature of the tenure, and the name of the tenant, in the field-book (*bhauria*). From the field book was prepared a statement (*warija*) intended to show at one glance all the lands held by a single tenant, and this and the field-book formed the basis of the Deputy Collector's enquiries. Armed with these he proceeded to take up the settlement of the particular estates entrusted to him.

His first care was to prepare a list of *lakhiraj* claims and to send these to the Collector to be numbered and registered, the number so given being what is now known as the 'general' number of the revenue-free lands. He then instituted suits for the resumption of all these lands and called upon the *lakhirajdars* to appear with the receipts held by them for the *sanads* filed in the Collector's Office. Very great pains were taken to obtain the attendance of the claimants, but if they failed to appear the lands were resumed; if they appeared the *sanads* were sent for and examined and a decision given on the validity of the title.

The next step was to call on the *kharidadars*, *muqaddams*, *sarbarahkars*, *pursethis*, *padhans*, and other claimants of subordinate interests in the land to appear and prove their title, and while these investigations were in progress the columns for soil and crop hitherto left blank in the field-book were filled up by *amins* under the supervision of the Deputy Collector.

This done he proceeded to enquire into the real assets of the village, examining the zamindar's statement of demand and collections, the former revenue, and any other sources of information available, and comparing the rates so deduced

* See paragraph 70 of his Progress Report for 1837.

† See Paragraph 410.

‡ *padika*, a bamboo pole of 7 to 12 feet in length see paragraph 124.

with those of neighbouring estates and with his own ideas as to the fair assessment of the village having regard to the quality of the soil and the crops grown.

Rates being fixed and the amount of land under each class of crop known, the total assessment of the revenue-paying lands * was easily arrived at, and to this was added the assessment of the resumed tenures. This being done a rent roll *bhian* for each estate or portion of an estate in the village was made out, showing in detail the lands held and the rents payable by *thani* or resident raiyats, *chandinadars* and all tenureholders and owners of resumed lands, but giving only a lump assessment on lands in the occupation of the proprietors or of *pahi* raiyats. The rates for these latter were in practice generally assumed as four annas per rupee less than those of *thani*, which could more easily be ascertained. The proceedings were on completion of the settlement of the estate described in a vernacular report (*ruidad*) giving an account of the history, the lands, the subordinate tenures, the resumptions and the assessments and the proposals for the new revenue, illustrated by elaborate figured statements.

This, with an English covering report, was submitted to the Collector—engagements being in the mean-time taken from the proprietors, tenureholders and cultivators, and leases given them in return. The Collector modified or confirmed the revenue, altering at his discretion rents or rates of allowance, and in turn forwarded the reports to the Commissioner who passed final orders or sent the reports on the Board of Revenue. Alterations were given effect to by a note of the change (*tarmim*) in the *ruidad*, and sometimes but by no means always a new rent-roll was prepared. In some cases—I may instance Gopinathpur Taluk—extensive alterations made by the Collector only resulted in a reduction of the revenue; neither raiyat nor tenureholder getting any of the intended benefit. While the estates were being thus dealt with the resumption proceedings were submitted to the scrutiny of the special Deputy Collector who tried any cases left pending, and if he differed from the assessing officer, referred the case for orders to the Collector who disposed of it subject only to an appeal to the Special Commissioner.

253. The settlement so made began practically in 1835 and was concluded in 1845. It cost Rs. 20,36,348 and resulted in an increase to the revenue of only Rs. 34,980.*

Results of the Settlement.

Nothing is more striking to a student of the literature of this great settlement than the disinterested zeal for the welfare of the people and the tender sympathy with their prejudices and weaknesses that is shown in every line of the letters of such men as Mills, Ricketts and Wilkinson; and the marked appreciation of their services and the deference to their opinion shown by the governing bodies in Calcutta. There was no attempt to realise the pound of flesh that might be the due of Government; the terms allowed to dis-siezed *lakhirajdars* were far more lenient than the strict letter of the law enjoined, and where there was reason to suspect the revenue of any estate to be burdensome, it was unhesitatingly reduced. The great fear of the local officers was, from first to last that they would, on the ground of expense, be compelled to revert to the aggregate to detail system of the North-Western Provinces. In his Operation Report for 1837-38 Mr. Commissioner Ricketts wrote—I have omitted some sentences :—

In the 226 mahals reported the rights and interests of every party connected with the land have been ascertained and recorded. Undefined, intricate and confused as those interests were, their adjustment was alone worth the outlay. The more experience in the Province I acquire, the more convinced I am that the aggregate to detail system is impracticable here. The Board have seen enough of Cuttack to judge what sort of a settlement it would be if all the relative rights of *kharidadars* of the first class, *kharidadars* of the second class, *maquddams*, *sarbarahkars*, and *thani raiyats* were to be left unadjusted; and I rely on their not proposing any alteration in the detail of the proceedings. It happens that I have charge of a large settled district as well as of the unsettled Province of Cuttack, and I have continued opportunities of comparing the two systems. The Midnapore district occupies more of my time than the Cuttack Province. It is Midnapore that is unsettled, and it is my belief that in several parganas of that district a survey and settlement on the Cuttack plan will ultimately be necessary.

The Board strongly endorsed the opinion thus expressed; and again in 1841, Mr. Commissioner Mills writes :—

* *Khalisa* or *hasilat. i. e.*, lands other than *lakhiraj*.

* Mr. Mill's Report of 1847. This is up to April 1845. In a statement of 9th Dec. 1950, the nett increase is shown as Rs. 42,165.

Operation Report. 1837-38, paragraph 102.

It was agreed (at the conference) that any alteration in the present system of making the Settlement and of preparing these papers (Settlement records) was unadvisable; and abounding as Cuttack does with such a variety of under tenures, I think the aggregate to datail system of the Upper provinces could not well be introduced, and sure am I that its introduction would cause great and general dissatisfaction to the country, while, as regards the rents to be paid by the *ex-lakhirajdars*, *kharidadars*, and others, who before held their lands at a quit-rent, or free of rent charges, it would in practice be found to retard the settlement operations; the settlement officers must fix the rents to be imposed on these holdings.

How completely experience has justified the contentions of these officers is obvious to any person who compares the agrarian condition of Orissa and Bengal. To the officer deciding disputes as to possession in a permanently-settled village of Bengal, the first and commonest stumbling block is the absence of any admitted basis of enquiry. In Orissa such a basis may always be found in the settlement papers, which if every mistrusted are now at least looked to with the most unquestioning faith. Their efficacy is shown by the security of tenure of all who hold settlement leases as compared with the slow development of the rights of the *pahi* raiyats, and affords proof, if such were wanting, of the possibility of controlling and modifying the development of rights by means of a record.

The one great want was that of a cadastral map, but, owing to the system of measurement, the field-book to a great extent supplied its place.

254. The settlement was originally made for thirty years, and expired in September, 1867. For two years previously the Province had suffered from the most disastrous famine on record, and it was thought inexpedient to attempt a re-settlement until time had been allowed it for recovery. Accordingly, Act X of 1867 was passed and continued the existing settlement to the end of the *Amli* year 1304, corresponding to the 7th day of the month of September 1897 A. D.

Extension of Settlement.

CHAPTER XI.

LAND TENURE.

255. In this chapter I propose to show what are the rights and liabilities of the various classes in occupation of the land, how those rights have developed and changed during this century, and how they may in all probability be affected by the present settlement and the actual or proposed alterations in the land laws. A good deal of what is here written is necessarily repeated elsewhere in the chapters on settlements of rent and revenue, but the two subjects have been kept separate as far as it was possible to do so without too great a sacrifice of completeness.

The classes whom we find possessing, or drawing an income from, the land fall generally under one or other of the following heads :—

- (1) The so-called 'proprietors' directly responsible to the State for the revenue of the land they own, *i. e.* *malguzars* or *zamindars*.
- (2) The tenureholder with *quasi*-proprietary rights, holding under the proprietors, viz., *muqaddams*, *padhans* and *sarbarahkars*.
- (3) The revenue-free proprietors, holding their lands free of revenue in perpetuity, *i. e.*, *lakshiraj bahaldars*.
- (4) Holders of resumed revenue free tenures or *bazyaftidars*.
- (5) Purchasers of waste lands, now reclaimed and settled : or, *kharidadars*.
- (6) Resident cultivators, whose right to hold at a rent fixed for the term of Settlement has been recognised, viz., *thani* and *chandina raiyats*.
- (7) Cultivators who have not such recognised rights, *i. e.*, *pahi raiyats* occupancy and non-occupancy.
- (8) Persons holding land free of rent in consideration of their services to an individual or to the community, *i. e.*, *jagirdars*.
- (9) Under tenants of classes (4) to (8).

256. An account of the several classes of persons who under the Mogul and Mahratta rule were directly responsible for the payment of the revenue has been given in the preceding chapter dealing with the early history of the land settlement in Orissa. Here I need only say that on the conquest of Orissa in 1803 the Commissioners appointed for the settlement of the Province found middlemen intermediate between the cultivator and the State and having a recognised right to the collection and payment into the Treasury of the public revenue.

In paragraph 183 I have enumerated the following :—

- (1) Ancient Zamindars of Rajas of the *Killa* estates.
- (2) Zamindars of Mogul or Mahratta creation.
- (3) *Chaudhri* and *Kanungo Talukdars*.
- (4) *Mazkuri Muqaddams*.
- (5) *Mazkuri Sarbarahkars* and *Karjis*.
- (6) *Pursethis* of *Patnas*.
- (7) Holders of *Kharidagi* (purchased) lands

To these may be added holders of the following estates :—

- (8) *Dogra mahals*, grants of land to bodies of *Dogras* or yeomen in return for their services, which had been resumed and assessed, one or two of the principal men being allowed to engage for the revenue, the others holding as their dependants.
- (9) *Nankar* and other *jagir* estates, consisting generally of scattered villages or portions of villages assigned for the support of high officials, or of friends and dependants of the sovereign.

It is not to be supposed that the rights of these very different classes were indetical, but it seems clear that none of them, except only the zamindars and *khanduits* of the border, had before the British conquest any recognised proprietary right. There had, indeed, grown up a custom of hereditary succession, but cases of removal were not infrequent, and all the larger holders found it convenient to obtain a *sanad* of appointment, or say of confirmation, on succeeding

to their inheritance. Their tenures were also to a certain extent transferable, but to complete the validity of the transaction, the counter signature of the *amil* or *sadar kanungo* was necessary. Further, Mr. Stirling states that, except in the case of waste lands, he was unable to discover any instance in which the sale did not purport to be made for the liquidation of balances of the public assessment.

For failure to pay their quota of revenue the *malguzars* were liable to imprisonment and to the forced sale of the whole or portions of their lands; but so long as they remained in possession they were entitled to collect all they could from the *raiya*t, and to take the profits arising from the assessment of waste lands and to levy tolls and miscellaneous imposts. Further, they were generally allowed a *rusum* or deduction from the valuation of the estate amounting to not less than one-twentieth of the total in land or money.

257. Much that is of the greatest interest has been written concerning the rights of these *malguzars* and I might fill my report with extracts; but it would be of little use now to go over this old and debatable ground, and I shall content myself with quoting the conclusions arrived at by Mr. Stirling as given in the 59th paragraph of his Minute.*

In discussing the real nature of the rights and privileges of the zamindars, *talookdars* and *muquddams*, according to the former sense of the country, it is much easier to say what they were not, than what they actually were. It is my decided opinion, that from the hereditary character pervading so remarkably all the institutions of the Hindus, they at all times possessed an imperfect title of property in their offices, which was distinctly admitted and recognised by the practice of the Mogul Government, as evinced by the numerous authentic deeds of sale extant, bearing the countersignature of the chief kanungo or his deputy. The following is an imperfect sketch of the functions and emoluments attaching to those offices. They had the right of collecting the Government revenue assessed on the land according to certain fixed rates, or determined proportions of the crop settled by Raja Toder Mull, whose general Settlement was unquestionable the basis of all subsequent revenue management, if not the only one known in the Province of Orissa. The *chowdree* and *canangoe talookdars* collected direct from the *raiya*t of the *pahikasht* villages, and through the *muquddams* from the *muquddami* ones. Both classes of hereditary Collectors and Managers were *maliks* of the *Nafa* and *Nogsan* within the limits specified, that is, they appropriated profits or surplus collections, and in return were responsible for deficiencies, unless they could show them to be the result of some great and overwhelming calamity of season. These profits would obviously arise from persuading the *raiya*t to cultivate the more valuable products in preference to those on which the *jama* was originally assessed, and from encouraging the resort of *pahi* or the extension of tillage by *thani* *raiya*t by judicious arrangements in leasing out land that was waste, unoccupied, and uncultivated, but fit for cultivation in the period of the great general Settlement, or which had subsequently become reduced to that state. The privilege exercised of selling as well as leasing out portions of the waste and jungly, or *bunjur kharij jama* land has before been noticed. The *muquddams* sold in his own village, with the knowledge and sanction of his superior, and the *talukdar* in his tenure at large with the sanction of the sudder kanungo, and the concurrence of his colleagues. They had both a share of the sayer duties or *furoiat ruqm*, and of certain taxes on trade and artisans mentioned always in the bills of sale, as the '*Kool haboobat*' and '*Mohterfa*', likewise perquisites or tithes on fisheries, pasture grounds, gardens, woods, bamboo jungles, and the plains called *Benapat*, producing the grass universally used for thatching in this district (*Andropogon muricatum*). As far as I can understand, the resident *raiya*t of each village were each entitled to a share of the firewood, *bena* grass, etc., sufficient for their home consumption, and to graze their own cattle on the plains fit for the purpose, without paying to anybody; but when a question arose as to disposing of produce to a stranger or admitting strange cattle to graze, the *talukdar* or *muquddam* (according to circumstances) would be the *Malik* and conclude the bargain and arrangement. The above article did not, I believe in general form a part of the public assessment, unless in cases where their value and amount were considerable. They were allowed also ground for building, or *khanabari*, and cultivated certain portion of land free of assessment for their substances, the *nankar* of the *talukdar* being called *khomar* or *nij-jote*, and that of the *muquddam* *pitraleh*, or *wutun*. They levied further established *rusum*, the *muquddam* from the *ryots* of his own village and the *talukdar* from the *muquddams* and the *pahikasht* villages. Being responsible jointly with the *khandiat* and *chokoyans* for the police of the country, they must of course have derived advantages from fines, forfeitures, bribes, etc., all of which with taxes on marriage, so regularly taken under the *Mahrattas* as to have become an avowed impost in the revenue accounts, are rather of the nature of illicit perquisites according to the proper constitution of the country.

258. On the acquisition of the Province by the British, engagements for the payment of revenue were taken from the holders of the several classes of estates already mentioned

Treatment of proprietors
at the Conquest.†

* Pages I to LX of the Appendices to Mr. Toynbee's "History of Orissa".

† See Regulation XII of 1805, and Chapter X *supra*.

and borne on the revenue roll of the Mahrattas; also from the holders of the small *taluk*s and zamindaris only nominally included in large estates, and from hereditary *muqaddams* who for five years past had paid their revenue directly into the public treasury. To these were subsequently added the holders of lands of more than 75 acres in extent which were alleged to have been held rent free or on a quit-rent but were resumed and assessed during the general enquiry into the validity of revenue free titles. Though not expressly so stated all these persons appear to have been regarded as "actual proprietors of the land", (*vide* section VI of Regulation XII of 1805) where mention is made of "zamindars, independent talukdars, and other actual proprietors of lands."

In Section IV of Regulation VII of 1822, it is declared "that it was in no degree the intention of Government to compromise private rights or privileges, or to vest the *Sadar Malguzars* with any rights not previously possessed by them;" but in fact, either purposely or owing to a misunderstanding of their true position, it appears that these collectors and payers of revenue were allowed all the rights of freehold proprietors, subject only to the liability to sale of their estates for default and to dispossession for improper conduct; and their various titles of *Chaudhri*, *Kanungo*, and *Muqaddam*, soon merged into the more honorific appellation of Zamindar allowed to them all under the British *regime*.

They have been permitted to enjoy a right of inheritance according to the Hindu law, and not according to the law of primogeniture which was in force previous to the British conquest. They have an almost unlimited right of partition; an absolute right of sale and transfer; and even on default receive the balance of the sale money after liquidating their debts to Government.

If they refuse or are not allowed settlement they still draw an income from the lands, and when they are in possession are not required to perform the police duties that formerly belonged to their office; some even live apart in other districts or provinces as mere devourers of the rent, almost without use or obligations.

259. The incidents of the zamindar's right in a temporarily-settled estate as it has grown up under nearly a century of British rule are as follows :—

Incidents of Zamindari right.

- (1) Right to inherit according to the personal law of the proprietor.
- (2) Right to transfer the whole or any portion of the estate.
- (3) Right to partition, subject to the limitations of the partition Law* for the security of the revenue.
- (4) Fixity of the revenue demand for the term of settlement subject only to reductions for acquisition of land by Government. No abatements or remissions can be claimed as of right for any calamity.
- (5) Right to the rents fixed in the settlement and, in villages not assigned to sub-proprietors, to all the profits of new cultivation and to the lawful increment in rents.
- (6) Right to all profits from the jungle waste, and other unassessed areas, and from fisheries in villages not assigned to sub-proprietors, subject to the prescriptive rights of the community to fuel, pasturage, common lands, and roadway.
- (7) Right to grant leases and create intermediate tenures, though such are only binding for the term of settlement.
- (8) Right to compensation for land required by Government.
- (9) Right of co-sharer to open a separate account and pay his revenue separately into the treasury.
- (10) Right to engage for the revenue in-re-settlement, subject to the proviso that Government may exclude any person on the ground that his admission to or continuance in the management would endanger the public tranquillity or otherwise be seriously detrimental (section III, Regulation VII of 1822).
- (11) Right of recusant or excluded proprietor to *malikana* (section V, Regulation VII, of 1822).
- (12) Obligation to treat ryots well and not to collect unauthorised cesses (Regulation VIII of 1793 and section 74 of Act VIII of 1885).

* Act VIII (BC), of 1876 as amended by Act V (BC), of 1897.