BIHAR AND ORISSA DISTRICT GAZETTEERS

PURI

BY

L. S. S. O'MALLEY, I.C.S.

REVISED EDITION,

BY

P. T. MANSFIELD, I.C.S.

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PURI

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PREFACE.

THE Gazetteer of Puri was originally written by Mr. L. S. S. O'Malley, I.C.S., and published in 1908. In revising it, I am indebted to Mr. Page, Superintendent of the Archæological Survey, who corrected the historical and archæological portions; to Rai Bahadur Dayanidhi Das, Collector of Puri, who supplied information with regard to matters of general interest, and to several officers working in the Settlement, whose notes, supplied to me as Settlement Officer, I have freely used. Some of the photographs have been kindly supplied by Captain Fisk of the Puri Hotel.

P. T. MANSFIELD.

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GAZETTEER

OF THE

PURI DISTRICT.

CHAPTER I.

PHYSICAL ASPECTS.

General description.

The district of Puri, the southernmost district of the Orissa Division and of the Province of Bihar and Orissa, is situated between 19° 28′ and 20° 26′ north latitude and between 84° 56′ and 86° 25′ east longitude. It extends over an area of 2,499 square miles and contains a population, according to the census of 1921, of 951,651 souls. The district is named after its headquarters Puri, situated on the shore of the Bay of Bengal in 19° 48′ N. and 85° 49′ E. The place is known to up-country Hindus as Jagannath and locally as Purushottam Kshetra, the abode of the best of beings, *i.e.*, Jagannath, the lord of the world, whose shrine has, for centuries past, attracted devout pilgrims from all parts of India. The name Puri means simply the city and seems never to have been in use before the British conquest of Orissa; it is believed to be merely an abbreviation of Jagannath Puri, the city of Jagannath.

Boundaries.

This district is bounded on the north and north-east by Cuttack; on the south-east and south by the Bay of Bengal; on the west by the district of Ganjam in the Madras Presidency; and on the north-west by the Feudatory States of Nayagarh, Ranpur and Khandpara. It used to form part of the Province of Bengal, until the new Province of Bihar and Orissa was formed.

Configuration.

Physically, Puri contains three distinct tracts. Along the sea stretches a belt of sandy ridges, which, towards the Madras frontier, forms a long bare spit of land dividing the Chilka lake from the ocean. This belt, formed by the strong

monsoon and the violent currents which sweep from the south during eight months of the year, varies from four miles to a few hundred yards in width, and in some places rises into lofty cliffs. It effectually prevents all but two of the rivers finding an exit to the sea, and they are thus diverted to the Chilka, which is the great basin into which the rivers of the delta find their way. Behind this barren strip lies a fertile alluvial tract forming the south-western part of the Mahanadi delta. This is a rich, flat region of villages and rice-fields, watered by a network of channels, through which the waters of the Kuakhai, the most southerly branch of the Mahanadi, find their way to the sea. To the extreme east, however, between the Kushbhadra river and the boundary of Cuttack, there is a strip of high and less fertile land, where cultivation is varied by stretches of moorland and patches of forest and scrub jungle; this tract eventually merges in the jungle round the mouths of the Devi river, where it finds an outlet to the sea in a network of creeks. The third tract is a hilly broken country to the west and north-west, where the land rises in rocky undulations, long ranges of hills, and isolated peaks to meet the wooded glens and hills of the Feudatory States.

Natural divisions.

For practical purposes, the district may be regarded as containing two main divisions, a level alluvial tract to the south-east and a hilly tract to the north-west, corresponding with the administrative units known as the headquarters and Khurda subdivisions. The headquarters subdivision covers roughly three-fifths of the total area of the district, while the Khurda subdivision contains the remaining two-fifths. The Khurda subdivision marks the transition from the peaceful, thickly-peopled delta to the wild jungles and mountain passes of the Feudatory States, the country along the Daya being flat and alluvial, while further inland there are long ranges of rugged hills. The river Daya is, in fact, the boundary between the plains and the inland hilly tract, the country to the north and west being studded with hills, while to the south and east the only hills are the Dhauli hills on the left bank of the river and another group close to the Delang railway station.

Scenery.

The hill ranges run an irregular course from north-east to south-west, breaking up the country into small, well-cultivated valleys intersected by small streams. The villages are situated on the higher lands and surrounded by picturesque groves of trees. Many of the hills have been deforested and

nothing now remains but a thin covering of scrub jungle, but towards the south, where the ranges run down to the Chilka lake, they are covered with bamboo and dense jungle. The scenery in some parts of this tract, where the hills rise, range after range, towards the plateau of Central India, is very beautiful.

In the deltaic tract in the Sadr subdivision the scenery is of a different character. To the north there is considerable diversity of level. The higher lands are occupied by small patches of forest, by extensive mango, jack, and *palang* groves, and by village sites concealed from view in the foliage of banyan, tamarind, and other trees. Rice lands of varied levels fill up the intervening space, and the whole combines to form a pleasing picture, the eye being nowhere wearied by dull flat expanses stretching unbroken to the horizon. As we proceed further south, we come to the second zone of the delta, where there is less diversity of level and woodland scenery is rarer. The village sites are more exposed, and clusters of account, palmyra, and date palms take the place of the more leafy groves of the north. The only breaks in the monotony of the landscape are caused by the large rivers, whose banks are fringed with trees and undergrowth. In the southern extremity of this zone the aspect of the country is dreary beyond description. The land is flat as the surface of a table; it is only a few feet above sea-level, and is mostly subject to floods, which convert whole tracts by turn into inland seas or marshy swamps. The village sites are huddled on the top of isolated mounds, some provided by nature, others constructed or developed by art, and the trees, if any, round the homesteads, are seldom more than a group of palms.

The last zone is the area lying beyond the line of cultivation. On the south-east it is a belt of sand along the sea-coast varying from one to four miles in breadth; on the south-west it consists of the great expanse of water called the Chilka lake. Along the coast is a line of sand hills, which the rivers of the delta find it difficult to pierce. The Kushbhadra on the east finds an obstructed outlet to the sea; but the Bhargavi, after flowing due south for nearly fifty

Most of this account of the Chilka lake has been reproduced, in a slightly condensed form, and with a few changes necessary to bring it up to date, from the description given by Sir W. W. Hunter in the Statistical Account of Puri.

miles, is unable to make any headway through the sand, and after throwing off some of its volume into the Sar lake and the Samang Pat, two shallow lagoons to the east and north of Puri town, turns abruptly to the west and debouches in the Chilka lake.

LAKES. Chilka lake.

The Chilka lake is a shallow inland sea situated in the extreme south of the district and extending into the district of Ganjam in the Madras Presidency. It is separated from the Bay of Bengal by a group of islands formed by silt deposit and by a long strip of land, which for miles consists of nothing but a sandy ridge, little more than two hundred yards wide. It communicates with the Bay by a narrow inlet through the sandy bar thrown up by the sea—an inlet which in some years has to be kept open by artificial means. On the south-west, it is walled in by lofty hills, in some places descending abruptly to the water's edge, and in others thrusting out arms and promontories of rock into the lake. To the north, it loses itself in endless shallows, sedgy banks, and islands just peeping above the surface, formed year by year from the silt which the Daya and other rivers bring down. Thus hemmed in between the mountains and the sea, the Chilka spreads itself out into a pear-shaped expanse of water forty-four miles long, of which the northern half has a mean breadth of twenty miles, while the southern half tapers into an irregularly curved point, barely averaging five miles wide.

Its area fluctuates with the season, with the intensity and duration of the annual river floods, and with the ebb and flow of the tide; it is returned at three hundred and forty four square miles in the dry weather, and about four hundred and fifty square miles during the rainy season. The normal area of the portion included in this district is three hundred and ten square miles. The average depth is from five to six feet, and scarcely anywhere exceeds twelve feet, except in the south-west. The bed of the lake is a very few feet below the level of sea high water. The neck which joins it to the sea is only two hundred to three hundred yards broad; but the narrow tidal stream which rushes through it suffices to keep the lake distinctly salt during the dry months from December to June. Once the rains have set in, and the rivers come pouring down upon its northern extremity, the sea-water is gradually driven out, and the Chilka becomes a

fresh-water lake. This changeable mass of water forms one of a series of lagoon-like formations down the western shores of the Bay of Bengal, the result of a perpetual war going on between the rivers and the sea—the former struggling to find vent for their water and silt, the latter repelling them with its sand-laden currents.

The Chilka may be regarded as a gulf of the original Bay of Bengal. On the south, a bold, barren spur of hills runs down to the coast; on the north the land-making rivers have pushed out their rounded mouths and flat deltas into the ocean. Nor has the sea been idle; meeting and overmastering the languid river discharge that enters the Chilka, it has joined the two eastern extremities with a bar of sand, and thus formed a lake. The delicate process of land-making from the river silt at the north-east end of the lake is slowly but steadily going on, while the bar-building sea is also busily at work. Old documents show that a century ago the neck of land dividing the lake from the sea was only from half a mile to a mile broad in places where it is now two miles; and the opening in the bar, which was a mile wide in 1780 and had to be crossed in large boats, was described forty years later as choked up. Shortly before 1825 an artificial mouth had to be cut; and although this also rapidly began to silt up, it remained, as late as 1837, more than three times its present breadth.

The scenery of the Chilka is very varied, and in parts exceedingly picturesque. In the south and west hill ranges bound its shores; and in this part it is dotted with a number of small rocky islands rising from deep water. Proceeding northwards, the lake expands into a majestic sheet of water. Half-way across is Nalbana (a name meaning "the reed forest" from a kind of reed with which it is covered), an island about five miles in circumference, scarcely anywhere rising more than a few inches above water-level. This island is altogether uninhabited, but is regularly visited by parties of thatchers from the main land, who cut the reeds and high grasses with which it is covered. On the eastern side of the lake lie the islands of Parikud, with new silt formations behind, and now partially joined to the narrow ridge of land which separates the Chilka from the sea. At some places they emerge almost imperceptibly from the water; at others, they spread out into well-raised rice-fields. Their northern extremity slopes gracefully down to the lake like an English

park, dotted with fine trees, and backed by masses of foliage. Beyond the northern end of Parikud, the lake gradually shallows until it becomes solid ground, for here the Puri rivers empty themselves into the lake and the process of land-making is going on. Water-fowl of all kinds, and in the cold weather great flocks of duck, are very abundant in all parts of the lake, black buck and other deer are common on the islands and shores, and large numbers of fish, specially prawns and crabs, are found in its waters.

At the southern extremity of the lake in the district of Ganjam, is Rambha, which used to be a favourite resort of the European population of Ganjam town. About two miles from the shore at this end of the lake is a mass of rocks, known as Breakfast Island, on which a room and conical pillar have been built; this room is said to have been built by Mr. Snodgrass, a Collector of Ganjam under the East India Company, to serve as his office, while the pillar was intended to have a light on the top. There are a few travellers' bungalows along the shores of the lake, of which that at Barkul is best known for its picturesque view of the lake; the Raja of Kallikotta has a residence at Rambha and a house on the island of Barakud in the middle of the lake, which commands some most beautiful scenery. A tidal canal connects the lake with the Rushikulya river in Ganjam and is navigable throughout the year. Large quantities of grain are transported across the lake and along this canal. The boats employed are flat-bottomed vessels, which, when loaded, draw less than a foot of water, and are poled against the wind or drift before it under crazy mat sails.

According to tradition, the Chilka was formed by an inrush of the sea. The legend is that in the fourth century A.D. a strange race came sailing across the sea, and cast anchor off the holy city of Puri, hoping to surprise the temple with its store of jewels and costly oblations. But the priests, having for days beforehand seen quantities of litter from the horses and elephants drifting ashore, fled with the precious image and left an empty city to the invaders. The disappointed general, enraged at the tell-tale tide, advanced in battle array to punish the ocean. The sea receded deceitfully for a couple of miles, and then, suddenly surging in upon the presumptuous foreigners, swallowed them up; at the same time it flooded a great part of the Puri district, and formed the Chilka lake. There seems little doubt, that

the lake was formerly a bay of the sea, which the advance of the riverain delta hemmed in on the north-east, while a spit of sand formed across the mouth and eventually separated it from the sea. The bed of the lake is now being gradually raised by the silt deposit brought in by the rivers, and it is probable that in time the low mud flats which are pushing their way southwards from the mouths of these rivers will extend over the whole lake.[1]

Sar lake.

The Sar lake is a fresh water lagoon a few miles to the north-east of Puri town, which is formed by a backwater of the Bhargavi river. It is about four miles long from east to west, and about two miles from north to south, though naturally it varies enormously at different seasons. It has no outlet to the sea, being separated from it by a stretch of sandy country, now partly occupied by the casuarina plantations of the Forest Department described in a subsequent chapter. The lake is not used for navigation nor, to any extent, for fisheries; and a large portion of the area is cultivated with *dalua* or spring rice, when the water recedes. As may be expected it is in most years the abode of numbers of waterfowl in the cold weather.

HILL SYSTEM.

Practically all the hills in the district are in the Khurda subdivision, where they are found in more or less extensive ranges or in detached peaks and blocks, with elevations varying from under five hundred to three thousand feet above sea-level. One of these ranges, beginning in Dompara in the Cuttack district and running south-east in an irregular line towards the Chilka lake, forms the watershed between it and the Mahanadi valley. The eastern faces of the hills are usually rocky and precipitous. The western slopes are easier, and are well covered with earth and jungle, often with beds of laterite and gravel, from which issue good springs of pure water. On the north-west of the Chilka the hills become bold and very varied in shape, with fertile valleys running far inland between the ridges, and throw out spurs and promontories into the lake, forming island-studded bays.

The most conspicuous peaks are Solari in Banpur, Bhelari on the south-west boundary of the Khurda subdivision, and Baitha and Barunai, a mile to the south-west of Khurda town. Solari is a group of peaks rising one above another from the flat land near the Chilka lake, and the other three

[1] Sir W. W. Hunter, *Orissa*, Vol. I.

are saddle-backed hills rising into bare and often inaccessible precipices. There is a splendid tank, believed to be the work of prehistoric builders, on the Solari hill; and both this and the Barunai hill contain caves which have been hermitages and places of pilgrimage from time immemorial. Historically, however, the most interesting hills are Khandagiri and Udayagiri, two hills, separated by a narrow gorge, which rise abruptly from the rocky soil near Bhubaneswar, and are honeycombed with cells and cave dwellings cut from the solid rock by the Jains over two thousand years ago. Among other interesting places in the hills may be mentioned Atri, where there is a hot mineral spring in the midst of a highly-cultivated valley; and two picturesque passes on the Ganjam road, one at Singeshwar and one at Kurarhmal, five miles south of Khurda.

There are a few outliers of the Khurda hills in the alluvial plains which constitute the rest of the district. They cross the valley of the Daya at Dhauligiri, an isolated peak which is famous for the Asoka inscription carved on a great slab of rock at its base, and at Jagdalpur, where there is a line of low hills intersected by the railway. The highest peak in this range is about five hundred feet above sea-level and is crowned by an ancient Hindu temple.

RIVER SYSTEM.

The rivers of Puri may be divided into three groups marking three distinct tracts of country, viz., the rivers of the Khurda subdivision to the north; the deltaic rivers of the plain in the centre of the district, consisting of the Kuakhai, its tributaries and offshoots; and a group of three rivers, the Prachi, Kadua and Devi, to the east. Of the rivers last named the most important is the Devi, which drains a marshy tract in the extreme south-east and reaches the sea through a network of creeks.

The Khurda subdivision is an elevated tract above flood-level, in which the hills form a natural watershed between the Chilka lake and the Mahanadi valley. The drainage of the north-western part of the subdivision is carried into the Mahanadi by means of its tributary, the Kusumi; to the north it is drained by the Ran and other small streams; while in the east and south the waters find their way direct into the Chilka lake.

RIVERS OF THE DELTA.

The deltaic tract comprising the headquarters subdivision is a low alluvial plain, through which a number of rivers follow an uncertain course towards the sea. With one exception,

however, their final exit is impeded by the ridges of sand which line the coast, and their banked-up waters often burst the embankments which have been erected to restrain them, and cause inundations. The fact is that the main drainage channels of the delta, viz., the Kushbhadra, Bhargavi and Daya, can only carry off part of the discharge which the Kuakhai brings them in years of floods. It has been suggested that the explanation of this state of affairs is that there was formerly a large river flowing to the sea along the course followed by the Prachi, which has been filled up, while the other channels have not developed. The Prachi now flows close to the boundary between Puri and Cuttack and has one noticeable peculiarity, viz., that along the northern side of the course there is a sand ridge, similar to those formed on the northern banks of most of the present channels of the river, which are drifts of sand thrown up by the strong south winds during the hot weather. Temples, ruins of temples and brick houses, and remains of old village sites are still found all along its course; and the number of shrines built on its banks was so great that a special guide book was compiled called the *Prachi Mahatmya*. It is probable, therefore, that at some period, more or less remote, there must have been a large river where the Prachi now flows, and that this was the channel by which part of the water which now passes through and over the Puri district then found its way to the sea.[1]

The main feeder of the deltaic rivers is the Kuakhai, which has three main distributaries, sending off the Kushbhadra to the east, about twelve miles from its head, and dividing seven miles lower down into the Bhargavi and the Daya. The most easterly of the three rivers, the Kushbhadra, makes its way by a more or less direct line to the sea, and forces a sluggish passage though the sand about half way between Puri town and the mouth of the Devi river. The most westerly of the three distributaries, the Daya, follows more or less closely the base of the Khurda hills and enters the Chilka lake at its north-eastern end. The Bhargavi, the central stream of the delta, flows almost due south in the direction of Puri town, and finding itself checked by the sand ridges, curves round to the west towards the Chilka, into which it discharges itself by a network of channels, some

[1] See also the article on Konarak in Chapter XVI.

of them linked with the Daya. The remaining rivers of the delta are either tributaries and affluents of the three main streams, or local drainage channels.

All the deltaic rivers have one common characteristic. In the rainy season they come down in heavy flood and, being unable to carry the whole flood water, sometimes inundate the country; but in the dry weather they die away till nothing is left but a series of long shallow pools in the midst of wide stretches of sand. The following is a detailed description of the principal rivers.

Kuakhai. The Kuakhai, a name meaning the crow's channel, is an offshoot from the Katjuri river, from which it takes off nearly opposite Cuttack. After flowing in a south-south-easterly direction for twelve miles, it throws off the Kushbhadra, and then travels nearly due south for seven miles until it reaches the village of Sardeipur, where it divides into two big branches—the Daya to the west and the Bhargavi to the east. This river is practically a spill channel of the Katjuri, and its head is closed by a bar, so that little water flows into it except at flood time. There appears to be little doubt that the head of the Kuakhai is fast silting up; and it has been held by competent authority that, unless steps are taken to reduce the silting there the Katjuri, from which it derives its supply, may form a new bed for itself and leave the Kuakhai high and dry. Such a diversion would be disastrous to the district.

Kushbhadra. The Kushbhadra leaves the Kuakhai at Balianta, and flows in a south-easterly direction for some forty miles till it enters the Bay of Bengal near the shrine of Ramchandi, fifteen miles east of Puri. For the last few miles of its course it is called the Niakhia. The mouth of the Kushbhadra below Ramchandi is free from silt, but the river bed between the Niakhia ferry and its mouth is shallow. This is due to the meeting of the river current and the tide, which has resulted in the formation of a sandy bar at its mouth which checks the river discharge in time of heavy flood. During the cold and hot weather months the tide is felt as far inland as Padampada, but during the rainy season only as far as Matkatpatna, somewhat below Takna village. After the first three miles of its course the Kushbhadra narrows considerably, and as a result, at the time of flood, breaches are liable to occur anywhere in the embankments on either bank. The Kushbhadra receives no important

contributions from the east; but on the west, at a point six miles from the sea, it receives the whole of the drainage of the tract between its own and the Bhargavi channels. The Dhanua, with its tributary the Mugai, brings this large volume of water to the Kushbhadra, and the point of junction is said to be the lowest point in the delta. The distance of this point from the sea by a direct line is only six miles, but, as the fall is very gradual, the river follows a winding course, and does not reach its destination till it has covered twice that distance.

Daya.

The Daya river, as already stated, takes off from the Kuakhai at Sardeipur. It runs due south for eight miles and then makes a sharp turn westward for four miles, and after that continues its course southward for the rest of its length, emptying itself into the north-eastern corner of the Chilka lake some thirty-seven miles from its off-take. The river is tidal as far as Bhatpara, but the action of the tide is inappreciable in the flood season. Two small rivers enter the Daya, the Gangua just above the village of Kanti, and the Managuni river a mile or two below Kanas; though small, these streams drain a considerable area, and during the rains add a large volume of water to the Daya. On the right bank the Daya is embanked from its off-take as far as Dakshin Nuagan, two miles above Kanti, and then the country is open to spill until the Teremul embankment is reached opposite the Ghoradiha hills. This embankment is carried on to the outfall of the Managuni river, but from there to the Chilka lake no embankment exists. The Teremul embankment, it may be added, has been abandoned and is in a bad state of repair. An important problem in connection with the Daya is that the Chilka lake at its outfall is silting up, owing to the enormous quantity of silt which it brings down. The result is that a large volume of water cannot find a free outlet and overflows into the surrounding country.

Bhargavi.

The Bhargavi, after leaving the Kuakhai at Sardeipur, and following a circuitous course for forty miles finally empties itself into the outfall of the Daya, breaking up into numerous branches in the last two and half miles of its course. The Bhargavi is fifty-three miles in length, and for all this distance is very much constricted, owing to embankments constructed on either bank close to its channel. In consequence of this, breaches are apt to occur in any portion of

the embankment during floods of any intensity; the growth of jungle and the cultivation of plantain and castor oil plants on any cultivable land between the embankments have gone on to such an extent as to retard the current materially, and this increases the danger of flooding.

A detailed description of the network of rivers forming the tributaries and offshoot of the Bhargavi would be tedious. There are four main branches, all taking off from the left bank, viz., the Kanchi, at Janakdeipur, the East Kania at the thirty-fifth mile, the Naya Nadi, an artificial channel, at the fortieth mile, and the South Kania at the forty-fifth. The first of these falls into the Sar Lake; and by various channels the first three are interconnected and finally join the Sunamuhi river which falls into the Harchandi, and so, finally, into the sea. The South Kania gets lost in the marshes on the western shore of the Chilka. The Harchandi river into which the three first branches of the Bhargavi finally fall, runs into the sea by the mouth of the Chilka lake. Its whole course is through sand and consequently it has become much silted up and is very shallow. It takes its name from a temple built on the sand about two miles from its head. The excavation of this river would do much to relieve the lower part of the Bhargavi, but owing to the south-west wind that blows steadily from February to June carrying sand with it, it would be next to impossible to keep the bed clear for any length of time without yearly excavation.

The country between the Bhargavi and the Daya is drained by the Ratnachaira and the Nuna, the former of which rising to the east of the Trunk road, crosses it near Satyabadi and falls into the Bhargavi; while the latter falls into the Daya.

THE EASTERN RIVERS.

The Kadua (or muddy river) is a monsoon stream which falls into the Prachi below Bandalo. It is formed by the confluence of two small streams at Charigan, and receives a good deal of the spill water of the Kushbhadra.

The Prachi drains the country at the border of Cuttack and Puri, having its origin near Kantapara on the direct Cuttack-Gope road, and passing through the village of Kakatpur to fall into the sea seven miles to the south of it.

The Devi is one of the branches of the Katjuri, which itself is a branch of the Mahanadi. It runs into the District

of Puri near the extreme east of the district, forming a tidal estuary with numerous branches. It is navigable up to Machgaon, and is used by country boats trading in oilseeds.

The Khurda subdivision is mainly an elevated tract above flood-level in which, as is to be expected, the rivers are liable to sudden rises and falls. The drainage of the west and south is carried into the Chilka Lake, of the north into the Mahanadi; and of the east into the Kuakhai or the Daya. The following is a brief account of the more important rivers in this subdivision. KHURDA RIVERS.

The Salia rises in the jungles of the Ranpur State, and after flowing through the Banpur Mals enters the cultivated tracts of zila Banpur below the village of Pratap; it then follows a southerly course, and after crossing the Ganjam road at the seventy-first mile from Cuttack enters the Chilka. The total length of the river is about thirty miles; it is fed by several tributaries coming from the Madras Presidency; and as the area of the catchment basin is about sixty-nine thousand acres, it conveys a large volume of water into the Chilka during floods. The stream is used to some extent for irrigation purposes.

The Kusumi rises in the State of Ranpur, and then flowing along the boundary of Ranpur and Khurda, enters the latter subdivision near Mundila, and, taking a south-easterly course, falls into the Chilka lake. There is a large masonry bridge over the river, where it crosses the Ganjam road at the fifty-fourth mile. About a mile below the bridge, the river bifurcates in village Kusumi, one branch flowing towards Jaripara and the other going off towards Saran. KUSUMI.

The Managuni or Madagni (also called Malaguni) runs through zila Rameshwar, and is the channel by which almost the whole of the Ranpur State is drained. It is formed by the confluence of two streams close to Saharagai, near the boundary of Khurda and Ranpur, and further down, near Chanagiri, it is fed by an important tributary which drains almost the whole of Khurda on the south of the basin of the Ran river. Another tributary, called the Rajna, also drains a considerable portion of the Khurda estate. The Managuni joins the Daya river below the village of Balbhadrapur, and is navigable during the rains by small boats and dug-outs. MANAGUNI.

The Ran river rises in *kila* Khurda and eventually joins the Mahanadi after flowing through the Banki estate. It is RAN.

navigable during the rains from the Mahanadi to Baghmari on the Kantilo road, eight miles from Khurda. An area of ten square miles in *kila* Khurda is liable to inundation from this river when the Mahanadi is also in flood and forces back its waters.

Other rivers.

Among other rivers may be mentioned the Kansari, which has a catchment area of thirty-nine thousand acres and is joined by the Champajhar, the Hara with a catchment area of forty-five thousand acres, the Baghchal, Ghaguria, Kani and the Sarada.

Ports.

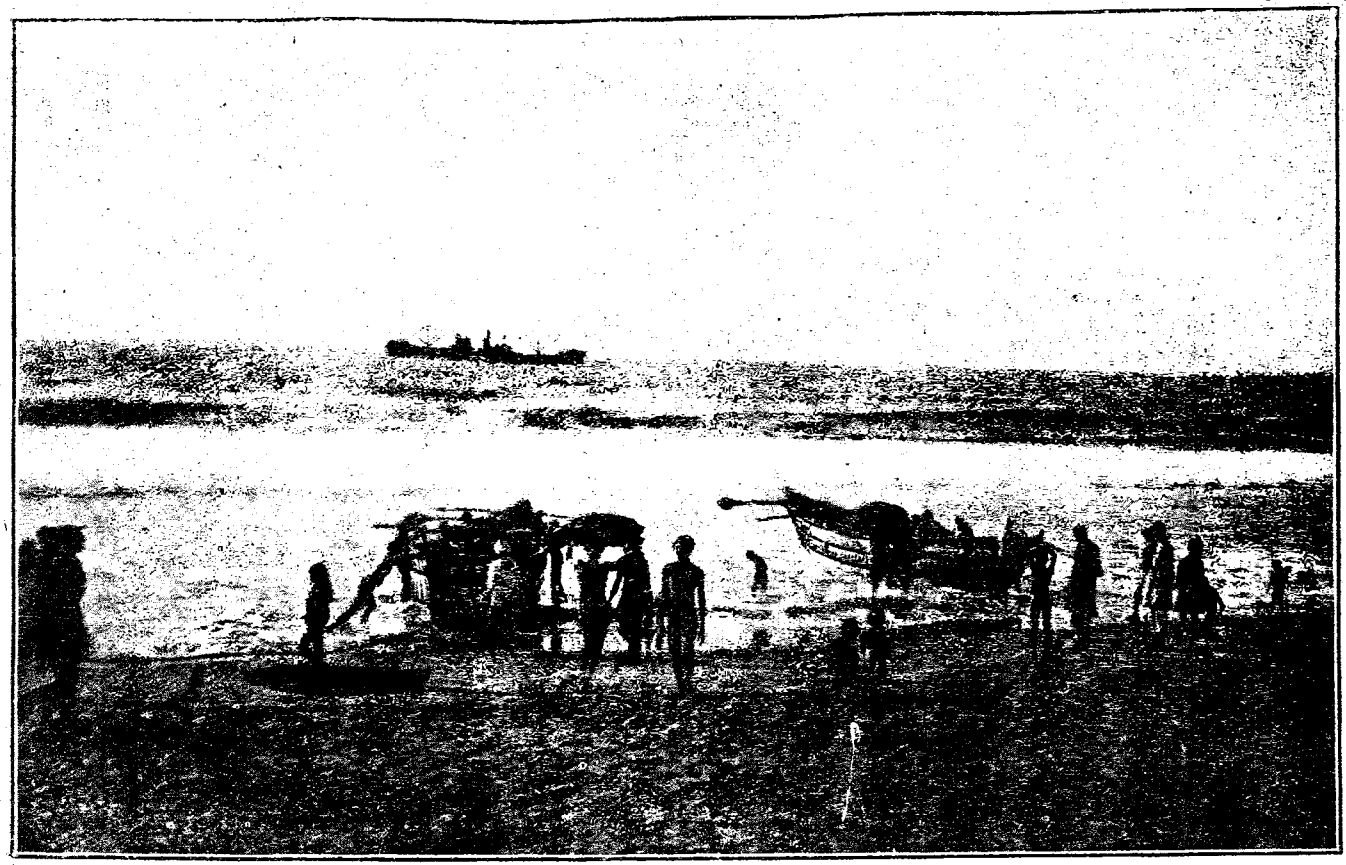
The only port in the district is Puri, and this is nothing but an unprotected roadstead. It is open for import and export trade from the middle of October to the middle of March, but during the rest of the year, the surf does not allow of ships being laden or unladen. Vessels bound here lie at a distance of about half a mile from the shore in good weather, and all goods are landed through the surf in *masula* boats.

Shiploads of pilgrims occasionally come to Puri from Calcutta, and the scene on the shore at such times is interesting, the pilgrims coming in in scores in these same country boats through the surf, which is always lively.

The trade of Puri fell to nothing during the war years and for a year or two after, but has recovered since 1921. The export is almost entirely rice and depends on the quality of the harvest. The average annual value of the exports of the seven years 1921—28 is roughly thirteen lakhs of rupees, as against an average of about four lakhs of rupees for the ten years preceding the war.

Geology.

The country near the coast and a broad tract in the north-east of the district are alluvial, but the western portions of the district are occupied by laterite, sandstone, and metamorphic rocks. There is a very small extent of the older undulating alluvium; almost all the eastern part of the district and the country extending from the Mahanadi to the Chilka lake is perfectly flat, and consists of the newer or delta alluvium. Hills of blown sand extend along the whole coast, and frequently are disposed in two or three principal ranges,—the first close to the shore, the second from one to two miles inland, and occasionally there is another still further from the sea. In some cases these sand hills cover a considerable area, as near Puri, where they are two or three miles



Loading rice in masula boats.

across. When such is the case, they are generally bounded on each side, towards the land and towards the sea, by a low range, sixty to eighty feet high, while other ranges more or less obliterated occur further inland. On the inner range there is almost always vegetation, and it seems to serve as a boundary for the barren land, which is prevented from being covered with grass by sand being continually blown upon it by high winds from the sea. There can be little doubt that each range of sand hills marks an old sea-coast, and it seems probable that the sea has retired gradually, and that the land has been raised, not continuously and uniformly, but at intervals and by interrupted movements.

Between two and three thousand acres of this sandy tract to the east of Puri have been acquired by the Forest Department and formed into casuarina plantations. The earliest planted portions are now thriving forests and form a most interesting example of the utilization of otherwise waste land. The plantations have not yet begun to pay, by the sale of wood for fuel, as they eventually will; but already they form an effective barrier to the blown sand. The cost of creation, apart from the price of the land, is given as fourteen rupees per acre, and the cost of supervision and upkeep at a little over one rupee per acre.

It is probable that the clusters of isolated hills, evidently once islands, which dot the whole of Orissa, have been brought to nearly their present form by denudation of an ancient date; while it seems clear from the laterite conglomerate which is found that a more recent agency has tended to modify their shape. This is not conclusive proof of a recent rise of land, but within the memory of man the tides came further up the rivers. The latter change may be due to the raising of the delta by silt deposits, but it is a noteworthy fact that local tradition asserts that the Black Pagoda, when first built, was on the sea-shore, whereas it is now two miles inland, and this tradition is confirmed by its position on the inner row of sand hills. Apart from this, the small, isolated, steep hills which rise from the plain, taken in connection with the bosses and whale-like ridges which stud the country, present all the features of an upraised archipelago; and it is probable that, at no very remote geological period, the sea of the western portion of the Bay of Bengal dashed against many a rugged cliff and rolled round clusters of islands in what is now the Province of Orissa.

The greater portion of the north-west of the district between Cuttack and Khurda consists of Athgarh sandstone, and is composed of coarse sandstone and conglomerates. To the west these beds appear to rest on metamorphic rocks, and they have a general dip to the east and south-east at low angles, not exceeding five or six degrees. They are surrounded on all sides by laterite and alluvium. At their apparent base to the west is a coarse conglomerate, the pebbles chiefly of quartzite. These rocks contain one band at least of white clay, which is dug up and used for white-washing houses and for other purposes. South-west of the sandstone country and west of Khurda, there is a broad undulating plain, partly covered with laterite, through which the gneiss rises at intervals. In the extreme north-west of the district, round Bolgarh and Goriali, there are two very barren ranges of no great height, running east and west, and formed of compact, rather granitoid gneiss. From this point, whence the boundary of the district turns to the southwards as far as the Chilka lake, only detached hills occur, all of gneiss, with intervening plains of laterite and alluvium. The group of hills near Chatarma are of granitoid gneiss; most of the others are of garnetiferous gneiss with quartzose bands. Such are Khurda hill and the smaller hills in the neighbourhood, and also the hills east of the Ganjam road between Rameshwar and Mangalajuri. Precisely similar country extends to the west of the Chilka lake.

The lake itself is a part of the sea first rendered shallow by deposits from the mouths of the Mahanadi, and by silt carried up the Bay by the violent southerly winds of the monsoon, and then entirely cut off by a spit of sand drifted along the coast. Near the south-western extremity of this spit there is a considerable deposit of estuarine shells, at a height of twenty to thirty feet above the present flood-level of the Chilka. The shells found (*cytherea casta* and *arca granosa*) have not been observed living in the Chilka, and both are estuarine species not occurring in the sea itself. The former is abundant in the estuary connecting the lake with the sea, and this deposit appears to accord evidence of a recent elevation of the land.[1]

[1] The Geological Structure and Physical Features of Bankura, Midnapore and Orissa, Memoirs, Geol. Surv. Ind., Vol. I; Sketch of the Geology of Orissa, by W. T. Blandford, Records, Geol. Surv. Ind., Vol. V.

Botany.

The sand hills stretching between the fertile rice plains and the sea constitute the only really distinctive feature of Puri from a botanical point of view, and present not a few of the littoral species characteristic of the Madras sea-coast, and unusual in Bengal, such as spinifex, hydrophylax and geniosperum prostratum. The summits of these ridges are for the most part covered with stiff thorny plants; and in some places, especially about the Black Pagoda (Konarak), the surface of the sand is covered by a thick network formed by the interlaced stalks of creeping convolvulus, which is for half the year loaded with large flowers of a bright purple colour. To the north-east, where the Devi finds an outlet, there are numerous tidal creeks fringed with jungle; and the banks of the sluggish rivers and creeks, which wind through the swampy low-lying country near the sea, exhibit the vegetation of a mangrove forest.

In the zone of cultivated land between the sea and the Khurda hills the usual rice-field weeds are met with, while ponds and ditches are filled with floating water weeds or submerged water plants, including the dangerous water hyacinth. Near human habitations shrubberies containing various semi-spontaneous shrubs are common. This undergrowth is loaded with a tangled mass of climbing naravelia, various menispermaceæ, many apocynaceæ, several species of vitis, a number of cucurbitaceæ, and several convolvulaceæ. The trees in these village shrubberies include the red cotton tree (bombax malabaricum), odina wodier, tamarindus indica, moringa pterygosperma, the *pipal* (ficus religiosa), the banyan (ficus bengalensis), the palmyra (borassus flabellifer) and the date palm (phœnix sylvestris). The usual bamboo is bambusa arundinacea. Open glades are filled with grasses, sometimes of a reedy character and used for thatching: sedges are abundant, and ferns are fairly plentiful.

In the Khurda subdivision there are extensive forests, which lie within what is technically known as the dry evergreen forest zone and comprise *sal* and mixed forest. In the metamorphic region to the south-west *sal* (shorea robusta) is seen at its best, its chief companions being *ablus* (diospyros melanoxylon), careya arborea, *asan* (terminalia tomentosa) and buchanania latifolia. In the mixed forest the chief species are anogeissus latifolia, *jiyal* (odina wodier),

kusum (schleichera trijuga), and dillenia pentagyna, while in the north-west hylia dolabriformis (the ironwood tree of Pegu and Arakan) is common. Of bamboos bambusa arundinacea and dendrocalamus strictus are most common. Climbers are numerous, the most noticeable being bauhinia vahlii, milletia auriculata, entada scandens, and combretum decandrum. A fuller description of these forests will be found in Chapter VII.

FAUNA. The carnivora of the district comprise tiger, leopard, bear, hyæna, wild dog, jackal and other smaller species. Tigers are not uncommon in the heavier jungles of the Khurda subdivision; and at times this part has suffered badly from man-eaters even up to the present day. Leopards are plentiful, the numerous low hills dotted over the northern part of the district being their favourite resort. Black bears are common and may be met with on every little rocky hill. Wild dogs are met with only in the reserved forests of the southern range, where they are very destructive to game. Bison are found in the Mal forests in the south-west; *nilgai* (boselaphus tragocamelus) towards the southern boundary of the Khurda estate; and black buck on the sea-coast. *Sambar* are common in the heavier hill jungles, while *chital* or spotted deer (cervus axis) generally frequent the more open jungle surrounding cultivation. Barking deer and mouse deer are found, but are not numerous. Wild pig and hyænas are numerous throughout the district.

The game birds of the district include jungle, spur and peafowl, grey partridge, rain button, bustard and bush quail, and snipe in season. Grey duck, comb duck, whistling teal, the large teal and cotton teal are also found, while swarms of the following birds are found on the Chilka lake and on *jhils* near Banki and Khandpara—grey-lag goose, bar-headed goose, ruddy sheldrake or Brahmini duck, burrow duck, shoveller, gadwali, pintail, common teal, blue-winged teal, pochard, red-crested pochard, white-eyed pochard, flamingo, demoiselle crane, curlew, golden plovers and waders. A pink-headed duck was shot on the Chilka in 1921. Imperial blue pigeon and two kinds of green pigeon are also met with.

Fish. The Chilka lake forms a most valuable fishery abounding in fish, chiefly perch and mugils or mullet, besides prawns and crabs. The best fishing grounds are in the creeks and channels on the south side near the sea, and there is a large

export trade by rail to Calcutta. Deep sea fishing is carried on at Puri, where large hauls are made, bijram (Madras seir, Cybium guttatum), pomfrets, small soles, etc., being among the fish caught. There is also a small bed of oysters near Manikpatna. A fuller account of the fishing industry will be found in Chapter X.

CLIMATE. The town of Puri, situated on the shore of the Bay of Bengal, enjoys an equable temperature all the year round, the thermometer rarely falling below 70° or rising above 90°.

During the hot weather a strong sea breeze blows almost continuously from the south-south-west and keeps the air comfortably cool, rendering punkhas almost always unnecessary. The air is always damp, however, and becomes uncomfortable if the breeze drops, as it occasionally does, or in sheltered places away from the sea front where the breeze does not penetrate. Puri is becoming a favourite resort at this time of the year both for Indians and Europeans. There is a large hotel under European management and the number of bungalows along the sea-coast built by Indian gentlemen as summer resorts is increasing year by year. The increase in the population of the town between 1911 and 1921 was over two thousand, whereas the population of the rest of the district decreased.

During the rains the climate varies, and is pleasant or unpleasant according as there is or is not a sea breeze. Towards the close of the monsoon it is almost invariably damp and uncomfortably hot.

In Khurda and the hilly tract to the north the climate is drier and the temperature higher. The maximum temperature in the shade, however, rarely reaches 100°, and that only for two or three days, and the thermometer has been known to fall as low as 55°. The crisp cool of the morning, moreover, begins earlier and lasts longer at Khurda than in other parts of Orissa. In the hot weather the strong southerly breeze prevents the nights from being unbearably hot. After the cessation of this wind the weather is sultry and disagreeable till the rains set in.

Winds. From the beginning of April to the end of August the prevailing breeze is from the south-south-west; from September to March it is from the north-north-east. Both April and May are marked by sudden storms known as nor'westers, and

the monsoon is usually ushered in by one or more cyclones. The south-west monsoon breaks in June in normal years, and the coast is then inaccessible owing to the violence of the surf. From the middle of September, however, till about the middle of November, the weather is comparatively calm and is broken only by occasional cyclones. The district is directly on the track of the cyclonic storms which cross Orissa during the monsoon season, but as a rule is not liable to suffer from the devastating cyclones which have given the Bay of Bengal such an evil reputation, because these usually occur in May, October and November, and if they move into the north of the Bay, the tendency is for them to move towards the Arakan or Bengal coast.

Temperature.

The sea breezes result in an equable climate. Even in April and May the average maximum temperature is only 89°, while the mean temperature falls from 86° in the hot months to 84° in the monsoon season and to 77° in February. Humidity ranges from 75 per cent. of saturation in December to 86 per cent. in August.

Rainfall.

The average annual rainfall is about fifty-five inches and the distribution is fairly even over the whole district. From December to April the monthly fall averages only a fraction of an inch. In May cyclonic storms are liable to occur, causing on the average a fall of two to three inches in the month. From June to September the monsoon is in full force, the average falls being about eight inches in June, eleven inches in July, twelve inches in August, and nine inches in September. The October rainfall, when the monsoon is practically at an end, is important to agriculture; the average fall of this month is about seven inches. In November, in the majority of years less than two inches of rain will fall; in other years cyclonic storms occur, depositing ten or even fifteen inches of rain, so that the average fall for the month is about five inches.

CHAPTER II.

HISTORY.

Prehistoric Period.

In prehistoric times the hilly tract to the north appears to have been inhabited by savage tribes differing from those occupying the lowlands near the sea, while the intervening plains were in the possession of races somewhat more civilized. Along the sea-board were settlements of fishers and boatmen, the descendants of whom, the Kewats, still follow the ancestral calling and perpetuate the name of the Kevatas, which has been traced to very early times, being mentioned in Asoka's fifth pillar edict. Of the hill tribes some descendants still survive in the Savars, who now occupy a degraded position among the servile castes. They have been identified with the Suari of Pliny and the Sabarai of Ptolemy;[1] and they are mentioned in several places in the Bhagavati, the oldest sacred literature of the Jains, where their language is referred to as one of the tongues of the barbarians (*Mlechchha*).[2] They were detested by the Aryans, according to whom they were goblins, devils and man-eaters, and to this day they, like the Pans and other very low castes, are excluded from the sacred courts of Jagannath. They themselves say that they were originally a wandering tribe roaming through the hills of Orissa and living on the fruits of the forest; and the memory of this primitive state is almost the only tradition which they preserve. The Pans are also probably the descendants of another of these wild tribes. Everywhere they rank among the lowest classes; they are employed as village drudges even by such tribes as the Khonds, who in the days of human sacrifices selected a Pan boy as the best sacrifice which could be offered to

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[1] Cunningham, *Anc. Geog. India*, p. 509; Do., Arch. Surv. Rep. India, ix, 1877.

[2] Weber, Sacred Literature of the Jainas, translation, *Ind. Antiquary*, Bhagavati, Angas, v, vi & x: Upangas, i & iv.

mother earth. All these facts seem to indicate that they were the original occupants of the soil, who were dispossessed and reduced to slavery by other tribes.

Utkalas and Odras.

The intervening plains and uplands appear to have been held by tribes on a somewhat higher level of civilization. From the scanty references made to them in later literature, it would seem that two of these tribes were known as Odras and Utkalas, who in course of time spread southwards to Kalinga. The Utkalas became absorbed in the larger tribe of Odras, though their name is found attached to the land in Sanskrit works at least before the sixth century A.D.[1] It is noticeable that Tapussa and Bhallika, the first lay disciples of Buddha, are said to have been merchants from Utkala, who were travelling to Madhyadesh with five hundred carts when they met Buddha at Bodh Gaya.[2]

Indo-Aryan settlers.

It seems probable that before the third century B.C., several of the Indo-Aryan castes, such as Brahmans, Kshattriyas, Karans and others, had migrated to Orissa, which then formed part of Kalinga and was regarded as an impure country inhabited by fallen races. Thus, in the Baudhayana Dharma-Sutra it is laid down that the man who has visited Kalinga must offer a sacrifice as a penance;[3] the Mahabharata says that pilgrims should avoid Kalinga and that the Kshattriyas settled there had become outcastes;[4] while a similar statement is made in the Manu-Samhita regarding the Kshattriyas who lived among the Odras.[5] These references appear to point to the migration of several Indo-Aryan castes, and among them there must have been Brahmans. The Mastans and the Saruas are probably the descendants of these early immigrants; they call themselves Brahmans, and wear the sacred thread, though they neglect the nine *sanskaras* or ceremonies incumbent on Brahmans, and have taken to forbidden occupations, such as cultivating with their own hands, selling vegetables, etc.

EARLY HISTORIC PERIOD.

Kalinga.

As Orissa formed part of Kalinga before the conquest of Asoka, its history is merged in the history of that country.

[1] *Raghuvansa* of Kalidasa, iv, verse 38.

[2] *Mahavagga*, i. 4, 2.

[3] I. 1, 2, 14-15.

[4] Karna-parvva, ch. xliv, 42; Anusasana-P°, ch. xxx, 22-3; cf. Adi-P°, ch. ccxv, 10.

[5] Ch. x, 43-44.

According to the Mahabharata it would appear that Kalinga was bounded on the North by the Vaitarsini, on the South by the Godavari, on the West by what are now the Feudatory States of Orissa, and on the East by the Bay of Bengal. It would seem to have been joined on the North by the territory of Utkara, which extended as far as Tamralipa or the modern Tamulk.[1] Pliny also states that Kalinga stretched as far south as the promontory of Calingon, *i.e.*, Coringa at the mouth of the Godavari.[2] It was an extensive, populous and civilized kingdom. Some idea of its teeming population may be gathered from rock edict XIII, which says that, when it was conquered by Asoka, one hundred and fifty thousand persons were carried away captive, one hundred thousand were slain, and many times that number perished. The evidence of the high standard of civilization and prosperity attained in Kalinga is equally striking. Elephants were specially bred for the royal forces, of which they formed a prominent part;[3] diamonds of an unique kind were quarried and exported;[4] medicine was carefully studied, giving rise to a separate system of measures;[5] cloth was manufactured and exported in such quantities that Kalinga became the word for cloth in old Tamil; and frequent sea voyages were made to countries outside India, on account of which the Indians came to be called Klings in the Malay Peninsula.

Asoka's reign.

As the result of the bloody war mentioned above, Kalinga with Orissa was incorporated in the empire of Asoka in 262 or 261 B.C. In this district Asoka commemorated his rule by inscribing at Dhauli hill (near Sardeipur on the Daya), rock edicts I—X and XIII, in which he gave an exposition of his ethical system and principles of government. Besides these general edicts, he also inscribed two edicts, known as the Kalinga edicts, in which he laid down principles for the administration of the newly conquered province and of the wild tribes dwelling on its borders: the first edict, called by Mr. Vincent Smith the Borderer's Edict, dealt with the duties of officials to the border tribes, and the second, called

[1] M. M. Ganguly's Orissa and her Remains, 1912.

[2] Cunningham, *Anc. Geog.*, p. 517.

[3] *Mahabharata*, Sabha-P°, ch. lii, 18, 20-1, Bhishma-P°, ch. xviii, 32-4, liv, 40-3; Drona-P°, xlv, 21-2, xci, 32; Karna-P°, xxii, 3; Periplus, *Erythr. Mar.*, 362; *Raghuvansa*, iv, 41, vi, 54.

[4] *Brihat-Samhita*, ch. lxxx. 7.

[5] *Charaka-Samhita*, Kalpasthana, ch. xii, 105.

the Provincials' Edict, summarized their duties to the more settled inhabitants. These edicts illustrate clearly the methods of administration followed in this frontier province and shew that it was considered necessary to place it under a Viceroy stationed at Tosali. Tosali, to the officers in charge of which the Kalinga edicts were addressed, was probably some place close to the modern Bhubaneswar, which is not far off from Dhauli and the ancient caves of Khandagiri, and from its upland position, commanding the bifurcations of the rivers, was well fitted for the site of the capital of the Viceroy.

Maurya rule.

Under the rule of the Mauryan Emperors Orissa must have been brought into closer relations with Northern India, and its inaccessibility to some extent removed by roads lined with banyan trees and mango groves, with wells and rest-houses, and by the arrangements made for the safety of Government messengers and travellers. These measures naturally facilitated an influx not only of officials but also of traders and pilgrims, some of whom eventually settled in the land. Hence in the Mahabharata,[1] one finds later verses declaring that there were good men in Kalinga, and that places of pilgrimage existed there, which show that the ban laid on travelling in that country had been withdrawn.

It seems at least certain that, during the rule of the Mauryan Emperors, a number of Jains settled in the district, for the sandstone hills of Khandagiri and Udayagiri are honey-combed with their hermitage caves, some of which bear inscriptions in the Brahmi character of the Mauryan age. They all appear to have been made for the religious use of the Jains and to have been used by Jains and monks for many centuries. This seems evident from the inscription on the Hathigumpha or elephant cave, which opens with the usual benedictory formula of the Jains, while another inscription in the Swargapuri cave declares that, by the grace of the Arhats, it was made by the chief queen of the king of the country.

Reign of Kharavela.

The Hathigumpha inscription is valuable as an historical record, for it shows that, on the downfall of the Mauryan empire, Kalinga revolted and became an independent kingdom. This inscription, which is ascribed to the middle

[1] Vana-P°., ch. lxxxv, 114; Karna-P°., ch. xlv, 45.

of the second century B.C., contains a record of the career of king Kharavela, entitled *Mahameghavahana, i.e.*, one whose elephant is as big as a large cloud. Kharavela evidently made Kalinga a powerful kingdom, and his invasion of Magadha indicates that he had become not only independent but aggressive; for this expedition into the heart of the empire led him to the capital, Pataliputra (Patna), on the banks of the Ganges, and compelled its Emperor to sue for peace and acknowledge his independence. Besides this account of his military prowess, the inscription records the pious deeds of the king, his repair of an alms-house, his gifts to Brahmans and Arhats, the musical entertainments he provided for the people, the construction of pillars and caves, etc. The inscription also affords good grounds for the belief that the king and his family had a leaning towards Jainism; and his successors were apparently also adherents of that religion. The capital of this monarch was at Kalinganagari, which, it has been suggested, was probably somewhere near Bhubaneswar, but perhaps closer to the sea, as it is said to have been destroyed by a tidal wave.[1]

Andhra rule.

It is not known how long this dynasty lasted or by whom its kings were succeeded, but it is probable that in the second century A.D. Kalinga, including Orissa, acknowledged the suzerainty of the Andhras, to whose active influence the introduction of Buddhism may perhaps be ascribed. The Tibetan chronicles have preserved a tradition that the king of Otisha was converted to Buddhism, with 1,000 of his subjects, by Nagarjuna, who is believed to have flourished, about 200 A.D., at the court of the Andhras; and the conversion of the people would naturally have been facilitated by the royal example.

MEDIÆVAL PERIOD.

From this time there is a gap of several centuries until the beginning of the seventh century, when we know from an inscription that Southern Orissa had been subdued by Sasanka, the powerful king of Bengal. A few years afterwards, it was conquered by Siladitya Harshavardhana of Kanauj, during whose reign it was visited by the Chinese traveller Yuan Chwang (sometimes called Hiuen Tsiang) in 640 A.D. He gave a short but graphic account of the country (Kung-yu-to) in his Travels.[2] This country, he

[1] Report, Arch. Surv., Eastern Circle, 1905-06.

[2] *Travels of Yuan Chwang*, Mr. Watters, II, 196-7.

remarked, was about a thousand *li* (a *li* being one-fifth to one-sixth of a mile) in circuit, with a capital twenty *li* in circuit. A hilly country bordering on a bay of the sea, it contained some tens of towns, stretching from the slope of the hills to the sea. The climate was hot; the harvests regular; and being on the sea-side it contained many rare and precious commodities. It produced large dark-coloured elephants, capable of long journeys. The currency was in cowries and pearls. The people were tall, black-complexioned, valorous, not very deceitful, with some sense of propriety. Their language was the same as that of India, but their manner of speaking it different. They were not Buddhists, having Deva temples a hundred in number and of Tirthikas more than ten thousand.

The description of the country bordering on a bay, of the towns stretching from the hills to the sea, and of the religion being strongly Brahmanical, agrees perfectly well with the situation and the religion of Puri district. The word Kong-yu-to also closely resembles Kongoda, Kongeda or Kaingoda, varying forms of a name given to a tract of country in several copperplate inscriptions discovered in the Khurda subdivision and the Ganjam Tributary States.[1] Its capital should probably be identified with the old Tosali or with mediæval Bhubaneswar, the centre of Saivism.

Kesari kings.

On the death of Siladitya, his empire was dismembered, and according to the Madala Panji or palm-leaf chronicles of the temple of Jagannath, Orissa was under the Kesari or Lion dynasty from the seventh to the twelfth century A.D. The very existence of this dynasty is denied by several scholars, but Babu Monmohan Chakravarti points out that there are many good reasons for maintaining that a line of kings with the title Kesari actually existed. Thus, in the Bhakti-bhagavata Mahakavyam, a Sanskrit poem of 1409-10 A.D. which gives a brief history of Orissa, it is distinctly stated that the Kesari kings preceded the Gangas, and that Udyota Kesari was one of them; two inscriptions of the time of Udyota Kesari have been discovered, one in the Nabamuni cave on the Khandagiri hill and the other in a temple at Bhubaneswar.[2] He also points to the fact that in the

[1] *Epigraphia Indica*, vi. 136, 144.

[2] For the cave inscription, see the article on Khandagiri in Chapter XVI, and for the Bhubaneswar inscription, see J.A.S.B., VII, p. 558, *et seq.*

Japanese edition of the Chinese Tripitaka is a translation of a part of the Buddhist Buddhavatamsaka Sutra, made by a monk in 796-98 A.D. on a copy of the Sutra which was sent as a present to the Emperor of China by the king of U-tcha (Odra), and that the name of this king in the letter of presentation may be read as Subhakara Kesari.[1] Another Kesari king of Orissa, Karna Kesari, is mentioned in the commentary of the historical poem Ramapala-Charitam as having been defeated by Jayasingh, king of Dandabhukti (Bihar) : both the poem and the commentary are believed to be by the same author, probably a contemporary of the hero of the poem, Ramapala, king of Magadha, who flourished in the latter half of the eleventh century.[2] According to the Bhubaneswar inscription, there were five Kesari kings, the first being Janmejaya and the last Udyota Kesari, who was king of Kalinga and defeated the Simhalas, Chodas and Gaudas. The palm-leaf chronicles attribute most of the great temples at Bhubaneswar to this line of kings; and this, if true, must place it among the important dynasties of India.

On the other hand, the reliability of the Madala Panji or annals of the Jagannath temple is completely denied by other authorities. "None of the records," writes Dr. Bloch, "can be relied upon. Mr. Fleet has, I think, conclusively proved that up to the conquest of Orissa by the Ganga king Chodaganga the annals contain nothing but pure fiction, and that they cannot be used for historical purposes.[3] The long line of Kesari kings, who are said to have ruled over Orissa for many centuries and to have built the principal shrines at Bhubaneswar, may be regarded as a later fabrication, containing nothing historical, except a dim reminiscence of two actual kings of Orissa, Yayati and Janmejaya, but even these have been entirely misplaced as regards chronology. I do not think that the name of Uddyota Kesari can be used as an argument to show that kings of the Kesari line actually existed. The word *kesari* simply means 'lion,' and I have met with the corresponding name Uddyotasimha in two mediæval Buddhist dedicatory inscriptions, which I discovered at Kispa, in the district of

1 This fact, but not the name, is mentioned in Mr. Watter's notes on *Yuan Chwang's Travels*, 1906, Vol. II, p. 196.

2 *Proceedings, A.S.B.*, March 1900, p. 72.

3 *Epigraphia Indica*, Vol. III, p. 334, *et seq.*

Gaya. There is, moreover, no other name in the list of this king's ancestors formed in the same way, while I am unable to verify the statement that Kolavati, the queen of Uddyotakesari, is mentioned in the Puri temple records.[1] The Madala Panji list also omits the name of Uddyotakesari.

"The history of Orissa in mediæval times is broken by a long gap, which it is as yet impossible to fill. We know, however, that during the tenth and eleventh centuries A.D. Orissa was ruled over by kings of the lunar race, whose names alternate between Bhavagupta and Sivagupta, the first two of whom bear also the surnames of Janmejaya[2] and Yayati. To this line also belonged Uddyotakesari, whose queen, Kolavati, built the temple of Brahmeswar. The names Bhavagupta and Sivagupta, both signify 'protected by Siva,' and we may conclude from them that the kings who were thus called were worshippers of Siva. Now, as Bhubaneswar is the great stronghold of Siva-worship in Orissa, in opposition to the Vishnu-worship in the Padmakshetra or Puri, and to the Surya-worship in the Arkakshetra or Konarak, one may venture to assume that Bhubaneswar owes its importance as such to those very kings of the lunar race who ruled over it in the tenth and eleventh centuries A.D., and who were, as we have inferred from their names, devoted to Saivism."[3]

However this may be, the number and magnificence of the remains at Bhubaneswar and elsewhere are evidence of a wealthy and highly-civilized kingdom. The art of architecture and sculpture must have been well developed to enable such huge structures to be designed and constructed; and the skill and resource both of builders and masons are clearly shown by the fact that they were able to move and lay in place, without mortar, such gigantic stone blocks, and to produce the vigorous and often exquisitely carved figures, foliage and arabesque patterns, which lend a charm to the carvings adorning these shrines. These stately temples shew

[1] J. A. S. B. Vol. LXVII, 1898, page 377.

[2] Mr. M. M. Ganguly in his "Orissa and her Remains" 1912, p. 22, appears to accept the view that a Kesari line existed, and argues that Janmejaya, the founder of the dynasty, is assignable to the latter half of the eighth century A.D. The question however still remains to be settled.

[3] Report, Archæological Survey of India, 1902—8.

the hold which Hinduism had obtained in Orissa by this time; and no trace is found of the Buddhism which, according to tradition, was introduced a few centuries earlier. At the same time, Jainism appears to have continued to retain its hold on the affections of the people or to have had a revival, for in the caves at Khandagiri and Udayagiri we find inscriptions and rock-cut images of Jain saints or deities dating back to the same period.

Eastern Ganga kings.

In the beginning of the eleventh century, the Cholas, who had established a great empire in the Deccan, began to extend their power over Orissa; but their conquests do not appear to have left any permanent mark on the country, being merely brief but successful expeditions. At the end of that century it was effectually subdued by the Eastern Gangas of Kalinganagara (the modern Mukhalingam in the Ganjam district), and the rule of these monarchs lasted till 1434-35, the dynasty including altogether fifteen kings.[1] Of these by far the most powerful was Chodaganga, who extended his dominions from the Godavari to the Ganges, and built the famous temple of Jagannath at Puri in the first half of the twelfth century. Another of the Ganga kings, Narasinha I (1238—64), is known to posterity as the builder of the beautiful temple of Konarak, which he dedicated to the sun-god Arka at Kona; while the temple of Megheswar at Bhubaneswar was erected by a general and councillor of one of his predecessors, Ananga-bhima, about 1200 A.D.

Muhammadan raids.

Soon after this, Orissa was exposed to the fury of Musalman invaders. The first incursion occurred in 1205, when Muhammad-i-Shiram, an officer of Bakhtiyar Khilji, burst down upon the country, and this incursion was followed by many others. In an inscription at Chateswar in Cuttack, the founder, a Brahman minister of Ananga-bhima Deva, claims to have fought with Yavanas, by whom he probably meant the Muhammadans under Ghias-ud-din Iwaz, the fourth Bengal Sultan, who, according to Muhammadan historians, carried his arms into the territory of the Raja of Jagannath, which had never before been subdued by the hosts of Islam, and compelled him to pay tribute. There was no effectual conquest, however, and the Hindus of Orissa managed to hold their own. The *Tabakat-i-Nasiri* records in

[1] *Eastern Ganga kings of Orissa*, M. M. Chakravarti, J.A.S.B., 1903, p. 92, *et seq.*

1244 first a raid made by the army of Orissa, and then a counter raid of the Bengal king, which ended with his defeat by the local levies; in 1245 the Oriyas retaliated by marching northwards, besieged Lakhnauti (Gaur), and only raised the siege on the arrival of reinforcements from Oudh; and between 1247 and 1258 there were three battles between the Oriyas and the Muhammadan forces under Ikhtiyar-ud-din Yuzbak, Sultan of Bengal. In the last of these battles the Bengal king was defeated, but next year he again led his army to the south, and captured and sacked the capital.

The object of most of these raids, and of subsequent raids was to secure the elephants for which Jajnagar, as the Muhammadan chroniclers styled Orissa, was famous. A foray of the Bengal Sultan, Tughril Khan, in 1279 or 1280 resulted in the capture of a great number of these animals; in 1323 Ulugh Khan, the son of the Delhi Sultan, Ghias-ud-din Tughlik, took away forty of them; and similar results followed the inroads of the Bahmani Sultan, Firoz, in 1412, and of Hushan-ud-din Hoshang, the king of Malwa, in 1422. Not the least notable of these invasions was that of the Delhi Emperor, Firoz Shah, in 1360-61. Leading his forces in person, he subdued Orissa, occupied the royal residence at Cuttack, and spent several days hunting elephants. When the Oriya king sent envoys to sue for peace, he ironically replied that he had only come to hunt elephants and was surprised that, instead of welcoming him, the Raja had taken flight. Finally, the latter made him a present of some elephants and agreed to send a certain number annually as tribute. The Emperor then marched back to Delhi, carrying off with him, according to Siraj, the sacred idol of Jagannath.

Solar dynasty.

On the death of the last Ganga king, his minister, Kapilendra Deva, seized the throne and founded the Suryavansa or solar dynasty (1435).[1] He found the fortunes of his kingdom at a very low ebb, but succeeded by constant wars in extending its limits till it stretched from the Ganges to the Pennar. In Bengal Nasir-ud-din Mahmud Shah was striving to keep up a tottering throne, and here the Oriyas extended their frontier up to the Ganges. In the south, Kapilendra overran the country as far as the Krishna (Kistna), wrested it from the petty ruling chiefs and then proceeded against the kings of the first Vijayanagara dynasty, who were

[1] *The last Hindu kings of Orissa*, M. M. Chakravarti, J.A.S.B., 1900, p. 180, *et seq.*

harassed by internal revolt and bloody wars with the Bahmani Sultans. Taking advantage of their troubles, the Oriya king annexed the east coast south of the Krishna as far as Udayagiri near Nellore, and then successfully resisted the attempts of the Bahmani Sultans to crush him, ravaging their territories up to Bidar in 1457. Energetic as was his foreign policy, he showed no less vigour in his internal administration. One of the earliest measures of his reign was to remit the *chaukidari* tax paid by Brahmans, to abolish the tax on salt and cowries, to stop the resumption of waste and pasture lands, and to issue orders that all the chiefs in Orissa were to work for the general good on pain of banishment and confiscation of their property. He was also a royal patron of Vaishnavism and richly endowed the temple of Jagannath at Puri.

On the death of Kapilendra in 1470, a civil war ensued, each of his sons claiming the throne, but finally Purusottamadeva overcame his rivals. This king extended the kingdom far to the south, and in the confusion which prevailed on the overthrow of the Vijayanagara dynasty, invaded their country, retiring with a magnificent booty, including the image of Sakshigopala, which is now at Satyabadi in this district. His son, Prataparudradeva, ascended the throne in 1497, and had at once to march to the north to repel an invading army sent by the king of Bengal, Husain Shah; and twelve years later he had again to drive out another force which advanced under Ismail Khan, a general of Husain Shah, who sacked Cuttack and successfully stormed the holy city of Puri. In the south Prataparudradeva was engaged in constant wars with the kings of the second Vijayanagara dynasty, the struggle ending with the cession of all the territory south of the Krishna by the Oriya king. His kingdom was still further reduced by the loss of the tract between the Krishna and Godavari in 1522, when Kuli Kutb Shah, the founder of the Golconda dynasty, drove out the Oriya army.

Bhoi dynasty.

The Solar dynasty did not long survive the death of Prataparudradeva. His powerful minister, Govinda Bidyadhara, killed his two sons, and in 1541-42 seized the throne. The short-lived Bhoi dynasty which he established only lasted till 1560, and the few years it covered were spent in civil war. First Raghubhanja, the nephew of Govinda, revolted, but he was soon defeated and driven out of the country by his uncle.

On the death of Govinda's son, Chaka Pratapa, whose unpopular reign ended about 1557, the minister, Mukunda Deva, rebelled,[1] and after killing the two last Bhoi kings and defeating Raghubhanja, who had returned at the head of a Bengal army, secured the throne in 1560.

Mukunda Deva.

Mukunda Deva, who was a Telugu by birth, was the last independent Hindu king of Orissa, which at this time was in danger from its powerful neighbours both on the north and south. In 1564 Ibrahim, the Golconda king, was eager for aggrandizement, and in Bengal Sulaiman Karani was equally anxious to extend his dominions by annexing Orissa. In 1564-65 Mukunda Deva concluded a treaty with the Emperor Akbar,[2] which was intended as a counterpoise to the ambition of the Afghans in Bengal, but this measure did not long help the Oriya king. In 1567 Ibrahim conquered the country as far north as Chicacole; and next year Sulaiman Karani, finding Akbar fully occupied by wars in the west, sent his son Bayazid through Jharkhand, and he attacked Mukunda Deva on the banks of the Ganges and forced him to take refuge in the frontier fort of Kotsama. A part of his force under his Afghan general, Illahabad Kalapahar, then quickly marched southwards through Mayurbhanj, defeated the king's deputy, and ravaged Orissa. At this juncture, one of the Oriya chiefs raised the standard of revolt, and hearing of this, Mukunda Deva hurried south to save his kingdom, but was defeated and slain by the rebel forces, whose leader was in his turn killed by the Muhammadan invaders. Raghubhanja escaped from the prison in which he had been confined by Mukunda Deva, and attempted to secure the empty throne, but after some four months' desultory fighting, his death left the Afghans masters of Orissa (1568 A.D.).

Religious movements.

Of the internal state of the country during these five centuries of Hindu sovereignty, we have unfortunately very little record. Both Buddhism and Jainism were neglected by the Ganga and Solar kings, and, if the palm-leaf records can be believed, the followers of those religions were persecuted by the former line. The Gangas did not, however, neglect the older Saiva worship; the temples of Megheswar at Bhubaneswar and of Chateswar in Cuttack were built during

[1] *Akbarnama*, Elliot's History of India, vi, 88.

[2] *Tabakati Akbari*, Elliot, v, 299; Al Badaoni's *Muntakhabut Tawarikh*, Lowe's transl., pp. 77-78; and *Akbarnama*.

their rule; and, though they did not build any temples themselves, their rich gifts to the shrines at Bhubaneswar shew that they continued to be patrons of Saivism. At the same time, they seem to have been catholic in their religious tastes, as the great fane of Jagannath at Puri and the massive sun-temple of Konarak were built by them. The Suryavansa kings followed in their foot-steps and liberally endowed the Puri temple. The reign of Prataparudradeva, the last of this line, though disastrous to the temporal fortunes of the kingdom, was one of great religious activity, owing to the spread of Vishnuite doctrines. In 1510 Chaitanya, the great apostle of Vaishnavism, visited Orissa and there devoted the rest of his days to the propagation of the faith. He is said to have converted the king and several of his officers, but his preaching was not confined to the court, while the purity of his life and doctrines made a lasting impression on the people generally. A revival of Buddhism is also said to have taken place towards the close of the Hindu rule; according to Kern,[1] "the light of the Law blazed anew for a moment about the middle of the sixteenth century under the Hindu ruler, Mukunda Deva Harischandra, until, owing to the conquest of the country by the Musulman Governor of Bengal, it was extinguished." This view, however, is not generally accepted.

MUHAMMADAN CONQUEST.

During the Afghan conquest Puri did not escape. The town was besieged and captured, and the image of Jagannath was burnt; the zealous Badaoni, indeed, claims that Sulaiman Karani made the place a *Dar-ul Islam*. After bringing the conquest to a close, Sulaiman Karani took his departure, making his Vizier, Khan Jahan Lodi, Viceroy of Orissa with headquarters at Cuttack, and later on Kutlu Khan, Governor of Puri. The Oriyas soon after his departure broke out in revolt, but Sulaiman marching southwards at the head of an Afghan army quickly succeeded in re-establishing his supremacy.

On his death in 1573, his son, Daud Khan, threw off allegiance to the Emperor of Delhi, and when driven out of Bengal by the forces of Akbar, fled to Orissa. The imperial forces under Munim Khan and Todar Mal followed hard after him and compelled him to give battle at Takaroi or Mughalmari in 1575. The battle ended with his utter defeat, and Munim Khan, marching on to Cuttack, concluded a treaty by which

[1] H. Kern, *Manual of Indian Buddhism*, 1898.

Daud Khan was allowed to retain Orissa as a fief under the Mughal Emperor (1575). It was on this occasion that the victorious Musulman, struck with amazement at the sight of Bhubaneswar, its lofty temples of stone, and its crowds of Brahmans, exclaimed—"This country is no fit subject for conquest or for schemes of human ambition. It belongs entirely to the gods and is one great region of pilgrimage throughout."

Munim Khan, who had removed his headquarters to Gaur, died there during the rains of 1575 with many of his officers, and Daud Khan revolted and overran Bengal. But next year in a great battle at Agmahal the Afghans were defeated, and Daud Khan was captured and slain. Orissa became nominally a province of Akbar's empire; but the Mughals had not established their rule securely, and the Afghans were in frequent revolt. In 1582, taking advantage of the military revolt of the Amirs, they sallied forth from the hills in which they had taken refuge, recaptured the province, and under the leadership of Kutlu Khan, extended their sway as far north as the Rupnarayan river. In the beginning of 1584 Kutlu Khan was defeated, but shortly afterwards the Governor of Bengal, weary of the fight, made a treaty with him, by which Orissa was relinquished to the Afghans on condition that they retired from Bengal and acknowledged themselves as tributary. In 1590 the Emperor Akbar appointed his great Hindu general, Raja Man Singh, Governor of Bihar; and one of the first steps taken by the new Viceroy was an expedition in 1591 to recover Orissa from the Afghans. Kutlu Khan died at this time, and the Afghans sued for peace, opening the negotiations by making Man Singh a present of a hundred and fifty elephants. They agreed to acknowledge the suzerainty of Akbar, to stamp coin in his name, and to prefix his name to all public edicts on condition that they were allowed to retain their *jagirs*. Finally, "in compliment to the Raja, they agreed to give up to him the temple of Jagannath and his domain, held sacred by all Hindus. The latter article highly pleased the Raja and his Brahman councillors."[1] For a short time this treaty was observed by both sides, Miyan Isa Khan, the *vakil* of Kutlu Khan, being able to keep the Afghans in check, "but at the end of two years that able man quitted this transitory world, and the covetous Afghans seized upon the rich and sacred territory of Jagannath. This proceeding was

[1] C. Stewart, *History of Bengal*, 1847.

considered as sacrilege by the pious Raja, and he requested the Emperor's permission to exterminate the Afghans from that province ". In a decisive battle fought on the banks of the Subarnarekha towards the end of 1592 he defeated the Afghans, forced them back to Cuttack, and having compelled them to make their submission, sent the Emperor a hundred and twenty elephants, that he had taken from them, as proof of his victory.

But the Afghans, though defeated, were not crushed. According to Stewart, they again rebelled next year, made a raid into Bengal and sacked the royal port of Satgaon. Man Singh again took the field, the Afghans retired to their *jagirs* in Orissa, and " peace was once more restored to that unhappy province, the inhabitants of which had been so often plundered and their fields destroyed by contending armies ". This peace did not last long. In 1599 the Afghans, taking advantage of the absence of Man Singh and the death of his son and Deputy Governor, Jagat Singh, again rose under Usman Khan, defeated the imperial troops and overran the country as far north as the Subarnarekha. Man Singh, who was then engaged in a campaign in Ajmer, at once returned and in 1600 defeated Usman Khan at Sherpur Atai near Suri in Birbhum. Usman Khan once more sallied forth in 1612 with an army of twenty thousand horse. After a fierce struggle he was killed, his troops fled in disorder, and Shujaat Khan, the leader of the Mughals, entered Orissa as a conqueror. This defeat of the Afghans virtually ended the struggle between them and the Mughals, and Orissa remained a Province of the Empire till 1751, when it passed to the Marathas.

Bruton's visit.

Shortly after the final establishment of the Mughal rule we have a quaint but interesting record of Puri as it appeared to the first Englishman who ever visited it. This was William Bruton, quartermaster of the good ship Hopewell, who with a few companions came to Cuttack in 1633 from Masulipatam. He thus describes his visit in a " Brief Relation of the Great City of Jaggarnat ". " The fifth day of November (1633) I was sent about the Companies business, to the great city of Jaggarnat; and I travelled this day to a town called Madew, and I lodged all night in a pagod or pagado. The sixth day I, William Bruton, travelled eight course, which is thirty-two miles English, and came to a town named Amudpore, where I found, met together, of men,

women, and children, more than three thousand; and all of them were travellers and rangers of the country, having no residence, but are called Ashmen (because they cast ashes upon themselves); also they are called Fackeires, which are religious names given to them for their supposed holiness, but indeed they are very rogues, such as our gypsies are here in England, when they see their time and opportunity to put roguery and villainy in practice: at this town I made no great stay, for I had a good charge about me of the Company's.

"The seventh day of November in the morning, about two of the clock, I hasted from Amudpore, over a passage, and so for Jaggarnat, which was ten course between, that is, forty miles English: so about the hour of four in the afternoon I drew near to this great city of Jaggarnat, to which I passed over a great stone causeway, on either side whereof was a very goodly tank to wash in; this causeway was about half a mile in length: then as I came to the west end of this city, I entered into a very fair place for situation, furnished with exceeding store of pleasant trees and groves, and on either side of the way tanks of water, and pagods in the midst of them. From thence I passed up into the high street, where I was entertained by a bramin (which is one of their religious men or idolatrous priests); but let his religion be what it would, into his house I went, and there I lodged all the time of my stay there.

"The eighth day of November, in the morning, after I had gone about the affairs that I was sent to do, I went to view the city in some part, but especially that mighty pagado or pagod, the mirror of all wickedness and idolatry: unto this pagod, or house of Satan (as it may rightly be called), belong nine thousand bramins or priests, which daily offer sacrifices unto their great god Jaggarnat, from which idol the city is so called; and when he is but named, then all the people in the town and country bow and bend their knees to the ground, as the Moabites did to their idol Baalpeor: here they also offer their children to this idol, and make them to pass through the fire; and also they have an abominable custom, to cause or make them pass through the water, as sacrifices unto the said ungodly god.

"This idol is in shape like a serpent, with seven heads, and on cheeks of each head it hath the form of a wing upon such cheek; which wings open and shut, and flap, as it is

carried in a stately chariot, and the idol in the midst of it; and one of the moguls sitting behind it in the chariot, upon a convenient place, with a canopy, to keep the Sun from injuring of it. When I (with horror) beheld these strange things, I called to mind the XIIIth Chapter of the Revelations, first verse, and likewise the sixteenth or seventeenth verses of the said Chapter, in which places there is a beast, and such idolatrous worship, mentioned; and those sayings in that text are herein truly accomplished in the sixteenth Ver., for the bramins are all marked in the forehead, and likewise all that come to worship the idol, are marked also in their foreheads; but those that buy and sell, are all marked in the left shoulder; and all such as dare or presume to buy and sell, not being marked, are most severely and grievously punished.

"They have built a great chariot, that goeth on sixteen wheels of a side, and every wheel is five feet in height, and the chariot itself is about thirty feet high. In this chariot on their great festival days at night, they place their wicked god Jaggarnat, and all the bramins, being in number nine thousand, then attend this great idol, besides of Ashmen and Fackeires some thousands, or more than a good many. The chariot is most richly adorned with most rich and costly ornaments; and the aforesaid wheels are placed very complete in a round circle so artificially, that every wheel doth its proper office without any impediment: for the chariot is aloft and in the centre betwixt the wheels; they have also more than two thousand lights with them: and this chariot, with the idol, is also drawn with the greatest and best men of the town; and they are so eager and greedy to draw it, that whosoever, by shouldering, crowding, shoving, heaving, thrusting, or any violent way, can but come to lay a hand upon the ropes, they think themselves blessed and happy. And when it is going along the city, there are many that will offer themselves as a sacrifice to this idol, and desperately lie down on the ground, that the chariot wheels may run over them, whereby they are killed outright; some get broken arms, some broken legs, so that many of them are so destroyed, and by this means they think to merit heaven.

"There is also another Chariot, which hath but twelve wheels, and that is for an idol or a devil of an inferior rank or lower degree, and he goes not abroad or in progress, but when the bramins please. This pagodo is situated by the Sea side,

and is to be seen into the Sea, at the least, ten or twelve leagues; for the air and sky is clear and pure in those parts, that it may be seen far: it is enclosed with a wall of stone, much about twenty-two feet in height, and the enclosure is four square, and every square is a hundred fifty geometrical paces; so the four squares in the total are six hundred paces or yards about: it standeth due east, west, north, and south; and every square hath a great gate for the entrance into it, but the south and west gates are barred up till the festival times, and none commonly used but the north and east gates, but especially the north gate; for it hath all its prospect into the high or Chief Street of this city."

Muhammadan Governors.

During the Mughal rule the system of administration changed from time to time.[1] At the outset, Bengal, Bihar and Orissa were all placed under one Governor, the first being Man Singh, who was appointed in 1591 and continued to hold office till 1604, when Akbar's serious illness made him resign and hurry off to the imperial court. On the accession of Jahangir, he was sent back to Bengal as Governor, but was recalled in 1606, and was succeeded by the Emperor's foster brother, Kutb-ud-din Khan-i-Chisti, who was killed by Sher Afghan, the first husband of Nur Jahan. After his death, Orissa was made a separate Governorship in 1607, the first Governor being Hashim Beg, who was succeeded in 1610 by Raja Kalyan of Jesalmir, whose niece had been married to Jahangir before he became Emperor. Kalyan lived till 1617, when he was, according to the chronicles of Jagannath, killed by the Raja of Khurda. To avenge his death, his successor Mukarram Khan invaded Khurda and formally annexed it to the empire in 1617; he appears to have been succeeded in 1620 by Hasan Ali Turkman.

When Ibrahim Beg Khan Fath Jang, the brother of the Empress Nur Jahan, became Governor of Bengal, Orissa seems to have been added to his territory; and he appointed his nephew Ahmad Beg Khan *Naib Subahdar* of Orissa. In 1624 the latter invaded Karaha (Khurda), whose ruler had got out of hand, when prince Khurram (afterwards Emperor Shah Jahan) rebelled against his father and marched into Orissa from the Deccan. To this invasion Ahmad Beg offered

[1] Compiled from the *Akbarnama*, *Tuzuki Jahangiri*, *Padishanama*, *Maasirul-umra* and other Muhammadan accounts, and from Blochmann's notes on the *Ain-i-Akbari*.

little resistance, for he retreated first to Pipli and next to Cuttack, and finally went off to Burdwan. The prince thereupon marched to Bengal, after having appointed Muhammad Taki Simsaz *alias* Shah Kuli Khan as Governor. On the subsequent retreat of the prince through Orissa, Rao Ratan successfully attacked Shah Kuli, and sent him captive to the Emperor. In the last year of Jahangir's reign we find that Bakr Khan Nazamshani was installed as Governor, and in 1631 conquered Mansurgarh and Khirapara, a valley between Orissa and Tilang. Next year, on account of complaints about his oppression, his post was given to Mutakid Khan, who seems however to have held office for only a short time; for from Bruton's account Agha Muhammad Zaman Teherani appears to have been Governor in May 1633: it was this nobleman who granted the first *farman* authorizing the English to trade in Orissa. In 1634 Mutakid Khan was again sent back to Orissa, where he stayed fairly long for a Muhammadan Governor, viz., till 1639, probably on the strength of his having presented the Emperor with twelve elephants in 1637 and again in 1638. Shah Nawaz Khan Shafvi held the post from 1639 to 1641.

In the latter year Orissa was added to Bengal, which had already been placed in charge of prince Shah Shuja. He deputed Agha Muhammad Zaman to Orissa as Deputy Governor, but in 1644 Mutakid was reappointed, only to be recalled three years later; he is referred to as "Muttus Cawn" in English accounts, which record the fact that he granted another *farman* to the English. A quick succession of Governors now followed, viz., Simsamuddaula (1654), Tarbiat Khan Barlas (1655—57), and then Khwaja Bakherdad Ashraf Khan, who appears to have been the last *Subahdar* of Orissa in the reign of Shah Jahan. All these Governors were subordinate to prince Shah Shuja, who revised the rent-roll of Bengal and Orissa, which had been prepared under the supervision of Todar Mal sixty years before.

With the accession of Aurangzeb in 1658 and the decline of the Mughal empire, the Orissa Governors were changed very frequently, too frequently indeed for any good administration. The following is a list of them as far as they can be traced in the *Alamgir-nama* and the Factory Records[1] and

[1] Factory Records and O. C. Collections, quoted in *Countries round the Bay of Bengal*, 1669—79, ed. by Sir R. C. Temple, Hakluyt Society, Series II, vol. XII, pp. 162-3, Note 4.

other documents :—Saiyid Sher Khan of Barha (1658-59), Khan Douran Saiyid Muhammad (1660—68), Kobad Khan Mir Akhar (1668) according to *Maasir-ul-umra*, Tarbiat Khan (1669), Safi Khan (1670), Ibrahim Khan (before 1673), Safi Khan (1673), Safsikan Khan (1673), Rashid Khan (1674), Sale Khan (1677), Nurulla Khan (1678), Abu Nasr Khan (1682), Akram Khan (1697), Muhammad Raza (1710), and Khan Jahan Bahadur, otherwise called Izz-ud-daula Khan Alam[1] (1711).

Of these numerous Governors there is little of interest to record. Safi Khan is probably the same as "Ruffee Ckauns, Nabob of Orixa", who granted an order confirming the privileges of the English in Orissa in the thirteenth year of the reign of Aurangzeb.[2] Rashid Khan also granted a *farman* to the English[3] and was described as follows in 1675 :—"We have notice of not a worse Nabob come to Orissa than the present Ruzzard Chaan who robs the whole country in and about Cateck." Sale Khan, son of Azzum Khan, called "Saly Cawn"[4] by the English, also granted them a *farman* to trade in Orissa. Abu Nasr Khan built the Jajpur mosque in 1682, and the temple of Jagannath was broken by orders of Akram Khan.

Last days of Muhammadan rule.

Finally Orissa was added to the Deputy Nizamship of Murshid Kuli Khan, who revised the rent-rolls of Bengal and Orissa for the second time and appointed his son-in-law, Shuja-ud-din Muhammad Khan, as Deputy Governor (*Naib Subahdar* or *Naib Nazim*) of Orissa. He held office for nearly fourteen years, and built the Kadam Rasul of Cuttack in the reign of Shah Alam I (1707—1712). His successor was Muhammad Taki Khan, his illegitimate son, who interfered greatly with the worship of Jagannath. Consequently, the Raja of Khurda carried away the idol across the Chilka lake.

[1] *Later Mughals*, W. A. Irvine, J.A.S.B., 1896, p. 174, *Early Annals*, Wilson, II, 14.

[2] *William Hedges' Diary*, ed. by Col. H. Yule, Hakluyt Society, vol. III, 191; Sir G. Birdwood's Report on the old Records of the India Office, p. 80.

[3] Factory Records and O.C. Collections, quoted in *Countries round the Bay of Bengal*, note to p. 153.

[4] List of Farmans under August 1714, in the Diary and Consultation Book of the United Trade Council at Fort William in Bengal, quoted in C. R. Wilson's *Early Annals of the English in Bengal*, vol. II, 184, 189.

and for greater safety placed it on the summit of a hill, "which circumstance," we are told, "injured the revenue of Orissa to the amount of nine lakhs of rupees per annum, being the usual amount of the collections from the pilgrims".[1] On the death of Muhammad Taki Khan in 1734, the Nawab entrusted the Government of Orissa to his own son-in-law, Murshid Kuli Khan. The Raja of Khurda managed to conciliate his Diwan, Mir Habib Ali Khan, and secured the favour of Murshid Kuli Khan by payment of *nazr*; and then feeling that the worship of Jagannath could be carried on with safety, brought back the idol and re-established the worship at Puri.[2]

In 1740 Ali Vardi Khan became Nawab of Bengal, and one of his first acts was to march south against Murshid Kuli Khan, who had refused to acknowledge his authority. A battle fought near Balasore in 1741 ended in the complete defeat of the Governor, who fled to Masulipatam, leaving behind his family, his wife and all his treasure. "But, Providence, which watched over that forlorn family, suscitated a saviour for it, and this was the Raja or prince of Ratipur, who is also lord of Jagannath, a famous place of resort and pilgrimage from all India, where the diversity of clans so remarkable amongst Gentoos, and the shyness from each other which it produces, ceases at once by an ancient law, to make place for a mutual intercourse deemed obligatory in a sacred place held in the highest veneration."[3] The Raja sent an escort to Cuttack under the command of one of his officers, Murad Shah, and the Governor's household and treasure were safely removed to "Inchapur". Ratipur or Rathipur it may be explained, is a place in the Khurda subdivision where the Raja had a fort; Inchapur is Ichchapuram, a small town in the Ganjam district. The "Lord of Jagannath" is Ramchandradeva II, who had turned Musalman, according to the palm-leaf chronicles, and thus had a Musalman employé.[4]

Ali Vardi put his nephew Saiyed Muhammad Khan in charge of Orissa, and the *Sair-ul-Mutakharin* and *Riyazu-s-Salatin* mention the names of several other Deputy Governors

[1] Stewart's *History of Bengal*.

[2] *Riyazu-s-Salatin*, Eng. transl., Bibl. Ind. Edn., pp. 302-3.

[3] Raymond's translation of the *Sair-ul-Mutakharin*, vol. I, p. 354.

[4] *Later Kings of Khurda*, M. M. Chakravarti, J.A.S.B., 1898, p. 383.

of Orissa during this troublous period, viz., Sheikh Muhammad Masum, his nephew Abdul Nabi Khan and his son Abdul Rasul Khan, Durlabh Ram, and Sheikh Abdul Sobhan. Of these Masum and Sobhan were killed in battle, Durlabh Ram was captured, and Abdul Nabi died and was buried in the Kadam Rasul at Cuttack, like Muhammad Taki Khan, a previous Deputy Governor.

MARATHA RULE.

In 1742 the Marathas came down upon Bengal, and made Orissa a basis for their annual inroads until 1751, when Ali Vardi Khan, wearied by long years of fighting and borne down by age—he was nearly seventy-five—bought them off, by practically ceding to them the Province of Orissa, and agreeing to pay twelve lakhs of rupees as *chauth* for Bengal. The treaty of 1751, nominally preserved the dignity of the Emperor, for a Musalman, Mir Habib according to one account and Sadrul Haq according to another, was appointed to govern in his name; but the revenue was collected with the aid of Maratha troopers, and was made over to the Maratha prince. In a short time the pretence of dependence upon the Empire was given up. The Muhammadan deputy of the Emperor was assassinated, and his successor found himself unable to carry on the government. In 1755-56 the nominal deputy of the Mughal Emperor could not even wring the stipulated Maratha tribute out of the Province, and begged to be released from his office. A few months later a Maratha obtained the governorship, and from that date till 1803 Orissa remained a Maratha Province.

The general nature of the Maratha rule may be gathered from the remarks of Mr. Stirling:—"The administration of the Marathas in this, as in every other part of their foreign conquests, was fatal to the welfare of the people and the prosperity of the country; and exhibits a picture of misrule, anarchy, weakness, rapacity, and violence combined, which makes one wonder how society can have kept together under so calamitous a tyranny." But a clearer insight into the actual condition of the country as it appeared to the people themselves may be gathered from the account given to the Collector of Puri in 1867 by an aged Hindu, who had been living in Orissa ever since the latter days of Maratha rule. This old man had seen Raghuji Bhonsla, when he came to Puri in order to replenish his purse. He used to ride in at the head of his troops, about fifteen hundred fighting men, besides camp-followers, with a long train of elephants, horses,

palanquins and carts, and then held *darbars* at which he made the leading men of the town pay what he demanded. His idea of justice was to decide in favour of the side which gave him most money, and "a poor man would as soon have thought of drinking the ocean dry as of going to Raghuji to settle his disputes."

There were no courts or jails in the country; thieves and dacoits went everywhere. If an Oriya caught a thief in his house at night, he used to brand him by burning and then let him loose; but sometimes the villagers would rise and kill the thief outright. The Governor's camp-followers lived by plunder, and men struggled for even this mean post, while to be one of his regular sepoys was to be a king. The Marathas made no roads or embankments; the only roads, if they can be called such, were mere pathways across the fields; and even the old pilgrim road to Jagannath was a rough track, which in the rains was covered with water for miles together. To add to the difficulties and dangers of the journey, the Marathas systematically stripped all rich pilgrims on the road, and poor pilgrims, if they escaped being plundered by the Marathas, were attacked and sometimes killed by bands of dacoits who infested the jungle.

The old man's description of the drastic methods employed by the Marathas in collecting the revenue is equally graphic. "An underling of the governor entered a village, called the people together, and ordered one man to give him so many *pans* or *kahans* of cowries, and another so many. If the people did not at once pay, they were first beaten with sticks, and if that would not do, they were afterwards tortured. A favourite mode of torture was to thrust a brass nail between the finger-nails and the flesh, and another was the *chapuni*. This consisted of throwing the man on the ground, placing two crossed bamboos over his chest, and gradually pressing on them till the man consented to pay what was demanded. If he still refused to pay, the operation was repeated on his stomach, back, legs, arms, etc. If the Marathas saw a man was fat, they said that he had eaten plenty of *ghi*, and must be wealthy—so all people tried to keep lean. If they saw any one wearing clean clothes, they declared he could afford to pay—so all people went about in dirty clothes. If they saw a man with a door to his house, they said it was plain he had something—so people either did not keep doors, or hid them when the officials were coming. Above all, if a man lived in a masonry house, he was sure to be fleeced. The Marathas

held that a man who could build a brick house could always afford to pay them a hundred rupees. They also had another test to find out whether a man had money. They got together the leaves which serve as plates, and on which is served the family repast; and poured water over them; if this did not cover every part of the leaves, they declared that they were greasy, and that the family were all *ghi*-eaters, and must be possessed of money. They used to enter houses, even the women's apartments, dig up the floors, probe the walls, and sometimes pull them down altogether, in search of money."[1]

From Mr. Motte's account of his journey through Orissa in 1766 we learn that such exactions were not confined to the collectors of revenue. "The followers of the camp," he says, "are plunderers by profession. They are under a chief, who accounts with the commanding officer. They carry each an iron rod, ten feet long, with which they probe the ground wherever they suspect money or effects to be buried. They smell the rod, repeating cabalistical words, and pretend they make their discoveries by the nose; but this is mere affectation, for they know by the ease with which the rod enters whether the ground has been lately dug, however carefully the earth may have been thrown in again, or however artfully the surface may have been formed." At the same time, he says, oppression was not so flagrant in any place which was a military station to the support of which the rent of the surrounding country is appropriated. "It is, in other words, an official fief, and the country becomes the property of the fouzdar for the time being. Now it is the custom of the Mahratta troops to plunder as much in the zamindaries tributary to them as in any enemy's country; the tenants of such zamindaries, therefore, desert their villages at the approach of an army, while the fouzdar, meeting the commander with a present, obtains an order to be exempted from pillage, the execution of which he attends to himself." The general result of Maratha rule as witnessed by him in his journey from Calcutta to Cuttack is briefly but forcibly described. "In my journey it will be unnecessary to say that any place I came to was once considerable, since all the places which were not so are now depopulated by the Mahrattas, and such alone remain as on account of their bulk are longer in decaying."[2]

[1] Sir W. W. Hunter's Orissa.

[2] T. Motte, *Narrative of a Journey to the Diamond Mines at Sumbhulpoor*, Asiatic Annual Register, 1799.

A list of Maratha Governors, as far as they can be traced,[1] is given in the margin. Of these *subahdars* the most energetic was Sheobhat, who gradually changed a disputed and precarious authority into a fairly powerful government. In his time, the zamindar of Kimedi invaded Khurda in 1761, and its Raja having called in his aid, Sheobhat drove out the invaders, and then seized Puri and *parganas* Lembai, Rahang, etc., as compensation for the expenses incurred. In the same year he completed a settlement of Orissa with the following rent-roll:—231 gold mohurs, 3,82,829-8-0 rupees and 27,82,446 *kahans* of cowries, *i.e.*, reckoning at the rate of four *kahans* per rupee, nearly ten and a half lakhs of rupees. The oppression of his successor Bhawani Pandit appears to have given him a posthumous popularity. "Sheobhat," it was said, "supported the national troops with the plunder of foreign countries; Bhawani Pandit with the plunder of his own."[2] The latter was the Maratha Governor with whom, as shown later, Lord Clive opened up negotiations for the cession of Orissa. His successor Sambhuji Ganesa revised the settlement of the Province, which resulted in a nominal increase of more than five lakhs. A further revision was carried out by Rajaram Pandit, who from the rank of an assistant rose to be the head of the Province. Setting aside the *chaudhris* and *kanungos*, he introduced the system of direct collections from tenants and village headmen, and imposed on the Raja of Khurda a tribute of ten thousand rupees. In 1781 Chemnaji, a nephew of the Bhonsla king, visited Cuttack and sent Rajaram to Calcutta to demand *chauth*. According to

Maratha Governors

	A.D.
Sheobhat Santra	1756
Chemna Sahu and Udayapuri Gosain ...	1764
Bhawani Pandit	1764
Sambhuji Ganesa	1768
Babaji Nayak	1771
Madhoji Hari	1773
Babaji Nayak (2nd time)	1775
Madhoji Hari (2nd time)	1775
Rajaram Pandit	1778
Sadasiva Rao	1782
Inkaji Sukhdeo	Uncertain
Balaji Konji	1803

[1] J. Beames, *Notes on the History of Orissa*, J.A.S.B., 1883; A. Stirling, *Account of Orissa*, reprinted, Calcutta, 1904; Palm-leaf chronicles of Jagannath temple.

[2] T. Motte, *Narrative of a Journey to the Diamond Mines at Sumbhulpoor*, Asiatic Annual Register, 1799.

Stirling, he is said to have negotiated a treaty with Warren Hastings, by which the British Government agreed to pay 27 lakhs on condition of all further claims being abandoned, while the author of the *Sair-ul-Mutakharin* says that the Maratha prince was given three lakhs of rupees, with a number of rich presents, to induce him to permit an English force to pass through Orissa and reinforce General Coote at Madras. It is at least certain, as mentioned later, that Rajaram Pandit concluded a treaty by which the Marathas and British promised mutual aid. Of later Governors we know little. Another revision of settlement took place in the time of Inkaji Sukhdeo; and we may gather that Balaji Konji was the last of the Maratha Governors from a mention of a grand ball being given in his hall on Christmas 1803 after the British conquest.[1]

Negotiations with Marathas.

During the rule of the Marathas the British appear to have entered into negotiations for the cession of Orissa on more than one occasion. As early as 1766 Lord Clive instructed an envoy, Mr. Motte, to sound the officers of Janoji, the Raja of Nagpur, on the question of his ceding Orissa for an annual tribute. He was received at Cuttack "with more politeness than state" by the Governor, Bhawani Pandit, who "explained the just demand Jannoojei, his master, had on the Company for the arrears of tribute of Bengal and Bahar". Motte thereupon replied that he "understood the revenues of Orissa were made over to Jannoojei in lieu of the tribute of the three Provinces and that the best mode which could be adopted was to restore it to the Company, who should pay a stipulated sum and send a resident to the Court of Nagpoor as a hostage. . . . Bowanee Pundit was too good a statesman not to comprehend the use which might be made of an alliance with the English. He caught the idea with the vivacity of a Mahratta, told me the interests of our court were the same, that he would write what he had said to Jannoojei, and desired me to write to Lord Clive." The negotiations were however abortive, for shortly afterwards, Janoji being attacked by the Peshwa and his capital Nagpur captured, Bhawani Pandit wrote to say that "his master must give up all thoughts of an alliance with the British at present".[2] Subsequently Warren

[1] *Calcutta Gazette*, 12th January 1804, *Selections*, III, p. 326.

[2] T. Motte, *Narrative of a Journey to the Diamond Mines at Sumbhulpoor*, Asiatic Annual Register, 1799.

Hastings made an unsuccessful attempt to rent a tract of country from the coast from Madhoji, who ruled over the Marathas as regent for Raghuji, the nephew and adopted son of Janoji, who had succeeded in 1772.

In 1779 Madhoji sent a force to invade Bengal in pursuance of a confederacy between the Marathas, the Nizam, and Haidar Ali for the overthrow of the British power. Madhoji was, however, at heart friendly to the British, and being disgusted at the refusal of the Peshwa to admit his claims to Mandla undertook the expedition with much reluctance. The British Government, who had despatched a force to the Carnatic by the coast route, under Colonel Pearse, to co-operate with the Madras army against Haidar Ali, found little difficulty therefore in concluding a treaty in 1781, by which the army of Madhoji was bought off from an invasion. A force of two thousand Maratha horse was to be sent from Cuttack with Colonel Pearse to assist in the war against Haidar Ali, and the British, for their part, engaged to pay a lakh a month for the maintenance of this force, and to send troops to assist in an expedition against Garh Mandla, and obtained a promise that they were to be represented by an agent at the Nagpur Court.[1]

British conquest.

The British conquest of Orissa, which took place twenty-two years later, formed part of the great campaign against the Marathas in Central India undertaken by the Marquis of Wellesley. The force destined for the expedition assembled at Ganjam, and started from that place on the eighth of September 1803 under the command of Colonel Harcourt. It marched along the narrow strip of coast between the sea and the Chilka lake, and Manikpatna was reached on the fifteenth, having been abandoned by the enemy without resistance. It took two days to cross the dangerous channel through which the Chilka communicates with the sea; and had the enemy made a determined stand there, the position would have been one of considerable danger and difficulty. Leaving Narsinghpatna on the eighteenth, the British forces entered Puri without opposition. After a halt of two days in the holy city, Colonel Harcourt told off a detachment of Hindu sepoys for the protection of the temple and resumed his march.

[1] Aitchison's Treaties, Engagements and Sunnuds.

The Marathas, who had gathered in a camp on the other side of the river which flows past the city, at first opened a sharp fire upon the British troops, but soon broke and fled. The British crossed the river, driving them out of the wood in which they had entrenched themselves. The real difficulties of the expedition now began. There were no roads; the cart tracks, which did duty as roads, were rendered almost impassable by water and mud; and it was with the greatest difficulty that the guns and supplies could be dragged along. The enemy, though not daring to come to close quarters, threw out skirmishers and impeded the progress of the invaders by every means, which their superior knowledge of the country put in their power. A night attack on the Maratha camp was made on the second of October; the enemy were found leisurely eating their dinner, and driven out. The Marathas then took up a position before Mukundpur near Pipli. On the fourth of October they attacked the advanced guard in vastly superior numbers, but were repulsed with considerable loss. They made good their retreat into the jungles of Khurda, and no further opposition was offered to the march of the British troops, who reached the banks of the Katjuri a few days after the action at Mukundpur. The crossing of the river was effected safely; and on the 8th October Colonel Harcourt entered Cuttack city unopposed, and six days afterwards captured the fort. Equal success attended the expedition against Balasore, which had been despatched from Bengal, and the British conquest was complete.

RAJAS OF KHURDA.

The only two noteworthy events in the subsequent history of Puri are the rebellion of the Raja of Khurda in 1804, and the rising of the *paiks* or peasant militia in 1817-18.

In order to understand the situation which the British now had to face, it will be necessary to revert briefly to the history of the Rajas of Khurda, who had long been semi-independent chiefs.[1]

On the death of Mukundadeva, the last independent Hindu king of Orissa, the country was thrown into great disorder. During the confusion Ramai Rautra, who, according to one version, was a son of Danai Bidyadhara,

[1] This account has been compiled from the palm-leaf chronicles, checked and supplemented by the information in Muhammadan and other histories.

a minister of the Bhoi dynasty, came from the south, seized the western part of the Puri district, and fixed his capital at Khurda. His reign began in 1568-69,[1] and at the Mughal conquest Todar Mal is said to have recognized his claim to be the paramount chief of Orissa. He brought the sacred relics of Jagannath from Kujang fort in Cuttack, and consecrated them in the temple with much pomp and solemnity. Subsequently, in 1590, the Afghans ceded Puri and its temple to Man Singh, but, two years later, attacked and plundered the city. Man Singh having defeated them in a decisive battle at Jaleswar, pursued them to the fort at Sarangarh, five miles south-west of Cuttack town, which was then in possession of Ramchandradeva, besieged the fort and compelled them and their ally to sue for peace. The Afghan chiefs were transferred from Orissa to *pargana* Khalifabad with new *jagirs;* and Man Singh after hearing a counter-claim advanced by the sons of Mukundadeva, confirmed Ramchandra in possession of Khurda on payment of tribute.[2] Mukundadeva's sons were compensated by the grant of *kila* Aul to one, and *kila* Patiya to the other; and all three were made grandees of Akbar's court.[3]

For some time Man Singh appears to have kept the Jagannath temple in his own hands. but eventually he placed the shrine in the charge of the Khurda Raja, who maintained the worship with great splendour and founded several colonies of Brahmans in villages bearing his name. Henceforward the history of the Khurda Rajas is closely connected with that of the temple. About 1598-99, Mukunda Rai of Cossimcotta in the Vizagapatam district was defeated by the general of Muhammad Kuli Kutb Shah of Golconda and took shelter in the territory of Ramchandra. The latter, though aided by Madhu Singh, a brother of Man Singh, could not prevent the Musulman general ravaging his country, and Mukunda Rai had perforce to retire to Bengal.[4]

After a long reign of about thirty years Ramchandra died, and was succeeded in 1599-1600 by his son Purushottamdeva, whose reign was a troubled one. His territory was first

[1] J.A.S.B., 1883, p. 33.

[2] *Akbarnama*, *Ain-i-Akbari*, Blochmann, I, 607, Note 4; Stewart's *History of Bengal*; F. C. Danvers, *The Portuguese in India*, vol. ii, p. 97.

[3] *Ain-i-Akbari*, I, 489, 508, 526.

[4] Brigg's *Feristah*, III, 465-6, 531.

invaded by Mirza Khurram, alias Kamal Khan, and the idols had to be removed from the Jagannath temple to Kapileswarpur. In 1609-10 at the time of the Car Festival one Kesomare (Kesudas Maru) burnt the cars, killed many of the people, and then prevented all worship for nearly eight months, until the Raja managed to satisfy his demands. Next, in 1613-14, Raja Kalyan invaded the country, and the gods had to be removed to fort Gurbai on the Chilka lake and there kept on a boat for safety. The following year the Khurda chief met and killed Kalyan in battle, and overran the land up to Cuttack; but two years later Mukarram Khan stormed the Khurda fort and annexed the *kila*. The Raja fled to Mantiri on the frontier of the Ranpur State, while the idols were removed from Gurbai fort to the frontiers of Banpur, but were taken back to the temple two years later on the retreat of Mukarram Khan. After this the Raja did not long enjoy peace, for in 1620-21 Ahmed Beg marched through the *kila* as far as Banpur and Mahima in Garh Andhari. The Raja died in the following year and was succeeded by his son Narasinhadeva.

The troubles with the Musulman Governors still continued. In 1624-25 the Raja, on being ordered by Ahmed Beg to send to Cuttack some of his relatives, probably as hostages, removed his camp and idols to Mantiri in Ranpur, and then attacked Ahmed Beg, who however escaped. Next year prince Khurram (afterwards Emperor Shah Jahan) marched from the south with a large retinue. The Raja met him and accompanied him to Jajpur, returning with a rich present (*khilat*). Subsequently, on the news that Shah Jahan had retreated from Patna, the Raja, in fear of an invasion, removed the images of Jagannath to Khurda, and only replaced them after Shah Jahan was well away from the Province. In 1626-27 he paid a visit to the Konarak temple, had a measurement made of it, and removed the sun-image to the temple of Indra inside the Jagannath enclosure. In 1646 he was killed at Puri by Fateh Khan, an officer of the Nawab, who looted both the palace and the temple. He was succeeded by Gangadharadeva, who after ruling for less than four months, was killed by Balabhadradeva, who held Khurda till 1654-55 and was succeeded by Mukundadeva I. Except for a terrible famine in 1669-70 the long reign of this chief is barren of interest. On his death in 1692-93 his son Dibyasinhadeva succeeded. In the fifth year of this reign the

Nawab Ekram Khan had the images of Jagannath seized and the temple broken and closed; the chronicles add that he secured only the wooden substitutes, the real images being kept hidden behind the Bimala temple. Two years later there was a disastrous cyclone, and in the following year (1700-01) another famine occurred.

Of the next two Rajas, Harikrishnadeva (1719-20 to 1724-25) and Gopinathdeva (1724-25 to 1731-32), there is nothing of interest to record. In the time of the tenth Raja, Ramchandradeva, we find that on account of Muhammadan interference with the temple worship, the images were again removed from the Jagannath temple to a hill on the Chilka lake, and kept there until Mir Habib, the Assistant of the Orissa Nawab, induced the Raja to bring them back to Puri. The Nawab soon afterwards attacked the Raja and took him captive to Cuttack, where he turned Musulman and married the daughter of the Nawab. It was this Raja who, as stated above,[1] rescued the family of the Nawab Murshid Kuli Khan, after he had been defeated by Ali Vardi Khan in 1741 near Balasore, and sent them under an escort to Ichchapuram in Ganjam, while a few months later the Raja's Commander-in-Chief, Murad Khan, with a large contingent of troops, assisted Mirza Bakr Khan, son-in-law of Murshid Kuli, who had usurped the governorship, in a battle with Ali Vardi's advance guard.

On the death of Ramchandradeva, Mir Habib at first set up Padmalabhdeva of Patiya, but eventually recognized his grandson Virakishoradeva (1742-43 to 1779-80). Soon after his succession, the Marathas burst into Orissa and captured Ali Vardi Khan's Deputy, Durlagh Ram, and finally had the Province ceded to them. When Khurda was invaded in 1760 by Narayan Deo, a chieftain of Kimedi, Virakishora sought the assistance of the Maratha Governor Sheobhat Santra. The latter drove out the invaders, but the Raja could not pay the expenses of the campaign and had to mortgage to the Governor the best portions of his territory, including Lembai, Rahang, and Puri town. Towards the end of his rule, the Raja became mad, murdered four of his own children and committed other excesses. On his death in 1779-80, his grandson Dibyasinhadeva II was acknowledged Raja by the Marathas on his agreeing to pay an annual tribute of ten thousand rupees. The Raja now removed his

[1] *See* page 41.

quarters from Khurda fort to a fort built in the pass of the Barunai hill and took possession of Banpur, Khurda and Lembai. He was succeeded in 1797-98 by Mukundadeva II, with whom the chieftainship of Khurda ended, his territory being annexed by the British in 1804 in consequence of his rebellion. The following account of this rebellion, and of the subsequent rebellion of 1817-18, is quoted with some abbreviation from Mr. G. Toynbee's *Sketch of the History of Orissa from 1803 to 1828.*

Rebellion of 1804.

The Raja of Khurda, although stripped of a considerable slice of his original territory, had been left by the Marathas in comparative independence within his own *kila*. This, indeed, was more a matter of necessity than of choice. Although the Maratha cavalry easily overran the open parganas of Rahang, Sirai and Chaubiskud, they could not penetrate into the jungle fastnesses of Khurda proper; nor did their infantry care to encounter in their own ground the *paiks* or local militia, who were little, if at all, inferior to them in the open. The lowland country was exposed to frequent devastation, and the unfortunate inhabitants, fearful of espousing either side, suffered equally from the ravages and depredations of both. When the British entered the Province in 1803, the Raja passively espoused their cause, and tendered his allegiance to the British Government, doubtless in the hope that these *parganas*, wrung from him by the Marathas, would be restored. The Commissioners in charge of the civil administration decided, however, to retain them, as they had been taken from the Marathas, who were in actual possession of them at the time of the conquest. Though this decision was at the time silently acquiesced in by the Raja, it was a source of bitter disappointment to him. When the European troops returned to Madras after the conquest, and the native force which remained at Cuttack had been considerably reduced in numbers by the necessity of establishing detached outposts in different parts of the country, he thought that a favourable opportunity had arrived for recovering the lost territory.

In September 1804, the Raja was detected in an intrigue in the affairs of the Puri temple, and was therefore forbidden to issue orders to any person whatever residing within the limits of the Mughalbandi territory, without the express sanction of the Commissioners. In October, exactly one month after the issue of this order, the Raja's troops—if

a disorderly mob of *paiks* and peons can so be called—made a raid on the villages in the vicinity of Pipli, and carried off all the cattle and other moveable property on which they could lay hands. This affair, though partaking more of the nature of a large dacoity or gang-robbery than of an organized and preconcerted military aggression, nevertheless occasioned considerable alarm. In the circumstances, this was perhaps not unnatural, for the majority of the British forces had returned to Madras, and what few troops remained behind were scattered over a considerable area. The nature of the country rendered speedy communication and rapid concentration impossible. There was, moreover, a lurking suspicion that the Marathas might be in secret league with the Raja to harass, if not to overthrow, the British authority. The Commissioners, therefore, determined to be on the safe side, and by prompt and decisive steps, to prevent these raids from growing into anything more serious.

Troops were sent from Ganjam, and a detachment marched from Cuttack. The rebels, being quickly driven out of Pipli, retreated to the fort at Khurda, followed by the British troops. This fort, the ruins of which still remain, was situated at the foot of a hill at the east end of the valley of Khurda. The approaches from the south lay through a difficult pass between the Barunai hills, and were stockaded and fortified with strong masonry barriers. It was three weeks before the British were in a position to carry these works by storm. When this was at length achieved, the Raja made good his escape southwards with a handful of his followers, the British troops being too exhausted to pursue; but he surrendered a few days afterwards. His territory was confiscated and placed in charge of Major Fletcher, who erected the first civil buildings at Khurda; and the estate has since been managed as a Government Estate, the Raja receiving an allowance of Rs. 2,133-5-4 per mensem out of the revenue. Mukundadeva was sent a prisoner to fort Barabati at Cuttack, from which he was shortly removed to Midnapore. He was released in 1807, allowed to live in the palace in Balisahi in Puri town, and vested with the superintendentship of the Jagannath temple; but in 1817 he was again made prisoner in consequence of another rebellion.

Paik rebellion.

This was the rebellion of the *paiks*, a kind of local militia to whom the English conquest had brought little but ruin and oppression. Rude and contemptible as this new foe

undoubtedly was in comparison with the British sepoys the nature of the country and their intimate knowledge of it gave them an advantage which rendered the contest more equal than it would otherwise have been. They are described as follows by Stirling in his *Account of Orissa*:—The *paiks*, or landed militia of the Rajwara, combine with the most profound barbarism and the blindest devotion to the will of their chiefs, a ferocity and unquietness of disposition which have ever rendered them an important and formidable class of the population of the Province. They are paid by service lands, which they cultivate with their own hands in time of peace, subject to the performance of certain military and police duties whenever called on by their chiefs.

"The *paiks* of Orissa are divided into three ranks, distinguished by names taken from their occupation, or the weapons which they chiefly use, viz. :—(1) The *paharis*, who carry a large shield made of wood, covered with hide and strengthened by knobs and circles of iron, and the long straight national sword of Orissa, called the *khanda*. They are stationed chiefly as guards. (2) The *banuas*, who now principally use the matchlock (in lieu of their old missile weapons), but have besides a small shield and sword. It was their duty to take the field principally and go on distant expeditions. (3) The *dhenkiyas*, who are armed with bows and arrows and a sword, and perform all sorts of duties. The war dress of the *paiks* consists, or did consist, of a cap and vest made of the skin of the tiger or leopard, a sort of chain armour for the body and thighs, and a girdle formed of the tail of some wild animal. Besides the terror inspired by these unusual habiliments, they further heightened the ferocity of their appearance by staining their limbs with yellow clay and their countenances with vermilion, thus exhibiting altogether as savage and fantastic an air as one can well conceive to invest the national army of any country or people. However wild and motley their appearance and composition, they certainly did not fight badly, at least when encouraged by the proximity of their jungles, since we find them sustaining the most bloody battles with the Mughals; and it may be doubted whether they were not superior to any infantry which the Berar Marathas ever brought into the field during their government of the Province."

A body of local landed militia of this kind might have been a tower of strength to the British Government, had

liberal and conciliatory measures been adopted from the first: but by a fatal and short-sighted policy, Major Fletcher had been allowed to resume their service lands shortly after the confiscation of the Khurda estate. Nor was this all. Deprived of the lands which they had enjoyed from time immemorial, they were subjected to the grossest extortion and oppression at the hands of the farmers, *sarbarahkars*, and other underlings to whom the Government entrusted the collection of the revenue, and also to the tyrannies of a corrupt and venal police. A leader was all that was required to fan the lurking embers of rebellion into open flame.

The opportunity produced the man in the person of Jagabhandhu Bidyadhar Mahapatra Bhawanbir Rai, an officer who had inherited from his ancestors the post of *bakhshi* or commander of the forces of the Raja of Khurda, being second only to the Raja himself in rank. Besides *jagirs* or grants of land and other perquisites, the family of Jagabandhu had held for several generations the valuable estate of *kila* Rorang at a low quit-rent. This estate was in Jagabandhu's possession at the time of the British conquest; and he was one of the first to proffer submission to Colonel Harcourt in 1803. The settlement of *kila* Rorang was accordingly made with him, but eventually he was dispossessed by a Bengali adventurer, and in June 1814 the Government passed orders that no settlement should be made with him, until he should have established a title to the property in the regular course of law. Jagabandhu was reduced to beggary, and for nearly two years derived his maintenance from the voluntary contributions made by the people of Khurda for his support. He was constantly attended by a ragged tribe of followers, bearing the insignia of state pertaining to his former condition. When advised to institute a suit for the recovery of his estate, he evinced the greatest reluctance to do so, pleading his want of means, the degradation of suing as a pauper, and the uselessness of any reference to the Courts from an Oriya when a rich Bengali was the defendant.

This was the position of Jagabandhu in March 1817 when a body of Khonds, four hundred strong, from the State of Gumsur, crossed over into the Khurda territory and openly unfurled the banner of revolt.[1] The *paiks* rose as one man

[1] For a contemporary account, *see Calcutta Gazette*, April 10, 1817, *Selections*, vol. V, pp. 189-190.

and joined them under their former leader, Jagabandhu. They proceeded to attack the police station and other Government buildings at Banpur, where they killed upwards of a hundred men and carried off some fifteen thousand rupees worth of treasure. The rebels then marched on Khurda itself, increasing in numbers as they proceeded. Their success at Banpur had set the whole country in arms against the British; and, seeing the hopelessness of resistance, the whole of the Government officers stationed in Khurda sought safety in flight. All the civil buildings were burnt to the ground by the rebels, and the treasury sacked. Another body of the rebels advanced into *pargana* Lembai, and murdered one of the native officials, who had rendered himself obnoxious. On the intelligence of these events reaching Cuttack, the authorities at once despatched such a force as they thought would be sufficient to quell the disturbance and restore order. One detachment marched direct to Khurda, and another proceeded to Pipli to protect *pargana* Lembai.

The Magistrate, thinking that his presence would help to restore order, set out on the first of April, accompanied by a detachment of sixty sepoys, with the intention of joining the force which had proceeded to Khurda. On the evening of the following day he arrived at Gangpara, a village only about two miles distant from Khurda. A barricade had been erected here, which was defended by a considerable body of rebels. The British troops were fired upon; and, as it was growing dark, it was resolved to halt for the night and attempt to force the stockade early the next morning. A letter was sent off to the officer who had proceeded to Khurda, begging him to march out with his force from Khurda, so as to place the enemy between two fires. Early next morning the messenger returned with the intelligence that the village of Khurda had been totally destroyed, and that the troops were nowhere in the neighbourhood. There was nothing for it under the circumstances but to beat a speedy retreat. No provisions had been brought from Cuttack, and none were to be procured on the spot. The sepoys were worn out with hunger and fatigue, and the number of the rebels gradually swelled to about three thousand men. As soon as the retreat was commenced, the enemy opened a brisk fire. The English troops kept as much as possible to the open; the *paiks*, on the other hand, kept well under cover of the jungle, from which they suddenly emerged now and again to fire, or to secure

whatever baggage had been dropped or abandoned in the confusion.

The situation was a critical one, but no loss of life was sustained; and after marching without a halt from 5-30 A.M. until 3-30 P.M., the troops safely reached Balkati on the Puri road, and there halted. While preparing to resume their march at 9-30 P.M., they were again attacked under cover of the darkness by a large body of insurgents; but a well-directed volley soon scattered the rebels, and the troops continued their retreat without further molestation. They reached Cuttack on the fourth of April, having lost tents, elephants, and every article of heavy baggage which they had taken with them. The Magistrate wrote to Government as follows:— "This instant returned, after a most fatiguing march of a day and night, from Khurda; I can only write for the information of His Lordship in Council that my retreat was forced, and that the whole of the Khurda territory is in a complete state of insurrection. The insurgents call upon the Raja of Khurda, and Jagabandhu issues orders in his name. Their avowed intention is to proceed to Puri and reconduct him in triumph to his territory."

The detachments of sepoys which had proceeded to Khurda and Pipli were not more fortunate than the Magistrate's party. The officer in command of the Pipli detachment, in attempting to force the rebel position at Gangpara and effect a junction with the Khurda force, was killed at the head of his men. Both detachments were compelled to retreat, with the loss of all the baggage, to Cuttack viâ Pipli. The latter place fell into the hands of the *paiks*, who sacked it and burnt the police station. On the other hand, an officer who had been despatched with a force for the protection of Puri, reached that town on the second of April and found all quiet there. His progress had not been molested in any way, and he wrote to recommend that a force should be detached for the special duty of falling upon the rebels and bringing on a decisive action with them. Accordingly on the ninth of April, an officer with five hundred and fifty men and a few guns, marched on Khurda; and on the twelfth of April martial law was proclaimed in the Khurda territory.

On the morning of the same day a large body of the insurgents assembled at Sukal, a small village near Puri. In the evening they entered the town by the Loknath Ghat, and burnt the Government court-house and several other public

and private buildings. The houses of the European residents were situated then as now on the seashore about half a mile from the Indian town. In these the Indian officers of Government took refuge. The troops were located in the bungalow of the Salt Agent. On the morning of the thirteenth of April, the rebels emerged from the jungle which skirted the town on the east and opened a desultory fire. The sepoys returned it, and the contest was continued for about two hours, but at length the sepoys charged the enemy and drove them back into the town.

The success was, however, only temporary. The insurgents returned in greater numbers, having been reinforced by others of their own party and joined by many of the rebels belonging to the temple and to the Raja's private establishment. Some of the inhabitants of the town also joined the rebels, and the priests of the temple openly proclaimed the fall of the English rule and the restoration of the authority of the ancient line of sacred kings. Being thus hemmed in on three sides by the insurgents and the sea, the British deemed it advisable to beat a speedy retreat to Cuttack by the only road still left open. Provisions were beginning to run short, and it was found impossible to procure a fresh supply. It was important, too, to prevent the Government treasure from falling into the hands of the rebels. Puri was therefore abandoned; and the fugitives, among whom were the Salt Agent and the Collector of the pilgrim tax, reached Cuttack on the eighteenth.

All communication between Cuttack and the southern portion of the Province was now completely cut off; consequently, nothing had been heard of the force despatched to Khurda on the ninth of April, and the greatest apprehensions were entertained for its safety. The detachment, however, reached Khurda without encountering any opposition; and the officer in command, on learning that the insurgents had gone in great force in the direction of Puri, proceeded against them by forced marches. On the second day after leaving Khurda he came upon the rebels, about a thousand strong, drawn up behind a line of embankments. The insurgents, who had never before encountered any large body of disciplined troops, fled in the wildest dismay and confusion as soon as fire was opened. The force resumed its march on Puri, entered the town, and captured the Raja, just as he was on the point of taking flight.

Several other encounters took place between the British troops and the insurgent *paiks*, and the rising spread to Cuttack, where it was stamped out without much difficulty. British authority soon re-established itself everywhere, although the country did not at once recover its accustomed tranquillity and security. Bands of *paiks*, most of them proclaimed offenders and fugitives, continued to infest the jungles of Khurda for some time after the pacification of the rest of the country. They committed, chiefly by night, the direst excesses which the police were powerless to punish or prevent. It was necessary, therefore, in the early part of the year 1818, again to have recourse to military force, and the bands of marauders were at length hunted down. The Commissioners appointed to investigate the causes of this outbreak reported that the Government itself was to a large extent to blame, and that the peasantry had many real grievances to complain of. The resumption of a large tract of service land, the currency regulations, which compelled the people to pay their land tax in silver instead of in cowries as heretofore, the heavy salt duty, the extortions and chicanery of underling Bengali officials, were all bitter grounds of discontent. At the present day, the Khurda estate is a profitable and well managed Government property, and the cultivators are a contented and generally prosperous class.

Raja Makunda deva died a captive in November 1817. His son Ramchandradeva (1817—56) built a new palace on the car road at Puri and amassed much wealth by his thrifty habits. He was succeeded by Virakishoradeva II (1856—62), and the next Raja was Dibyasinhadeva II (1862—77), who was transported for life on a charge of murder. His successor Makundadeva died in 1926, and was succeeded by his adopted son, Ramchandra Deva, a younger son of the late Raja of the Bamra State.

Archæological remains.

To the archæologist, Puri is a most interesting district. On the western border have been found dolmens and other traces of prehistoric peoples. The Dhauli hill near Sardeipur contains the oldest carving of an elephant known in India, besides edicts of Asoka inscribed in the latter half of the third century B.C., which, with one exception, are the oldest Indian historical inscriptions. Nine miles to the north lie the caves of Khandagiri and Udayagiri, the earliest Jain caves and Jain remains as yet authenticated, which modern research

has shewn to have been excavated between the third and first century B.C. Midway lies the holy city of Bhubaneswar, which is crowded with numerous Saiva temples and contains fine gems of artistic architecture, like the shrines of Parasurameswar, Sisireswar, Kapalini, Mukteswar, Rajarani, and magnificent structures, such as the temples of Lingaraj, Basudeva, Brahmeswar and Megheswar. These temples range over several centuries, and were apparently constructed from the eighth to the twelfth century A.D. Parasurameswar is the oldest; Megheswar and Basudeva are the latest; and the great temple of Lingaraj may be ascribed to the middle of the epoch, being built about the tenth century A.D.

The place of pilgrimage described in early works, such as the Mahabharata, as being on the seashore on the road to Kalinga may or may not be the old site of Purushottam Kshetra; but it is, at any rate, clear from inscriptions that the present temple of Jagannath was built under the orders of king Chodaganga, probably in the first half of the twelfth century. The temple of Markandeswar may be somewhat earlier, but the present Gundicha Mandapa was built at a considerably later date. Of the tanks in the town of Puri, Indradyumna, Markanda and Swetganga seem to be the oldest, while the Narendra tank was built later in the fourteenth century. The imposing temple of the sun-god at Konarak, justly described as the most exquisite memorial of sun-worship in India, is another monument of the Ganga dynasty, having been built under the orders of Narasinhadeva I in the third quarter of the thirteenth century.

There are numerous other temples in the district of archæological interest, such as the temple of Gopinath at Satyabadi, of Nilkantheswar in Kotdesh, and of Durga at Banpur. The western part of the district is studded with the remains of old forts, the oldest of which is the fort at Sisupal close to Bhubaneswar, which is probably anterior to the rule of the Ganga kings, while the remains at Khurda date back to the last days of the Khurda kings. A more detailed account of the archæological remains will be found in Chapter XVI.

ARCHITECTURE.

Architecturally, the temples of this district are of great interest as showing the gradual evolution of a peculiar style of Hindu architecture. This style, which is a local development of the Indo-Aryans, is called Orissan, from its exclusive

prevalence in Orissa,[1] but imitations of it spread as far south as Mukhalingam in the Ganjam district of the Madras Presidency, as far north as Barakar in the Burdwan district of Bengal, and as far west as Rajam in the Raipur district of the Central Provinces. Puri district, however, contains the most numerous and also the best examples of this style.

An examination of the architectural details of the different temples reveals at least three sub-types. The first may be called the Parasurameswar sub-type, after its best and oldest example at Bhubaneswar. These temples are neither large nor high, the largest, the Parasurameswar temple, being only twenty-one feet square outside and less than sixty feet high; their carvings are well executed and kept subordinate to the general plan. Gradually, the temples became larger, higher, and more elaborate, as size, massiveness and elaborate detail came to be regarded as more important than fine execution, symmetry of proportion, and the severe beauty of a simple, well-conceived plan. The vast majority of Orissan temples are of this class. They are more or less repetitions of one another, but signs of at least two sub-groups may be traced, viz., the Brahmeswar and the Lingaraj.

The Parasurameswar group is represented by the shrines of Parasurameswar, Sisireswar and Kapalini (miscalled Baitala Deula) at Bhubaneswar which seem to have been built between the eighth and the tenth century A.D. A feature of interest in the last named is the introduction of crowning members, definitely reminiscent of the Dravidian Rath. Chronologically, the Brahmeswar and Lingaraj types overlap, but in the long run the Lingaraj type prevailed in Orissa to the exclusion of the former. The best specimens of the Lingaraj type were constructed between the tenth and thirteenth century A.D., and include such magnificent temples as Lingaraj (with Bhagavati's shrine), Basudeva, Yameswar and Megheswar at Bhubaneswar, the temples of Jagannath and Markandeswar in Puri town, and the sun-temple at Konarak. The Brahmeswar type falls between the tenth and twelfth century A.D. and includes several fine temples at Bhubaneswar, such as Brahmeswar, Rajarani, Kedareswar and Chitrakarni.

The most flourishing period of the architectural art of Orissa appears to have been between the eighth and the

[1] R. L. Mitra's *Antiquities of Orissa*, vol. I, p. 24; Fergusson's *History of Indian and Eastern Architecture*, Book VI, Ch. II, p. 414 *et seq*; Prof. Fletcher's *History of Architecture*, p. 618.

thirteenth centuries A.D., beginning with the temple of Parasurameswar, reaching its meridian in the great temple of Lingaraj, and closing in the massive structure of Konarak. The grandeur of the general plan, the elaboration of minute details, the gigantic size of the stones and iron beams used, the minute and often exquisitely cut carvings in the large number of temples still surviving, all combine to justify the description of the Orissan style of arthitecture as "one of the most complete and interesting styles of Indian architecture."[1]

[1] Fergusson's *History of India and Eastern Architecture*, p. 485.

CHAPTER III.

THE PEOPLE.

GROWTH OF POPULATION.

THE first census of the district was taken in the year 1872, and the result was to show for the district, as now constituted, a population of 769,779 persons. During the next ten years the population increased by no less than 15·4 per cent., being returned in 1881 at 888,592 souls, but it is probable that a large part of the increase was due to greater accuracy of enumeration. However this may be, the growth of population appears to have been sustained; for, notwithstanding repeated outbreaks of cholera and small-pox during the ensuing ten years, the number of inhabitants in 1891 was returned at 944,998, representing an increase of 6·4 per cent. In the following decade there were droughts and epidemics in several years; in 1891 the crops suffered from insufficient rain early in the monsoon, and from an exceptionally heavy flood caused by a cyclone in November. On account of short rain in 1896 the crops again failed, and the year 1897 was a year of famine, though relief operations were necessary only in the neighbourhood of the Chilka lake and in parts of Khurda; and in 1900 the country round the Chilka again suffered from scarcity due to short rainfall. Nevertheless the census of 1901 showed another increase of 7·6 per cent., the population having risen to 1,017,284. This increase was, however, partly explained away by the fact that a great religious festival was in progress in Puri on the day of the census.

Between 1901 and 1911 the population remained almost stationary, the total increase being only 6,118; the increase, such as it was, occurred almost entirely in the Khurda subdivision. There had been failures or partial failures of crops in 1901, and again between 1905 and 1908; in the last of these years famine conditions prevailed in some areas and relief operations were found necessary.

In the succeeding ten years conditions were even less favourable. The conditions prevailing, and the result of the census are thus summed up in the Bihar and Orissa Census Report of 1921:

"In 1911 the rainfall was ten inches in defect, but the year was healthy. In 1912 the rainfall was in excess and a

cyclone in October damaged the crop of winter rice; there was a severe outbreak of cholera and the death-rate rose. The next four years were fairly healthy and the crops were fair also. The birth-rate reached its highest point (nearly 43 per mille) in 1914 after which it showed a steady decline to the end of the decade. In 1917 abnormal rainfall in November damaged or washed away the rice crop and relief operations had to be started in the Chilka area and in some villages in the Sadr subdivision, but owing to the stoppage of exports the price of food-grains remained lower than it would otherwise have been. There were many deaths from fever in this year and the death-rate rose by 9 points per mille. The rainfall of 1918 was normal in quantity but disastrously distributed. Floods occurred in June which damaged the seeds in the fields and in September the rain ceased. Owing to the outbreak of influenza at the end of the year the death-rate rose to 47·69 per mille, but it was not till 1919 that the wave broke in its full force. In that year circumstances combined to raise the death-rate to no less than 70·31 per mille. The floods of 1917 and the drought of 1918, following on a series of years in which there had been no really good crop, had reduced stocks and raised the prices of local produce: the prices of imported articles had also risen as the result of four years of war. The supply of drinking water was impaired by the drought and past experience pointed to the likelihood of a severe outbreak of cholera and dysentery. In this direction the worst fears were realized and the epidemic of influenza also occurred at the same time. The number of deaths that occurred in 1919 was 72,000 or more than twice the number of births (34,000). When the rain of 1919 came, it came in excess and a large tract in the Sadr subdivision was inundated. Heavy rain fell again in November and damaged the *rabi* crop in the same area. The price of rice rose from 6½ to not quite 4½ seers to the rupee, and gratuitous relief had to be distributed on a large scale in this year and continued in 1920. The distress of the year is reflected in the birth-rate of 1920 which sank to less than 26 per mille, while the death-rate was still high, chiefly owing to heavy mortality from fever. Except in Gop thana however the rice crop of 1920 was an average one; by the middle of November the general relief work was closed down and by the end of the year the price of rice at last showed signs of falling.

"After this chapter of disasters it was only to be expected that the census would show a decrease of population. The natural decrease of the decade, representing the excess of the deaths over the births, was 26,000, the decrease being fairly equal between the sexes. The census showed that the population had declined by 71,751 or 7.01 per cent., the decrease of males amounting to over 51,000 and of females to 20,000. The loss was shared by every thana; Khurda lost rather more than the Sadr subdivision, but on the whole the loss was very evenly distributed throughout the district. The migration figures throw light on this decrease. If the natural decrease in females during the last decade and the further loss by migration be deducted from the actual population of 1911, the figure arrived at is very nearly the actual number of females in 1921. If the same process is applied to the males the result fits less neatly, but here also the greater part of the decrease can be accounted for by the recorded facts of migration and natural decrease. Puri and Balasore have both fared much worse than Cuttack during the last decade, but Puri has escaped rather more lightly than Balasore; Puri's losses have been rather less, and more of them can be written off to migration."

The following tables show the main figures of the last two decades.

Population by Thanas, and variation since 1911.

—	Population, 1921.	Percentage variation.	
		1911—21.	1901—11.
Whole District	951,651	−7·01	+0·60
Sadr Subdivision	614,754	−6·26	−0·34
Puri Thana	242,190	−7·79	−1·43
Gop „	110,337	−4·04	+0·53
Pipli „	262,227	−5·72	+0·36
Khurda Subdivision	336,897	−8·35	+2·33
Khurda Thana	237,727	−8·98	+2·71
Banpur	99,170	−6·82	+1·41

Emigration and Immigration.

	1921.		1911.	
	Males.	Females.	Males.	Females.
Actual population	455,543	496,108	506,570	516,832
Immigrants	13,519	23,291	17,667	25 773
Emigrants	31,552	25,085	16,123	19,397
Natural population ...	473 576	497,852	505,026	510,456

The statistics of births and deaths, being based on the reports of chaukidars, naturally cannot be strictly accurate, and this explains the discrepancy pointed out by Mr. Tallents in the numbers of the male population. The total population in 1921 was about 6,000 more than in 1891. The increase in the number of emigrants as compared with 1911 indicates the extent to which people now avail themselves of the facilities for emigration, so supplementing their incomes in times of agricultural stress by labouring in other districts; over thirty-one thousand males born in Puri were enumerated in districts outside the province, not only in Bengal, but also in Burma, Madras and Assam.

Density of population.

The average density of population in 1921 was 382 persons to the square mile. If the area of the Chilka lake be excluded the average density is about 480 persons to the square mile. This constitutes a denser population than that of any of the Chota Nagpur districts; it is denser than Gaya, Shahabad and Purnea of the Bihar districts; it is as dense as that of Balasore, but not so dense as Cuttack. The most densely populated thana as a whole is Pipli, where soil is fertile, and the population is 700 persons to the square mile. The density in the inland portion of Puri thana, excluding the Chilka lake, and the sandy strip along the sea, is very little less than this. In these areas, consisting roughly of the police-stations of Nimapara, Pipli, Balianta, Balipatna, Delang, Satyabadi, from seventy to eighty per cent. of the total area is cultivated. In Gop and Khurda thanas the density of population is about equal, viz., 383 in the former and 393 in the latter; in these, unlike Pipli and the parts of

Puri mentioned above, there is still room for expansion of cultivation; for example in Gop, more than half the area which is at present uncultivated (which comprises about 45 per cent. of the whole), is capable of being cultivated. The lowest density of population is in Banpur, which consists largely of hill and reserved forest and contains only 271 persons to the square mile.

Migration.

The centres of Puri, Bhubaneswar, and Satyabadi attract thousands of pilgrims every year, principally at certain festivals. Railway statistics do not indicate that there is any marked tendency for the volume to decrease or increase, though the numbers fluctuate from year to year. The number of passengers carried into Puri town by rail is about three and a half to four hundred thousand annually, to Bhubaneswar about a hundred thousand, to Satyabadi a little less, and to Khurda Road about a hundred and forty thousand. The only other stations with considerable passenger traffic are Delang with about thirty thousand, Kalupara Ghat with twenty-five thousand, and Balugaon with about thirty thousand. These last two have shown a tendency to increase, as compared with pre-war days, the traffic consisting mainly of labourers in search of and returning from work in other districts. At the census of 1921 the number of natives of Puri enumerated in other districts was seventeen thousand more than in 1911. Unlike Bihar, emigration from Orissa had vastly increased during the decade, as a result of the bad times. For every hundred males enumerated in the district, seven males born in Puri were enumerated outside. The migration is mainly periodic, the emigrants going out after the rice harvest and returning at the break of the monsoon, bringing with them what they have earned by general labour.

Though the passengers into Puri, Bhubaneswar and Satyabadi are mainly pilgrims, it is not possible to estimate the total number of pilgrims coming into the district by adding together the figures for these three stations, as large numbers come from a long distance and do all these pilgrimages in succession. On the other hand large numbers perform the journey between these three places on foot, and some come into the district on foot, even from places as far distant as North Bihar. At the times of festivals there is a stream of pilgrims on foot along the Pilgrim Road in the district, particularly between Puri and Satyabadi.

Towns.

The only town in the district is Puri, the permanent population of which in 1911 was 34,393, and in 1921 was 36,451. The gross population is a variable quantity; in 1911 it was about 40,000, owing to the presence of 5,000 pilgrims; in 1921 the gross population was 38,694, the number of pilgrims being only 2,243. The permanent population has steadily increased, for in 1872 the total population, including pilgrims, was less than 22,000. Building operations proceed continually; about ten thousand maunds of stone come in annually by rail, and there is usually a stream of carts coming in laden with bricks from the brick-fields a few miles out on the Trunk Road.

In the rest of the district, just over half the people live in villages of less than 500 inhabitants; there are 366 villages with populations between 500 and 1,000, containing in all rather more than one quarter of the total population; and 113 villages of over 1,000 inhabitants containing about 182,000 people.

GENERAL CONDITION OF THE PEOPLE.

The account of the general condition of the people given in Mr. (now Sir H.) McPherson's Settlement Report of 1900, still applies with little modification. The condition of the average cultivator has slightly improved since that date. The opening up of communications has raised the price of agricultural produce more than it has raised rents, which in fact remained practically stationary from 1900 until the revision settlement which began in 1923. The cultivator therefore has a bigger balance left to purchase other articles, and the result is indicated by the increase in the last decade, as compared with the previous decade, of the import into Orissa, of such articles as kerosene and other oils, of spices, sugar and tobacco, and of opium, all of which have increased in volume by from ten to fifty per cent. It is nevertheless true that the average cultivator is continually in debt, for nothing is laid by in the good years to provide for the bad years which periodically, and in some places, frequently, occur; and much money is wasted on marriage and other ceremonies. He then has recourse to the local money-lender, whose usual rate of interest is from 25 to 37½ per cent; and once in debt he very rarely gets out of it. Co-operative credit societies are doing something to relieve this indebtedness by encouraging thrift and reducing the rate of interest; but at present there are only 466 of these with a membership of about 8,600.

The following statement indicates the economic position of the average cultivator.

The census shows that 506,073 persons in the district were ordinary cultivators, i.e., including dependants but excluding labourers and rent-receivers. Assuming the proportions to be the same over the whole district, then in the Sadr subdivision out of a total population of 614,754 persons, about 327,000 are actual cultivators. About 315,000 would be in that part which has so far come under revision settlement operations in this subdivision, in which the net cultivated area is just over 420,000 acres. Of this not more than 40,000 acres is in the cultivation of the landlord classes, so that the average amount of raiyati land per head is about 1·20 acres. A family of five persons (consisting of one child under ten, one about fifteen and one adult, besides father and mother) would thus possess on the average a holding of six acres.

Facts collected during the settlement operations in 1925 from ten families in different parts of the district, indicate that the rent, cost of seed and cost of cultivation (if all the labour be hired and none done by the family itself) would absorb about thirty-seven per cent. of the gross produce of such a holding, including such miscellaneous produce as straw, fruit of mango or coconut or other trees. The food, oil, etc., required by the family would absorb another fifty-five per cent., clothing six per cent. and annual repairs to house five per cent. The average family in these circumstances spends about one to two per cent of its income in presents to village servants, such as the barber, washerman, and blacksmith; and about six per cent. on ornaments, betel-nut and other minor luxuries. Allowing something more for other expenditure such as religious ceremonies and interest on debts, it is seen that the expenditure exceeds the income by about fifteen per cent. In practice a large portion of the labour is performed by the family members, and thus the budget can be balanced. On the other hand, though the average holding of such a family may be six acres, there must be thousands of families with less than six acres. These have to supplement their incomes by labouring for their more well-to-do neighbours, or on the landlord's own land, which they cultivate on produce rent, or by some subsidiary occupation, or by sending one of their number abroad. Seven per cent. of the rent-payers were found to have some subsidiary occupation, and for every hundred males

there are seven emigrants. Brahmans are usually prevented by caste rules from handling the plough, so that a Brahman family with an average holding or less is hard put to it to make ends meet, and may have to depend on fees paid by religious clients for priestly duties. The agricultural labouring classes, who number about one to every family of cultivators, have to depend for their livelihood on the labour which is not done by the cultivators' families, and on the cultivation of the landlord's land.

Food.

The income from the cultivators' holding does not allow of luxurious expenditure under any head. The food consists of rice prepared by the cultivators' own labour from the paddy reserved for home consumption, of dal, oil, spices and salt; fish caught in neighbouring streams or swamps is occasionally added to the fare; of the fish caught in the rains part is reserved for future use. The unconsumed boiled rice is mixed with water and left over for the next day's meal. This is locally called *pakhala*, and is eaten with greater relish when spiced with salt and mixed with vegetables produced from the kitchen garden. Meals are served hot during the day only to old men and children in well-to-do families.

Dress.

The dress of an ordinary cultivator is a *dhoti* and a *gamchha*, while the women wear the ordinary *sari*. The man will require as a rule two *dhotis* and two *gamchhas*, and the women two *saries* and a *gamchha*. Well-to-do people now use shirts and coats, and most people have also a *chadar*; and some wear country-made shoes. The clothing consists usually of locally made, or Indian Mill made, cotton cloth. Cheap cotton umbrellas have come largely into use, and the majority of cultivators possess one; hurricane-lanterns are frequently found replacing the country-made wick. Gold and silver ornaments are used to a very limited extent. Women of the cultivating classes generally wear brass or *kansa* ornaments, and sometimes bangles of glass or shellac.

Minor Luxuries.

Naturally there cannot be much expenditure on luxuries in a family existing on a few acres of land, whose produce is worth something in the neighbourhood of Rs. 200 per annum. Every cultivator provides himself with a little *pan* and betel-nut. The consumption of opium, which is widespread, is more than one-tenth of that of the whole province, and of *ganja* nearly one-twentieth, though the population is only about one-thirty-fifth of the whole. The consumption of

country spirit and toddy however is almost nil, so that the total revenue per head from excise for the district is less than the average of the province.

Houses. The houses are built of mud and timber. Each house is generally divided into two compartments; one of these is called the *dandaghara*, where the bullocks are kept, and the other is set apart for the women's quarters. Alongside the house there is a verandah, on which visitors are received. The dwelling-house of an ordinary cultivator costs very little. Bamboo groves are found in almost all village sites. The string used is made of coconut fibre. The thatching straw and labour are their own. Brass and *kansa* utensils are much used. We now find in the house of almost every cultivator a brass vessel (*gara*) for carrying water, a brass or *kansa* jug (*dhala*), a brass or *kansa* plate (*thali*), and a few brass and *kansa* cups (*gina*).

Marriage. There is nothing peculiar to note about marriage customs except that child marriage is less prevalent here than it is in the rest of the province. Less than one per cent of the girls in the district are married before the age of ten; and less than eight per cent are or have been married before the age of fifteen; whereas in the province as a whole the corresponding figures are over nine per cent. and nearly twenty per cent., respectively. The consummation of marriage before the girl reaches the age of puberty is strictly forbidden; and the census figures shew that the practice of child marriage is substantially decreasing. Widow marriage is permitted to some extent except among the higher castes; but the population of widows among the female population (about twenty-one per cent.) is higher than the provincial average of eighteen per cent., a result of Hindu orthodoxy.

Ghajia is the name of a peculiar marriage custom obtaining in Kotdesh. According to this custom, a man obtains his wife by working for her. When a man is too poor to pay his marriage expenses, they are met by the parents of the girl, on condition that the man will remain and work for them in the fields till the amount has been made up.

Religious festivals. The most important festivals observed by the people are the Doljatra, Chandanjatra, Rathjatra, and Rasjatra, in which all join. During these festivals the idols are brought in procession with music; and village boys and young men are

regularly taught and rehearsed in some central place, large mango topes near the river side being generally selected. In these *jatras* primitive and rustic theatrical entertainments are also given.

Every village has its *Bhagwatghar*, *i.e.*, a place where sacred books are deposited and read at night, and also its village idol. For the maintenance of the former the villagers contribute. If any stranger puts up in the *Bhagwatghar*, he receives hospitality from the villagers even if he is not known to any one of them. The Gram Thakurani or village deity, who is supposed to be continually moving about the village, generally resides under a large fig or *pipal* tree. She is believed to cure sickness among children, and to be specially active during outbreaks of cholera and small-pox, when special offerings are made to her.

Summary. The villages and countryside in the more prosperous parts of Puri present an attractive appearance, such as the greater part of Pipli thana and Khurda subdivision, and parts of Gop and Puri thanas. The villages there are usually shady and neat, and the country is fairly well timbered and comparatively free from flood and drought. The condition of the tenants in the Khurda estate is, in fact, said to be better than in any other part of Orissa. This is ascribed to the following causes :—the fertility of the soil; the facilities for grazing cattle; the supply of fuel and building materials; the low rents; the fixity of the demand; the absence of illegal taxation; the fixity of tenure; the grant of remissions in bad years; the improvements made in irrigation, water-supply and communications; and the general administration of the estate. The result is reflected in the price of raiyati land in Khurda, which is higher than in any other part of Orissa.

Next in order of prosperity come the Pipli thana, and the inland parts of Puri and Gop. These two are fertile and to a great extent immune from flood; but rents are higher and the land is not better than that of Khurda. Lastly comes the lowlying country lying mainly round the north-eastern end of the Chilka, and between there and Puri, and the lowlying trough which extends more or less through the whole length of the district, a few miles inland and parallel to the sea. This is liable to periodical floods, which, though they may and usually do make a deposit of silt which produces a better crop in the next year, cause a fluctuation in the harvests, the

result of which, with an improvident peasantry, is indebtedness. In the worst of these parts rents are extremely low, being about Re. 1 to Rs. 1-8 per acre, and raiyati rights are sold for about fifty rupees per acre. The general outlook of the country is depressing, with open treeless plains dotted with villages.

CHARACTER OF THE PEOPLE.

The impression gained of the Oriya character is likely to vary with the class with which the observer comes in contact. The most highly-educated classes are as intelligent as in any part of the province; but in the villages the more well-to-do people are generally divided into factions and much given to litigation. The ordinary uneducated cultivator is superstitious and obsessed with caste prejudices; he is less industrious and slower to understand his own rights and interests than the Bihar peasant; but his home is neater and tidier; he is mild and inoffensive and generally law-abiding. The land riot which is so common in Bihar is almost unknown in Puri, though the total number of criminal cases reported is no less, in proportion to the population, than in the province as a whole. The Brahmans and priests have a strong hold over the ignorant villagers, but there are some indications that the hold is not so firm as it was. Oriyas working as personal servants are generally regarded in other parts of Bengal and Bihar, as hardworking and trustworthy, and sometimes accompany their masters all over India; not many of these come from the Puri district. Methods of agriculture have changed but little; but the inhabitants of the district are becoming a little more enterprizing and ready to emigrate than they were.

There is no doubt that the damp and enervating climate is largely responsible for a love of ease and lack of ambition and capacity to take pains. Those who emigrate enjoy a higher reputation in this respect than those who remain at home. In justice, moreover, to the Oriyas, it should be remembered that they have long been a conquered nation, and that from the middle of the sixteenth century they were continually oppressed, first by the Afghans, then by the Mughals, and lastly by the Marathas, "whose administration," writes Stirling, "was fatal to the welfare of the people and the prosperity of the country, and exhibits a picture of misrule, anarchy, weakness, rapacity and violence combined, which makes one wonder how society can have kept together under so calamitous a tyranny." It would have been strange, if the Oriya character had not been affected by such tyranny, which

discouraged thrift, promoted improvidence, and tended to make the people feeble and timid.

There has also been another influence at work which helps to account for their want of spirit and enterprise, the fact that from time immemorial they have been a priest-ridden race, kept in subjection by the Brahmans and Gurus, and subject to all the influences of religious superstition and caste prejudice. Until half a century ago, the Brahmans and Karans held the monopoly of education and kept it strictly in their own hands. The efforts of Government to diffuse education met with great opposition. The schools were looked upon as infidel inventions; and even as late as 1860, a learned Oriya, on being appointed to the orthodox post of Sanskrit teacher in the Puri school, was excluded for a year or two from the Brahmanical orders, and stormy discussions took place as to whether he should not be formally expelled from his caste. Not only had the Brahman and Karan the monopoly of education, but no one outside the priestly caste might plant even a coconut tree. These profitable trees were only planted by non-Brahmanical hands after the advent of the missionaries, and the Oriya Christian who had been the first to break the immemorial custom was regarded for many years as a man lying under the wrath of the gods.[1]

A third important factor in the development of the national character has been the liability of Orissa to physical calamities. This has been largely instrumental in promoting thriftlessness and idleness. The ruin of crops and houses by cyclones, the loss of life and destruction of property caused by storm-waves, the drought following short rainfall and the floods which are due to its excess, all these are calamities, the very prospect of which induces improvidence, while their occurrence results in indebtedness and poverty. In these circumstances, it is perhaps not surprising that the raiyat, whom the inclemency of the seasons may deprive of half his produce in any year, should exhibit an oriental fatalism and show little desire for progress.

LANGUAGE. Oriya is the mother-tongue of the great majority of the people, but a few other languages are also in use. Muhammadans speak a kind of ungrammatical Urdu among themselves; some of the *mahants* from Bihar and immigrants from Northern India talk Hindi; Bengalis talk their own

[1] *Orissa*, by Sir W. W. Hunter, vol. ii, pp. 139—141.

language, at least among themselves, and so do the Telugu boatmen and fishermen from the Madras Presidency

With these exceptions, the language of the district is Oriya. Oriya,[1] or as it is sometimes called Odri or Utkali, *i.e.*, the language of Odra or Utkal, both of which are ancient names for the country now called Orissa. Oriya, with Bengali, Bihari and Assamese, forms one of the four speeches which together make up the eastern group of the Indo-Aryan languages. Its grammatical construction closely resembles that of Bengali, but it has one great advantage over Bengali in the fact that, as a rule, it is pronounced as it is spelt. There are few of those slurred consonants and broken vowels which make Bengali so difficult to the foreigner, and each letter in each word is clearly sounded. The Oriya verbal system is at once simple and complete. It has a long array of tenses, but the whole is so logically arranged, and built on so regular a model, that its principles are easily impressed upon the memory. It is particularly noticeable for the very complete set of verbal nouns, present, past and future. When an Oriya wishes to express the idea embodied in what in Latin would be called the infinitive, he simply takes the appropriate verbal noun, and declines it in the case which the meaning requires. As every infinitive must be some oblique case of a verbal noun, it follows that Oriya grammar does not know the so-called infinitive mood at all. In this respect Oriya is in an older stage of grammatical development than even classical Sanskrit, and, among Indo-Aryan languages, can only be compared with the ancient Sanskrit spoken in the Vedic times.

The archaic character, both of form and vocabulary, runs through the whole language, and is no doubt accounted for by geographical position. Orissa has ever been an isolated country bounded on the east by the ocean, and on the west by the hilly tracts inhabited by wild aboriginal tribes. On the south the language is Dravidian and belongs to an altogether different family, while, on the north, it has seldom had political ties with Bengal. On the other hand, the Oriyas have been a conquered nation. For eight centuries Orissa was subject to the kings of Telingana, and, in modern times, it was for fifty years under the sway of the Bhonslas of Nagpur, both of whom left deep impressions of their rule upon the country. On the

[1] This account of the Oriya language has been condensed from Sir G. Grierson's Linguistic Survey of India, vol. v.

language they imposed a number of Telugu and of Marathi words and idioms, which still survive. These are, so far as we know, the only foreign elements which have intruded themselves into Oriya, except the small vocabulary of English court terms and certain other English expressions, which English domination and education have brought into vogue.

Oriya is remarkably free from dialectic variation. The well-known saying, which is true all over the north of India, that the language changes every ten kos does not hold in Orissa. In what is known as the Mughalbandi, which consists of Cuttack, Puri and the southern half of Balasore, the language is one and the same. "Three localities," writes Sir G. Grierson, "each claim to be the place where Oriya is spoken in its greatest purity, viz., Cuttack, Khurda in Puri, and Gumsur in the north of Ganjam. Probably Khurda has the greatest claim to being considered the well of Oriya undefiled."

Written character.

Oriya is encumbered with the drawback of an excessively awkward and cumbrous written character. This character is, in its basis, the same as Devanagari, but is written by the local scribes with a stylus on a palm-leaf. These scratches are, in themselves, legible, but in order to make them more plain, ink is rubbed over the surface of leaf and fills up the furrows which form the letters. The palm-leaf is excessively fragile, and any scratch in the direction of the grain tends to make it split. As a line of writing on the long, narrow leaf is necessarily in the direction of the grain, this peculiarity prohibits the use of the straight top line, or *matra*, which is a distinguishing characteristic of the Devanagari character. For this the Orissa scribe is compelled to substitute a series of curves, which almost surround each letter. It requires remarkably good eyes to read an Oriya printed book, for the exigencies of the printing press compel the type to be small, and the greater part of each letter is this curve, which is the same in nearly all, while the real soul of the character, by which one is distinguished from another, is hidden in the centre, and is so minute, that it is often difficult to see. At first glance, an Oriya book seems to be all curves, and it takes a second look to notice that there is something inside each.

Literature.

Oriya literature is of comparatively recent growth, none of the existing works, so far as can be ascertained, going back beyond the sixteenth century A.D. It consists exclusively

of verse, and as is natural with a conservative people like the Oriyas, the earliest works extant are religious, viz., a few songs and certain paraphrases of the Sanskrit Puranas and epics. No work is so much venerated as the *Bhagabata* of Jagannatha Dasa; and next in estimation come the *Ramayana* of Balarama Dasa, the *Bharata* of Sarola Dasa and the *Harivansa* of Achyutananda Dasa. All these were composed in the first half of the sixteenth century A.D., to which period may probably be referred popular songs like the *Kesabakoili* or cuckoo-song about Krishna. Profane literature appeared later, and at first dealt only with mythological stories. Among the oldest of these is the poem *Rasa-kallola* by Dinakrishna Dasa. This poem describes the early career of Krishna, and is a favourite with the Oriyas; its versification is peculiar in making every line begin with the same letter *ka*.

The most famous of the Oriya poets is Upendra Bhanja, who flourished in the beginning of the eighteenth century. One of the royal family of Gumsur, a petty hill State in the north-west of Ganjam, he was driven to take refuge in Orissa in the course of a civil war, and there devoted his life to Oriya literature. Of his voluminous compositions, forty-two are at present known, the bulk of them consisting of poems with love stories as their theme. He was apparently the first Oriya poet to free himself from the trammels of exclusively religious and mythological influences. His poems labour under the defects of obscenity and unintelligibility, but have a fluent and graceful versification, and display a mastery over Sanskrit vocabulary and the rules of composition. His only rival in the latter respect is Abhimanyu Samantasinghar (who died in 1806), the author of the *Bidagdha-Chintamani*, which explains in lucid lines the abstruse doctrines of Vaishnavite *Bhakti* and *Prema*. During the British period Oriya poetry has shown no progress. It is represented by a few doggerel compositions and some small pieces of verse, among which a collection of short poems by Rai Radha Nath Rai Bahadur, late Inspector of Schools, Orissa, deserves notice. Prose is, however, being carefully studied and has a promising future.

The bulk of the population of the district consists of Oriya castes, but many little colonies from other parts of India have settled in the district. Among the official and landed classes there is a fair sprinkling of Bengalis, who long monopolized almost all the offices of trust in the administration and purchased many valuable estates. Some of the richest Bengali

land-holders are absentees, living in Calcutta, and seldom or never visiting their estates, but many among the official classes and smaller proprietors have gradually settled down in the district, and consider themselves naturalized in it. A small number of Telugus have come from the south, and established themselves along the coast and on the shores of the Chilka. Among these may be mentioned the Kumutis from the adjoining district of Ganjam, who mostly reside in Puri town, and live by wholesale and retail trade, and the Nuliyas from the same district, who have practically the monopoly of deep-sea fishing.

A few immigrants from Bihar and the United Provinces have also settled in the district; while the trading classes contain families who have come from Bhojpur, Bundelkhand, and other parts of North-Western India. The Marwaris have also effected settlements; they are the leading cloth merchants, and buy up the surplus crops of the year for exportation. A very few Marathas survive from the time when the country was in the hands of their race. They live chiefly by trade, or enjoy little grants of land.

Aboriginal races.

A large proportion of the population still consists of aboriginal races or semi-Hinduized castes, such as Bauris, whose numbers have decreased from 84,000 to 74,000 since the census of 1911, Sahars or Savars (18,000), Pans (5,400) and Khonds (1,600). They support themselves by the sale of wood and other jungle produce, or by working as labourers for Oriya landlords. In the latter case their services are remunerated by wages paid in kind or by permission to cultivate a portion of the farm as a kind of service tenure, provided that they perform all the heavy field work on their master's holding. Every village in Khurda where these aborigines dwell has its Bauri or Savar quarter. They are the Gibeonites of Orissa, of whom Sir John Edgar, formerly Chief Secretary to the Bengal Government, has given the following account :—

" During my stay in Orissa, I was startled to find these people described as Pariahs, this term being clearly used as the equivalent of Paharia or hillman. I had never before heard such a use of the word Pariah, and it is undoubtedly irreconcilable both with the received etymology and supposed history of the word. Still, in its application to the aborigines of Orissa, it indicates accurately their origin and position. They are evidently the descendants of the forest races by

whom the uplands of Orissa were inhabited before the Aryan conquest. Their ancestors, hemmed in on all sides by the advancing immigrants, either took refuge in the then inaccessible hills of the interior, or remained as landless serfs in the tracts once held by them, helping their conquerors to work in the fields, or being employed by them in weaving and other handicrafts or in menial work. Even these serfs, however, so long as the forests remained uncleared, were not deprived by their conquerors of the use of them. They were able to catch game, to collect the various edible roots and fruits, which form so important a part of a hillman's food, to cut timber for their own use or for sale, to collect materials for basket work, and to make use of the forest in a thousand other ways. Besides this, the aboriginal people were in the habit of utilizing the uplands not suited to the plough cultivation of the Hindus for their hoe cultivation, which is locally known as *toila*, mainly carried on upon newly-cleared portions of scrub-jungle and yielding abundant crops of early rice, oil-seeds and cotton.

"Of late years, however, the enormous extension of cultivation which has followed on the security of our rule has constantly lessened the area of forest and waste land, which in former days had been looked upon as only fit for *toila* cultivation, but has now been brought under the plough. Again, economic changes, like the substitution of foreign-made cotton goods for the produce of the native looms, have tended to deprive the aborigines of some of their occupations. At the same time, it must be said that their wretched condition is aggravated by the hostility, or at least want of sympathy, of the Hindu population of Orissa, which contributes much to keep the Pariahs in their present state of degradation. A striking illustration of this is afforded by their exclusion from the great temple of Puri. Hindu tradition declares that Jagannath was originally a god of the aboriginal Savars, and that he was transferred to the Hindus by the stratagem of a Brahman. Anyhow, he is emphatically the god of the poor, and the distinctive feature of his worship is the levelling of all differences of rank and caste in his temple. But he is the god of the Hindu poor only, and no aboriginal caste is allowed to enter his temple, not even the Savars, whose god he is acknowledged to have been originally."

RELIGIONS. Christians.

According to the census of 1921 Hindus number 930,285 or 97.7 per cent. of the population, and Muhammadans 19,774

or 2·1 per cent, while there are 1,286 Christians. Of the latter 1,009 are Indians, chiefly converts of the Baptist Mission, which has stations at Puri, Pipli, Khurda, and other places.

The Baptist Mission was established at Puri, more than 100 years ago, owing largely to the efforts of Dr. Claudius Buchanan, Vice-Provost of the College of Fort William, who visited the town in 1806, and there witnessed the great Car Festival. A zealous Christian, he strongly advocated the establishment of some Christian institution near the temple, and the result was that in 1822 Cuttack became a centre of missionary labour with an outstation at Puri. The first Baptist missionary at Puri was the Revd. William Bampton, who arrived from England in 1822, died after nine years' service in Orissa, and was buried in the small cemetery at Puri. The first Oriya convert was a Brahman, who was baptized in 1828.

Muhammadans.

The Muhammadans, once a dominant race in Orissa, are now an insignificant minority, said to be generally poor, proud and discontented. They include a few descendants of Afghan families from Northern India, but, as a rule, they are descendants of the common soldiery, camp-followers, and low caste Hindu converts. The latter, however, are not numerous, for the Muhammadan religion has never made any progress among the native population. The Muhammadan conquest was not only late chronologically, but failed to attain the same permanence and completeness as it did in Bengal. There was no effective colonization, and Islam could make few converts in this stronghold of Hinduism. Nevertheless, they have increased in number by two thousand since 1901, whereas the Hindus have decreased by sixty thousand.

Hindus.

The elasticity of Hinduism is very clearly marked in Puri. At one end of the scale are the Oriya Brahmans, with scrupulous observances about ceremonial purity; at the other are semi-Hinduized aboriginals, who still cling, in part at least, to the Animistic cult of their forefathers. As the stream of Aryan invasion passed over Orissa, it swept these aboriginal tribes into the hills, where they remained isolated and untouched by Aryan influences. In course of time, some of them migrated into the plains, and, by a process of assimilation, became gradually Hinduized, hanging loosely on the skirts of the main body of the Hindus and retaining several of their primitive customs.

The process has been well described by Mr. N. K. Bose, C.S., formerly Collector of Puri, in an article on *The Hindus of Puri and Their Religion*, published in the *Calcutta Review*, July 1891. "The Khonds of the hills are a purely aboriginal race with a religion and polity of their own; but those who have migrated into the plains have gradually adopted a settled life, copying Hindu rites and becoming fused in the general Hindu community. Mr. W. Taylor, who was Subdivisional Magistrate of the Khurda subdivision for more than fifteen years, and who knew the people well, thus describes them :— "The Khonds, or Santias, are aboriginal tribes, but those inhabiting the Banpur Mals have no connection with the Khonds and Santias of Gumsur and Baud. They are, in fact, completely Hinduized. They venerate the cow and observe all Hindu festivals, and look upon themselves as Hindus of good caste. . . . The orthodox Hindus of Khurda look upon the semi-civilized Khonds as of fairly good caste and will put up in their villages, or lodge in the house of a Khond, although they would consider themselves polluted by doing such things in the villages of Savars, Bauris and other aboriginal races of Khurda."

"Hinduism in Orissa holds out to all an ascending scale of ceremonial purity. The backward aboriginal tribes outside the pale of Hinduism, like the Khonds, set up a Hindu god, get a Hindu priest to minister to them, adopt some of the customs of the pure Hindus, and thus become, in time, recognized as low class Hindus. The more energetic of the low castes within the pale of Hinduism, like the Chasa, gradually raise themselves to higher standards of ceremonial purity, and the more wealthy members among them even raise themselves to membership of some higher castes. Not only does Hinduism in Orissa, even at the present time, absorb the less civilized tribes outside its pale, but there is also a process of evolution in active operation among the recognized Hindu castes themselves."

Again in 1899 Mr. J. H. Taylor wrote in the Settlement Report :—

"Mr. W. C. Taylor pointed out that the aboriginal races were wild and barbarous more by reputation than in fact. I can confirm this from my personal experience. Only persons with an intimate knowledge of the Oriya races and dialects can distinguish the Khond from the ordinary Oriya *chasa* by his speech. I also found that they had lost all knowledge of

their own Khond language, and could not understand simple questions in that tongue, such as 'What is your name?', 'Where is your home?' The majority are in appearance like respectable Oriya tenants, only very poor, appearing in scanty rags, and their religion and customs differ little from those of the dwellers of the plains."

Vaishnavism.

Vaishnavism is predominant among the people, and the causes of this predominance are not far to seek. The existence of the temple of Jagannath, who is regarded as the incarnation of Vishnu, has exerted a powerful influence on the popular faith; and besides this, the famous reformer Chaitanya passed an important part of his life in these parts, and made a lasting impression upon the popular mind by the purity of his life and teachings. Vaishnavism is still struggling to divert the popular mind from the number of animistic accretions by which the religion of the lowest classes is encumbered; and it is Vaishnavism which mainly distinguishes the semi-Hinduized aborigines in the plains from their animistic brethren in the hills, though its adoption is often merely nominal and its high ethical principles do not shape the moral conduct of the people. A fuller account of Vaishnavism will be found in the next chapter.

Some aspects of Hinduism.

The religion of the lowest classes still exhibits very clearly the blending of Hinduism with Animism, a process of assimilation which is illustrated by the legend of Jagannath.[1] Here we find the aboriginal people worshipping a blue stone in the depth of the jungle, until the deity grows tired of the jungle offerings of the primitive people and longs for the cooked food of the more civilized Aryan race. When the Aryan element at length comes on the scene, the rude blue stone disappears and gives place to a carved image. At the present time the twofold worship co-exists throughout Orissa. The common people have their shapeless stone or block before which they make their simple offerings in the open air; while side by side with it is a temple to one of the Aryan gods with its carved image and elaborate rites. Every village pays homage to the Gram Devati or Thakurani, as these stones and stocks are called, and reverence her as the tutelary goddess of their small community.[2]

[1] *See* Chapter IV and Sir W. W. Hunter's *Orissa*, vol. 1, pp. 88–95.

[2] For a fuller account *see* Note on the Gram Devati or Tutelary Village Deity of Orissa, by Babu Jamini Mohan Das, J.A.S.B., Vol. LXXII, Part III, No. 2, 1903.

The goddess is commonly represented by a piece of shapeless stone, smeared with vermilion and surrounded by several smaller pieces of stone, also vermilion-daubed and shapeless, which represent her children. Carved images are sometimes, though rarely, met with, and occasionally the trunk of some tree supposed to possess supernatural properties is smeared with vermilion and worshipped as the village goddess. Besides the generic name Gram Devati, each goddess has a separate specific name, which is commonly one of the thousand names of the goddess Kali. The general idea seems to be that she is like a mischievous old witch; and earthenware figures of horses, elephants and other animals are placed before her by the superstitious rustics, as it is believed that she wanders about at night.

The most noticeable feature of the Gram Devati worship is the non-priestly caste of the men who conduct it, the Bhandari, Mali or Raul, or Dhoba being usually the priest. They hold small rent-free grants which were left unassessed for her worship at the time of the first regular settlement; and they also receive daily doles from the rich men of the village and weekly doles from the poorer peasants. The latter are given on Thursday, commonly regarded as Lakshmi day, or the day of the goddess of fortune, which is considered a specially auspicious day for the regular *puja* of the Gram Devati. The first essential in this worship is a bath, which keeps the Thakurani cool and well disposed towards the village. The bath includes smearing with *ghi* and turmeric; when it is completed, vermilion paint is put on, and after the toilet is over, a light oblation (*bhoga*) of fruit and sweetmeats is offered. The daily worship, including both bath and *bhoga*, costs about an anna; and if this small daily expenditure cannot be met, the priest contents himself by pouring a little water over the goddess, though sometimes even this inexpensive offering is dispensed with. The worship of the Gram Devati is conducted with great pomp and ceremony on the Mahastami or second day of the Durga *puja;* and special offerings of sweetmeats and fruit are made on all festive occasions.

The Thakurani, who is supposed to possess more powers for doing or averting mischief than for doing positive good, receives special attention on the outbreak of any epidemic disease. Within her own village she is believed not to commit any mischief; and epidemics are supposed to be the work of

neighbouring goddesses, whom the tutelary village goddess expels by persuasion or superior force, if she is duly propitiated. The occurrence of a single case of cholera or small-pox in the village is the signal for "Thakurani Marjana" or washing of the Thakurani. The villagers immediately raise the necessary funds by subscription, and propitiate the goddess by a cooling bath and refreshing offerings, the ceremony being repeated if the epidemic does not cease.

The people have a peculiar means of knowing the wishes and decrees of the goddess. In almost every village there is a male or female medium, called Kalasi, through whom the goddess communicates with the people. The presentation of a betel-nut is the token of engaging the Kalasi, whose services are specially in demand on the occasion of an outbreak of cholera or small-pox. Before the time appointed for the Marjana, he takes a purifying bath, puts on a new cloth, and paints his forehead with vermilion. Then holding two canes in his hands, he appears before the Gram Devati, and with dishevelled hair swings his body to and fro. After a time he begins to tremble, and in the course of his confused mutterings gives out some secrets of the village to win the confidence of the people. He then predicts evil to some and good to others, prescribing at the same time the remedies required, which take the shape of offerings to the goddess and special favours to himself. While going through these antics, the Kalasi is sometimes offered a fowl, the blood of which he drinks after pulling off the head.

Certain village goddesses are regarded as "Parama Vaishnavis" or devoted followers of Vishnu, and animal sacrifices are not allowed before them. Probably owing to the spread of Vaishnavism, such sacrifices are only made sparingly before the other goddesses; but in the Mahastami *puja* and other special *pujas* offered in fulfilment of vows, animals are generally sacrificed. Fowls are also let loose before some of the goddesses by the upper classes of Hindus, and are killed and eaten by the lower classes.

It seems hardly open to question that this worship of the malevolent spirit, through the medium of shapeless stones, is an offshoot of the fetishism of the aborigines. It still includes, though to a restricted extent, the sacrifice of animals, which is one of the most characteristic features of aboriginal worship; and the offering of fowls, which are so rigorously excluded from the houses of the upper classes of Hindus, can hardly be

said to be anything else than an aboriginal practice. The restriction of the priestly function to the Sudra castes is another link in the chain of circumstances which indicate the aboriginal origin of this form of worship. While the Brahman stood aloof, the mass of the people, leavened in their lower strata by the aborigines, adopted the faith which, by its easy explanation of the origin of evil, appealed most strongly to their simple minds. The Brahman could not, however, long stand against the popular current which thus set in, and he eventually invented more refined forms of worshipping the same malevolent spirit.[1]

Orissa has a complete caste system of its own, differing in many respects from that of Bengal. The Brahman, as usual, heads the list, and the next group consists of castes of twice-born rank, of whom the Karans and Khandaits are most numerous in Puri. Then come the clean Sudra castes, from whose hands Brahmans will take water and food cooked with *ghi*, as opposed to *kachhi* or ordinary cooked food. These castes are grouped in two subdivisions with reference to the degree of purity of the traditional caste occupation. The first subdivision includes the Chasas, the most numerous caste of Puri, and the Malis, Rajus and Sudhas; in the second subdivision the castes most strongly represented in this district are the Gauras and Gurias. The fourth group consists of unclean Sudras whose touch does not defile, but who may draw water only from masonry wells in metal vessels, and are not *jalacharaniya*, *i.e.*, the highest castes will not take water from their hands. The most numerous castes in this group are Tantis, Golas, Thorias, Kansaris and Kachras. The fifth group consists of castes whose touch defiles, among whom the most prominent are Telis, Kewats and Kumhars. Next come castes who eat fowls and drink spirits, but who abstain from beef. There are three well-defined sub-groups: the first are served by the Dhoba and have the Jyotish as their priest; the second are not served by the Dhoba and have no priest of any kind; and the third, though comparable to the second in other respects, rank lower, mainly on account of the freedom of their women. This first sub-group includes Siyals and Chamars; the second Dhobas, Bauris, Khatias and Nuliyas; and the third Ahir Gauras, Kelas and Kandras. The last

CASTE SYSTEM.

[1] Note on the Gram Devati or Tutelary Village Deity of Orissa, by Babu Jammi Mohan Das, J.A.S.B., Vol. LXXII, Part III, no. 2, 1903.

group consists of the very lowest castes and includes in this district Doms, Pans and Haris.

"Nowhere else," writes Sir W. W. Hunter, "do the ancient caste rules exercise such an influence. Thus, men following precisely the same occupation are sometimes separated by so vast a social gulf, that the slightest bodily contact with each other brings pollution; and the higher cannot touch any article that the lower has handled, until it undergoes purification by being put down upon mother earth. I once had a party of palanquin bearers in Orissa consisting of different castes. Not only was it impossible for two castes to join in carrying me; but each time that the different castes relieved each other, they had to place the palanquin on the road before the new relay would touch it. The higher sort loathed the lower; and beneath these latter there is a third class, who hold the same degraded position to the intermediate sort as the intermediate ones do to the upper. To this day, when a professional astrologer enters a dwelling, the mats are all taken up to avoid the pollution of his touch." At the present day a motorist who has to get his car pushed through a sandy river bed will find that a higher caste man will refuse to help so long as there is one of the untouchable castes assisting, while the lower castes may not draw water from the wells used by the high castes.

Another striking instance of the strength of caste prejudice is the existence of a caste called Chhatrakhia, which is made up of the people who lost their caste in 1866 for eating in relief-kitchens (*chhatra*). The caste is divided into an upper and lower sub-caste—the former comprising Brahmans, Karans and Khandaits, the latter consisting of castes ranking below them in the social scale. Members of each sub-caste marry within that group, irrespective of the caste to which they originally belonged; and no intermarriage is possible between members of the two sub-castes. In other respects, however, the caste system in Orissa appears in some respects to be more loosely organized, and more plastic than in Bengal, for it is possible on the one hand for outsiders to be admitted into an already organized caste, and on the other, for the members of the same caste to raise themselves to membership of some higher caste. For instance, the Chasas, when they become wealthy, raise themselves to membership of the lower classes of Karans, and assume the respectable title of Mahanti; or, more frequently they become recognized as Khandaits.

There are only nine castes numbering over 25,000 as shewn in the margin. Of these Chasas and Brahmans alone account for nearly two-fifths of the total population. PRINCIPAL CASTES.

Chasa	...	268,853
Brahman	...	93,564
Bauri	...	74,677
Gaura	...	44,440
Sudha	...	40,443
Teli	...	36,083
Khandait	...	34,051
Karan	...	31,458
Kewat	...	30,381

Chasas.

The Chasas may be described as the characteristic caste of Puri. As their name implies, they are an agricultural caste, including the well-to-do peasantry of the villages; almost all hold land as occupancy raiyats or work for others as field labourers. They are divided into four sects, the Orh, Benatiya, Chukuliya and Sukuliya, of which the Benatiya stands first in rank, and the Sukuliya and Chukuliya lowest; all the sub-castes may drink and smoke, but not eat cooked rice together. The Orh or Od Chasas, it is alleged, were the first of the tribes who settled in Orissa and began to cultivate the soil; and they claim that the country was called Orissa after them. The Benatiyas are said to have been created from a tuft of *bena* grass, or to be descended from the early settlers who first made the land fit for cultivation by clearing away the *bena* grass. The Chasas are believed to be for the most part of non-Aryan descent, the loose organization of the Oriya caste system making it possible on the one hand for outsiders to be admitted into the caste, and on the other for wealthy Chasas who gave up ploughing with their own hands to raise themselves to membership of the Khandait or Karan castes. The popular belief is that they are somewhat dull-witted, and this belief finds expression in a proverb—*Chasa ki jone pasara katha, padile bolai das, i.e.*, "What does the Chasa know of the dice? At every throw he calls out 'ten'."

Brahmans.

The Brahmans of Puri belong, for the most part, to the Utkal class which is one of the five great territorial groups into which the Gaura Brahmans of Northern India are divided. It is not known when this division took place, but it may perhaps be assumed that the colonies of Utkal Brahmans were separated by local usage, as well as by geographical limits, before the wave of Buddhism passed over Orissa. Buddhism and want of communication with Northern India made them ignorant of their priestly functions and drove them to more worldly pursuits for their subsistence. Most of them resorted to agriculture, while a few are believed to have taken service as cooks in the temple of Jagannath. In the fifth century A.D.,

it is said, the ruling dynasty revived the Brahmanical faith in Orissa, not by restoring priestly functions to the degraded Brahmans, who forsaking the Vedas, had turned cultivators and cooks, but by importing ten thousand Brahmans of pure faith, fit to perform Vedic rites, from Kánauj, the greatest stronghold of Hinduism in Northern India. These imported Brahmans gradually spread over the whole of Orissa, and the colonies which they formed with the aid of royal grants of rent-free lands are still known as *sasans*.

In course of time, two endogamous subdivisions were formed on the two sides of the river Brahmani, the northern subdivision being called Jajpurotriya and the southern Dakshinotriya; Jajpur is the centre of the former, and Puri district of the latter. Each territorial subdivision has been divided into two groups called Srotriya or Vaidik and Asrotriya or non-Vaidik. The former includes the Sasani Brahmans, who depend, for their subsistence, chiefly on royal grants of rent-free lands, and the latter includes the following classes :— (1) Sarua or Paniari, growers and sellers of vegetables; (2) Panda, Jujari, Suara or Deulia, professional temple worshippers or cooks; and (3) Marhia, priests of low castes, who receive alms from the humble clients whom they serve, and enjoy the privilege of being fed first in all feasts connected with *prayaschitta* or purification ceremonies. The Srotriyas do not intermarry with the Asrotriyas, and the latter have no intercourse with the degraded Mastans or Mahastans of the pre-Buddhistic period. The non-Brahmanical occupations and titles of the latter mark them out as a class quite distinct from the rest of the Brahmans of Orissa; they are called Balbhadra-gotri, from the fact that the plough is the emblem of the god Balbhadra.

The Utkal Brahmans were originally Saivas or Saktas, but now worship the four gods Vishnu, Siva, Ganesh and Surya, and the goddess Durga. Chaitanya converted some of the Brahmans to Vaishnavism, but even these converts worship the four gods and the goddess mentioned above on ceremonial occasions. The Gram Devati receives the same degree of homage from this caste as she does from the other castes in Orissa. The ten *sanskars* or purifying ceremonies are a distinctive feature in the life of the Utkal Brahman. According to the Sastras, they should be performed at different periods of life, but in Orissa all the ceremonies are performed at the

time of *upanayana* or assumption of the sacred thread. The Utkal Brahmans observe most strictly the limits of age laid down in the Sastras for the marriage of girls, giving them in marriage usually before twelve, unlike other high castes, such as the Kshattriyas, Karans and Khandaits, whose daughters are rarely married before twelve and are sometimes kept unmarried up to what is regarded as an advanced age even among educated reformers.

Among the Utkal Brahmans traces are found of the existence of totemistic beliefs common among Dravidian races. A Brahman of the Atreya *gotra*, for instance, will not sit on the skin of the deer or eat its flesh. A Brahman of the Kaundinya *gotra* similarly does not sit on the skin of a tiger, and a Brahman of the Gautama *gotra* offers special *puja* to the cow on the occasion of marriage. The usage is explained, not by any direct descent from the animals revered, but by a legend that the *gotra rishis* who were invited to the *jajna* of Daksha fled in the disguise of animals, when the *jajna* was broken up by Siva. This is no doubt a fiction invented to explain an aboriginal belief, which the Brahmans apparently borrowed from the Dravidians with whom they came in contact. There is, however, no evidence that there was any infusion of Dravidian blood among the pure Aryans imported from Kanauj, and the Sasan Brahmans exhibit an unmistakably Aryan type of countenance.

Bauria.

The Bauris occupy a very low position in the social scale. Like the Pans, they claim to be Hindus, but it is doubtful whether, strictly speaking, they can be said to have come within the pale of Hinduism. At any rate, the custom of worshipping trees, which still lingers among them, lends support to the theory that they originally had a more primitive belief—a religion of the woods. There appear to be some reasons for believing that they are ethnically distinct from the Bauris of Western Bengal.

Gauras.

The Gauras are the great pastoral caste of Orissa, corresponding to the Goalas in Bengal and Bihar. They nearly all possess cattle, and are chiefly engaged in breeding cows and in selling milk, curds and *ghi*; they also engage in agriculture, and some serve as hired agricultural labourers. They also work as domestic servants and very largely follow the profession of *palki*-bearers. Many of them affect a high standard of orthodoxy, and widow marriage, which was formerly permitted, is now being forbidden.

Sudhas. The Sudhas appear originally to have been a forest tribe with nomadic habits. They are now mainly settled cultivators, but traces of their former life are still apparent. They worship a deity called Pancha Khanda, *i.e.*, the five swords, with offerings of goats and fowls, and their tutelary goddess is Khambeswari, whose visible representation is a wooden peg (*khamba*). The highest sept, called the Bara Sudhas, have adopted Hindu customs, and the better castes will take water from their hands.

Telis. The Telis call for only a brief mention. They are the oilmen of the country, but many of them are tradesmen; they are also known as Kuberaputras or sons of Kubera, the god of wealth.

Khandaits. The Khandaits are mainly the descendants of the old rural militia. But, while the Chasas decreased by ten per cent. between 1911 and 1921, the Khandaits increased by seven per cent., and the probability is that many who were formerly recorded as Chasas are now recorded as Khandaits.

Karans. The Karans are the writer caste of Orissa, who find employment in the service of Government or of zamindars as minor officials, accountants, clerks, schoolmasters, and *patwaris;* many of them are land-holders. They are also called Mahantis, but that is really a family name, and they prefer the name of Karan, because that of Mahanti is often adopted by affluent Chasas and others who wish to get a rise in rank; in fact, there is a popular proverb: *Jara nahin jati, taku bolanti Mahanti, i.e.*, he who has no caste calls himself a Mahanti. Other titles are Patnaik, literally, a great commander, or Bohidar. They are notorious for extravagance and also for shrewdness, characteristics which have given rise to two popular proverbs: the first is *Mahanti jati, udhara paile kinanti hati, i.e.*, the Mahanti, if he can get a loan, will at once buy an elephant; the second is *Patarkata, Tantarkata, Paniota, Gauduni mai, E chari jati ku biswas nai, i.e.*, trust not the palm-leaf writer (Karan), weaver, distiller and milk-maid.

Kewats. The Kewats are the fishermen of the district, though some have taken to agriculture, and one section, the Rarhis, parch rice. The latter section have a curious ceremony, called *Chaitaghora*, held in the month of Chaitra, when one of them is supposed to represent a horse and parades the village with an attendant crowd.

The Gurias, numbering twenty-three thousand, are the confectioners of Orissa. Many of them are also agriculturists and hold land as occupancy raiyats. Gurias.

It remains to note a few castes which are more or less peculiar to this district.

Daita is the name of a small caste found in Puri. On the occasion of the Snan-jatra and Rath-jatra festivals, the Brahman priests, who ordinarily perform the worship of the idols in the temple of Jagannath, stand aside, and the Daitas take their place. From time to time the old idols are replaced by new ones, and the work in connection therewith is also done by the Daitas, and not by the regular *sebaks*. They hold several rent-free villages granted them in former times as a reward for their services in the temple. Some act as *pandas*, or pilgrim guides, a profitable employment. They are believed to be of Savar origin, but their position has been raised by the nature of their employment, and they are now regarded as equal in point of rank to the Karans, whose customs they ape, and with whom they occasionally intermarry. Daitas.

Irika, Idiga or Chelia Gola, is the name of a small community who rear goats and sell milk, *ghi* and vegetables. Their headquarters are in Ganjam, whence they are said to have immigrated in recent times. Irikas.

Kahalia, like Daita, is a small caste peculiar to the Puri district. They are believed to be descended from the illegitimate children of the dancing girls attached to the great temples, but they themselves not unnaturally deny this and profess to have come originally from the banks of the Ganges. They play in the temples on a wind instrument, called *kahali*, from which their name is derived, and sometimes describe their caste as Tali Sebaka, *i.e.*, inferior temple servants. Kahalias.

The Kelas are a low caste of fowlers, jugglers and beggars, who are said to have come from Madras fifty years ago. They are a gipsy-like race of nomadic habits, divided into five sub-castes, viz., Nalua or Patrasaura, Sapua, Matia, Gandia, and Sabakhia or the omnivorous ones. With the exception of the Naluas, the Kelas speak a mixture of Oriya and Telugu, which in the case of the Sabakhias approaches much more nearly to Telugu than to Oriya. The Naluas, on the other hand, are said to speak an archaic form of Bengali, and differ greatly in appearance from the other sub-castes, being of fair complexion Kelas.

with well-marked Mongoloid features. The Naluas catch and sell birds, the Sapuas exhibit snakes, the Matias are earth workers, and the Sabakhias are professional beggars. The section last mentioned will eat anything, even dead snakes; they wear a plume of feathers in their turbans; they paint their faces; and they are said to frighten people into giving them alms by cutting their bodies and vomiting in front of their houses. Begging, however, is by no means a monopoly of this sub-caste. The begging party usually consists of a man with his wife and child, the woman singing and dancing, while the man plays on a rude instrument called *dhuruki*. They move about in gangs of from ten to fifty persons, and take up their quarters under trees or in market sheds. Some of them make mats from the leaves of the date-palm, fans of peacock feathers, and the arrows, called *kandasara*, used by some of the higher castes in certain religious ceremonies.

Kumutis.

The Kumutis, who are practically confined to Puri and some of the Tributary States, are said to have migrated from Ganjam in the Madras Presidency; intermarriage with their caste-fellows in Ganjam still exists. They are usually pedlars or grocers; a few are zamindars, while the poorest among them collect and sell the leaves of the *sal* tree (Shorea robusta). They marry by preference the daughter of their maternal uncle; if there be none such, they must obtain the consent of their caste-fellows before they can marry anyone else.

Nuliyas.

The Nuliyas are a caste of fishermen and boatmen who have migrated to Puri from Madras. There are two sub-castes called Jaliya and Khalasi. The former are fishermen, and the latter work in sea-going vessels; some dig earth, pull punkhas and carry loads. The rule among them, as among the Kumutis, is that a man should, if possible, marry his first cousin. A widow may marry again, and it is thought proper for her to espouse her first husband's younger brother. The sons inherit, but if there are no sons, the property is taken by the community. They profess to be followers of Ramanuja, and worship Baruna, the Hindu Neptune, with offerings of flowers and sweetmeats before launching a boat or casting a net. They are found in Puri, Nuagaon, Arakuda, Manikpatna, Khirisai, Sahadi and Ramlenka. They are expert swimmers, with well-made bodies, and are usually in attendance when bathing is going on in the surf, where there are dangerous currents, and numerous lives have been saved by their skill.

Saraks.

The Saraks are an archaic community, of whom Sir Edward Gait gives the following account in the Bengal Census Report of 1901 : " The word Sarak is doubtless derived from Sravaka, the Sanskrit word for 'a hearer'. Among the Jains the term was used to indicate the laymen or persons who engaged in secular pursuits as distinguished from the *Yatis*, the monks or ascetics; and it still survives as the name of a group which is rapidly becoming a regular caste of the usual type. The Buddhists used the same word to designate the second class of monks, who mainly occupied the monasteries; the highest class of Arhats usually lived solitary lives as hermits, while the great majority of the Bhikshus, or lowest class of monks, led a vagrant life of mendicancy, only resorting to the monasteries in times of difficulty or distress. In course of time the Saraks appear to have taken to weaving as a means of livelihood; and this is the occupation of the Orissa Saraks, who are often known as Saraki Tanti."

There are four main settlements in Orissa, viz., in the Tigiria and Baramba States, in the Banki thana in Cuttack, and in Pipli thana in Puri. The Puri Saraks have lost all connection with the others, and do not intermarry with them. Though they are not served by Brahmans, they call themselves Hindus. They have no traditions regarding their origin, but like other Saraks are strict vegetarians. The Saraks assemble once a year (on the Magh Saptami) at the celebrated cave temples of Khandagiri to offer homage to the idols there and to confer on religious matters. The only offerings at Hindu temples of which they will partake are those made at Puri to Jagannath, who is often said to be of Buddhistic origin.

Chronology.

The Oriyas have an era distinct from the Christian, the Muhammadan and the Hindu methods of reckoning time. It is based on the reigns of the ancient Rajas of Khurda, whose descendants have lost the territory held by their ancestors, but have a spiritual principality, as they are in charge of the temple of Jagannath. The most striking characteristics of this era are as follows. The figure 1 and all figures ending in 0 and 6, except 10, are omitted. The last *anka* year of one king and the first *anka* year of the succeeding king fall in the same year. The year begins on the twelfth *tithi* of the bright half of the month of Bhadra.[1] Regarding this chronology, which is still used in Oriya almanacs and also in documents, Sir William

[1] J.A.S.B. Vol. LXXII, 1903, Part I, p. 100.

Hunter writes: "Orissa has always been prolific of prophecies dated according to the local era, prophecies in which the people firmly believe, and which sometimes bring about their own fulfilment. The Vishnuvite mendicants keep the manufacture of them in their own hands and work them for their own purposes. For example, the income-tax touched in an unprecedented manner their monastery lands; and the unsettled feeling arising from the bewildering succession of license, certificate and income-taxes in late years prepared the peasantry for the most extravagant portents and omens. Among the spawn of prophecies which accordingly spread like wild fire through Orissa, one had eventually the honour of being noticed in the Government Gazette. It ran somewhat as follows: 'Take heed of the 13th *anka* (or year of the Maharaja's reign). In the 14th *anka* a great battle will take place; in the 15th there will be nothing left to eat; in the 17th the truth will come.' A million of peasants went in fear and trembling for many months at the sound of these mystic words. The prediction of the general extermination of the people for some time actually held back the husbandmen from tilling their fields."[1]

[1] W. W. Hunter, *Orissa* (1872), Vol. II, p. 126.

CHAPTER IV.

THE WORSHIP OF JAGANNATH.

Development of religions.

THE history of religion in the Puri district is of special interest, as at one time or another it has been the home of such widely different cults as Animism, Vedic Brahmanism, Buddhism, Jainism and Pauranik Brahmanism, including Saivism, Sun-worship and Vaishnavism. The earliest of these religions is Animism, which dates back to prehistoric times and still lingers among some of the wilder races on the western border, such as the Savars and Pans. The Pans are more Hinduized than the Savars; but both tribes still practise ancestor-worship and totemism, and make offerings to deities represented by rude stone images and propitiated by sacrifices of animals. Other instances of the influence exercised by Animism over the uneducated masses will be found in the account of the worship of the Gram Devati given in the preceding chapter. The Vedic religion of nature-worship was introduced by the Aryan immigrants who made their way into Orissa in the early centuries. This cult, however, was largely modified by the primitive belief of the surrounding aboriginal population and by the want of communication between Orissa and the more highly civilized country of Northern India. Consequently, so corrupt did the religion of these Aryans become that the Brahmans of Madhyadesh, the home of later Vedic religion, called them Vratyas, and refused to recognize them as Brahmans or Kshattriyas. Their descendants have probably survived in the modern Mastan Brahmans.

With the conquest of Kalinga by Asoka in 261 B.C., Orissa became a part of the Mauryan empire, and came into touch with the three religions then prevalent in Northern India, viz., Brahmanism, Buddhism and Jainism. The references in the Mahabharata to Kalinga, and the descriptions of Biraja *kshettra* and the sea *tirtha*, seem to show that later Vedic Brahmanism obtained a foothold in Orissa, and traces of its influence may still be found in the existence of Agnihotri Brahmans at Jajpur and elsewhere. Buddhism of the early type was presumably introduced by the officers of Asoka and

their followers, but no traces of it have survived. Jainism was more successful, as it was patronized by Kharavela and his successors, and on the decline of the Mauryan empire it lingered on till the eleventh or twelfth century A.D. It has now entirely disappeared from the district, but it has left its traces in the hills of Khandagiri and Udayagiri, which are honey-combed with Jain caves, built between the third and first century B.C., in which the worship of Parsvanatha is more prominent than that of Mahavira.

About the second century A.D. Orissa seems to have been absorbed in the Andhra empire, and Buddhism and Brahmanism both came into prominence. According to traditions preserved in the Tibetan chronicles, Nagarjuna the great preacher of the Mahayana system (*circa* 200 A.D.), converted the King of Orissa (O-tisa), while the Buddhist philosopher Dignagacharya lived in U-tcha or Northern Orissa and there composed his work on logic *Pramanasamuchchya* (*circa* 500 A.D.). Further proofs of the prevalence of Buddhism are to be found in the travels of Hiuen Tsiang (Yuan Chwang) and in the Japanese accounts of the Chinese Tripitakas, which describe the sending to China of a Buddhist scripture by the king of Orissa (U-tcha) in the eighth century A.D. This Buddhism gradually changed into the latest type, the Tantrik system of Magadha, remains of which may still be found in the Assia hills in the Cuttack district and the Kupari hill in the Balasore district. But in Puri district Buddhism has left no remains, probably because it was dominated from an early time by Pauranik Brahmanism, the worship of Siva, of the Sun, and of Krishna in the form of Jagannath.

Saivism was apparently the first of these cults to become predominant. It had its chief centre at Bhubaneswar, where it is represented by phallic symbols, the *linga* and the *yoni*, enshrined in temples, whose size, massive structure and elaborate carvings still excite admiration, and indicate how strong was the hold of this faith on both the royal house and the people. Sun-worship held a minor position, and is commemorated chiefly by the magnificent remains of the Konarak temple. With the change of dynasties which took place, a change came over the spirit of religion. The Ganga and the Surya dynasties did not neglect Saivism, but patronized Vaishnavism more liberally; the erection of the great temple

of Jagannath being among the first fruits of this change. Eventually, Krishna-worship, with the help of royal patronage, the encouragement of the numerous *pandas* of Jagannath, and the preaching of Vaishnavite apostles, like Chaitanya, Jagannath Das and others, spread over the land, superseding other Pauranik faiths. Gradually to the worship of Krishna alone was added the worship of his beloved Radha, and now this dual worship forms the prevalent religion in Orissa, while Saivism is confined to Brahmans, and Saktism to a few Bengali settlers and some of the lowest castes.

LEGEND OF JAGANNATH.

The legend of the origin of Jagannath is briefly as follows[1]. In the golden age, Indradyumna, king of Malwa, sent out Brahmans to seek for Vishnu, one of whom, named Vidyapati, travelled through the jungle till he came to the country of the aboriginal Savars. There he dwelt in the house of a fowler, named Viswabasu, who was a servant of the god Jagannath, and went daily into the jungle to offer him fruits and flowers in secret. The Brahman won the confidence of Viswabasu, and the latter, as a proof of his friendship, showed him his god in the form of a blue stone image at the foot of a fig tree. But the god came not to partake of the offering of Viswabasu. Only a voice was heard saying: "O faithful servant, I am wearied of thy jungle flowers and fruits, and crave for cooked rice and sweetmeats. No longer shalt thou see me in the form of thy blue god. Hereafter I shall be known as Jagannath, the Lord of the World."

The Brahman Vidyapati now returned to tell the king of his discovery. In joy at the good news, Indradyumna set out with a vast army, cut a road through the dense forest, and at length arrived at the holy spot, only to find that the blue image had disappeared; for the day the Brahman left, it had been miraculously caught up in a sand-storm. In bitter disappointment, the king performed certain penances, in order to propitiate the god, and then heard a voice from heaven saying that if he offered a thousand *asvamedha* sacrifices, he would be blessed by the sight of Vishnu, in the shape not of the blue image but of a log with certain marks on it. Indradyumna performed the necessary sacrifices, and the god

[1] The legend as given in the Madala Panji or palm-leaf chronicles of Jagannath differs considerably from that given by Sir William Hunter, which was based on oral [illegible]. Where the two accounts differ, the former has been followed as being the more authoritative version.

thereupon appeared in the form of a log floating in the sea. This was brought to land and installed with great ceremony in the enclosure in which he had performed the *asvamedha* sacrifices (identified with the present site of Jagannath's garden house).

The king then gathered together all the carpenters in his country, and ordered them to fashion the log into an image of Jagannath. But when they put their chisels on the wood, the iron lost its edge; and when they struck them with their mallets, the mallets missed and crushed their hands. At last, Vishnu came down in the form of an aged carpenter and offered to make an image of the log, if he was shut up alone with it for fifteen days. At the end of the allotted time Indradyumna found that the carpenter had disappeared and had left three images (of Jagannath and his brother and sister) fashioned from the waist upwards, Jagannath and his brother having only stumps for arms, while his sister had none at all—even so they remain to this day. Indradyumna built a temple a hundred cubits high for their reception, and then, as Brahma alone could consecrate the images and shrine, went to heaven to bring him down to earth. Brahma came in a moment, but with Brahma a moment lasts for many ages of mortal life; and in the meantime a new king ruled over the land. This king, learning that Indradyumna claimed the temple, prepared to resist him with armed force, but was soon reconciled when Indradyumna assured him of his peaceful purpose. The images were then brought down in cars to the temple, placed on a throne, and consecrated by Brahma.

This legend, Sir William Hunter says, proclaims Jagannath not less the god of the Brahmans than of the low caste aboriginal races. "We find the aboriginal people worshipping a blue stone in the depths of the forest; but the deity has grown tired of the jungle offerings of the primitive people, and longs for the cooked food of the more civilized Aryan race. When the Aryan element at length comes on the scene, the rude blue stone disappears, and gives place to a carved image." In other words, the legend "shadows forth the original importation of Vishnu-worship by an Aryan king from the north-west, and its amalgamation with the aboriginal rites existing in Orissa."

Elsewhere Sir William [illegible] to ascribe a Buddhist origin to the worship of [illegible] Jagannath," he says, "represents, with unmistakable clearness, that

coalition of Brahman and Buddhist doctrines which forms the basis of Vishnu-worship. In this temple are three rude images unconsciously representing the Brahmanical Triad. His Car Festival is probably a once-conscious reproduction of the Tooth Festival of the Buddhists, although its original significance has dropped out of sight. The Chinese pilgrim Fa Hian gives an account of the yearly procession of Buddha's sacred tooth from its chapel to a shrine some way off, and of its return after a stay there. This was in the fifth century A.D., but the account applies so exactly to the Car Festival of Jagannath at the present day, that Fergusson pronounces the latter to be merely a copy.[1] A similar festival is still celebrated with great rejoicing in Japan. As in the Indian procession of Jagannath, the Japanese use three cars; and Buddha sits in his temple, together with two other figures, like the Jagannath Triad of Orissa."[2]

The procession of Buddha's tooth alluded to above took place in Ceylon, but we also find a detailed account by Fa Hian of a car festival at Pataliputra (Patna). "Every year," he writes, "on the eighth month they celebrate a procession of images. They make a four-wheeled car, and on it erect a structure of five storeys by means of bamboos tied together. This is supported by a king-post, with poles and lances slanting from it, and is rather more than twenty cubits high, having the shape of a tope. White and silk-like cloth of hair is wrapped all round it, which is then painted in various colours. They make figures of *devas*, with gold, silver, and lapis lazuli blended, and having silken streamers and canopies hung out over them. On the four sides are niches with a Buddha seated in each, and a Bodhisattva standing in attendance on him. There may be twenty cars, all grand and imposing, but each one different from the others. On the day mentioned, the monks and laity within the borders all come together; they have singers and skilful musicians; they pay their devotions with flowers and incense. The Brahmans come and invite the Buddhas to enter the city. These do so in order, and remain two nights in the city. Through the night they keep lamps burning, have [illegible] and present offerings. This is the practice [illegible] kingdoms as well."[3] Such

[1] *History of* [illegible] 390 (ed. 1867).

[2] Sir W. W. [illegible] *Empire*, 1893.

[3] Legge's translation.

car festivals took place several centuries before Fa Hian's visit, for Asoka's Rock Edict IV inscribed in 256 B.C. records the fact that "instead of the sound of the war-drum, the sound of the drum of piety is heard, while heavenly spectacles of processional cars, elephants, illuminations, and the like, are displayed to the people".

The view that the worship of Jagannath is an adaptation of some cult of Buddhism has been supported by other arguments. It has been held that Puri was probably the place where the famous tooth relic of Buddha was worshipped, and it is pointed out in this connection that the wooden image of Jagannath contains a certain article, about which the priests preserve inviolate silence, and which is never replaced by a new piece whenever the image is renewed. According to tradition, one of the immediate followers of Buddha gained possession of one of his teeth when the relics of his master were distributed and conveyed it to a place in Kalinga, afterwards called Dantapura, the city of the tooth. This city has been identified by some with Puri, and among others by Sir William Hunter, who says that "the golden tooth of Buddha remained for centuries at Puri, then the Jerusalem of the Buddhists as it has for centuries been of the Hindus". It was subsequently seized and carried off by a king who reigned at Pataliputra; about 300 A.D. a princess of Kalinga surreptitiously conveyed it in her hair to Ceylon, and after numerous adventures and vicissitudes, it at last returned to Kandy, where it is worshipped to this day.[1]

As mentioned later, there are good grounds for doubting the identification of Dantapura with Puri, but there appears to be a local belief that Puri was once an ancient Buddhist site. A tradition lingers that many centuries ago a large Buddhist stupa stood on a sand hill on the present site of Puri and another smaller one twelve miles inland at what is now Satyabadi. A few miles to the north of the larger stupa a wide river ran into the sea, which here curved into a bay. But gradually the sea receded and the land silted up. The stupa fell into ruins, and eventually King Indradyumna built a temple on the platform on which the stupa stood. This tradition tallies with the legend [illegible] given by Sir

[1] Sir M. Monier-Williams, [illegible] 1889.

William Hunter. Indradyumna, it is said, having heard from his Brahman emissary of the discovery of Jagannath, came and built a temple for the god. "When the temple was finished, he asked Brahma to consecrate it; but Brahma had just begun his devotions, which last for nine ages of mortal men. Meanwhile, the city that Indradyumna had built round the temple crumbled into ruins, and the lofty fane itself was buried under the drifting sand of the sea. One day, as the king of the place was riding along the beach, his horses stumbled against the pinnacle of the forgotten shrine. Then his servants dug away the sand, and there was the temple of lord Jagannath, fair and fresh as at the time of its building."

Three other reasons advanced in favour of the Buddhist origin of Jagannath may be mentioned. The abolition of caste rules in regard to the *mahaprasad* or the sacred food cooked in the temple reminds one of the protest of Buddhism against caste prejudices. In some modern representations of the ten incarnations of Vishnu the place of the ninth or Buddha incarnation (*avatara*) is occasionally occupied by the figure of Jagannath. The crude form of the images of Jagannath, his brother Balbadhra and his sister Subhadra, with their round shapeless heads and their arms represented by stumps only, is believed by some to be of Buddhist origin, *e.g.*, General Cunningham says in *The Ancient Geography of India:* "The three shapeless figures of Jagannath, and his brother and sister, are simple copies of the symbolical figures of the Buddhist Triad, Buddha, Dharma and Sangha, of which the second is always represented as a female. The Buddhist origin of the Jagannath figures is proved beyond all doubt by their adoption as the representative of the Brahmanical *avatara* of Buddha in the annual almanacs of Mathura and Benares."

Again, in his monograph on the Bhilsa Topes, General Cunningham suggested that the shape of the images was derived from two Buddhistic symbols, viz., an open *trisula* placed on a wheel. This view is also supported by Count Goblet D'Alviella, who in *The Migration of Symbols* quotes instances of the *trisula* converted into an anthropoid figure, and goes on [illegible] transformation of the same kind, but still more [illegible] observable in the three famous idols of [illegible] General Cunningham long ago proved to be [illegible] *trisula*. These emblems were doubtlessly a great [illegible] popular veneration at the period

when Puri was a Buddhist sanctuary. When Brahmanism came to establish itself there, it contented itself with changing them by means of a few slight alterations into the image of Vishnu, or rather Jagannath, and his brother and sister. In thus appropriating the old solar symbol, still discernible in spite of its successive alterations, Vishnu, moreover, did nothing but recover what belonged to him, since he is, in Hinduism, pre-eminently the solar divinity."

Other arguments in favour of the Buddhist origin of Jagannath are deduced from the general spirit of his worship. Thus, Mr. Fergusson writes: "Everything at Puri is redolent of Buddhism, but of Buddhism so degraded as to be hardly recognizable by those who know that faith only in its older and purer form." Sir Monier Williams, again, says in *Budhism*: "Vaishnavism took care to adopt all the popular features of Buddhism. It vied with Buddhism in inculcating universal love, toleration, liberality, benevolence, and abstinence from injury. It preached equality, fraternity, and even in some cases the abolition of caste distinctions. It taught a succession of incarnations or rather descents (*avatara*) of divine beings upon earth (as Buddhism taught a succession of Buddhas), and it even adopted the Buddha himself as one of the incarnations of Vishnu. This, indeed, is the best explanation of what has happened at Puri in Orissa, where a temple once dedicated to Gautama Buddha, and supposed to contain a relic of his burnt body, was afterwards dedicated to the Jagannath form of Krishna and supposed to enshrine one of his bones, and where low caste and high caste both eat together the food cooked in the house of that popular god."

The theory that the worship of Jagannath is of Buddhist origin appears also to have been adopted in *The Imperial Gazetteer of India* (1907), which describes Jagannath as "that unconscious representative of a coalition of Brahman and Buddhist doctrine who is to the devout Hindu the very type of the Vaishnav faith. On the yellow shores, where beats the eternal unresting surf, millions of pilgrims collect once a year to render homage to the god whom they ignorantly worship with a ritual that once was purely Buddhist." Similarly, Dr. Hopkins says in *The Religions of India*: "The Jagannath temple was [illegible] dedicated to Buddha. Name, temple, and idol-car are now all Vishnu's!"

On the other hand, there are weighty reasons for rejecting the theory of a Buddhist origin. The legend of Buddha's

tooth is after all only a legend, the historical basis of which has not been proved; and it is very doubtful whether Dantapura, the city of the tooth, can be identified with Puri. Modern scholars hold that this town, the Dantakura of the Mahabharata and the capital of the Kalinga, should with greater probability be identified with Pliny's Dandagula near the Godavari river; and it is noticeable that no mention of Puri town or Purusottama *Kshetra* has been found in any works older than some of the latest Puranas. Again, the similarity between the form of the image and the Buddhistic symbols of an open *trisula* on a wheel, though curious, is not convincing; for such symbols are as common to Hinduism as Buddhism, the *trisula* being a well-known symbol of Saivism and the wheel of Vaishnavism. At least, the anthropoid development of the *trisula* is sufficient to account for the modern triple image, though it is also possible that they are imitations of crude images originally set up by the aboriginal Savars. At Mukhalingam in the Ganjam district there is a larger temple of Siva, called Mukhalingeswar, to which is ascribed a connection with the Savars similar to that given in the legend about Jagannath.

As regards the Car Festival, it is noticeable that cars are used not only in Puri for the worship of Jagannath, but also in Bhubaneswar for the worship of Siva, in Jajpur for the worship of the goddess Biraja, and also in many temples to the south. Moreover, the procession of cars of the gods is, as shewn above, mentioned in one of Asoka's Edicts, and is probably pre-Buddhistic. The eating of *mahaprasad* by all castes from the same plate is a custom also found in Bhubaneswar and outside Orissa, while the substitution of Jagannath for Buddha as the ninth *avatara* is purely local, Balaram and Krishna being substituted in other instances. Lastly, one of the strongest arguments, the finding of relics, can be traced to the Vedic period as a very old custom,[1] and the oldest Buddhist work, the *Mahaparinirvana-Sutta*, describes the cremation and erection of funeral monuments over the ashes of Buddha himself.

Whatever may be the origin of Jagannath, it is at least certain that, in the eyes of his true believers, he is the Lord of the World. The pre-eminence dates back to the end of the

VAISHNAVISM. Early reformers.

[1] Dr. Caland, *Die alteridischen Todten-und Bestattunge-gebranche*, 1896.

fourteenth century, when the reformation began which made the worship of Vishnu a national religion in Northern India. The earliest apostle of Vaishnavism in this part of India was Ramanand, who proclaimed the divinity of Rama and the equality of man before God. His work in Hindustan was carried on by Kabir, who tried to build up an eclectic religion that would embrace Hindu and Muhammadan alike, preaching that the God of the Hindu is also the God of the Musalman. In the book *Kabir and the Kabir-panth* by the Rev. G. H. Westcott (Cawnpore, 1907), the view is advanced that Kabir (1440—1518 A.D.) was a Muhammadan by birth and was associated with the Sufi order, that the great object of his life was to break down the barriers that separated Hindus from Muhammadans, and that, in order to achieve this object, he resided in Benares and associated with the followers of Ramanand. A monastery called after his name exists at Puri at the present day, and it is probably this to which Tavernier referred in his account of the Jagannath temple, in which he said: "Near the pagoda the tomb of one of their prophets, called Cabir, to whom they do great honour, is to be seen."

Chaitanya.

Ramanand and Kabir were the apostles of Vaishnavism in Hindustan, but Chaitanya (1485—1527) was its prophet in Bengal and Orissa. Signs and wonders, we are told, attended him through life, and on the lonely shores of Puri he received heavenly visions and revelations. On one occasion he beheld the host of heaven sporting upon the waves and plunged into the sea in a religious ecstasy, but was miraculously brought back to land in a fisherman's net. Apart from these and other legends we know that Chaitanya, when he was twenty-four years old, forsook the world, and devoted the rest of his life to extending the worship of Jagannath. With regard to his doctrines there is ample evidence. He preached vehemently against the immolation of animals in sacrifice and the use of animal food and stimulants, and taught that the true road to salvation lay in Bhakti, or fervent devotion to God. He recommended Radha worship and taught that the love felt by her for Krishna was the highest form of devotion. The acceptable offerings were flowers, money and the like; but the great form of worship was the Sankirtan or procession of worshippers playing and singing.[1]

[1] (Sir) E. A. Gait, *Bengal Census Report of* 1901.

The doctrines of Chaitanya found ready acceptance among the Oriyas, by whom he is regarded as an incarnation of Krishna and Radha. "The adoration of Chaitanya has become a sort of family worship throughout Orissa. In Puri there is a temple specially dedicated to his name, and many little shrines are scattered over the country. But he is generally adored in connection with Krishna; and of such joint temples there are three hundred in the town of Puri, and five hundred more throughout the district. At this moment, Chaitanya is the apostle of the common people. The Brahmans, unless they happen to enjoy grants of land in his name, ignore his work. In almost every Brahman village the communal shrine is dedicated to Siva; but in the village of the ordinary husbandmen, it is Krishna who is worshipped with Radha, and Chaitanya who is remembered as the great teacher of the popular faith."[1]

The strict followers of Chaitanya are known as Gauriyas; but in the religious ferment created by the preaching of Chaitanya and his disciple Jagannath Das, several other sub-sects came to be formed in Orissa.

Later phases.

The difference between the doctrines of the early reformers and the later developments of the cult has been forcibly expressed by Sir George Grierson: "Ramanand, the popularizer of the worship of Rama, flourished about the year 1400; and even greater than he was his famous disciple Kabir, who succeeded in founding a still existing sect, which united the salient points of Muhammadanism and Hinduism. Here we first touch upon that marvellous catholicity of sentiment of which the key-note was struck by Ramanand, which is visible in the doctrines of all his successors, and which reached its truest height in the lofty teaching of Tulsi Das two centuries later. The worship of the deified prince of Oudh and the loving adoration of Sita, the perfect wife and the perfect mother, have developed naturally into a doctrine of eclecticism in its best form—a doctrine which, while teaching the infinite vileness of mankind before the Infinitely Good, yet sees good in everything that He has created, and condemns no religion and no system of philosophy as utterly bad, that inculcates, Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy strength, and with all thy mind, and thy neighbour as thyself. Far

[1] Sir W. W. Hunter's *Orissa*.

different has been the fate of that other great branch of the Vaishnava religion which is founded on mystic interpretations of the love which Krishna bore to Radha. Beautiful in itself, its passionate adoration, whose inner meaning was too esoteric for the spirits of the common herd of disciples, in many cases degenerated into a poetry worthy of only the baser sorts of Tantrik Siva worshippers. But at its best the Krishna cult is wanting in the nobler elements of the teaching of Ramanand. Its essence is almost selfish, a soul-absorbing, nay all-absorbing, individual love cast at the feet of Him who is love itself. It teaches the first and great commandment of the Christian law, but the second, which is like unto it—Thou shalt love thy neighbour as itself—it omits."[1]

CATHOLIC NATURE OF THE WORSHIP.

The above is a brief account of the history of Vaishnavism, and it will suffice to add a sketch of its position, as described by Mr. N. K. Bose, some time Collector of Puri, in *The Hindus of Puri and their Religion* (Calcutta Review, 1891). "Jagannath is the great god of the people of Orissa. All who call themselves Hindus are entitled to worship him, and, excepting the pronounced aboriginal tribes and those low castes who are engaged in offensive occupations, all are entitled to enter the precincts of the temple. For the excluded classes there is an image at the entrance gate called Patitpaban Hari, to whom they can offer their homage. The worship of Jagannath is for the highest minds among the Hindus a pure system of theism. To the polytheistic multitude it offers the infinite phases of divinity as objects of worship and provides for their delectation an infinite number of rituals and ceremonies. In a word, it supplies the spiritual requirements of different classes of Hindus in different stages of their intellectual development. Under its broad all-receptive roof doctrines the most divergent find a resting-place. There you see the learned *pandit* of the Sankaracharya monastery seeking salvation by the way of spiritual knowledge. Here you find a large number of Saiva *sannyasis* voluntarily enduring excruciating torture and misery, and seeking absorption into the deity by severe austerities. You also see a large number of devotees consecrating their entire soul as it were to Hari with outpourings of love and affection. Jagannath is an

[1] Sir G. A. Grierson, *The Modern Vernacular Literature of Hindustan*, J.A.S.B., Part I, 1888; do., Journal, Royal Asiatic Society, 1907, p. 319 *et seq.*

unsectarian name. All Hindu sects worship at its shrine. The followers of Sankaracharya, Ramanuja, Ramanand, Kabir, Chaitanya and Nanak are to be seen doing homage to the great god. Even the Jains of the Digambar sect flock to the temple at a certain season of the year. The common link of all these sects is their belief in the supremacy of Jagannath; and their differences consist in the character which they assign to his supremacy, in their religious and other practices founded on the nature of such beliefs, and in their sectarian marks."

EXCLUDED CLASSES.

Not unnaturally, Jagannath has a secure place in the affections of the Oriyas, most of whom wear the *kanthi* (*i.e.*, a piece of *tulsi* wood worn on the neck) as a distinctive mark of a Vaishnava, and change their family title to Das (*i.e.*, servitor) as a token of their devotion. Not all, however, may enter the temple and see the god. "The temple of Jagannath," says Sir William Hunter, "in which every creed obtains an asylum, and in which every class and sect can find its god, now closes its gates against the low caste population. Speaking generally, only those castes are shut out who retain the flesh-eating and animal-life-destroying propensities and professions of the aboriginal tribes. A man must be a very pronounced non-Aryan to be excluded. Certain of the low castes may enter half way, and, standing humbly in the court outside the great temple, catch a glimpse of the jewelled god within. But unquestionable non-Aryans cannot go in at all. The same ban extends to those engaged in occupations either offensive in themselves, or repugnant to Aryan ideas of purity, such as wine-sellers, sweepers, skinners, corpse-bearers, hunters, fishers and bird-killers. Basu the fowler would now be driven from the doors of the temple dedicated to his own god. Criminals who have been in jail, and women of bad character, except the privileged temple girls, are also excluded, with this difference, however, that a criminal may expiate the defilement of imprisonment by penance and costly purifications; but a woman once fallen can never more pass the temple gates."

The following are excluded:—Christians and Jews; Muhammadans; Hill or forest races; Savars; Pans; Haris (except to clear away filth); Chamars; Doms and Chandals; Chiriamars (bird-killers); Siyals (wine-sellers); Gokhas (fishermen); Siulas (fishermen); Tiyars (fishermen); Nuliyas (Telinga boatmen); Kandras (a low Oriya caste); Mochis;

and common prostitutes. Other equally low castes from Bihar and elsewhere, such as Mallahs and Dusadhs, would also be excluded. Criminals who have been in jail and had jail diet may not enter unless they have performed a ceremony of purification, while Bauris may enter the outer court only.[1]

It is said that an European in disguise succeeded in entering the temple at night in the first half of the nineteenth century, but was discovered before he could penetrate to the inner sanctuary. His presence necessitated the purification of the temple.

TEMPLE. The shrine of Jagannath, like other shrines in Orissa, consists of a suite of four buildings standing in line with chambers opening one into another. There are numerous other shrines within the temple enclosure, but these four may be regarded as peculiarly the shrine of Jagannath. They are, proceeding from east to west:—(1) the Bhoga-mandapa or hall of offerings, where the *chhattrabhoga*, or offerings made by the *maths* and private persons, is presented; (2) the Jagamohana also called the Nat-mandapa or dancing hall; (3) the Mukhsiali, the hall of audience, in which the pilgrims assemble to gaze upon the god; and (4) the Baradeul or inner sanctuary of Jagannath, surmounted by a lofty conical tower, in which the *kothbhoga* or offerings provided from temple funds are presented. A fuller description of the temple will be found in the article on Puri town in Chapter XVI.

IDOLS. In the Baradeul, Jagannath, his brother Balabhadra (also called Bara Thakur) and his sister Subhadra are enthroned on the Ratnavedi or Singhasan, a throne of chlorite about five feet high. The images are of wood, and there are also miniature metal images of Lakshmi and Saraswati, besides an image called Sudarsan Chakra (the name for the wheel of Vishnu). The three principal images are described by Brij Kishore Ghose in the *History of Pooree* as "bulky, hideous, wooden busts. The elder brother Balabhadra is six feet in height, the younger Jagannath five feet, and their sister Subhadra four feet. They are fashioned into a curious resemblance of the human head resting on a sort of pedestal. They are painted white, black, and yellow respectively; their

[1] The list given by Sir William Hunter has been revised from information supplied by the Manager of the Jagannath Temple.

faces are exceedingly large, and their bodies are decorated with a dress of different coloured cloths. The two brothers have arms projecting horizontally forward from the ears. The sister is entirely devoid of even that approximation to the human form."

Being of wood, the images require periodical renewal, and this is a matter about which there is considerable mystery. The account given in the *History of Pooree* quoted above is that "a nim tree is sought for in the forests, on which no crow or other carrion bird has ever perched: it is known to the initiated by certain marks. The idol is prepared by the carpenters, and then entrusted to certain priests, who are protected from all intrusion. The process is a great mystery. A boy from a Pati's family is selected to take out from the breast of the old idol a small box containing quicksilver, said to be the spirit, which he conveys inside the new. The boy who does this is always removed from the world before the end of the year." Other accounts are given by Mr. Crooke in an article on "Juggurnaut" in *Things Indian*: "When the stock is shaped by the carpenters, it is made over to the priests, one of whom is selected to take out of the original image a box containing the bones of Krishna, which is then transferred to the new image. One account describes how this Brahman veils his face lest he should be struck dead in gazing on relics of such sanctity. Once, it is said, a Raja of Burdwan paid the priests an enormous sum for permission to see the relics and died soon after. Others say that the Brahman who handles the relics is slain by his brother priests lest he should divulge their character, or that he is always removed by the god from this world before the close of the year. These tales, in their present form, are obviously absurd. The rule of Vaishnavism is utterly opposed to the preservation of relics of the dead. The tale, in fact, points to a tradition from Buddhist times, when relics of the master were preserved in stupas all over the land."

The present practice is reported by the Manager of the Temple to be as follows: When the new image is ready, a certain article is taken out of the old one and placed in it by a priest of the Pati family: the latter are the traditional descendants of the Brahman Vidyapati, who first discovered the abode of Jagannath. This article is called the Brahmapadartha. The priest is blindfolded and his hands are

swathed in cloth, so that he may neither see nor touch the sacred article. When he has placed it in the new image, the opening is closed by a carpenter of a certain family.

It is stated that the conditions which the tree selected for the image must fulfil, are that it must be a *nim*; it must have certain marks under the bark in the shape of a conch shell and a wheel; it must have no birds' nest in it; the shadow of no other tree must fall upon it; and there must be snake holes near its roots indicating that snakes live there.

RITUAL. The service of the temple consists partly in a daily round of oblations, and partly in sumptuous ceremonials at stated periods throughout the year. The offerings made to Jagannath and the other deities enshrined in the temple enclosure are bloodless, consisting of fruit, flowers and various articles of vegetable food. To this rule there is one exception in the offerings made for three days in the year to Bimala, who has a shrine in the temple compound. She generally receives offerings of vegetable food, but on each of the three nights of the Durga *puja* she is given offerings of two sheep and of fish specially caught in the Narendra tank, where ordinarily no net may be thrown. The offerings are made at a late hour, when the daily rites of Jagannath are over and the temple is shut up.

The following is a brief account of the chief *nitis* or ceremonies which make up the daily ritual.[1] The rules regulating these ceremonies are contained in three sacred books, the Niladri Mohodaya, the Kshetra Mahatmya and the Smritis of Gadadhar Paddhati. It is of great importance that they should be punctually observed, as on it depends the safety of the large crowds of pilgrims who flock into the temple. Besides the *nitis*, there are what are known as *sahana melas*, *i.e.*, audiences granted to the worshippers during the leisure moments of the deities. The term is apparently a corruption of *sadharana mela*, meaning open to the public, and implies that the general public have access to the innermost shrines. A *sahana mela* may take place at any time, but is at present held after the bathing ceremony described below. A diary is kept of the daily ceremonies actually performed, and the time appointed for each.

[1] This account of the *nitis* and festivals was prepared from a note by Mr. A. Garrett, I.C.S., formerly Collector of Puri, and brought up to date from information supplied by the present Manager of the Jagannath Temple.

The first *niti* consists of opening the doors of the different shrines. An officer, called the Bhitarchhu Mahapatra, arrives at the Lion Gate at about 5 A.M., challenges the sentry there, and passes into the inner courtyard where he is joined by four other temple servants. This party examines the seals on the doors of the different shrines, and if they are intact, they are broken, the padlocks unlocked and the doors opened. The object of this inspection is to see that there has been no defilement of the sacred buildings, in which case a purifying ceremony is necessary. Before opening the door of the Holy of Holies, a hymn is chanted to the gods within, warning them to leave their couches and go to the throne, as the sun from his eastern chambers is even now shooting forth his rays. This done, the door is opened, the priests enter the shrine, and the couches are removed one by one to the store-room. Meanwhile, before the Jaya Bijaya door, a crowd of eager worshippers is struggling, pushing and hustling one another for the foremost place, so as to be first to rush down the steps into the next sanctuary as soon as the second ceremony of the day is over.

This ceremony, *mangala arati*, consists of lighting camphor in silver salvers, and waving blazing torches before the gods. It is followed by the offering of *pitha*, a cake or paste made of rice, flour and water; in this a greased wick is placed, lighted, and waved before the gods. A gong now sounds, and the Jaya Bijaya door is opened. By the light of the torches, the worshippers scan the features of the gods, and then arises the cry, "Take pity on me, O God, and free me from all my woe." While this ceremony is being performed, the cry ceases, and in silence the crowd awaits permission to enter. The Pashupalaks next mount the throne, and take off the flower garlands from the images.

Next come the bathing and dressing of the gods. The bathing is performed vicariously by their sacred attendants, who sit in front of the gods' throne, pretend to clean their teeth in front of the round brass plates in which the images are reflected, rinse their mouths, and pour water into brass tubs. The Pashupalaks then dress the gods and rub them with camphor. After this *sahana mela* takes place, *i.e.*, the public are permitted to see the gods, and their offerings are collected.

The priests next go to the temple and perform the *homa* ceremony, *ghi* and cocoanuts being burnt and sanctified. These rites are followed by *ballabha* or early breakfast; *i.e.*, rice which has been dried in the sun, fried and covered with *ghi*, is placed before the images; and this is followed by *surya puja*, or an offering to the sun-god, which consists of boiling some rice in the sun.

The next important ceremony is *sakala dhupa*, at which Jagannath is supposed to enjoy his breakfast. It consists of rice, vegetables and cakes, which are offered at 10 A.M., and is the only meal supplied entirely from the temple funds. Meanwhile, the imaginary repast is enlivened by a girl dancing an antiquated measure to the sound of a drum. The offering of betel-nut and the changing of the gods' clothes succeed this as all the other meals of the day. The next important ceremony is the midday meal, after which the gods enjoy a siesta between 1 and 2 P.M., the cots being taken from the store-room and placed in front of them.

In the evening *sandhya arati* is performed in the same manner as *mangala arati*; and the next *niti* is the evening meal between 8 and 9 P.M. Then at about 10 P.M. *chandanalagi* takes place. Three large silver cups containing essence of sandal wood are brought, and the Pashupalaks, standing on the throne, apply the contents to the bodies of the gods. The pilgrims are now allowed *sahana mela* for about two hours, *i.e.*, are admitted to the inner temple. At midnight the gods are given nose ornaments composed of sweet-scented flowers, and are garlanded from head to foot. After this, the final offering, known as *bara singari bhoga*, is made, followed by music and singing, and the gods are then put to bed. Their couches are brought in from the store-room and put in front of the throne, three unripe coconuts with holes bored in them being placed close by with some betel-nut and flowers. Then the door is closed for the night by the Baradwar Parihari, who fastens a padlock to the chains, a little mud is put on the lock, and the stamp of Madan Mohan (a representation of Jagannath) is impressed on it. The gods are then left to their slumbers.

FESTIVALS. There are altogether sixty-two festivals in the year, but the following are the chief festivals of general or local interest arranged according to the months of the year.

Pausa (December-January.—Three festivals are held in this month. The Navanna Jatra is held on the last day of the month; the pilgrims walk nine times round the inner temple, and pudding and rice-meal cakes are consumed. Pusyabhisheka is a local holiday occurring on the full-moon day of the month, when Jagannath is clothed in his finest robes. The third festival, which lasts the whole month, is called Dhanu Sankranti Pratham Bhoga; a special offering consisting of cakes made of various pulses is offered to Jagannath.

Mugha (January-February).—The Makara Sankranti or Makar Jatra takes place on the first day of Magha or Makara, and is attended by a large crowd of pilgrims on their way from Sagar Island. The Sri Panchami or Basantotshava, a festival in honour of the spring, is also held in this month. Jagannath is dressed in gorgeous clothing, and golden fingers and feet are attached to his image.

Phalguna (February-March).—The Dol Jatra is held in honour of the spring. On this occasion the image of Madan Mohan is brought to the *dola-ḳedi* or swinging platform outside the north-eastern corner of the temple. The festival is at its height on the full-moon day, Dol Purnima. The day before this is known as Mendha-pudi and the day after it as Dhulandi; on the latter day there is general merry-making, which finds expression in squirting red powder through syringes.

Baisakha (April-May).—The chief festival is the Chandan Jatra, which lasts for twenty-one days. On this occasion Madan Mohan comes forth from the temple every day and is escorted in procession to the Narendra tank; the idol is then placed on a boat and carried round the tank with music and dancing.

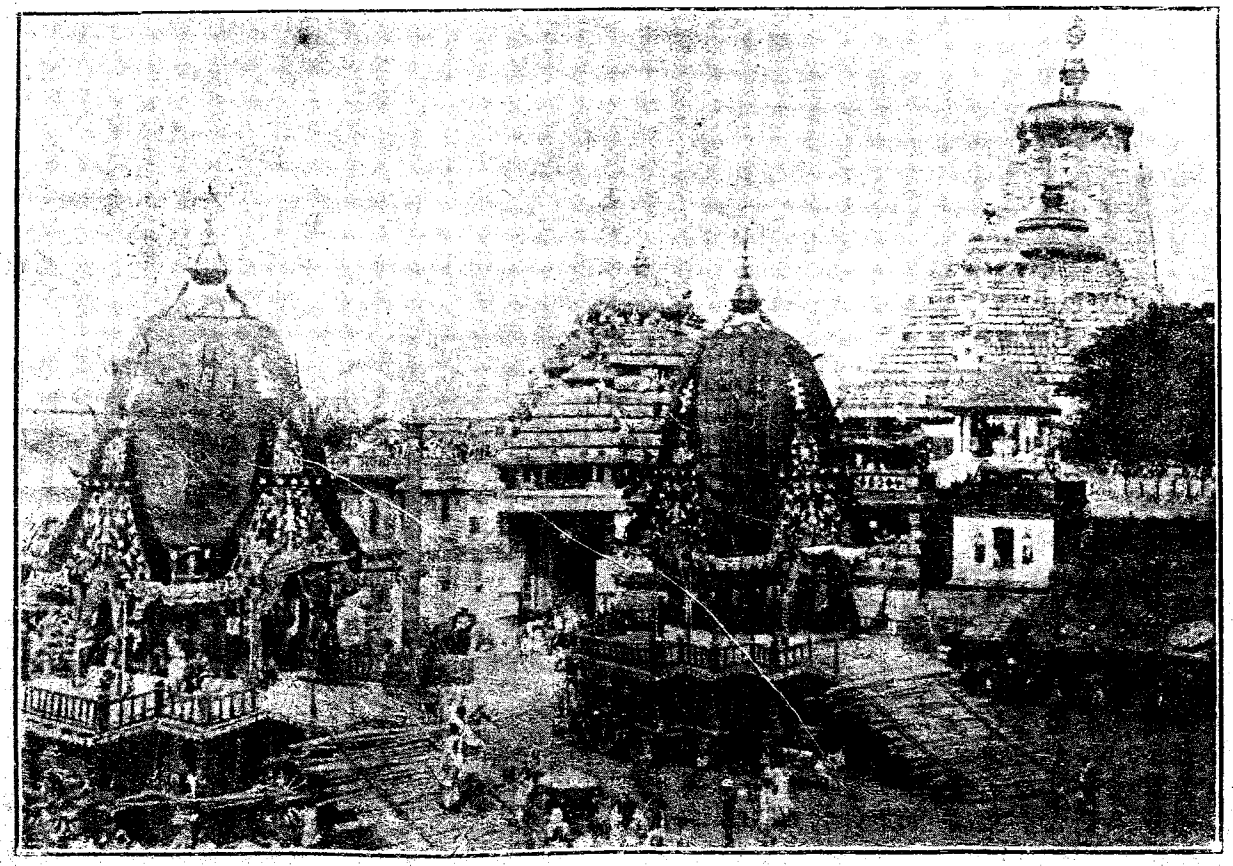
Jyaistha (May-June).—This month witnesses a local festival, called the Narsingha Janama, at which Jagannath is covered over with flowers, and appears with a lion's face made of sola; or rather a large piece of sola with pieces of cotton stuck on it is put in front of Jagannath's face, with a huge slit in it to represent a mouth. It commemorates the appearance of Jagannath as a man-lion to kill the demon, Hiranyakasipu, who was oppressing the gods.

Asadha (June-July).—The Snan Jatra or bathing ceremony in Jyaishtha ushers in the great festival of the year, the

Rath Jatra, which occurs seventeen days later. On the Snan Jatra day, *i.e.*, the full moon of Jyaishtha, the images of Jagannath, Balabhadra and Subhadra are taken out of the sanctuary and placed on a lofty platform near the outer wall, where they can be seen from the street below. Here they are bathed with a hundred and eight pitchers containing water taken from a well near the northern gateway, which is used only once in the year. In consequence, the paint is so much damaged that they have to be removed to a side room in order to be renovated for the Car Festival, when they next make their public appearance. They are placed behind a screen, in front of which are hung three painted scrolls that represent the gods for the time being. None are allowed to go behind the screen except the Daitas, whose duty it is to renovate the images. This period is called *anabasara* (literally, not at leisure).

The process of renovation and decoration is usually completed two or three days before the Car Festival, when the gods are again fit to be seen. This occasion is celebrated as the Nabayauvana, literally fresh youth, and is eagerly looked forward to by the crowd that have been assembling from the time of the Snan Jatra. On the first day of the Nabayauvana, *sahana mela* is allowed for the first time since the Snan Jatra; on the second day the finishing touches are given to the eyes of the gods by the Daitas, the ceremony being called Netrotshava. On the third day, known as Sri Gundicha day, the gods are brought out and put on the cars by the Daitas. The Rath festival now commences, and ends when the gods return to their shrine. The crowds of pilgrims who have begun to collect during the Snan Jatra begin to disperse directly Jagannath's car has been pulled a few yards. New pilgrims also continue to come throughout the festival, as they do not seem to care at what stage they see it, or to attach importance to the *pahandi*, or installation of the idols on the cars. A more detailed account of the Rath Jatra will be given later.

Sravana (July-August).—The Jhulana Jatra is held from the eleventh day of the month to the full-moon day. A swing is erected on the platform between the Mukti Mandapa and the Jagamohana, on which Jagannath is represented by Madan Mohan. The festival is celebrated with greater pomp in the *maths*, especially the Gangamata.



The Rath Jatra or Car Festival, Puri.

Bhadra (August-September).—The Krishna Janama or festival in honour of the birth of Krishna is held in this month. An extra *bhoga* is offered before the image of Krishna during the night, and next day the image is exposed to public view in a swinging cradle. Kaliya-damana Besha is another local festival held in this month. Jagannath is dressed with great splendour, and a snake is placed in front of his image to commemorate his victory, in the waters of the Jamuna, over the snake that troubled his friends, the Gopis.

Aswin (September-October).—An important festival is held in Aswin, viz., the Dasahara, which commemorates the conquest of Southern India by Ramachandra, the husband of Sita.

Karttika (October-November).—The Ras Purnima, also known as the Panchaka festival, is held during the last five days before the full moon. Large numbers of visitors come to Puri from different parts of Orissa to join in it.

A special festival is that known as the *Nua kalebara* (literally the new body) which takes its name from the fact that, on the occasion of its celebration, the *nim*-wood bodies of Jagannath, Subhadra and Balbhadra are renewed. Its celebration is said to depend on certain astronomical conditions, viz., the occurrence of two months of Asadha in the same year, *i.e.*, when there is an intercalary month owing to the lunar month of Asadha not coinciding with the solar month. This accounts for the rarity of the festival. It was celebrated in 1853, in 1877, and in 1912. It was expected in 1893, but was not celebrated, according to one account, because of a popular tradition that the carpenter, a Brahman priest and one of the Raja's household would die within the year. There should also have been a *kalebara* in 1900 according to the Bengali calendar, but not according to the Oriya almanacs, and the latter were followed. The popular belief is that the festival depends on the durability of the wood of which the images are made. If the festival takes place at an interval of one *yuga* (twelve years) or more, the images are entirely renewed, and the old ones buried in great secrecy; but if there is a smaller interval of time, only a partial renovation is necessary. *Nua kalebara.*

Of all the festivals of the year the greatest is the Rath Jatra or Car Festival, which commemorates the journey of Krishna from Gokul to Mathura. According to Hindu CAR FESTIVAL.

mythology, Krishna, the ninth incarnation of Vishnu, was the eighth son of Basudeva and his wife Devaki. It had been predicted that a son of theirs would kill Kansa, the demon king of Mathura, who typifies the principle of evil. Kansa, therefore, imprisoned Basudeva and his wife, and slew their first six sons; Balarama, the seventh was abstracted from Devaki's womb, transferred to that of Rohini, another wife of Basudeva, and so saved. On the birth of Krishna, the father escaped from Mathura with the children and, crossing the Jamuna, entrusted the infant Krishna to the care of the herdsman king, Nanda of Vraja. In Gokul or Vraja, Krishna grew up to manhood. At length, Kansa heard of him and sent a messenger to bring him and his brother to Mathura. The brothers drove in their chariot victoriously to Mathura, where Krishna killed Kansa and ruled in his stead.

This episode in the life of Krishna is commemorated by the Rath Jatra, which takes place in June or July every year. On this occasion the images of Jagannath, Balabhadra and Subhadra are removed from the temple and taken in great chariots to the garden house (Gundicha-bari) along the Bara Danda road, which is about a mile and a half long. Here the gods remain in the car at night, and are taken out next morning and placed in the shrine. They remain there for a week and are then again put into the cars and taken back to the temple, thus commemorating the return journey of Krishna. The rule is that the whole festival should last nine days, allowing a day for the journey to the Gundicha-bari, a day for the return journey, and seven days for the stay there; but in practice it lasts much longer, the return journey sometimes taking many days.

The cars are large structures of considerable height, resembling lofty towers, bedecked with tinsel, paintings and wooden statuary. The largest is the car of Jagannath, which is forty-five feet in height and thirty-five feet square, and is supported on sixteen wheels with a diameter of seven feet. The brother and sister of Jagannath have separate cars a few feet smaller. The images are brought out from the temple through the Lion Gate and placed on the cars, this being known as the *pahandi*, a sacred moment when the assembled pilgrims fall on their knees and bow their foreheads in the dust. When all is ready, they seize the ropes, and drag the cars down the Bara Danda road to the garden house of Jagannath. The distance is only about a mile and a half,

but as the heavy structures have no contrivance to guide them, and the wheels sink deep into the sand, which in some places covers the road, the journey takes several hours and has been known to take several days. Once arrived at the garden house, the enthusiasm subsides. By the third day most of the pilgrims have left, and but for professional car-pullers, Jagannath would often be left there. The cars are dragged from the temple by the assembled pilgrims and by a number of villagers, who hold revenue-free lands granted to them as remuneration for the work; when the pilgrims are insufficient to drag the cars back, coolies are engaged from the neighbouring villages. In 1904, the pilgrims alone pulled the cars to the country house in four hours and brought them back again to the temple without such assistance; in 1925, when over fifty thousand pilgrims attended the ceremony, the journey took several hours.

No crowd is more amenable than that which gathers during the Rath Jatra, but a very large proportion consists of women; and this constitutes a danger, as their eagerness to press forward and see Jagannath is very great, and if one falls down, a fatal accident may easily occur. Moreover the atmosphere, where thousands of people are crowded together in the street in the monsoon climate, is stifling, and many are overcome by the heat, particularly as hundreds are old people, who have struggled to perform this pilgrimage before death. The greatest care is taken to prevent accidents, but this is not always an easy task, for the more zealous devotees rush in front of the cars, especially that containing Jagannath, before which they prostrate themselves with the object of touching it and so obtaining merit. This is not unnatural, for it is believed that he who obtains a sight of Jagannath at this time is saved from the misery of future rebirths. The accidents which have occurred in this way have given rise to the belief that self-immolation is practised at the festival.

Early European writers unanimously gave voice to this belief. Bruton, the first Englishman to visit Puri (1633), wrote in his description of the temple: "Unto this Pagod or house of Sathen doe belong nine thousand Brammines or Priests, which doe dayly offer sacrifice unto their God Jaggarnat, from which Idoll the City is so called. And when it (the chariot of Jaggarnat) is going along the city, there are many that will offer themselves a sacrifice to this Idoll, and desperately lye downe on the ground, that the Chariott wheeles

may runne over them, whereby they are killed outright; some get broken armes, some broken legges, so that many of them are destroyed, and by this means they think to merit Heaven."

Bernier also wrote (1667): "In the town of Jagannat, situated on the Gulf of Bengale, and containing the famous temple of the idol of that name, a certain annual festival is held, which continues, if my memory fail not, for the space of eight or nine days. At this festival is collected an incredible concourse of people. The number, I am told, sometimes exceeds one hundred and fifty thousand. A superb wooden machine is constructed, such as I have seen in several other parts of the Indies, with I know not how many grotesque figures. This machine is set on fourteen or sixteen wheels like those of a gun-carriage, and drawn or pushed along by the united exertions of fifty or sixty persons. The idol, Jagannat, placed conspicuously in the middle, richly attired, and gorgeously adorned, is thus conveyed from one temple to another. The first day on which this idol is formally exhibited in the temple, the crowd is so immense, and the press so violent, that some of the pilgrims, fatigued and worn out in consequence of their long journey, are squeezed to death: the surrounding throng give them a thousand benedictions, and consider them highly favoured to die on such a holy occasion after travelling so great a distance. And while the chariot of hellish triumph pursues its solemn march, persons are found (it is no fiction which I recount) so blindly credulous and so full of wild notions as to throw themselves upon the ground in the way of its ponderous wheels, which pass over and crush to atoms the bodies of the wretched fanatics without exciting the horror or surprise of the spectators. No deed, according to their estimation, is so heroic or meritorious as this self-devotion: the victims believe that Jagannat will receive them as children, and recall them to life in a state of happiness and dignity."

Alexander Hamilton, writing in 1727, gave a similar account: "Jagarynat's effigy is carried abroad in procession, mounted on a coach four stories high. They fasten small ropes to the cable, two or three fathoms long, so that upwards of two thousand people have room enough to draw the coach, and some old zealots, as it passes through the street, fall flat on the ground, to have the honour to be crushed to pieces by the coach wheels."

These travellers' tales began to be discredited when there were actually British residents at Puri. As early as 1818 Stirling wrote: "That excess of fanaticism which formerly prompted the pilgrims to court death by throwing themselves in crowds under the wheels of the car of Jagannath has happily long ceased to actuate the worshippers of the present day. During four years that I have witnessed the ceremony, three cases only of this revolting species of immolation have occurred, one of which I may observe is doubtful, and should probably be ascribed to accident; in the others the victims had long been suffering from some excruciating complaints, and chose this method of ridding themselves of the burthen of life in preference to other modes of suicide so prevalent with the lower orders under similar circumstances." Mr. Fergusson, who visited Puri in 1838, saw "the pilgrims hurrying to the spot talking and laughing, like people going to a fair in England, which in fact it is;" but he saw no victims crushed under the wheels, and none had been heard of for many years before.

This fallacy was finally exposed by Sir William Hunter, who carefully examined the whole evidence on the subject, from 1580, when Abul Fazl wrote, through a long series of travellers, down to the police reports of 1870, and came to the conclusion that the deaths at the Car Festival were almost always accidental. "In a closely-packed, eager throng of a hundred thousand men and women, many of them unaccustomed to exposure or hard labour, and all of them tugging and straining to the utmost under the blazing tropical sun, deaths must occasionally occur. There have, doubtless, been instances of pilgrims throwing themselves under the wheels in a frenzy of religious excitement; but such instances have always been rare, and are now unknown. At one time, several unhappy people were killed or injured every year, but they were almost invariably cases of accidental trampling. The few suicides that did occur were for the most part cases of diseased and miserable objects, who took this means to put themselves out of pain. The official returns now place this beyond doubt.

"Nothing, indeed, could be more opposed to the spirit of Vishnu worship than self-immolation. Accidental deaths within the temple render the whole place unclean. The ritual suddenly stops, and the polluted offerings are hurried away from the sight of the offended god. According to

Chaitanya, the apostle of Jagannath, the destruction of the least of God's creatures is a sin against the Creator. Self-immolation he would have regarded with horror. The copious religious literature of his sect frequently describes the Car Festival, but makes no mention of self-sacrifice, nor does it contain any passage that could be twisted into a sanction for it. Abul Fazl, the keen Musalman observer, is equally silent, although from the context it is almost certain that, had he heard of the practice, he would have mentioned it."

TEMPLE STAFF.

For the due observance of the daily ritual and the celebration of the festivals there is an elaborate organization of *sebaits*, *i.e.*, the priests, attendants and servants of Jagannath. They are divided into thirty-six orders, known as *chhattisa niyoga*, under a head officer called the *nayaka*; but they may be broadly grouped under two heads :—(1) the guards of the temple, such as Brahman Pariharis (Sans. *Pratihari*) and Gochhikars, and non-Brahmans (*e.g.*, Dwaris, Lenkas, Paiks, etc.); and (2) the Pandas or priests of the god. Both Pariharis and Pandas are regarded with the greatest reverence by the pilgrims, so much so that if they are struck by their canes, they regard it as a sign of the grace of God and believe that their sins are washed away. Of the other orders, the most noticeable are the Suars (Sans. *Supakara*) or cooks, the Mekaps in charge of the wardrobe, and the Bandus, who assist in the worship by handling water-pots, brass vessels, lamps, etc., the Khuntias, who call the priests and distribute the sacrificial flowers, the musical players, and the dancing girls or Devadasis.

Daitas.

Ordinarily, only two orders of priests can touch the images of the gods, viz., the Pashupalaks and the Puja Pandas; but this rule is relaxed during the Car Festival and the Snan Jatra or bathing festival, when the services of all classes of priests are required to carry the images to and from the Snanavedi and the cars. During these two festivals the Daitas are supposed to be specially in charge of the persons of the gods, but they have to go away before any *bhoga* can be offered or any rite performed. It has been suggested that the position of the Daitas points to a compromise between Brahmanism and the older religion, whatever it was. According to tradition, the Daitas are the descendants of the fowler Viswabasu, and possess the privilege of touching the body of Jagannath in virtue of their descent. This tradition,

their claims to be the guardians of the god, their present duties and habits, all point to the fact that they are the descendants of the old people who worshipped the god, whom the Brahmans absorbed in their system.

Dancing girls.

Another class about whose position there has been some misconception is that of the dancing girls. For example, Sir William Hunter writes :—" Indecent ceremonies disgrace the ritual, and dancing girls with rolling eyes put the modest female worshipper to the blush " . . . " The baser features of a worship which aims at a sensuous realization of God appears in bands of prostitutes who sing before the image" . . . . " In the Pillared Hall a choir of dancing girls enliven the idol's repast by their airy gyrations " . . "The indecent rites which have crept into Vishnuvism are represented by the Birth Festival (*Janam*), in which a priest takes the part of the father and a dancing girl that of the mother of Jagannath, and the ceremony of his nativity is performed to the life." It is reported that there is no indecency in any of the rites, and no dancing girl has part in the ritual. One girl, it is true, performs an antiquated dance to the accompaniment of a small drum during Jagannath's morning meal; but this is not regarded as an essential part of the ceremony, and her absence does not interfere with its performance. Again, at night, when all the ceremonies are over, one of the dancing girls comes (after a bath whatever the hour may be) and sings a song in the presence of the deity. But, should any of the dancing girls enter the inner sanctuary, except on these two occasions, the whole shrine is considered defiled, and a ceremony of purification has to be performed before the rites can continue.

Another statement which may be corrected is that " As the pilgrims pass the Lion Gate, a man of the sweeper caste strikes them with his broom to purify them of their sins, and forces them to promise on pain of losing all the benefits of pilgrimage not to disclose the events of the journey and the secrets of the shrine." Sweepers as a class are prohibited from entering, no pilgrim is struck by their brooms, and no promise of secrecy is exacted.

Raja of Puri.

The temple, with its full establishment, is under the Raja of Khurda, now known generally as the Raja of Puri, because he lives at Puri. The Raja has to perform some nominal services in the temple, viz., sweeping the cars and

strewing flowers over the idols during the Car Festival, but as he rarely comes out, this work is done by a proxy, the *Mudiratha*.

For many years the late Raja of Puri was required to delegate his power of management to an officer approved by the Government, in accordance with the terms of an agreement executed by him. When the late Raja died his adopted son, Ramchandra Deva, was recognised as his heir, and it was decided to transfer the management of the temple to him, with the condition that he should submit to Government the name of anyone to whom he proposed to delegate his powers.

The connection of the Raja of Khurda with the temple dates back to the time of Man Singh, who in 1590 conquered Orissa, and selected the then Raja of Khurda, Ramchandradeva, as Superintendent of the temple, probably because he was related to the Bhoi kings of Orissa. Ramchandra's descendants continued to manage the temple till the eighteenth century, when the Musulman Deputy Governors ousted the Raja, levied a pilgrim tax, and generally interfered so much with the internal management of the temple, that the priests fled with the idols and kept them hid in a hill on the Chilka lake. The loss of revenue which resulted forced the Deputy Governor to induce the priests to bring back the idols under a promise that the worship of Jagannath would not be interfered with. When Ali Vardi Khan ceded Orissa to the Marathas, the latter kept the management in their own hands, had the ceremonies and festivals properly conducted, and made good any deficits due to an excess of expenditure. On the conquest of Orissa in 1803, the British authorities managed the temple for the first few years, and then, desirous of withdrawing from the direct management of a heathen temple, entrusted the superintendence to the Raja of Khurda, who had been released from imprisonment in 1807, and ordered him to live in Puri town. The subsequent history of the connection of the Raja with the temple will be found in the section dealing with Administration at the end of this chapter.

Maths.

No account of Jagannath worship would be complete without some account of the *maths* in Puri. *Maths* are monastic houses originally founded with the object of feeding travellers, beggars and ascetics, of giving religious instruction to *chelas* or disciples, and generally of encouraging a religious life. The heads of these religious houses, who are called *Mahants*

or *Math-dharis*, are elected from among the *chelas*, and are assisted in the management of their properties by *Adhikaris*, who may be described as their business managers. They are generally celibates, but in certain *maths*, married men may hold the office. *Mahants* are the *gurus* or spiritual guides of many people, who present the *maths* with presents of money and endowments in land. Thus, the Sriramdasa or Dakhinparsva *math* received rich endowments from the Marathas, its abbot having been the *guru* of the Maratha Governor; while the *Mahant* of the Emar *math* in the eighteenth century, who had the reputation of being a very holy ascetic, similarly got large offerings from his followers and is possessed of large estates. Both Shiva and Vaishnava *maths* exist in Puri. The lands of the latter are known as *amruta-manohi* (literally nectar-food), because they were given with the intention that the proceeds thereof should be spent in offering *bhoga* before Jagannath, and that the *mahaprasad* thus obtained should be distributed among pilgrims, beggars and ascetics; they are distinct from the *amruta-manohi* lands of the temple itself, which are under the superintendence of the Raja. In 1848, Babu Brij Kishore Ghose roughly estimated the annual income of twenty-nine *maths* from land alone at Rs. 1,45,400,[1] and this income has increased largely during the last eighty years.

There are over seventy *maths* in Puri town. The chief Saiva *maths* are located in the sandy tract near Swarga-dwar, viz., Sankaracharya, with a fine library of old manuscripts, and Sankarananda, which has a branch at Bhubaneswar. Near the Sankaracharya *math* is a small *math* of the Kabirpanthis or followers of Kabir and the Sikh Guru Nanak. Most of the *maths* are naturally Vaishnava. The richest of the latter are Emar, Sriramadasa and Raghavadasa, the inmates of which are Ramats or followers of Ramananda. The Gauriyas or followers of Chaitanya have two *maths*, viz., Radhakanta, with a celibate abbot, and Kothbhoga, with a married abbot; while the Madhvacharis have the Achari *math* with a Telugu married abbot, and the local sub-sects have two Oriya *maths*. The Uttaraparsva *math* is one of the oldest and most highly esteemed, being permitted to supply a special *bhoga* of Jagannath, the *mohana-bhoga*. Another *math* with a fair income is located in the Jagannath-ballabha garden, which is frequently mentioned in the biographies of Chaitanya.

[1] History of Pooree, pp. 8-9.

PILGRIMAGE.

The Jagannath pilgrimage appears to be at least eight centuries old, for in an inscription dating back to 1137 A.D. we find mention of a pilgrim who "went to the sacred Purushottam Kshetra and gave away his wealth in charity on the noisy shore of the sea.[1] Throughout these centuries the magnificence of the temple, with its elaborate ritual, the liberal royal patronage it enjoyed, the development of Vaishnavism, the catholicity of worship it inculcated, have combined in attracting attention to Jagannath; and year after year a steady stream of pilgrims has flowed to the temple by the sea in spite of the great difficulties of the journey. Nothing, however, has stimulated pilgrimage so much as the organized system of pilgrim guides. The Pandas and Pariharis of the temple have divided among themselves the whole of India, each having their allotted circle, in which they claim to possess a monopoly of pilgrims. Two or three months before the beginning of the principal festivals, the Dol and Rath Jatras, they engage agents, mostly Brahmans and sometimes barbers and Gauras, and depute them to different parts of India in order to recruit pilgrims. These agents who are often erroneously called Pandas, are known as *batuas* (journeymen) in Oriya and *sethos* in Bengali

Pilgrim guides.

They travel among the chief towns and villages of their circle, carrying with them rice half boiled and offered to Jagannath, and *mahaprasad, i.e.*, fully boiled rice, sweetmeats, pulse, etc., which have been similarly placed before the god. This sacred food they offer to the townsfolk and villagers whom they visit, and at the same time persuasively appeal to their pious feelings and their longing for new sights by telling them—and specially the women and old men—of the miraculous power of the god, his great temple and holy service, of the wonderful sights to be seen on the way and at Puri itself, of the beatific vision to be enjoyed in the temple, and of the certain salvation to be obtained from a glimpse of the god. Hurried consultations follow in the family and with the neighbours, and money is got together for the journey. A short time before the festival, the pilgrims leave home, on an auspicious day, under the guidance of the Panda's agent, generally in a party of five to twenty persons. Females

[1] Monmohan Chakravarti, *The date of the Jagannath Temple in Puri*, J.A.S.B., Part I, 1898.

predominate, and among females widows; instances are not wanting of young women running away from their homes and joining the little body of pilgrims.

The perils of the journey seventy years ago have been vividly described by Sir W. W. Hunter: "The great spiritual army marched its hundreds, and sometimes its thousands of miles along burning roads, across unbridged rivers, and through pestilent regions of jungle and swamps. Those who kept to the road had spent their strength long before the holy city was reached. The sturdy women of Hindustan braved it out and sang songs till they dropped; but the weaker females of Bengal limped piteously along with bleeding feet in silence, broken only by deep sighs and an occasional sob. Many a sickly girl died upon the road; and by the time they reached Puri, the whole party had their feet bound up in rags, plastered with dirt and blood." At that time the Bengal pilgrims had to tramp all the way from Uluberia to Puri on the Jagannath Trunk Road, only the wealthier classes travelling in bullock carts or palanquins, while pilgrims from the south used to come by road along the strip of land between the Chilka lake and the Bay, or in a few cases by boats across the Chilka. During the last thirty years of the nineteenth century the difficulties of the journey were much decreased, as it was possible to go from Calcutta by sea-going steamers to Chandbali in the Balasore district, thence by river in barges towed by steam-launches to Cuttack, and lastly by road to Puri. Now-a-days most pilgrims travel by rail direct to the sacred town.[1] The journey.

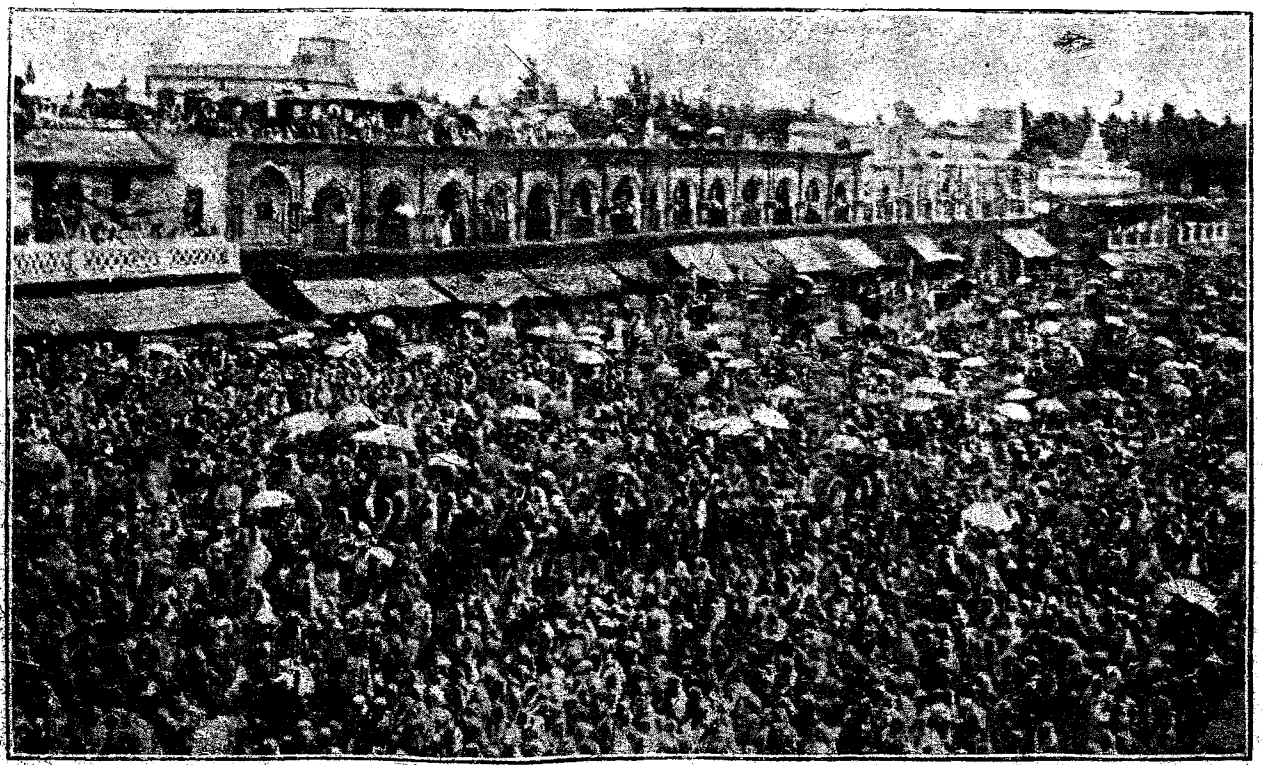
The earliest known account of the pilgrimage in detail is recorded in the biographies of Chaitanya, such as the *Kadcha* of Govinda Das, the *Chaitanya-bhagavata*, and the *Chaitanya-Charitamrita*. That great apostle of Vaishnavism first came to Puri early in 1510 A.D. During his pilgrimage through Orissa he visited the Saiva temple in Jaleswar, the shrines of Kshirachora Gopinatha at Remuna, of Varahanatha and Birija at Jajpur, of Sakshi Gopala Gopinath, at Cuttack (since removed to Satyabadi, twelve miles north of Puri) and the Lingaraj at Bhubaneswar. Modern pilgrims omit Jaleswar and Remuna, and only a few visit Jajpur and Satyabadi. Passing onwards through Cuttack, the next important station reached The pilgrim round.

[1] Some pilgrims may still be seen measuring their length prostrate along the road, all the way from their homes, even for scores of miles.

is Bhubaneswar, which though inferior to Puri in religious sanctity surpasses it in its wealth of artistic and archæological remains. Here the pilgrims bathe in the sacred tank of Vindusagara, pay their respects to Basudeva on its east bank, visit the great temple of Lingaraj, and next circumambulate the other great temples in the neighbourhood, Siddheswar and Kedareswar, Brahmeswar, Yameswar and Rameswar. The offerings of boiled rice at Lingaraj and Basudeva, it may be added, are considered nearly as sacred as the *mahaprasad* of Jagannath in their power to obliterate caste distinction.

Pursuing their journey from Bhubaneswar, the weary pilgrims at last catch sight of the blue wheel topping the tower of the Jagannath temple. Raising a loud shout of "*Jai Jagannath ki jai*," they change their dress. Those who have come by road hurry on over the old bridge of eighteen openings, the Atharanala bridge, while those who alight at the railway station hurry on over the sand, all eager to arrive quickly at the Lion Gate. The pains and miseries of the journey are forgotten, when the devotees reverently enter inside and catch a glimpse of the idols seated in their full glory on the Ratnavedi. This first visit is known as *dhula paye darsan*, *i.e.*, "paying homage to the gods with the dust on the feet." The pilgrim guide now makes over his little flock to his employer. Those who have none are eagerly questioned by the priests or their servants, registers are brought forward, and in most cases an ancestor or a relation is traced out as a client. The registers, it may be explained, are the Pandas' books, in which the names of their pilgrims and their ancestors are entered. When no ancestor or relation can be traced, and the pilgrims hesitate to select a Panda, there is often a brawl, and occasionally a fight between the agents of the different priests. The priests then lodge the pilgrims in the licensed lodging-houses, arrange for a supply of daily food from the temple, and depute men to show them the sacred places.

The pilgrims naturally first visit the shrine of Jagannath, Balabhadra and Subhadra; and offer jewels, ornaments, money, cloths and other valuable articles at their throne. These become the property of the temple. Then they visit the other shrines within the enclosure, of which the most important are Bimala (a form of Durga), Lakshmi, Saraswati and Surya. Barren women especially worship the Akshaya-bata (*ficus*



Pilgrims at the Rath Jatra, Puri.

bengalensis) and its presiding deity, Bata-Ganesha, in order that they may be blessed with offspring. Outside the temple, the principal sacred places visited by the pilgrim are (1) Gundichabari, to which the three deities are driven in cars during the Car Festival; (2) the *pancha-tirtha* or five sacred sites, viz., the stone-embanked tanks of Indradyumna, Markánda and Swet-Ganga with temples rising from their edge, the Chakra-*tirtha* and the Swargadwar or door of heaven, both on the seaside; and (3) the temple of Loknath on the west, the water of which is so sacred that an oath taken by it is regarded by the people of Puri as more awful than an oath on the holy offerings of Jagannath or any other deity. The Gauriya Vaishnavas, the followers of the Chaitanya cult, also visit *maths* hallowed by association with Chaitanya, viz., Radhakanta, where he lived and where his cell and quilt are shown, Aulia, where his wooden shoes are kept, and Tota Gopinath near the seashore, where he is said to have disappeared.

Pilgrims.

The pilgrims are enjoined to stop at Puri at least three nights, but most stop longer during the Rath and Dola festivals. During the former Bengalis predominate; during the latter, the proportion of up-country people is larger; and during the Panchaka or Rasa festival, the local people prevail. Formerly the largest number came during the Car Festival, and next during the Holi; but now-a-days, on account of easy communication by rail, the number of pilgrims is more equally distributed over the whole year, and the crowd has also increased on other holidays, such as the Puja and Christmas holidays. Special occasions, such as the *Kalebara* or Gobind Dwadasi, which occur at rare intervals, attract enormous crowds numbering hundreds of thousands. Accurate statistics of the number of pilgrims who visit Puri every year are not available, but a very fair idea of their number may be gathered from the figures showing the number of passengers booked by railway every year, which vary from three hundred to five hundred thousand; over a half of these came from places over one hundred miles distant. The greatest rush is at the time of the Rath Jatra. It is on record that in 1892 there was an influx of over two hundred thousand pilgrims, this large crowd being attracted by the fact that the year was considered an highly auspicious one, and that it was intended to renew the images (*nua kalebara*)—an intention which was subsequently given up, or even more would have flocked to the

sacred city. Ordinarily, from fifty to a hundred and fifty thousand attend.

The pilgrims include Bengalis, Oriyas, Gujaratis, Marwaris, Punjabis, Marathas and Telugus, and the majority are people of the poorer classes, such as indigent widows, religious mendicants, and needy peasants. A very large proportion are widows, who make great sacrifices to undertake a pilgrimage; instances are known of poor widows saving a little month after month for years together, by foregoing some of the necessities of life, until they have enough for the expenses of the journey and for the offerings required. The difficulties of housing and feeding these multitudes can easily be imagined. The lodging-houses only provide accommodation for twenty thousand pilgrims, and many have to camp out in the open, so that in the dry weather the place looks like a great encampment. Unfortunately the Car Festival, the great ceremony of the year, takes place in the rainy weather, and at this time the pilgrims who cannot find room in the lodging-houses or shelter elsewhere are exposed to the inclemency of the season. Conditions have now improved owing to the opening of the railway, the increase in the number of licensed lodging-houses, the improved sanitation of the town and the greater facilities afforded for getting non-rice food. Pilgrims also observe less rigidly the custom of not cooking their food, exceptions being made in the case of the sick and the young. With all these changes for the better, however, Puri town and district still form a focus of cholera.

Inside the temple the greatest rush takes place on the *navayauvana* day, when the images, repainted and fully dressed, after fifteen days' rest, are brought out for public view. The pilgrims who have been eagerly waiting for this day crowd inside to see the gods, and special arrangements have to be made by the temple authorities to prevent accidents. The pilgrims are allowed to enter the temple in batches by the north door of the Jagamahana, taken by a tortuous way to the sandal-wood barrier in the Mukhsiali, allowed a minute or two to have a look at the idols and then hurried out through the south gate of the Jagamahana. The services of the Pandas are of much value at this time, their men forming a cordon round the pilgrims by interlocking hands, and then slowly taking them by the tortuous passage inside, thus

bearing on themselves the full brunt of the crush. Nevertheless, the frantic struggles of men and women, many old and sick, are often a pitiable sight, and several swoon away in the heat and the crush.

Pandas' income.

The Pandas have frequently been charged, and not without reason, with fleecing their pilgrims; but it is undeniable that they labour hard to secure the personal comfort of the latter, and to show them the *tirthas* and have the due ceremonies performed with the least inconvenience possible. Apart from small commissions on the purchase of *mahaprasad* and knick-knacks, the chief income of these spiritual guides is obtained when the ceremony called *atika-bandha* is performed. This takes place in a building known as Vaikuntha, situated outside the inner enclosure to the north of the temple. Here moral pressure is put on the pilgrims to pay a round sum for periodical *bhogas* of food to be distributed among Brahmans, beggars and ascetics. Sums varying from five to one thousand rupees are realized in this way from each head of the family, and are appropriated by the priests. In case the pilgrim has no ready cash in hand, he executes a note of hand to pay the balance on reaching home and these debts are almost always repaid. Big landholders and Rajas also grant the Pandas endowments of land and even entire villages. But the Pandas, though often well paid, quickly spend the money, partly in spendthrift habits, partly in employing men for recruiting pilgrims. Most pilgrims are able to pay their Pandas for the services rendered by them including accommodation in the lodging-houses; but numbers are in a state of destitution before the time comes for them to turn their backs upon the holy city and set their faces once more homewards. Since 1902 there has been a fund for the relief of destitute pilgrims, the object of which is to furnish them with sufficient money for travelling and diet, and thus enable them to return to their homes in safety.

Bhoga and *mahaprasad.*

Bhoga (Sans. *bhunja*, to eat) means food sanctified by being offered to a god, while food made holy by presentation to Jagannath goes under the name of *mahaprasad*. The latter term properly means any food offered to Jagannath, whether cooked or uncooked, rice or other food, but popularly it is used only for cooked rice, pulse, vegetables, tamarind, preparations of the same, and sweetmeats, but not for edible fruit. The *bhogas* are of two kinds, the *kothbhoga* or offerings made

from the temple funds and the Raja's house, and *chhattra-bhoga*, or offerings made by *maths* or private persons. About half of the *kothbhoga mahaprasad* is given as remuneration to the officiating priests, and the rest is sold, the sale-proceeds being credited to the account of the Raja of Puri. The whole of the *kothbhoga* is regarded as part of the Raja's perquisites, from which he allows a portion to the priests. The food is cooked in the temple kitchens by the Suars, and is thence removed by a covered passage to the inner sanctuary in the case of ordinary *kothbhogas*, and to the Bhogamandapa in the case of larger *kothbhogas* and *chhatrabhogas*. When the food is being presented to the gods, the priests on duty utter prayers, fans and fly-flaps are waved, and music is played. Except the Suars and the priests, none can touch the pots; otherwise they become unfit for presentation before the god and have to be thrown away. But on the completion of worship, the food becomes *mahaprasad*, and then can be touched by anybody and offered even by men of low caste to Brahmans and others of high caste. The *mahaprasad* thus prepared (minus the quantity retained by the Raja and the priests on duty) is offered for sale at Sarghara, a place outside the inner enclosure on the way to the Snanavedi. Here the pilgrims or their Pandas' employees buy and take the pots to the lodging-houses. The cooking is generally well done; but if kept for more than a day, as is usually the case during the Car Festival, the food putrefies and becomes unfit for consumption.

The eating of *mahaprasad* or the holy food is perhaps the most distinctive feature of a pilgrimage to Puri. In the presence of Jagannath all men, whether priest, noble or peasant, are regarded as equal, and the sign of this equality is that all may join together in eating the *mahaprasad*. Popular belief, indeed, has it that, if a low caste man offers it to one of a higher caste, and the latter turns away his head in contemptuous refusal, his neck becomes rigid and his head remains in that position. Another legend is that a proud pilgrim from Northern India once swore that he would eat the leavings of no mortal or immortal being. But as he crossed the bridge outside the sacred city, his arms and legs fell off, and there he lay on the roadside for two months, till a dog came out of the town eating a fragment of the holy food, and dropped some as he passed. The proud man crawled forward on his stomach, and ate the leavings, all slavered from the jaws of

the unclean animal. Thereupon, the mercy of Jagannath visited him; new limbs were given to him, and he entered the holy city as a humble disciple. It should be added, however, that the doctrine of equality of all men in the sacrament of the holy food is not always realized in practice, as a high caste man will sometimes take care to avoid the chance of being offered rice touched by a man of low caste.

The *mahaprasad* is unfortunately a fruitful source of disease. No pious pilgrims in good health would dream of cooking their food at Puri, and they eat the holy rice in whatever state it may be, for every grain is holy. It is too sacred for the least fragment to be thrown away, and the result is that large quantities are eaten in a state dangerous even to a man in robust health, while some is taken away to the pilgrims' homes and there distributed among their relatives. The state of boiled rice kept for such a long time can be better imagined than described, but its effects are sufficiently apparent from the number of deaths caused by cholera and bowel complaints.

ADMINISTRATION.

Under the Muhammadan rule nine lakhs of rupees are said to have been realized by Government from the tax levied on pilgrims coming to Jagannath.[1] The Marathas, being Hindus, encouraged the worship and sanctioned regular payments for the support of the temple. In spite of this, their misrule must have greatly diminished the number of pilgrims. The Maratha officials levied oppressive dues along the route; at each ford and pass the unhappy pilgrims had to pay toll; and every myrmidon extorted all that he could. The Jagannath road was a mere foot-path, marked by the dead bodies of victims of cholera; and in 1806 the Revd. Claudius Buchanan describes the neighbourhood of Jagannath as "a valley of skulls," and tells us that tigers roared every night near the outskirts and made havoc of the unhappy pilgrims, whose bones strewed the highways.

When the British marched to occupy the Province in 1803, Lord Wellesley expressly enjoined the troops to respect the temple and the religious prejudices of the Brahmans and pilgrims; and a deputation of Brahmans accordingly came into the camp, and placed the temple under their protection without a blow being struck. For the first few years the East India Company followed the same system as the Marathas,

[1] *Riyazu-s-Salatin*, Bibl. Ind. Ed. transl., p. 303.

who had annually made up the difference between the receipts and the expenditure of the temple. The result was that there was a deficit every year, which the Company had to make good. In 1806 the Government endeavoured to get rid of the minute supervision of idolatrous rites which this system involved, and by Regulation IV of 1806 the superintendence of the temple was vested in an assembly of three *pandits* nominated by the Collector of the Pilgrims' Tax and appointed by Government. By Regulation IV of 1809 the assembly of *pandits* was abolished, and the management was transferred to the Raja of Khurda (now known as the Raja of Puri), who was appointed hereditary Superintendent. He was not granted, however, supreme authority; for in order to prevent any abuse of power on his part, three of the principal servants of the temple were appointed to assist him. They were not to be removed from their office except with the sanction of Government, and were required to report to Government any cases in which the Raja issued orders inconsistent with the recorded rules and institutions of the temple. The Raja received a fixed allowance on the understanding that the sum allotted was to be spent wholly in the maintenance of the temple.

Government reimbursed itself by a pilgrim tax similar to that which had been levied by the native governments, but of a much lighter character. This tax formed an important item in the revenue from Orissa; but it was felt that the money received was to a certain extent the price of a State sanction to idolatry. Accordingly, in 1840, the Company abolished the pilgrim tax, gave up all connection with the temple, and by Act X of that year vested the Raja with full and absolute authority in regard to the management of the temple and its property. No provision, however, was made for his removal from the office of Superintendent of the temple on account of misconduct, or for carrying on his duties in the event of his being incapacitated. Act X of 1840 marked a new and important departure in the policy of Government. It not only repealed the pilgrim tax, but also forbade the temple authorities to impose taxes of any kind upon the pilgrims for admission into the temple and performing ceremonies there. The right of free admission and free worship thus became a recognized privilege of the general body of pilgrims.

At the same time, Government scrupulously maintained the pledges on the strength of which the temple had been

placed under its protection by the priests. It declined to interfere with its ancient grants, and continued to make an annual payment to meet the expenses of the temple, which are said to have averaged Rs. 53,000 per annum. In 1843, the estate of Satais Hazari Mahal, yielding an annual rental of Rs. 17,420, was made over to the Raja, and the annual money payment made by Government was thenceforth reduced to Rs. 35,738. In 1845, it was ascertained that out of this sum Rs. 23,321 represented partly certain assignments of revenue granted by the former Rajas of Berar, and partly certain dues (called *sair*) formerly collected on behalf of the temple, on account of which compensation was due; and it was therefore decided that the annual payment should be reduced to Rs. 23,321, being the amount of the resumed endowment and compensation for the *sair* referred to.

In 1856, owing to the neglect of the Superintendent of the temple, it was found necessary, for the protection of the pilgrims, to appoint a police establishment at an annual expense of nearly seven thousand rupees, which was accordingly deducted from the annual payment made by Government. In 1858 the Government decided to make no more of these payments, but to transfer to the temple certain lands, the Ekhrajat Mahal, yielding an income of Rs. 16,517, the sum then being paid by it. Subsequently, it was decided, in 1859, that in future the Superintendent should be held responsible for the preservation of peace inside the temple, that he should himself maintain such extra police as might be necessary outside the temple on the occasion of the great festivals, and that the sum of Rs. 6,804 hitherto paid direct to the police should be made over to the Superintendent, until a transfer of land yielding an equivalent sum could be effected. The Superintendent, for his part, executed an agreement, by which he bound himself to maintain a body of *barkandazes* to assist in preserving order outside the temple during the Car Festival, and to keep up barriers at the temple gates to prevent a rush of pilgrims.

In 1859 the Raja of Khurda died, and his widow was empowered by his will to conduct the affairs of the temple during the minority of his adopted heir. The management of the temple went from bad to worse, nor was there any improvement when the Raja came of age. Matters came to a crisis in 1878, when the Raja was tried for murder, convicted, and

sentenced to transportation for life. This sentence brought about a very anomalous state of things, inasmuch as, under Act X of 1840, the superintendence of the temple remained with the Raja even after his transportation. Eventually, in 1885, Government instituted a suit under Act XIV of 1882 (one section of which had repealed the provision in Act X of 1840 vesting the Raja of Puri with the superintendence) for the purpose of declaring vacant the office of Superintendent, which was nominally held by the convict Raja, and of obtaining a decree to appoint new trustees under the trust, and to settle a scheme for its management. This suit was hotly contested; the cry that religion was in danger was raised in the vernacular press; and in the end the case was abandoned in 1888 under a deed of compromise. This deed stipulated that during the minority of the young Raja, Mukunda Deva, his grandmother and guardian should exercise on his behalf the rights of superintendence over the temple till he came of age; and that she should appoint a competent Manager to manage the affairs of the temple during his minority. This arrangement continued till 1897, when the Raja having attained his majority, the decree ceased to have any force. Complaints of negligence and mismanagement continued even after the Raja came of age, and eventually a Deputy Magistrate was appointed as Manager, with his consent, in 1902.

This arrangement continued during the lifetime of the Raja; and on his death in 1926, his adopted son Ramchandra Deva was recognised as his heir, and it was decided to transfer the management of the temple to him.

Police.

One other point calls for special mention in connection with the temple administration, viz., the preservation of peace and maintenance of order in the shrine and its precincts—a matter of considerable importance, as the records shew that without proper police arrangements many pilgrims may be crushed to death at the great festivals. It is probable that the Pariharis or hereditary temple guards were originally charged with the maintenance of order within the temple; but in 1855 we find a body of *barkandazes* working apparently under the orders of the Superintendent. In consequence of several accidents which had taken place, this force was reorganized and augmented in 1856, under the direct control of the Magistrate, at an annual cost of Rs. 6,804, which was deducted from the sum paid by Government annually to the Superintendent.

This arrangement remained in force till 1859, when the responsibility for keeping up an adequate force of guards inside the temple, and for supplying extra police outside it during the great festivals, was entrusted to the Superintendent, who received an assignment of land yielding a yearly income of Rs. 6,804, to defray the expenses thereby incurred. Beyond occasional help, the arrangements for policing the interior of the temple remained in his charge till 1901, when a body of regular police was posted within it, at the Superintendent's expense, in consequence of some serious accidents which had occurred. This force has been withdrawn since the appointment of a Manager, the task of controlling the crowds of pilgrims inside the temple being left to the temple staff. Under the present system, Government supplies the police stationed at the gates of the temple and the principal tanks, and the Superintendent pays Rs. 240 on account of a temporary force of sixty *barkandazes* during the Rath Jatra. Inside the temple, the only force consists of the Pariharis or hereditary guards, who are remunerated by grants of lands or paid from the temple funds, and of salaried guards paid monthly, such as *dafadars*, *barkandazes*, *dwaris*, etc.

The landed endowments of the temple consist of the Ekhrajat mahals in the Khurda subdivision and of the Satais Hazari Mahal, mainly in the headquarters subdivision, an account of which will be found in Chapter XII. INCOME

Besides the income obtained from landed endowments, there are a number of miscellaneous sources of revenue, of which a few may be mentioned, viz., (1) the *pindika* or offerings made on the throne of the gods by the pilgrims. These include jewels, gold and silver ornaments, coins, silk and cotton cloths, shawls, plates, cups, umbrellas and fans. The money is spent, and the rest are removed to the wardrobe or treasury. Ranjit Singh, it may be mentioned, when on his death-bed in 1839, expressed a wish that the famous Koh-i-Nur diamond (then valued at one million sterling) should be sent to Jagannath, but his wish was not given effect to. (2) The sale of *koth-bhoga mahaprasad*, or the daily offerings paid for from temple funds. (3) Miscellaneous payments made by the *sebaits* at the time of first appointment, or for taking leases of fire-places in the temple kitchen, or for placing *bhoga* before the stone throne. (4) The sale of the wood and cloth used in the construction of the cars, which are considered

especially holy. (5) Miscellaneous receipts from pilgrims, *e.g.*, for the privilege of having a private view of the gods, for permission to use fans, fly-flaps or lighted torches before the gods, for having flags and strips of coloured cloth hung from the temple tower, for having their names inscribed on the stones of Satpahach and Baispahach, *i.e.*, the flights of seven and twenty-two steps. (6) Various sums obtained by leases of various rights, *e.g.*, the right to sell sweetmeats, *mahaprasad* or *nirmalya* inside the temple, or the right to collect pice from pilgrims at the Rohini-kund, Gundicha-bari or the cook-room when the gods are absent from the temple.

The wood for the construction of the cars is obtained every year from the jungles of the Daspalla State, as part of the income of the Satais Hazari Estate. The average income of the temple for the last three years is reported to have been about Rs. 2,60,000, and the expenditure the same.

CHAPTER V.

PUBLIC HEALTH.

CLIMATE.

UNTIL recent years the climate of the district was regarded as healthy, and the following description was given in the Gazetteer, which was published in 1908.

"The climate of the district is, on the whole, healthy, and except in certain swampy areas near the Chilka lake, its inhabitants are comparatively free from malaria. The healthiest part of the plains portion of the district is the north of the headquarters subdivision, which is free from water-logging in the rains; the south, where the land is often flooded and remains submerged for over a month at a time, is considered unhealthy, when the water drains off or dries up. The belt along the coast is always cool, but is often unpleasantly moist and is apt to be enervating after long residence; while the Chilka and its neighbourhood are damp during the rains, and the atmosphere is disagreeably saline in the hot weather. The climate of the Khurda subdivision, on the other hand, is dry and most parts are healthy, the only feverish tracts being the Mals, a wild hilly country lying to the west, and the neighbourhood of the Chilka lake. In years of deficient rainfall however, many parts of the subdivision suffer from want of a sufficient supply of drinking water, for the wells, tanks, springs and nullahs dry up or provide a scanty amount of bad water; in such years outbreaks of disease are almost inevitable. The railway is also a common source of infection. The stream of pilgrims coming to Puri by rail is a constant one, averaging about twenty thousand a month and increasing at the time of the great festivals; and the possibility of the introduction of cholera and other epidemic diseases is obvious. It is believed that, but for deaths among pilgrims and the effect that pilgrims have on the resident population, both directly and indirectly, Puri would compare favourably with the healthiest towns in Bengal."

Since this was written, a severe epidemic of malaria spread through Orissa from north to south, reaching the

district of Puri in 1924. The stagnant pools and tanks, particularly in the low-lying parts of the Sadr subdivision, form a breeding ground for mosquitoes, and, though the state of affairs is not so bad as it was, a large proportion of the population is still affected by the disease. Dysentery and diarrhœa are more prevalent than in other parts of the province, and this is ascribed to the climate and the bad water-supply. The district does not suffer from plague, but in the five years ending in 1924 the proportions of deaths from cholera and small-pox were respectively two and four times as high as the proportions in the province as a whole. As in the rest of the province, a large percentage of the population (fifty to seventy-five per cent.) is affected by hookworm, and elephantiasis is not uncommon.

Sanitation.

The health of Puri town has been improved by the drainage scheme of the Bara Danda completed in 1895; and by the general drainage scheme completed in part of the town in 1915-16, which cost up to the end of 1923, Rs. 1,55,480. Improvement in health, as compared with thirty years ago, is also due to the generally improved sanitary conditions, brought about by constant attention to sanitation on the part of the local authorities, and to the advent of the railway which has helped to remove the congestion of the population particularly at the big festivals. Nevertheless the death rate from dysentery and diarrhœa continues the highest in any town in the province (4.3 per thousand), while epidemics of cholera which still occur at the great festivals cannot be prevented unless there is a further improvement in the sanitary arrangements in the town.

Vital statistics.

Previous to 1892, there were several changes in the system of registering births and deaths. In 1869 the duty of reporting deaths was imposed on the village *chaukidars*, and in 1876 the system was extended to births; but the returns received were so incomplete that they were soon discontinued, and, except in towns deaths alone were registered until 1892, when the collection of statistics of births as well as of deaths was ordered, and the system now in vogue was introduced. Under this system vital occurrences are reported by the *chaukidars* to the police, and the latter submit monthly returns to the Civil Surgeon, by whom statistics for the whole district are prepared. The statistics thus obtained are sufficiently accurate for the purpose of calculating the

approximate growth of the population and of showing the relative healthiness or unhealthiness of different years; but little reliance can be placed on the classification of diseases to which deaths are attributed, owing to want of medical knowledge on the part of the reporting agency, which causes the *chaukidar* to regard fever as a general cause of death. In the case of Puri, moreover, a large number of deaths take place among the thousands of pilgrims who visit the shrine of Jagannath every year, and these deaths cannot be distinguished in the returns from those occurring among the residents of the district.

The lowest birth rate on record (26 per thousand) was in 1920, which was the natural result of the bad conditions prevailing in that and the previous years. The average birth rate for the five years ending in 1923 was 34.3 per thousand, practically the same as for the province as a whole. The rate in the last year of the five was 39.1 per thousand, the rate in the province as a whole being 37 per thousand. The highest birth rates on record for the district are 43.19 in 1899, 40.47 in 1906, 42.80 in 1914, and 40.80 in 1922. The highest death rate was in 1919, after a series of bad years and high prices, when the rate reached 70.31 per thousand. The average of the five years ending in 1923 was 47.1 per thousand, or ten per thousand higher than the provincial average. In the last of these years, however, the death rate was only 25.8 per thousand, the provincial rate being 25 per thousand. This is almost equal to the lowest on record in the district, viz., 24.88 in 1896. The death rate is generally somewhat higher than the provincial rate.

PRINCIPAL DISEASES. Fevers.

As pointed out above, the statements furnished by *chaukidars* are not reliable as an indication of the actual death rate from malarial fever; but since statistics are collected in the same way all over the province, a comparison of the statistics with the provincial statistics sufficiently shews the relative prevalence of fever of all kinds. From this it appears that until the epidemic of malaria began in 1924 the proportionate prevalence of fever was only half that of the rest of the province, the death rate in 1920, for instance, being only 8.6 per thousand against 17.8. The severity of the malaria epidemic in 1924 is indicated by the fact that, whereas in 1923 the number of outpatients treated for this disease was 14,577, in 1924 the number was 41,585.

The incidence of fever generally is greatest in Gop thana, and in the low-lying land which forms a trough running

almost parallel with the sea across the district; here the flatness of the country is such that there is almost no natural drainage; the water at the end of the rains remains almost stagnant, with the result that the deaths from fever are most numerous in the months of October, November and December; falling off again towards the end of January. The incidence is lowest in the Khurda subdivision, most of which is composed of high land with hills of porous laterite and metamorphic rocks, and is most favourably situated with regard to rapid natural drainage. Most of Pipli thana occupies an intermediate position; it is not so low-lying as Gop and Puri, and yet has not such good natural drainage as Khurda; and as regards prevalence of fever it lies between the two.

Malarial fever.

In the edition of the Gazetteer published in 1908, Mr. O'Malley wrote: "Malarial fever is not a common disease in the district as a whole; but only in certain parts, notably the areas round the Chilka lake, where the people have the typical abdomens, yellow conjunctivæ and unhealthy appearance characteristic of a fever district in Bengal. The reason for this is not far to seek. The south-western part of the district is practically a Tarai country, a low-lying tract with dense jungle, sloping to the sea from the hills of the Tributary States. Mosquitoes abound, and they are of a peculiarly pertinacious variety. Their infective powers are high, and the malarial fever that new comers or visitors suffer from is of a very severe type. Apart from the malaria in this region, the disease is not a prominent one in Puri district, and appears to cause little interference with the ordinary avocations of the people. The number of cases varies from year to year, and some seasons are more malarious than others; but Major Waters remarks:—" I have at no time seen anything to correspond with the malaria of Bengal, or that in any way tallied with Hunter's description of Puri at the time his edition of the Gazetteer was published."

Since the year 1924, the epidemic of fever has again subsided, and the death rate from this cause is little more than half the rate in the rest of the province.

Other fevers.

Regarding other fevers, Major Waters wrote as follows:—

"Typhoid or enteric fever probably exists in Puri as in other towns, but I have never seen a case. Native practitioners tell me that it does occur, but it evidently is not

common. Chicken-pox occurs occasionally in the jail and probably elsewhere. Pneumonia occurs, but is not very common; it is mostly seen amongst pilgrims, or rather debilitated persons exposed to sudden and unexpected rain. Plague is unknown."

Filariasis.

Any visitor to Puri can see that elephantiasis is a common disease among the people; and regarding it and kindred infections Rai Bahadur Premananda Das, late Civil Surgeon of Puri, wrote as follows: "Filariasis, Ankylostomiasis (Hookworm) and similar infections are endemic in Puri, and are responsible for the poor physique of the Oriya people, especially in the district. The incidence and intensity of these infections and their effect upon the general physique, vitality, energy and working capacity of the population is so great as to constitute a problem of great economic importance. The investigation of filariasis was begun in 1919 and has been carried on since then (a research laboratory and hospital having been opened in Puri in 1924)."

"*Culex fatigans* is the vector i.e. metamorphosis of the filarial larvæ takes place in culex fatigans; and it takes 20 days for the microfilaria to become a fully developed infective larva. About eighty per cent. of the mosquitoes in Puri town are culex fatigans, and about 44 per cent. of these are infected. About thirty per cent. of the human population harbour microfilaria in the blood. Elephantiasis is a clinical condition, and a manifestation of filariasis from which about ten per cent. of the people suffer."

"Periodical filarial fever associated with lymphangitis is also a manifestation of filariasis. It is probable that in the Puri area the meteorological conditions, temperature and humidity, are those which permit the development of the filarial larvæ into an infective stage, thus accounting for the prevalence of filariasis in an endemic form."

"From our experience of about five hundred cases of filariasis in seven years, we have arrived at the conclusion that periodical filarial fever and mild cases of elephantiasis and filarial lymphangitis yield to antimony injections; while more severe or complicated cases may require vaccine treatment or an operation. Puri town abounds in wells where *culex fatigans* breed; it is probable that filariasis will be stamped out after the wells are closed, when the pipe water-supply is

introduced. There has been no tangible progress in the two sister schemes, viz., water-supply and drainage. Filariasis has been practically stamped out in Bombay after the introduction of a pipe water-supply and closing of the wells."

The importance of these and allied diseases to the Oriya race is estimated as follows in the annual report of the Inspector-General of Civil Hospitals for 1924 :—

"The Filariasis Hospital at Puri was primarily intended for the investigation and treatment of filariasis, but its scope has been considerably extended and there is now in existence a compact unit doing magnificent work. All injections are carried out here. The three main investigations now conducted relate to Filariasis, Ankylostomiasis and Strongyloides Stercoralis. In Orissa it seems essential that the latter parasites should be thoroughly investigated, as they probably account for the poor physique of the Oriyas."

Cholera.

For many years Puri has had the evil reputation of being a focus of cholera, and a centre from which the disease spreads to other parts of India. "Puri city," Sir W. W. Hunter wrote years ago, "is a hot-bed of the disease. It only requires the annually recurring conditions of overcrowding, of filth, of great heat, of dampness, and sudden atmospheric changes, to turn the pilgrim city into a pest house. . . . . The Car Festival annually slays its thousands. It occurs at the most unfavourable and inclement season of the year. Before its close the rains are pretty well advanced, the roads are cut up, the rivers are full, the roadside lodging-houses are close and steamy; and often the sole shelter for travellers is under trees dripping with rain."

The chief force of the epidemics was concentrated in the town, but thence they spread into the district, especially to the villages along the Trunk Road. Here there were no proper arrangements for the accommodation of cholera-stricken patients, for water-supply, for latrine accommodation, or for the disposal of refuse. During the rainy season the roadsides were converted into huge sewage drains by the pilgrims, who encamped in swarms under the trees, or wherever they could find anything like a dry piece of ground, where they slept, cooked, ate, drank, and attended to the calls of nature openly and indiscriminately. Pilgrims entered the district enfeebled

by great heat and by exhausting marches. The unwholesome, uncooked and indigestible articles of food, on which they had to subsist during their long march, predisposed to disease, the conditions of the town fostered it, and the deplorable ignorance and carelessness of the people themselves helped its ravages. They could not, or would not, understand how easily cholera may be passed on. With a light heart the pilgrim washed the stained clothing of a dead relative in the first convenient tank or well, and congratulated himself on his economy. Even as late as 1892 an officer of Government, travelling on the Orissa Coast Canal after the festival at Puri, saw for days together the corpses of pilgrims, who had died from cholera, floating in the canals, into which apparently they had been thrown by their friends and relatives.

With the improvement of the sanitation and drainage of the town, which has been carried out in the last thirty years, the mortality caused by cholera has diminished, but epidemics still occur every year. A vicious circle has been formed in which the pilgrims infect Puri, and Puri in its turn affects the district. The following remarks are quoted from the Annual Report of the Director of Public Health (Colonel W. C. Ross, I.M.S.) in 1924 :—" Puri calls for special consideration and measures. The climatic conditions, the density of population, and overcrowding during melas, the debilitated state of many of the pilgrims, the feeding arrangements and the inadequacy of the conservancy arrangements, all combine towards the production of epidemic cholera, which cannot be prevented without very comprehensive permanent improvements in the conservancy and water-supply of the town and in the organization of preventive measures."

Small-pox.

The district is also notorious for the frequency with which epidemics of small-pox occur. In spite of the efforts made to popularize vaccination, the disease is very rife, especially in the more inaccessible parts; but the town of Puri is well protected, owing to vaccination being compulsory in the municipal area, and here only sporadic cases occur. The annual vaccinations in the district are about 37 per thousand of the population, the average for the province being about 28; yet the death-rate from small-pox is far higher than in the rest of the province; there were, on the average, 418 deaths from this cause annually in the district between 1919 and 1924.

Vaccination.

In the Gazetteer published in 1908, Mr. O'Malley wrote: "Vaccination is unpopular in Orissa, where the people are more conservative, less enlightened, and more wedded to superstitious beliefs than in Bengal."

The figures of vaccination quoted above, however, which are taken from the official report, indicate that the percentage of vaccinations is higher in Puri than in other parts of the province taken as a whole. About thirty paid vaccinators are employed, and the successful vaccinations number about thirty-five thousand annually.

Dysentery and Diarrhœa.

In Puri, as in other districts of Orissa, the mortality due to dysentery and diarrhœa is unusually great; in fact, the death-rate in recent years has been five or six times as high as in other districts in the province. The prevalence of diarrhœa and dysentery in Orissa was made the subject of a special enquiry, the object being to ascertain whether their prevalence was as great as would appear from the high death-rate persistently returned or whether it was due to error on the part of the reporting agency. The conclusions arrived at are that the high reported death-rate does more or less represent the state of affairs, and that diarrhœa and dysentery, particularly the former, are a frequent cause of death in this part of the country, their greatest incidence being in February and March. The death-rate is, however, undoubtedly increased by the fact that typical and lingering cases of cholera are reported as diarrhœa. Infantile diarrhœa is extraordinarily common, and is the chief cause of the high death-rate. Generally speaking, the causes of these diseases are the bad water-supply, the eating of new rice as soon as it is reaped, and the general ignorance of the people.

Skin diseases.

Nearly one-third of the patients treated in the hospitals are suffering from skin diseases, a higher number than for any other class of disease. This too is largely attributable to the stagnant tanks and pools in which the people bathe, and to their ignorance of hygiene, and depressed vitality.

SANITATION.

Puri is visited yearly by thousands of pilgrims from all parts of India. To deal with the immense crowds gathered together in a few days, has always been a grave sanitary problem, and it has therefore always been the aim of Government and the local authorities to ameliorate, as far as possible,

the condition of the pilgrims, and to prevent the outbreak of disease, due care being taken at the same time not to offend the religious prejudices of the people.

Drainage.

To enable an estimate to be formed of the sanitary improvements carried out in Puri town, it will not be out of place to quote from a sanitary inspection report written by Dr. D. Smith, Sanitary Commissioner of Bengal, in the year 1868, and to compare his description with the state of affairs now existing. First, with regard to dwellings, he stated :—"The houses are very faulty from a sanitary point of view. Noxious ooze is continually trickling from the opening in very plinth, down its front, to a sink or cess pit below. Sometimes even within the plinth itself a dark, deep, open cess-pool exists." Though much remains to be done, it will be seen that a marked and most gratifying improvement in the condition of the houses has taken place. In the plinth of nearly every masonry house in the town may be seen the sites of the former cess-pools which have been filled up, a pipe now passing through the centre of each, and conveying the domestic water into suitable receptacles. This work is one of the most important sanitary improvements that have been carried out in Puri. It is difficult to imagine a graver menace to the public health, or a more complete defiance of sanitary laws than these cess-pools, situated as they were, in the floor of the verandah of the house holding large quantities of house water, urine, and fœcal matter, and poisoning the air with the foul gases emanating from the festering sewage contained in them. To complicate and intensify this evil, it was the custom of the owners to allow the contents of the cess-pools to flow into the main streets. One would have thought that they would have been only too glad to be relieved from the noxious smells arising from these cess-pools; but, as a matter of fact, they were almost unanimous in desiring to retain them, and did all in their power to frustrate efforts to do away with the evil. A complete surface drainage scheme for the removal both of rain and sullage water throughout the town has been partly completed.

Another grave difficulty in connection with the sanitation of Puri is how to provide good and sufficient accommodation for the vast numbers of pilgrims. In former years no supervision was exercised, and the aim of every house-owner was

to crowd as many persons as possible into each room, in order to reap a rich harvest thereby, regardless of ventilation or overcrowding. The Sanitary Commissioner, describing this state of affairs in 1868, said :—" In the lodging-houses they (the pilgrims) are crowded to such an extent that I was shown one apartment in the best pilgrim hotel of the place, in which eighty people were said to have passed the night. It was thirteen feet long, ten feet broad, with walls six and a half feet in height, and a low pent-roof over it. It had but one entrance, and no escape for the effete air." Again, the District Superintendent of Police, Puri, remarked in his diary, dated the 4th June 1867 :—" I went into a house in the town this afternoon, where about forty-five pilgrims were putting up—men and women. The place had only two doors, no windows; and one of the doors was locked. This place measured twelve by twenty feet—certainly not more—and in it no less than forty-five people were crammed." These two descriptions read more like an account of the historical Black Hole of Calcutta than of lodgings provided by Hindus for their co-religionists.

A notable advance has been made since those days. There are now a large number of lodging-houses in the heart of the town, in which pilgrims find shelter. Every lodging-house-keeper has to take a license; all the rooms in the lodging-houses have been measured, and their cubic capacity estimated; in each room there is a notice stating the exact number of people that may be accommodated in it; and the lodging-house-keeper is prosecuted for any excess which may be detected. Special efforts have also been made to provide accommodation for excess pilgrims by the erection of tin sheds at the side of the Bara Danda road, and also of large rest-houses raised from the benefactions of pious Hindus. But, notwithstanding this, overcrowding still sometimes occurs, and thousands of pilgrims, rich and poor alike, for want of accommodation, have to sleep out in the open, under trees or in any temporary sheds they may themselves be able to erect, suffering no slight inconvenience and discomfort, which are not conducive to health.

Conservancy.

In addition to overcrowding and insufficient ventilation, there was in former years another serious sanitary evil in connection with the lodging-houses, viz., the want of proper

latrine accommodation. Writing in 1868, the then Sanitary Commissioner said :—" For centuries every variety of nuisance has been committed throughout the precincts of the place, and it is now, in many parts, loathsome from the concentrated and persistent odour of fœcal matter in a state of decomposition. The cloacal abominations discoverable in the gardens, intensified by heat and moisture, are almost unapproachable. The gutters are equally offensive. On all sides the air is foul to suffocation with emanations from garbage and putrescent debris." In the years which have elapsed since these remarks were made, sanitation has made great strides. Though it has not yet been found possible to provide complete latrine accommodation for the multitudes visiting Puri during the principal festivals, every lodging-house has now a latrine attached to it, and there are a number of permanent public latrines, besides temporary latrines to meet increased requirements during the festivals.

Water-supply.

The most important sanitary needs of the town are a good drainage system and an improved water-supply. At present, drinking water is obtained mainly from wells and tanks; the latter are often insanitary, while the inferior quality of the water which the former contain, as well as their faulty construction, is now, as it has been for years past, a grave sanitary evil. There is a considerable number of tanks in the town, of which four are of particular importance, since they are the only ones resorted to by the pilgrims for purposes of religious purification. These are the tanks called Swet Ganga, Narendra, Markanda, and Indradyumna. The Swet Ganga tank is of special sanitary importance. It is situated in the heart of the town, it is surrounded by houses, and its water-level is about forty feet below the surface. This tank is said to have been used by pilgrims for ablution and purification for seven hundred years, and until recent years was never dewatered. It used also formerly to receive the drainage of a part of the town; and its state after these centuries of neglect may be gathered from the description given by the Sanitary Commissioner in 1868 :—" I examined," he wrote, " the water from the Swet Ganga tank and found that it evolved a strong odour of sulphuretted hydrogen, and became of a deep chocolate colour on the addition of a solution of lead." In 1890 the Civil Surgeon described it as " a disgrace to civilization; to walk round it

makes one turn sick from the stench;" but in spite of this and of efforts to put a stop to the use of its water, the tank was still used by pilgrims. The water was of a rich green colour, giving off a most offensive smell, and in 1893 the Chemical Examiner, who analysed it, stated that it "resembles liquid sewage, which is not surprising, considering the various forms of the worst pollution to which the water has been subjected for seven centuries." Since that time, the discharge of drainage into the tank has been stopped; it is replenished by rain water and some springs said to exist in its bed; and, what is of even greater importance, since 1904 a scheme has been in operation, by which it is cleansed daily by means of a pulsometer pump, and the water pumped out is used to flush the drains by the side of the Bara Danda road.

Disposal of dead.

The last matter which need be noticed is the disposal of the dead, which is now effected by a properly constructed burning *ghat*. Contrast this with the state of affairs in 1868, when the Sanitary Commissioner wrote:—"The corpses are, in many instances, but imperfectly consumed; the result is a spectacle frightful to behold. In no single case, however, can this last long, as jackal, vultures, and other beasts soon come, and leave but whitened skulls and crumbling bones. Places such as these are usually termed Golgothas by the European residents in Orissa. During one of my evening walks with Mr. Raban, towards the northern part of the sands, we came upon a spot marking the former site of several sheds erected for the reception of those who were famine-stricken in 1866: close to this was a Golgotha indeed: within a radius of twenty feet I counted sixty skulls, and a little further on, in a radius of four feet, twenty-four skulls."

This is a gruesome picture, but an account of Puri written in 1841 is even more ghastly: "Corpse fields lay round the town, in one of which the traveller counted between forty and fifty bodies, besides many skeletons which had been picked by vultures. The birds were sitting in numbers on the neighbouring sand-hills and trees, holding carnivorous festivity on the dead; and the wild dogs lounged about full of the flesh of man. But the streets and lanes of the town, as well as the large road, presented many scenes of the most appalling misery and humiliation. In several instances poor deserted

women, quite naked, formed a dam to the insufferable filthiness of a thousand bodies washed down the narrow streets by the sudden showers. Here they lay, throwing about their arms in agony, imploring a little water of the heedless passers-by, who formed a half-circle around them for a moment and passed on. They had rolled about till they had lost their clothing, which was discernible at a small distance, beaten by the battering rain till it had mixed with the sand and mud. Others lay quiet enough, covered over by their cloth, except perhaps their feet and hands, having apparently died without much struggling. Others again, in their last extremity, with their clothing soaked, and their skin white with the soddening rain, had crawled under the partial shelter of some house or shed, awaiting in apparent insensibility their last moment."[1]

On the other hand, we have the testimony of Mr. Fergusson, who visited Puri in 1838, that he found nothing to justify the highly wrought picture of "hundreds of dead and dying pilgrims that strew the road and of their bones that whiten the plains."

Lodging-House Act.

No account of the sanitation of Puri would be complete without a reference to the Lodging-House Act. As already stated, one of the greatest difficulties in the administration of the town is to check overcrowding in the lodging-houses for pilgrims. In 1866 a Bill was introduced into the Bengal Council for the better regulation of such establishments, and was finally passed with amendments in 1868. It received the assent of the Governor General in 1871 and is called the Puri Lodging-House Act (Act IV B. C. of 1871). It provides for the appointment of a Health Officer to inspect the lodging-houses and report on them to the Magistrate. Under this Act no house may be opened without a license, and licenses are granted only upon a certificate from the Civil Surgeon, stating the suitability of the tenement for the purpose, and the number of persons which it can properly accommodate. Except in cases where the lodging-house-keepers are persons of known respectability, their establishments continue under the surveillance of the Health Officer;

[1] Letter to Lord Fitzgerald and Vesci on Jagannath, 1843, quoted in Sir W. W. Hunter's Orissa, Vol. I, pp. 152-153.

and penalties are provided for wilful overcrowding and similar breaches of the license. Much good has resulted from the operation of this Act, the primary object of which is to prevent the outbreak and spread of disease, particularly disease of an epidemic character, and to provide a source of revenue for improving the sanitation of the town and its approaches.

An Act, called the Puri Lodging-House (Amendment) Act, 1908, was passed by the Bengal Legislative Council, the chief objects of which were to provide further safeguards against overcrowding in lodging-houses, to give Government power to increase the fees for licenses for the reception of lodgers with a view to securing the funds necessary for proper sanitation, to render the inspection of lodging-houses more practicable, and to remove a few minor defects in the former Act which the practical working of the law had disclosed.

The receipts constitute what is known as the Puri Lodging-House Fund, and are obtained mainly from the fees for licensing lodging-houses; other minor sources of income are fees for the Health Officer's certificate, the rent of road-side lands, fines, etc. After making contributions to the Puri municipality, the income is applied to the following purposes :—the Health Officer's pay and allowances, office establishment and contingencies, dispensaries and others, medical expenditure, conservancy, construction and repairs, and miscellaneous charges. From this fund the Puri Cholera Hospital and the dispensaries at Bhubaneshwar and Satya-badi are maintained, and a conservancy staff is entertained, besides servants at rest-houses (*chattis*) along the pilgrim routes.

Institutions.

Fifty years ago there were only two charitable medical institutions in the district, viz., the Puri Pilgrim Hospital established in 1836, and the Khurda Dispensary established in 1864. There are now fourteen hospitals or dispensaries, as follows :—

In Puri Town.—

Pilgrim Hospital	...	...	... 64 beds.
Cholera Hospital	...	...	... 104 ,,
Lion's Gate Dispensary		...	... for outpatients only.

In the District—

at Khurda	...	...	... 20 beds.
Satyabadi	...	...	... 14 ,,
Pipli ...	...	...	... 14 ,,
Bhubaneshwar	...	...	... 10 ,,
Banpur ...	...	...	... 8 ,,
Nimapara	...	...	... 4 ,,
Gop ...	...	...	... for outpatients only.
Bolgarh ...	...	...	... Ditto.
Krishna Prasad	...	...	... Ditto.
Tangi ...	...	...	... Ditto.
Kakatpur	...	...	... Ditto.

There is also a special hospital for the treatment of filariasis at Puri, with 12 beds and a research laboratory attached. It was opened in 1924, the result of the munificence of Rai Bahadur Shiu Parsad Tulshan, of Calcutta.

Though the people still adhere largely to the kabiraji system of medicine, European medicines and methods have come more and more into favour. In 1905 the number of patients treated in the hospitals and dispensaries was ninety-three thousand; in 1923 it was one hundred and twenty-six thousand; and in 1926 it was one hundred and sixty thousand, besides over thirteen hundred inpatients at the hospitals in Puri, and seven hundred inpatients in the outlying dispensaries, while nearly five thousand operations, major and minor, were performed. The inpatients were treated mainly for cholera, dysentery, malaria, venereal diseases and injuries. The income of the dispensaries is provided by Government contributions (Rs. 19,000), District Board (Rs. 29,000), Municipality (Rs. 5,600) and voluntary contributions. The average daily attendance at some of the outlying dispensaries is above fifty, including even high caste Hindu women.

There is also a Leper Asylum in Puri town, at which lepers are fed on *mahaprasad* given free by different maths in the town. Three zamindars of Balasore have also endowed certain property in the Purushottampur estate in this district for the purpose of providing food for lepers, the endowment being known as the Raj Narayan Das Endowment.

There is a trained medical officer in charge of the leper asylum, and Government have sanctioned the establishment of a hospital and dispensary in the colony for the treatment of leprosy.

CHAPTER VI.

FORESTS.

GENERAL DESCRIPTION.

THE Puri Forest Division, except the casuarina plantations along the sea-coast near Puri town, lies entirely within the Khurda subdivision, and consists of reserved and protected forest extending over 474 square miles. The reserved forests of Khurda consist of separate demarcated blocks with an area of 120 square miles, while the protected forests comprise the unsettled waste lands of the subdivision. The latter are scattered all over the subdivision and have not been completely demarcated; their area is 354 square miles, of which 243 are managed by the civil department as part of the Government Estate; the total area of the subdivision is 1,013 square miles. With the exception of a few small blocks on level ground, the forests of the subdivision are on hills varying in elevation from 500 feet to 3,000 feet. The casuarina plantation in the Sadr subdivision covers 2,145 acres, to the east of Puri town.

The Khurda forests lie within what is technically known as the dry evergreen forest zone, and for general purposes may be classified under two main divisions, viz., *sal* forests, in which *sal* (shorea robusta) predominates, and mixed forests, in which *sal* is not the prevailing species. In forests of the first class *sal* forms practically pure forest, while in others the following species are found :—*asan* (terminalia tomentosa), *rai* (dillenia pentagyna), *kendu* (diospyros melanoxylon), *kasi* (bridelia retusa), *kongra* (xylia dolabriformis) and *sidha* (lagerstroemia parviflora).

The *sal* forest is seen at its best in the metamorphic region to the south-west of the Division, where trees three to five feet in girth and sixty to eighty feet high are found. The chief companions of *sal*, besides those already mentioned, are *kumbi* (careya arborea) and *charo* (buchanania latifolia), while such species as *piasal* (pterocarpus marsupium) and *jam* (eugenia jambolana) are occasionally met with. The species of bamboo known as *kantabaunsa* (bambusa arundinacea) and dendrocalamus strictus both occur, the former being found

more frequently in low-lying localities. Climbers are numerous, the most noticeable being bauhinia vahlii, which grows to an immense size, millettia auriculata, and entada scandens.

As regards the mixed forest, it varies considerably from place to place, being nothing more than a low scrub-jungle in some places, while in others it is a good high forest. The best portions are in the south-west of the Division, where trees of four to five feet in girth and sixty to eighty feet high are found, the chief species being *dhau* (anogeissus latifolia), *moi* (odina wodier), *kusum* (schleichera trijuga) and *rai* (dillenia pentagyna). In the north-west of the Division *kongra* (xylia dolabriformis), the iron-wood tree of Pegu and Arakan, is extremely common, being gregarious in places. Other common species are *asan* (terminalia tomentosa), *kochila* (strychnos nux vomica), *sidha* (lagerstrœmia parviflora), *kurum* (adina cordifolia), the Indian laburnum known locally as *sunari* (cassia fistula), *piasal* (pterocarpus marsupium), *gambhari* (gmelina arborea), *mahanim* (ailanthus excelsa), *bahera* (terminalia belerica), *bheru* (chloroxylon swietenia), *jam* (eugenia jambolana), *bandhan* (eugenia dalbergioides), the banyan (ficus bengalensis), *harira* (terminalia chebula), *charo* (buchanania latifolia), *suam* (soymida febrifuga), *kumbi* (careya arborea), *sisu* (dalbergia sissoo), *tinia* (albizzia lebbek) and the mango or *amba* (mangifera indica). There are also numerous kinds of thorny shrubs and three kinds of bamboo; a small variety of bamboo (bambusa arundinacea) is found in the north-west, and a large variety in the south-west, while Dendrocalamus strictus and Oxytenanthera nigrociliata (which is rare) are also found. The most noticeable climbers are Combretum decandrum, Millettia auriculata and Bauhinia Vahlii.

The chief timber trees are *sal*, *asan*, *kongra*, *tinia* and *piasal*; firewood and charcoal are obtained from a large variety of trees. There are no minor products of strictly local importance, except perhaps edible fruits, such as mango and jack. The residents of the south-west of the Division obtain *kamalagundi* powder from the fruit of *gundi* trees (mallotus phillipinensis) on their leased lands, and sell it either to the Forest Department or to traders in Ganjam, where it is used for dyeing purposes. Nux vomica seed, which is used medicinally, is collected by the Department, and is generally

purchased by traders from Cuttack. Other minor products are *harira* and *bahera* seed and *sunari* bark, which are used for tanning.

History. Before 1870 no restrictions were placed on the cutting of trees, and the main idea seems to have been to extend cultivation as far as possible. But in 1871 the Subdivisional Officer drew attention to the fact that the forests were being destroyed by the raiyats and others, and efforts were made to stop this destruction, restrictions being placed on felling, the removal of certain kinds of forest produce, and the practice of temporary cultivation. In spite of this, the Conservator of Forests reported in 1881 that the forests were in a deplorable condition. The unsettled lands in the Khurda estate were declared protected forests in 1880, and this area was taken over by the Forest Department in 1883, reserved blocks being notified during 1885, 1886 and 1891. From 1883 to 1895 forest conservancy, including protection from fire in the reserves, was established, and from 1896 to 1903 inclusive the reserves were managed in accordance with Mr. Hatt's working plan. In 1903 experimental coppice fellings were made. These were extended in 1904, when the improvement fellings prescribed for the better forests of the northern and central ranges were discontinued, the coppice system having been decided on for these ranges.

Measures of Conservancy. The following account of the past history, the working and the future prospects of the forests, was given by Mr. A. L. McIntire, Conservator of Forests, Bengal, 1908 :—

" In 1883 the forests were placed under the management of the Forest Department, a forest settlement being carried out at about the same time. Under the latter a total area of 110 square miles of forest was declared reserved forest, free of rights, and the rest of the forest and waste, with an estimated area of 356 square miles, was declared to be protected forest, in which revenue-paying raiyats were allowed to exercise a number of privileges, such as grazing their cattle and cutting bamboos and trees, of kinds which were not reserved, for making their houses, agricultural implements, etc., and for firewood. The most important timber and fruit trees were reserved, and they were not allowed to cut or damage them, nor were they allowed to cultivate any parts of the protected forests before such parts were properly leased to them; and they were required to pay grazing fees

for cattle in excess of the numbers supposed to be necessary for ploughing and manuring their fields, and cesses for permission to remove unreserved trees for firewood, etc. Since 1883 the 110 square miles of reserved forest have been carefully protected from fire, grazing and unauthorized felling; and efforts have been made to increase the productiveness of these forests by planting teak in small parts of the area. Under this management the growth of trees has steadily improved; and though it is now believed probable that in the northern half of the area, on account of the poorness of the soil, few of the trees will grow to much over three feet in girth, it has become evident that in the southern half of the area fine trees of many kinds can be grown. Consequently, though during the period 1883 to 1904 very few trees were cut, as it was desirable to give the forests rest that they might recover from the former excessive cutting and fires, since 1905 the following method of working them has been followed :—

"The northern half of the forests has been divided into thirty equal parts or coupes, each part or coupe consisting of a number of separate areas situated in different parts of the estate; and these parts or coupes are opened for felling in rotation at a rate of one coupe a year. In the year in which a part or coupe is open for fellings, every tree and shrub it contains, with the exception of a few very promising trees which are marked before the fellings begin that they may be left standing for seed, is cut down level with the ground. Experience has shown that when such forests are cut in this way, shoots from the roots of the trees which have been cut (called coppice shoots) and seedlings rapidly spring up, and, if the ground is protected from fire and grazing, soon cover it with a new growth of trees. As only one-thirtieth of the total area of the northern half of the reserves is cut every year, the whole of that area will be cut in thirty years, by which time the part or coupe cut in 1905 will be again ready for cutting. In this way there will be a permanent supply of poles, such as raiyats require for their buildings, and firewood, and also, in time, a small supply of larger sized timber. This method of cutting forests (called coppice felling) is unsuitable when the soil is good, and it is worth the while of the owner of the forest to keep all or most of the trees standing till they attain large size, such as a girth of five to six feet or over.

"In the southern half of the reserved forests, as the soil is generally good, and as most of the area is very distant from

villages and towns which require poles and firewood, it has been decided to grow large trees, i.e., those over six feet in girth, which are generally 100 to 150 years old. *Sal* is the most valuable tree, but other kinds of trees are also becoming saleable; and as a part of the area which does not contain *sal* is suitable for teak, teak is being planted in that part at the rate of 100 acres a year. If these teak plantations are successful they should eventually produce a large additional revenue."

The total area of the teak plantation is now 944 acres, and of other plantations, excluding the casuarina plantation, 406 acres. The damp climate of Banpur encourages the growth of evergreens, and where these cannot be burnt out, artificial reproduction has to be done. *Sal* regeneration is reported to be improving under the system of group felling; and the burning of undergrowth also promotes reproduction. Of the reserved forest, 77 square miles are closed to all grazing, while 43 square miles are open to grazing of animals other than browsers (i.e. sheep and goats) under special permits.

Forests. Protected

In the large area of protected forests management has consisted mainly in the prevention of fires, of unauthorised cultivation, and of the felling of reserved trees. Within the last twenty years, however, restrictions have been placed upon grazing, so that now 34 square miles are closed to all grazing, while a further 62 square miles are open to grazing of other animals than sheep and goats. The result of unrestricted grazing had been that unreserved trees which were cut were not replaced by coppice shoots or seedlings. Hence on extensive areas, where reserved trees were scarce, there is now hardly any tree growth, and on still more extensive areas there is only a poor scrub jungle. Dense forest growth only remains in remote places, which are so distant from villages that the raiyats have not yet thought it worth their while to remove poles or firewood. In the undemarcated protected forest, forming the waste land of the subdivision, unrestricted grazing is allowed.

The Casuarina plantation.

The casuarina plantation, though a reserved forest, is entirely distinct from the other reserved forests of the district. It was started in 1912, by the acquisition of land, on the

sandy barren strip along the sea-coast to the east of Puri. The total area so far planted is now 2,145 acres, and this covers the whole area acquired except those parts which are too much exposed to the sea breezes. The object is two-fold, to form a barrier to the sand which is otherwise continually blown inland, and to provide a fuel supply for the town itself. The cost of creation is given as Rs. 14 per acre, while the cost of supervision and upkeep is about Re. 1 per acre annually. So far the produce has just begun to be sold, but it is hoped that in time the plantation will more than pay its way. Though these trees, which grow in otherwise barren land, have been planted here and there by private landlords, there are no plantations of any size except those planted by the Government.

PROTECTION FROM FIRE.

No special arrangements are made to protect the scattered, undemarcated protected forests from fire, the only protection afforded being such as is provided by the rules mentioned above. In the reserved blocks special protective measures are undertaken and these consist of burning clean all outer boundary lines and several interior fire lines at the commencement of the dry season, which lasts from February to June. A staff of special fire patrols is also retained during the season. These measures have been carried out since 1885, and about 98 per cent. of the area undertaken has been successfully protected since then. In the reserved forests the majority of offences are petty, consisting either of cattle trespass or illicit fellings and removal of trees. For purposes of protection each range, comprising both reserved and protected forests, is divided into beats, and each beat is in the charge of a Forest Guard assisted by one or more forest *paiks*. The total area protected from fire now amounts to 116 square miles.

REVENUE.

From 1883 till 1890 all the forests in the Khurda estate formed part of the charge of a Forest Officer, who also held charge of the Angul forests; and it is not possible to give the exact financial results of their management during that period. During it very little produce or revenue was obtained from the reserves, but the loss on account of the cost of protecting the reserves appears to have been about covered by the revenue of the protected forests, which almost entirely consisted of cesses and grazing fees paid by the raiyats. Since 1890 the Puri forests have formed a separate forest charge,

and there has been an almost progressive increase in the revenue, as shown in the table below :—

Period.	Average yearly revenue			Average yearly expenditure.	Average surplus.
	From reserved forests.	From protected forests.	Total.		
	Rs.	Rs.	Rs.	Rs.	Rs.
1890 to 1899	4,642	15,845	20,487	19,231	1,256
1900 to 1904	9,556	23,379	32,935	23,233	9,702
1912-1913	...	...	63,566	37,184	26,384
1923-1926 (average) ...	...	...	99,363	78,792	20,571

It may be mentioned that the annual profit which was in 1908 anticipated for the succeeding fifteen years, was Rs. 30,000. It is to be noted that the casuarina plantations have not yet begun to pay their way, while the teak plantations have not yet reached maturity, and only a certain number of the trees are cut out for thinning purposes. The timber and fuel extracted from the reserved forests in 1923-4 amounted to 166,000 and 800,000 cubic feet respectively, as compared with 153,000 and 478,000 cubic feet in 1912-13; on the other hand the timber extracted from the protected forests decreased from 184,000 to 138,000 cubic feet.

Present system of administration.

For the purposes of control and management the reserved forests together with the surrounding protected forests have now been divided into three ranges, viz., the northern range with headquarters at Chandka, the central range with headquarters at Khurda, and the southern range with headquarters at Balugaon.

With a view to establishing the objects of management, namely, the production of a sustained yield of large timbers to meet market requirements, and the production of small timber, firewood and other produce to provide for local demands, the reserved forests have been worked since 1926 under a number of prescribed systems. In the northern and central ranges they are exclusively worked under the simple coppice, and coppice with standards systems, according to the

nature and condition of the standing crop, on a rotation of thirty years. In the southern range where the composition and condition of the crop varies, a number of systems have been introduced; (*a*) *sal* regeneration working circles in areas of better quality *sal*, consisting of regeneration fellings by the group method, on a rotation of eighty years, (*b*) hill working circles, consisting of selection fellings of trees with a minimum girth of four feet, (*c*) miscellaneous working circles, with special selection fellings at various girth limits for different species, and a felling cycle of thirty years, (*d*) teak plantation working circles, comprising annual plantings, with thinnings in existing plantations.

The simple coppice and coppice with standards working circles have been further subdivided into a number of felling series scattered over the whole area, in order to meet the needs of exploitation, and for convenience in working. An annual coupe is demarcated in each of the felling series, and is sold by public auction. The purchaser in each case is responsible for the working of the coupe and the extraction of the produce on permits, the actual execution of the work being supervised by the forest department. In the concentrated regeneration working circle a certain number of *sal* trees are annually marked by the Forest Officer. This marking is based on a previously calculated and enumerated possibility. The marked trees are disposed of by a contractor with an extended lease on a royalty basis. They are converted and extracted under the supervision of the forest department for the supply of sleepers, scantlings and other big timber. In the miscellaneous working circle an annual coupe is demarcated, the selected trees are marked, and then sold by public auction, the method of exploitation being the same as in the case of the simple coppice working circles. The hill working circle similarly comprises an annually marked coupe, but at present constitutes part of the extended lease granted for the *sal* regeneration working circle.

The output of the coupes of the Northern and Central ranges consists of small timber, firewood and charcoal, which are mostly exported to Cuttack and Puri. Large timber is obtained from the Southern range only, the *sal* being sold by auction and mainly exported to Cuttack and Puri for use in buildings. The right to collect and remove minor produce of all kinds is leased out by ranges. The most important of

these leases confer the right to collect *sunari* bark for tanning and nux vomica seed for medical purposes. A certain quantity of stone, chiefly laterite, is also removed on permit for building and road metalling.

The protected forests are worked under liberal rules framed under sections 29 and 31 of the Indian Forest Act, which provide for the removal of all kinds of produce required by the local population and allow grazing for their cattle. A cess of six pies per rupee of land revenue assessed is levied on all landholders, in return for the forest produce used, while a fee of four annas per annum per head of cattle, is levied for all cattle over and above the number allowed free to each landholder for the purposes of cultivation and household requirements.

There is no reason to expect any large additional increase in the revenue of the protected forests. But the outturn and revenue obtained from the reserved forests should continue to increase for many years to come. Of the expenditure now incurred, about a third is paid for improvements, such as fire protection, roads, buildings, creeper cutting and the cutting of inferior kinds of trees which are covering up young *sal*, teak plantations, etc. The object of such expenditure is to increase the value and usefulness of the forests to future generations. The last remark especially applies to expenditure on teak plantations, which cannot produce any revenue till they are 40 or 50 years old, and will not give a full return till they are 80 or 100 years old. Though the profit obtained from the Khurda forests is considerable, it is perhaps a less important consideration than the maintenance of supplies of timber and firewood for the Khurda raiyats and neighbouring towns, which depends on the careful management of these forests.

The people are almost exclusively agricultural. Their wants in the way of forest produce are chiefly bamboos, fuel and small timber for house posts and agricultural implements. No rights of any sort have been admitted in any of the reserved forests; but the protected forests have been specially set aside to supply their wants under the rules above mentioned, which include the payment of a forest cess to Government. The privileges enjoyed by the people under these rules have, however, been much abused, so that they are now more or less dependent on the reserves for both timber and bamboos.

This is apparent too in the decrease in the amount of timber which is extracted from the protected forests, as shown above. There are no special fuel or fodder reserves, and most local requirements are met from the protected forests, the quantity of fuel taken, mainly by right-holders, from the protected forests, being almost three times the amount taken from the reserves. There is continual pressure and agitation for increased liberty to use both the protected and reserved forests, but there is no room for this if anything is to be preserved for future generations; the mere fact of the present pressure is a proof that this generation is feeling the results of the short-sightedness of earlier years.

CHAPTER VII.

AGRICULTURE.

GENERAL CONDITIONS.

Natural divisions.

FOR practical purposes, the district of Puri may be regarded as consisting of two sharply defined divisions—the plains and the hilly tracts, the former occupying the south-east and the latter the north-west of the district. The two are separated by the river Daya, which forms a natural boundary. The country to the north-west is studded with hills, and a large portion of the area is covered with jungle. The soil is mostly lateritic, but in places where the soil is suitable, as in some of the valleys, a large area is cropped with *sarad* or winter rice. Almost the whole of this hilly tract is included in the Khurda subdivision and is under the direct management of Government. The country to the south-west of the Daya is marked by an almost entire absence of hills, there being only a few detached outliers, such as the Dhauli hills and the hills close to the Delang railway station, which rise somewhat abruptly from the alluvial plains. In this portion of the district there is practically no laterite or jungle, and almost the whole of the cultivable land is under the plough. The high lands, for which no means of irrigation have yet been devised, are cultivated with *biali* or autumn rice, pulses, etc., while *sarad* or winter rice is grown in the marshy depressions known as *pats* and in other low-lying land; and in the lowest land of all, such as that near the Sar lake, and to the north of Puri, *dalua* or spring rice is grown. This portion of the district is comprised mainly in the headquarters of the subdivision, and consists almost entirely of permanently-settled, temporarily-settled, and revenue-free estates, only a small part being Government estates.

Another marked difference between the two tracts is that the headquarters subdivision is liable to have its crops destroyed by inundations, while the Khurda subdivision is practically immune, for no part except Balabhadrapur on the Chilka lake is visited by heavy floods. Cultivation in the latter subdivision is, moreover, favoured by the deposit of vegetable matter washed down from the hills on the western border. On the other hand, the crops suffer to some extent from

drought in places where the water runs off rapidly or where there is only a thin covering of soil above the laterite. The majority of the fields here are laid out in terraces, and in order to retain water, are surrounded with small raised banks of earth called *hira*. It is the immemorial custom for the raiyat to repair only the ridges separating his field from one on a lower level; and any attempt to repair or to reduce the size of the ridge between his field and one on a higher level leads to disputes and not infrequently to fights. In this tract too the people are still in the habit of utilizing the uplands for hoe cultivation, locally known as *toila*, which is mainly carried on upon newly cleared portions of scrub jungle.

Rainfall.

Puri has in ordinary years abundant rain, the normal annual rainfall being about fifty-five inches. It has been known to be as high as 136 inches (in 1862), but on the other hand, deficiency is more frequent than in the other sea-board districts of Orissa, and Puri is the only district where the fall is occasionally less than forty inches. Unfortunately, too, the rainfall is precarious, and an untimely or unequal distribution is liable to cause serious damage to the crops, even if the actual fall does not fall short of the quantity required. A heavy shower in February or March is necessary to enable the land to be ploughed, but the most critical months are May, September and October. If the May showers, which are the precursors of the monsoon rains, do not fall, sowing may be prejudicially delayed; but deficiency in the rainfall in September and October is even more dangerous, as it affects the maturing of the staple rice crop, while the torrential rain which has from time to time occurred in November damages the ripening paddy. The most terrible famine the district has ever known was caused by the failure of the September and October rains in 1865; in 1896 with a total fall very little below the normal, and again in 1918 with a fall that was practically normal, very serious loss, amounting to famine, was caused by the cessation of the rains early in September. On the whole, it may be said that a well-distributed rainfall of forty inches is sufficient to secure the crop, provided that not less than four inches fall in October; but in order to obtain a bumper crop, at least fifty inches are required, of which eight inches should fall in September and six inches in October.

Floods.

Besides this, the district is liable to inundation from the rivers overflowing their banks when swollen by heavy rainfall

in the hills. When they are of great height and of long duration, or when they occur so late as to render resowing impossible, very serious damage is done by such floods. Provided, however, that they are not high, subside rapidly, and come early in the season, they are productive of good, as the fertilizing silt they leave behind renews the productive powers of the soil and assures good harvests; it is found that the market value of land in villages where such floods occur, not too frequently, is higher than that of land which is never flooded. Towards the east end of the Chilka lake, and in parts of Gop thana, there are villages which suffer from salt water inundation, and these too sometimes fare badly. The former of these might be improved by the widening of the mouth of the Chilka lake, but this is a task which, after examination, it has been found impossible to undertake. On the whole it may be said that the places which suffer from injurious floods lie almost entirely in the Puri and Gop thanas.

In the headquarters subdivision the soil is of the usual alluvial type found in deltaic country, except in the west, where the subdivision encroaches on the laterite uplands of Khurda, and on the south and east, where the sandy littoral forms a belt of varying width. There is every variety of admixture from almost pure sand to almost pure mud, but generally speaking, the lighter soils, such as the sandy loams, are most abundant in the north, where there is much diversity of level, and the black soils are found more widely in the lower levels of the southern *parganas*. The cultivators themselves recognize a large number of different classes of soil, the names of which vary according to their situation, elevation and composition.

In an ordinary village the lands fall primarily into three main divisions according to their situation, viz., (1) the low lands retaining rain water and hence called *jala* or wet lands, on which winter rice is grown. These lands predominate in the district and comprise the greater part of the whole cultivated area. (2) The high lands round the village homesteads, which being enriched by manure and household refuse, have a blackish colour and are therefore called *kala*; they are devoted to vegetables, cotton, and other valuable crops. (3) The riverside lands (*pal*), which being periodically fertilized by deposits of silt are suitable for growing tobacco, sugarcane, mustard, etc. Other common names are *diha*, *i.e.*, homestead

land, *gora* or light-coloured land, *nadipatu* or riverside land and *sarpatu* or watery land. There are numerous names again given to different varieties of land according to its composition, colour, etc. Among these may be mentioned *balia matal*, a sandy loam, *chaulia matal*, a friable soil of a brownish colour, *sudh matal*, a muddy soil, *kala matal*, a black fertile soil found in low levels, and *nunia matal*, a soil of a bluish-white colour, found near the Chilka lake, which becomes saltish in the hot weather; but these names, being chiefly local, are not of great importance.

The main portion of the Khurda subdivision is hilly, but it includes a narrow alluvial strip varying in width from one to three miles, and *zilas* Balabhadrapur and Mughalbandi are entirely deltaic. In *zilas* Khurda and Rameswar, and in part of Dandimal, there are extensive beds of laterite; but the valleys of *zilas* Dandimal, Khurda, Tapang, Rameswar and Kuhuri, and those in the northern portion of Banpur, are chiefly composed of recent alluvium, consisting of red and brown clays, white, brown and red loams, with more or less sand, detritus and vegetable moulds; here and there ridges or beds of old alluvium, containing nodular limestone (*genguti*), form the sub-soil, and this alluvium is found in large areas in *zila* Panchgarh and Kuspalla, as also in parts of *zila* Banpur. A portion of the Chilka lake is comprised within the subdivision, and along its shores are large tracts composed of recent deposits, while the valley of Banpur, extending down to the lake, is composed principally of black Chilka soil. The soil of this valley has been enriched and modified by the silt brought down by the Salia, a small river which flows through a densely-wooded and hilly country. Wherever the waters of the Salia can be taken for irrigation, the soil has become extremely fertile, and yields rich crops of every description. Speaking generally, the soils of Khurda formed of detritus of metamorphic rocks, sandstone and vegetable mould, are for the most part fertile. The great desideratum, however, is water, and if there is a sufficient supply of the latter, even a few inches of soil on the beds of laterite, which cover an extensive area at varying depths, can produce a fine crop of paddy. If, however, the rainfall is insufficient or unseasonable, the paddy rapidly withers and dies.

IRRIGATION.

Artificial irrigation is carried on from several sources, viz., (1) from the large rivers through embankment sluices; (2) from

rivers by means of water-lifts; (3) by damming up natural streams; (4) from tanks; (5) from natural springs; and (6) from wells. Of these, irrigation from natural sources is the most important, comprising about seventy per cent. of the whole irrigated area; but unfortunately the streams, with one or two exceptions, are not perennial, and cannot be of much use for irrigation, unless the surplus water is stored in suitable reservoirs during the rains. Wells form the least important source of supply; they are but little used, only a few fields of sugarcane or country potatoes being watered from wells dug yearly for the purpose. Properly speaking, there is no perfect system of irrigation in the whole district. A system of irrigation to be of real value should afford means of irrigating the fields whenever water is needed for the crops, *i.e.*, the source of supply should be perennial, or the supply should be drawn from some reservoirs where water can be stored up to meet the emergency of a drought. But, with the present system of irrigation, there is no command over the source of supply. The total area irrigated is about 220,000 acres.

In the hilly tracts which form the Khurda subdivision the natural sources of water-supply are the rainfall and the perennial springs issuing from the jungle-clad hills. These natural sources are inadequate for the requirements of cultivation and are supplemented by tanks, and by utilizing the water of the numerous nullahs and streams. When the latter method of irrigation is employed, dams are put across natural streams, and the water being thus headed up either flows over the cultivated area or is led to the fields by means of small natural artificial channels, locally known as *pahanis*. Tanks are of two kinds. Some are tanks of the ordinary kind made by excavation, which are occasionally fed by natural springs. Others are formed by constructing embankments across sloping land, so as to intercept the drainage of the land above. Sometimes they are artificially deepened by excavation to increase their capacity, and sometimes they are fed by natural springs; they are known locally as *garhias*. Perhaps the most valuable tract in the Khurda estate is the area irrigated from the Salia river in Banpur, but even there, if the rain fails in the basin of the river, the harvest is lost.

In the headquarters subdivision the chief sources of irrigation are the rivers, from which, in times of flood, water is let out into the cultivated land through embankment sluices.

The defect of this system of irrigation is that the crops suffer from drought, if there are no floods in the rivers. In the minor drainage channels also earthen dams are thrown across the stream so as to head up the water, which thus irrigates the fields lying close to them; but this is done to a very limited extent. Some irrigation is carried on by means of water-lifts, mainly in the case of *dalua* crops, but there are also some hot-weather crops irrigated in this way along the banks of the rivers Daya and Bhargavi, and some sugarcane cultivation on the banks of the Gangua near Bhubaneswar.

Water-lifts.

The three commonest contrivances for raising water from a lower to a higher level are the *tenda*, *sena* and *janta*. The *tenda* consists of two upright posts with a cross bar, which serves as a fulcrum on which a bamboo pole works; the latter is weighted at one end by a stone or mass of mud, and at the other a long rope is fastened, with an earthen pot or bucket attached. When water is required the cultivator pulls down the bamboo pole till the bucket is immersed: as soon as the tension is relaxed, the weight attached to the lever raises the bucket of itself, and the water is then emptied into a pipe, which is generally the hollowed trunk of a palm-tree, and is directed into the fields, through narrow channels. When the field is any considerable height above the water, a platform is built on four stout bamboos on which a man stands to work the lever.

Where the water has only to be raised a few feet, it may be scooped up in a *sena*, a sort of basket made of split bamboo, which two men use. Holding the ropes attached to either side, they swing it backwards, and bringing it down sharply into the water carry the forward motion of the swing through, until the basket, now full of water, is raised to the level of the water-channel, when the contents are poured out.

Another way of lifting water a short distance is with a scoop, called the *janta*, which is made of a single piece of wood about ten feet long, hollowed out and shaped like one-half of a canoe, the broad open end of which rests on the head of the water-channel. The pointed closed end dips into the water, and when this is raised, the water pours naturally into the channel. It may be worked by one man either directly or with the help of a bamboo crane and counterpoise, as is done with the *tenda*, but it cannot lift more than a few feet. It is not uncommon for two of these methods to be combined, the

water being lifted by the *tenda* into a reservoir, and from that into the water-channel by a *sena* or *janta*.

PRINCIPAL CROPS.

The following table shows the acreage of the crops grown in the district :—

Winter rice	...	660,800	
Autumn rice	...	19,500	
Spring rice	...	14,000	
Total rice ...	...	694,300	
Marua ...	...	11,400	
Other grains and pulses ...	...	31,100	
Total food-grains ...	...	...	7,36,800
Mustard	...	2,400	
Coconut	...	25,000	
Other oils	...	8,000	
Total oilseeds ...	...	...	35,400
Sugarcane	...	...	2,500
Cotton	...	...	500
Tobacco	...	...	400
Fruits and vegetables ...	...	...	50,100
Total area of crops sown	...	...	825,700

The actual nett cropped area in 1924-25 was 796,800 acres; of which 83 per cent was under *aghani* crops, 10 per cent under spring crops, 5 per cent under autumn crops, 6 per cent under fruit and vegetables; while only 4 per cent was twice cropped.[1]

Rice.

There are many varieties of rice grown in the district, but they may all be classified under three main divisions, corresponding to the different seasons of the year, viz., *dalua* or summer rice, *biali* or autumn rice, and *sarad* or winter rice. In some tracts *laghu* rice is regarded as a fourth class, but for practical purposes it may be considered an early variety of *sarad* rice. The growth of these different classes of rice varies according to locality. The northern portion of the head-quarters subdivision, where the level of the land is comparatively high and more or less free from inundation, is suitable for the cultivation of *biali*, *laghu* and medium *sarad* rice; while the southern portion, which is on a lower level and more subject to flood, is cultivated chiefly with the heavier *sarad* and *dalua* rice.

[1] More recent statistics shew that in the headquarters subdivision 16 per cent. of the area is twice-cropped.

Generally speaking, winter rice is the principal crop throughout the Puri subdivision, but the most striking preponderance is in the *parganas* of Sirai and Chaubiskud, near the head of the Chilka lake, which grow least *biali*. The proportion of *sarad* is lowest in Oldhar, which contains extensive *dalua* lands, and in Paschimduai, where there are larger *biali* and pulse-cropped areas. Early rice predominates in the *parganas* containing high land, which are protected from inundation; it is grown least in the flat low-lying tracts near the lower reaches of the rivers where they enter the sea and the Chilka. Spring rice is grown in very small areas except in *parganas* Oldhar, Matkatpatna and Rahang. Oldhar *pargana* includes the Sar lake, a large portion of which is cultivated with *dalua* in the winter months. In Matkatpatna the presence of the Kushbhadra river enables some *dalua* lands to be irrigated up to February or March, after which date the river becomes tidal. In Rahang *dalua* is grown chiefly on the Samang Pat, a large expanse of low-lying country north of Puri town, which is flooded annually from the Bhargavi through the Dhanua, East Kania and Athara Nullah escape channels.

In the Khurda subdivision the main crop grown is *sarad*, which occupies eighty-five per cent. of the cultivated area; and it is only in the extreme north that there is any considerable area under *biali* rice. *Dalua* rice is also unimportant, being confined almost entirely to *zilas* Dandimal and Rameswar, where alone there is low-lying marshy land suitable for its cultivation. The tendency in this subdivision is to grow *sarad* even on uplands unsuitable for its growth, which however would yield excellent harvests of *biali* rice; for the latter crop, being reaped in September before the rains have ceased, has a better chance in terraced fields on high land than *laghu* or early *sarad*, which is reaped in November and depends largely on later rains.

Sarad rice consists broadly of three classes, *bara*, *majhila* and *laghu*, the distinction between the three depending mainly on the amount of water that each variety requires. *Bara dhan* is sown on land where most water is obtainable, such as low lands and old river beds, and is reaped in December and January. *Majhila* is grown on land where there is less depth of water, and comes to maturity earlier than the *bara* variety, being reaped in November or December. *Laghu* requires less water again than *majhila*, and is therefore sown on higher

Sarad.

lands; it is reaped in September or October. In some cases *laghu* is sown on *biali* land after that crop has been cut, if the tenants see that there is sufficient water on the land.

Sarad rice is, for the most part, sown broadcast, but is transplanted if the seedlings have been destroyed by flood or early drought. Ploughing begins as soon as the first shower of rain falls after the harvesting of the previous winter crop and is continued until the end of May. The land is ploughed as often as the weather and the resources of the cultivator permit, but as a rule four or five ploughings are considered sufficient. The soil, after being turned up, is exposed to the action of the sun and wind, and lands lying beyond the reach of the fertilizing river silt receive a dressing of manure, mainly cow-dung and mud. The peasant then waits for the showers which usher in the monsoon, and starts sowing as soon as they appear in May or June. The plants germinate in fifteen days, and consequently the earlier the seed can be sown, and the stronger the young plants are when the rains set in, the better is the chance of a good crop. During the latter half of June and the first half of July, the growth of the rice is helped by the monsoon rains, and the cultivators have little to do but watch the young plants growing up, mend the small ridges round the fields, and do similar odd jobs.

Beusan.

During the rest of July, when the plants have attained a height of about fifteen inches, the important operation called *beusan* (literally changing of place) is performed. This consists of driving the plough through the young rice in order thoroughly to loosen the soil at their roots; the rice plants are then firmly replanted by hand, and a sort of blunt harrow is drawn over the field to level and consolidate it. *Beusan* is performed about a month after sowing, when there has been enough rain to soak the land thoroughly and leave some water on the top. It is considered of great importance that this operation should be performed as soon as possible after the plants are well above ground, and it is regarded as a sign of a bad season if it cannot take place by the end of July.

After *beusan* is over, the ridges enclosing the fields are strengthened, the grass cleared away, and the field is weeded. If the cultivator can afford the necessary labour or there are sufficient members of the family, weeding is done twice.

For these operations an ample supply of water is necessary, and if this is available and there is sufficient rainfall in

September and October, a good harvest is secured in the cold weather months.

Biali rice is sown broadcast on high lands, the richest yield being obtained from the fertile soil called *kala mati* in the vicinity of village sites. It is also raised on riverside land, but is precarious there, as it is liable to be destroyed or damaged by floods. Ploughing begins with the advent of the rains, and sowing should be finished early in June. Abundant rainfall within eight to fifteen days after sowing is essential, as otherwise the crop is materially injured or entirely lost. It is ready for cutting in August or September, leaving the land free for *rabi* crops, such as *birhi*, *kulthi*, etc. *Biali* rice is also known as *sathika* from its taking sixty days to come to maturity. *Biali.*

Dalua or spring rice is grown mainly in the marshes in the south of the headquarters subdivision. Some villages in *pargana* Rahang are almost entirely under this crop, as they are annually inundated; it is also raised in a few villages to the north, where the land is low-lying or advantage is taken of a small marsh or shallow tank. In the Khurda subdivision its cultivation is restricted to a few swampy tracts. This paddy requires marshy lands which can retain water or are capable of being irrigated till the monsoon showers begin. It is occasionally transplanted, but, as a rule, is sown broadcast. It is sown as soon as the water leaves the land sufficiently to allow of its being puddled, and the date of sowing therefore varies with the level of the ground and the rainfall or flood of the preceding season. Generally speaking, however, sowing takes place in January, and the crop is reaped in April. *Dalua.*

After rice the most important cereal is *mandia* (Eleusine coracana), which is grown on about four per cent. of the cultivated area. It is a valuable grain, as it is largely consumed by the poorer cultivators in years of scarcity, and not infrequently also in ordinary years when their food stocks run short. Cereals and pulses, such as *china*, *kulthi*, *birhi* and *muga*, are the other main food crops. *China* (Panicum miliaceum) is a cereal grown, as a rule, on low-lying *sarad* land; it is sown in December and harvested in March. *Kulthi* (Dolichos biflorus) is a cheap pulse sown in October or November and reaped in February or March. It is raised on land from which a crop of early rice has been removed, on riverside lands, and round village sites. *Birhi* or *kalai* Other cereals and pulses.

(Phaseolus radiatus) is another pulse grown during the same period on high lands. *Muga* (Phaseolus mungo) is a cheap pulse sown in January or February and cut in March and April; it is grown in large quantities on paddy lands of a medium level.

Oil-seeds and fibres.

Oil-seeds are unimportant crops in Puri, mustard being grown on a normal area of only 2,400 acres and other oil-seeds on 8,000 acres. Linseed, mustard and the castor oil plant are grown mainly on river banks and round village sites. Cotton is raised on an even smaller area, the normal acreage being only 500 acres.

Sugarcane.

The cultivation of sugarcane, which is grown here and there over practically the whole district, has increased of recent years; it is found in the more northerly parts of the Sadr subdivision, and the co-operative societies are endeavouring to extend the cultivation particularly in Khurda. It is a crop requiring high land with good soil and facilities for irrigation, and is frequently found on riverside lands, in the vicinity of village sites, and near tanks. It is an exhausting crop and is consequently rotated with other crops. It used to be pressed in locally made wooden presses, but these have now given place to imported iron roller presses, which are as a rule hired from one of the larger villages in the vicinity. They are worked by bullocks, and the juice is boiled down in large open pans on the spot. It is a profitable crop, but entails the use of much labour and capital, and takes much out of the soil.

Pan.

Pan is an important crop in some parts, notably in pargana Dandimal in Khurda, and along the Cuttack-Puri road, and near Narsinghpur in the sadr subdivision. The *pan* from the latter place is noted for its good taste and is known as Narsinghpuri *pan;* it is largely exported to Cuttack and Calcutta. *Pan* cultivation is very profitable, but it requires care and expense, and since it alters the character of the land on which it is grown, a *salami* or fee of about fifty rupees per acre is usually paid before permission to cultivate the crop is granted by the landlord, besides which a higher rent is charged for these gardens. The most suitable soil is a sandy loam; it is cleared of all grass and weeds, and ploughed and harrowed, and a fence of matted reeds is made around the plot. The plants are grown in small ridges two feet apart, the plants in each ridge being grown about six inches apart. They are watered and manured with oil-cake, and as they

grow they are trained up on a reed fencing till they reach the roof, which is also made of reeds and bamboos. After eight months the leaves are fit to be plucked, which is done every week. As the plants grow the roots are sprinkled with earth, and this causes the plot gradually to become higher than the surrounding earth; so that a *pan* garden in maturity is several feet high; and this, combined with the hollowing out of the land from which the earth is taken, is what causes the change in the character of the land. The usual life of a *pan* garden is supposed to be about twenty years.

Other Crops.

Indigo used to be grown in small quantities in the head-quarters subdivision, but is no longer found. Tobacco is sometimes grown on riverside lands which periodically receive a deposit of silt; it is grown for local consumption. Attempts by the co-operative societies to promote the cultivation of groundnut, more particularly in Khurda, have met with some success, while a start has also been made by these societies, with potatoes, and with *dhanicha* for green manure. A little jute is grown in the sadr subdivision.

FRUITS AND VEGETABLES.

The principal fruits and fruit-bearing trees of Puri are the mango, jack, papaya, custard-apple, pine-apple, coconut, palang and plantain. Of these fruits the most important is the mango, which forms an important part of the food supply of the people. The Khurda subdivision is specially noted for its numerous mango and jack groves, which have been estimated to extend over nearly thirty square miles; besides these regularly planted trees, there are a large number of wild trees scattered through the jungle or growing on the hills. The laterite soils common in this tract seem to be specially suited to the growth of mango trees, which on such soils often attain a remarkable size. The fruit they yield is of every variety and colour, varying from a large sweet and fibreless fruit to a small berry-like fruit with stringy flesh, a large stone, and a strong flavour of turpentine. In the Mals there is a variety of wild mango, yielding a small but often sweet and tasty fruit. The jack fruit is generally of the common stringy variety, though sweet and often of large size. The tamarind tree replaces the mango in tracts where the old undulating alluvium predominates; and on that soil, which is unsuited to the mango, thrives and grows to a great size. The common custard-apple, *jama*, *bel*, *lanka-amba*, limes and citrons are cultivated to a limited extent. The orange tree,

which succeeds in Ganjam, will only yield fruit in the Banpur Mals. The coconut is a valuable tree which thrives in Banpur, and in Gop and Puri thanas. There is an old superstition that only Brahmans should plant coconut trees, but this prejudice is said to be weakening. The tree provides drink, food, oil, fuel, matting and rope, and the annual value of a single tree is estimated at one to two rupees. The fruit is not only consumed locally, but is exported by rail from Sakhigopal station, as is also the rope locally made from the fibre.

The *palang* is grown in large groves, mainly near the big rivers in the sadr subdivision. It is valuable for the oil which is extracted from the fruit, and either used locally for burning or exported for use as a lubricant. Many different kinds of vegetables are also grown on these riverside lands, as well as in the small gardens usually attached to the houses, including brinjals, cucumbers, radishes, gourds, sweet potatoes and beans.

Extension of cultivation.

According to the latest agricultural statistics, nearly 1,300 square miles are under cultivation, or 54 per cent. of the total area of the district; forests account for 474 square miles; 269 square miles are unculturable and 419 square miles are culturable waste other than fallow. The information available shows that there has been a very great increase of cultivation since 1837, continuing, in the Khurda subdivision, and, to some extent, in Gop and Puri thanas, even to the present day.

In the sadr subdivision, in Pipli thana and the northern half of the Puri thana, practically nine-tenths of the culturable land is already cultivated. Only in Gop thana and the south-eastern part of Puri thana is there any considerable area available for extension of cultivation, amounting to about twenty-five per cent. of the total culturable area, and these are mainly poor lands, liable to damage from flood or other disadvantages.

In Khurda the jungle is being cleared steadily in places where the soil is suitable and particularly where means of irrigation can be provided. It is estimated that in the whole subdivision about seventy per cent. of the total culturable area (excluding of course reserved forests) is already cultivated, the highest percentage of cultivation being found in Panchgarh and Balbhadrapur, and the lowest in the Banpur Mals.

A noticeable example of reclamation may be observed in the case of some villages near Niladriprasad. Once a rich and thriving estate, it was devastated during the wars between the Rajas of Khurda and Parikud; the land relapsed into jungle, and no attempt was made to bring it again under cultivation. But about fifty years ago these villages were given out in lease with the object of reclaiming the land; means of irrigation were provided; and the result was that more than half of the area leased has been brought under cultivation.

IMPROVEMENT OF METHODS.

The most marked improvement in agricultural practice during the last half century has been the gradual decline of the shifting system of cultivation, known as *toila*, which was formerly practised on a large scale by the aboriginal inhabitants of the Khurda subdivision. This consists of a rough method of cultivating newly-cleared patches of land in upland tracts. The jungle is cut down and burnt upon the spot; and the soil, thus enriched with salts, yields abundant crops of early rice, oil-seeds and cotton. At the end of four or five years such clearings are abandoned for new ones, and the land relapses into jungle. When a fresh growth has sprung up, the trees and scrub-wood are again cut down and burnt on the spot, the whole process of clearing and cultivating being renewed. Of late years the extension of cultivation has considerably reduced the area of forest and waste land, which in former days was looked upon as only fit for *toila* cultivation, but has now been brought under the plough.

Toila cultivation.

In other respects there has not been any appreciable advance in the methods of agriculture. The plough in use is the ordinary country-made plough, drawn by a yoke of oxen; the plough cattle are very poor in quality and the plough really only scratches the surface of the earth. The paddy is for the most part sown broadcast, and not transplanted. Efforts to introduce groundnuts and other crops have met with a little success. Harvesting is done with the help of the small sickle made by the local blacksmith; in order not to damage the straw, which is required for thatching purposes, the ears of paddy are frequently removed first, and the straw afterwards. The commonest method of threshing out the grain is to tread it out with oxen; another method is to beat it out on a plank placed on two uprights, in the form of a bench.

Agricultural Department.

There is an experimental farm of 31 acres at Khurda under the control of the Deputy Director of Agriculture at

Cuttack. Sugarcane is grown here and has yielded a profit of Rs. 200 per acre. Varieties of local paddy are grown on the farm, for seed selection purposes.

Attempts have been made by the agricultural department to increase the growing of *rabi* crops in Khurda, but the conservatism of the cultivator is hard to overcome.

Manure.

Practically the only manure in use in the headquarters subdivision is cow-dung; but the supply of this is very limited, since it is largely consumed as fuel, where no jungles are available as a fuel supply. The cow-dung manure is eked out to some extent by the use of mud from the bottom of pits, by river deposits, and the refuse of sugarcane, and oil-cakes. In the Khurda subdivision, where fuel is available from the jungle, the supply of cow-dung for manure is better.

The droppings are collected from the cow-sheds and kept in pits. The urine, as a rule, is allowed to escape, but a portion is collected with the scrapings of the mud floor, which are added to the manure pit. The manure is kept for seven or eight months until quite decomposed; it is then placed in heaps on the field just before the May ploughings. Other artificial manures are but little used, but for some miscellaneous crops, such as sugarcane, a certain quantity of oil-cakes is employed. Green crops or jungle growth are not used as vegetable manure, although there are large quantities of suitable plants, such as the smaller cassias and wild indigo. A certain manurial value is obtained, however, from the weeds ploughed into the soil, and from the rice stubble, which is ploughed in immediately after reaping, and the co-operative societies have made a beginning with the use of crops grown as green manure. One of the finest manures which the Khurda rice lands enjoy is the water, impregnated with salts and loaded with vegetable detritus, which flows into them from the adjoining hills.

Productivity of the soil.

In the sadr subdivision the most productive paddy lands are found in Pipli thana, and in the northern parts of Puri and Gop thanas. In parts of Pipli the average annual outturn of an acre of paddy land is estimated to be about sixteen or seventeen maunds of paddy per acre; and the average of the whole subdivision is about thirteen to fourteen standard maunds of paddy. In Khurda for the purposes of settlement, the average outturn was estimated to be fourteen and a half

maunds per acre; but this was considered to be a very safe estimate, and the price at which land sells in Khurda indicates that the actual produce must be more.

Cattle. The cattle of the district are similar to those in the rest of the province of Bihar and Orissa, but are very poor in quality. Cows, buffaloes and oxen are kept by the pastoral caste of Gauras and by cultivators generally, sheep and goats by low castes, and pigs by the degraded caste of Ghusurias. A very few country-bred ponies are kept by well-to-do people for riding, and very few elephants are kept anywhere in the district.

The actual figures, according to the cattle census of 1925, are :—

Bulls, bullocks, cows and calves	587,000
Buffaloes	32,000
Sheep	37,500
Goats	40,000
Ponies	466

There were 106,000 ploughs, and 36,500 carts.

No stud bulls are kept in the district, but the necessity for improving the breed of cattle in Puri has recently been engaging the attention of the agricultural and veterinary departments. In the year 1924 the number of deaths among bovine cattle in the district, attributed to disease, was 847; of which 620 were due to hæmorrhagic septicæmia, and the rest to rinderpest, foot and mouth disease and blackquarter.

Pasturage. The cattle have to depend almost entirely on what they can get by grazing, the only other feeding that they get being a little straw, of which the supply is limited, since so much is required for thatching the houses. In order to ensure therefore that a sufficient, or at any rate a certain quantity, of grazing land should always be available in the sadr subdivision, where the extension of cultivation was already beginning to make the lack of pasturage felt, an area of 21,400 acres was set apart at the settlement of 1897 for grazing grounds; for though the cattle are allowed to graze on the grass growing on the ridges between the fields, and by immemorial custom the villages have acquired the right to graze their cattle on any uncultivated land in the village, they have acquired no right to prevent that waste land being let out by the landlord for cultivation. Thus though such lands as had been always used as burial or cremation grounds were regarded, and recorded in the record-of-rights, as public

lands, the other waste lands, i.e. the pasture land, were different, and were not recorded as " reserved for grazing " except by the consent of the landlord. In the rules of the settlement, the assistant settlement officers were directed to select in each village a few large waste fields, suitable for grazing, comprising three to five per cent. of the village area, and to enter them in a separate page of the record, to which they were required to get the signatures of some of the leading raiyats and of the zamindar, or sub-proprietor, or his agent. A note was then made in the record that the village community were entitled to graze their cattle without charge on this land, and that it was on this ground exempted from assessment. To safeguard these lands against subsequent encroachment, a clause was inserted in the form of agreement executed by all zamindars and sub-proprietors entering into engagements for the payment of revenue, binding them to preserve as grazing grounds, cremation grounds, and reserved tanks, the plots specified, to take no rent or grazing charge, and to take action in the Courts to eject trespassers, if required by the Collector to do so.

The system has worked well and has proved a great boon to the agriculturists; cases of encroachment have from time to time been detected by the Collector's staff, and the offenders ejected and sometimes prosecuted. At the revision settlement, begun in 1923, some further encroachments were discovered, but the area originally reserved remained practically intact; while at the same time more land has been recorded as set apart for grazing, with the landlord's consent, and will be entered in the agreement to be executed. The land set apart for grazing is commonly known as *rakhit* (reserved), and in most villages amounts to about five per cent. of the area of the village.

In the Khurda subdivision the cultivators depend mainly on the protected forests for pasturage, i.e., on the lands not included in the reserved forests or in the holdings of the raiyats. Elsewhere in Orissa the rice fields form a pasture ground, the stubble, weeds, and grass being intentionally left for fodder; but in Khurda, in order to convert the stubble and other vegetable growth into manure, the fields are ploughed immediately after reaping from November to January, so that, with the exception of a scanty herbage on the ridges, next to nothing springs up in the fields before ploughing recommences in May for the new crop.

CHAPTER VIII.

NATURAL CALAMITIES.

Liability to natural calamities.

The district of Puri is liable to suffer both from floods and droughts. The former are due to the sudden rising of the rivers, which have one common characteristic. In the hot weather they are nearly dry, and their beds consist of stretches of sand, through which small streams meander from bank to bank. But in the rainy season they rise to a great height with wonderful rapidity and bring down a large volume of water, which the lower channels are unable to discharge. The result is that the water spreads over the country particularly in the sadr subdivision, except where it is checked by embankments. Droughts are due to the deficiency of the rainfall. In most years the rainfall is sufficient for the needs of the district, but it is precarious, and its early cessation is fatal to the rice crop, on which the people depend. Practically the whole of the cultivated area is under rice; by far the greater part, moreover, of the rice crop consists of *sarad* or winter rice, and the autumn and spring rice are comparatively small crops; they are not grown at all in some parts, and can nowhere make up for the loss of the winter rice. In the sadr subdivision 84 per cent. of the net cropped area is under winter rice.

Famine of 1866.

The greatest famine within the last century was that of 1866, which was felt with even greater intensity in Puri than in either Cuttack or Balasore. The outturn of the rice crop of 1864 had been short, and this was followed by an utter failure owing to the scanty rainfall in 1865, when only 36.3 inches fell, of which not more than 5.2 inches fell in September, and none at all subsequently. In October 1865, prices were about two and a half times their ordinary rates, and distress began to appear, the people in many places subsisting on fruits and roots, while rice was selling at famine rates. The Collector applied early in the season for permission to make enquiries into the losses on the zamindari estates, but his request was summarily refused by the Board of Revenue. A more pressing application to the same effect was made at the end of November, but was again negatived, and the

Collector was informed that no remissions were to be granted, and that no hopes of receiving any aid should be held out to the zamindars. On the twenty-fifth of November he telegraphed that starvation was occurring in Parikud and Malud, that the number of deaths was increasing, and that general destitution prevailed. Relief works for the employment of the distressed were sanctioned; and a definite scheme for road-making on a large scale was submitted by the Collector, who recommended that wages should be given in food, instead of in money, and that grain should be imported and stored for this purpose. Grants were made for works on the Cuttack-Madras road and the Cuttack-Puri road, but Government rejected the proposal that wages should be paid in kind.

In January 1866 it became clear that rice was not procurable in any quantity, and the Collector called attention to the necessity of providing a supply of food for the labourers; but his request for an advance with which to purchase rice was refused. The Commissioner then telegraphed that famine relief was at a standstill and asked for permission to make an advance for the purchase of rice. He received a reply to the effect that Government declined to import rice into Puri, for if the market favoured importers rice would find its way into Puri without Government interference, which could only do harm, and all payments for labour were to be in cash. The result of this telegram seems to have been to put an end to the discussion regarding the importation of rice till a period when the weather and the state of the people rendered it too late to import it with successful effect. No further orders were issued on the subject till June. In the meantime, the Collector did all that he possibly could, but there can be no doubt that the relief works were rendered to a great degree inoperative from want of rice to feed the labourers.

Matters grew rapidly worse, and in the early part of May the distress in the town of Puri had become so great that it was no longer possible to leave it to the unorganized charity of the *mahants* or heads of religious houses. On the ninth of May the Collector, as Secretary to the Famine Relief Committee, made an appeal to public charity through the Calcutta Press. A sum of Rs. 1,000 was sent in answer to his appeal, and this enabled him to open a relief house in the town, at which cooked rice was supplied. At the end of May a grant was made by Government to the Committee, and an officer was appointed to superintend the distribution of

gratuitous relief in the interior. By this time some private trade had sprung up with the south, rice being imported by way of the Chilka lake from Gopalpur; but the supply was dependent on the imports from ports still further south. In the middle of June there was a cessation in the imports, in consequence of the non-arrival of a ship which had been expected at Gopalpur, and the Collector reported that rice was scarcely procurable even for the prisoners, and called on the Commissioner to send him a supply from the rice which had been sent by Government to False Point in order to avert a crisis. The selling price in Puri at this time was below six standard seers per rupee, but by the end of June it fell to seven seers per rupee, owing to the renewal of supplies from the south. Government had meanwhile abandoned its resolution not to import rice, and a supply reached Puri on the thirtieth of June. The Collector began to make sales of rice to the public at about eight seers to the rupee, but later was forced to raise the price which had the effect of stopping the sales for a time. Another large consignment of rice which arrived by steamer on the seventh of July, could not be completely landed for seven weeks owing to the bad weather, and a brig which brought a smaller consignment on private account from Gopalpur was eventually obliged to leave the port for the same reason, without discharging her cargo.

This period was one of very great distress throughout the district. The quantities of grain which the authorities were able to land at Puri from day to day were so small that there appeared to be no hope of carrying on the relief operations without a break. In July rice was selling in the market at less than six seers for the rupee, and the Collector was compelled to restrict his sales at market rates to one rupee's worth to each applicant in the town, and in August it was found necessary to stop the sales altogether for a time. The Relief Committee were still able to keep their relief centres in operation, but the distress was aggravated by the disastrous inundation described later in this chapter. At the end of August, another vessel arrived with rice, and during September operations were rapidly extended, the shopkeepers being employed as agents for the sale of the Government rice throughout the district. Rice from Gopalpur also began to come into the district on private account, but in September the committee recorded that the class whom they had hitherto

allowed to purchase rice at sixteen seers for the rupee, had merged into the pauper population, having sold all that they possessed. They therefore discontinued sales altogether, supplying the destitute gratuitously, and leaving those who could pay to purchase at the Government shops. In October another dearth of the rice stock took place, which compelled the Collector at first to reduce his sales at market rates and afterwards to put a stop to sales altogether. The Relief Committee, however, had stocks in hand, and were enabled to carry on operations at all their centres, with the assistance of old unhusked rice supplied to them by the *mahant* of one of the *maths*. Further stores of rice were imported in November and the reopening of Government sales, together with the appearance of the new rice in the market, had a marked effect on prices. Coarse rice rapidly fell in price, till the rate stood at twenty-one seers for the rupee. The condition of the people had much improved by this time, and it was decided to close the centres gradually, but in certain tracts which had suffered more severely than others, it was found necessary to continue gratuitous relief for several months longer.

The previous failure of the crop of 1864, the drought of 1865, and the terrible inundations in August 1866, all combined to make the famine more severely felt in Puri than in any other district. In the south and north-east scarcity had become famine some months earlier than either in Cuttack or Balasore; but unfortunately no rice was imported till a month later than to Cuttack. By June the famine had reached its height, and it continued unabated throughout July and August. The mortality reached its culminating point at the beginning of the second week of August during the heavy rain and storms which preceded and caused the floods. The people were then in the lowest stage of exhaustion; the emaciated crowds collected at the feeding stations had no sufficient shelter, and the cold and wet killed many. A number of deaths were also due to the fact that, at the centres in the interior, relief was given in the shape of uncooked rice till the end of July. But, as in other districts, it was found that the paupers, having no facilities for cooking it, and famishing with hunger, devoured the rice raw, which brought on fatal bowel complaints. The raw rice was also forcibly taken away from the weak by the strong, and this led to the distribution of rations of cooked rice. Regarding

the mortality, it is impossible to form any estimate which can be confidently pronounced even to approximate to the truth; but in October 1866 it was reported that 210,866 deaths had occurred in the year, and of these a large proportion must have been directly due to the famine.

Flood of 1866.

During the flood of 1866, nearly three hundred square miles of country were submerged for from five to forty-five days. Throughout this area the water was nowhere less than three feet deep; in some villages it was ten feet deep, and over thousands of acres it averaged seven feet. The rivers burst their banks in every direction and cut fifty-two wide breaches in the embankments. More than four hundred thousand people were suddenly driven from their houses and found themselves in the middle of an inland sea. Thousands of miserable families floated about in canoes, on bamboo rafts, trunks of trees, or on rice stacks which threatened every instant to dissolve into fragments beneath them, while others betook themselves to the roofs of their houses, which, profiting from previous experience, they had strengthened to be used as a refuge in such a calamity. Starving colonies might be seen thus perched above the waters. Every banyan tree had its rookery of human beings, while the Brahmans effected settlements on the roofs of their brick temples, and looked down in safety as the flood roared past. The common danger disarmed all creatures of their natural antipathies. Snakes glided up to the roofs and burrowed harmlessly in the thatch. Others wriggled up trees, and whenever a canoe or log of wood passed, slid down into the water and swam towards the ark which their instinct told them would bear them to dry land. The cattle suffered terribly. Sheep and goats were carried away by herds in the torrent, and in a few days their carcases came to the surface, and floated about covered with crows and scuffling kites. But the most pitiable sight of all was that of the plough cattle standing in shallow places up to their necks, and hungrily snuffing the barren waters for food until they sank exhausted into the slime. Before the flood was over, many a famished family had also succumbed. When the waters subsided, the survivors found themselves in a region of desolated homesteads, fœtid slime, and rotting crops.

Such was the flood of 1866, and although of unusually long duration, it was by no means singular in extent or depth; indeed in 1855 the inundation was deeper in every one of the parganas of the district, and in all of the floods of recent

years, villages have been entirely cut off by deep water from each other and from the surrounding country. On such occasions the traveller may go in a boat for miles across country, from one village to another, which look like islands in an inland sea. If the floods come early and subside quickly, some of the crops are saved, because it is possible to transplant paddy after they recede; but if the water is on the land too late in the season, the crop is destroyed.

Famine of 1897.

Scarcities have since occurred in 1877-78, 1885-86, 1888-89, 1897, 1908 and 1918-20. The famine which visited the district in 1897 was the combined result of floods and drought. All the great rivers rose almost simultaneously to nearly the highest point on record, overflowing their banks or breaching the embankments. The low lands were submerged, and owing to the unprecedented duration of the flood, remained water-logged for more than a month. Not only was the crop ruined, but much land was permanently thrown out of cultivation by deposits of sand. The cultivators, on the subsidence of the floods, replanted as soon as possible, but the new sowings were sacrificed to drought, as the old ones had been to flood. The drought was also of long duration, the rains having ceased at the end of September. The result was that in some places the rice crop failed entirely, and in others the outturn was not good, while the winter rice crop, which is the mainstay of the people, suffered most from both flood and drought.

Relief measures were necessary in 365 square miles, the area and the population affected being respectively about one-seventh and one-ninth of the total area and population of the district. The affected area moreover did not form a compact tract, but was scattered in both the subdivisions of the district; nor did all the tracts require relief to the same extent and at one and the same time. There were seven such tracts. The first and most important one was round the Chilka lake and comprised the *parganas* of Bajrakot, Malud, Parikud, Andhari, Manikpatna and parts of *parganas* Chaubiskud and Sirai in the headquarters subdivision, and *parganas* Satpara and Balabhadrapur in the Khurda subdivision. From its geographical position and physical conditions, this tract, which measures 231 square miles, is most exposed to the calamities of the seasons. It was here that relief measures were necessary in 1877-78, 1885-86, 1888-89, and again in 1908, 1920, and

1925; and it is no matter of wonder that it suffered severely from the unusual floods and drought of the year 1896-97.

The other six tracts, smaller in area, were in different parts of the Khurda subdivision. The period of relief was not the same for all the tracts; in some it was required from February to September, in others from April or May till July. The average daily number of persons employed on relief works was nearly two thousand and six hundred, and an average number of two hundred and forty were given gratuitous relief daily.

Other floods.

The scarcity of 1908 was due to floods in the sadr subdivision in 1907, following on years of poor crops. The same occurred again in 1920, when floods occurred in the sadr subdivision, notably around Gop and near the Chilka lake, the crops of the previous year having also been damaged by excessive rain, and those of 1918 by the early cessation of the monsoon. In 1925 floods occurred round the western shores of the Chilka lake, and in Gop thana, and relief measures on a limited scale were again necessary. This last flood resulted from unusually heavy rains in July, during which thirty-three inches of rain fell at Pipli, and at all stations the rainfall in that month was about double of the normal. Heavy rain also fell in the upper part of the Mahanadi, and this caused an overflow in the delta. It was with difficulty in many places that village and local officials, by strengthening and adding to the embankments, prevented them from being breached; and in spite of their efforts there were five important breaches in embankments maintained by the Public Works Department. In one place it was actually reported that a breach, which caused a lot of damage, was made intentionally by villagers anxious to get silt on to their fields. While the flood was still continuing, attempts were made to widen the mouth of the Chilka, and the Raja of Parikud succeeded in getting another mouth opened, but it soon silted up. The worst affected parts were, first, the villages around Brahmagiri, and between it and the shores of the Chilka lake, which had suffered from drought in the previous year, and secondly, parts of Nimapara and Gop police-stations. In both of these, and in other parts to a less degree, gratuitous relief became necessary, and was continued for several months.

Salt water.

In the flooded tracts the villages which suffer most are those which are liable to inundation by salt water, viz. those

adjoining the Chilka lake, and those near the mouth of the Prachi and other rivers. Here the salt water is forced up by the action of the tides and the winds, and sometimes spreads for miles over the fields. The soil becomes impregnated with salt, which is only washed out when a fresh water flood comes down the river; the salt may therefore remain and cause poor crops for some years.

Report of Flood Drainage Committee.

In 1924 a Committee of officials and non-officials was appointed by Government to consider the whole question of floods in Orissa, and methods to be adopted to minimize their evil effects. The following paragraphs are extracts from the Committee's Report :

" Coming now to the question of protection from flood, the only effective method of controlling the discharge in rivers is by the construction of retarding basins in the head waters of all the rivers. The cost of this method is prohibitive in the case of large rivers of the kind under consideration.

" No other method can give complete relief in the case of Orissa owing to the fact that the river channels half way between the head of the delta and the sea can only carry about half the maximum discharge brought down by the river. It is clear that whatever method is adopted at least fifty per cent of the maximum flood discharge must pass over the land. The only results which we can hope to attain are a reduction of the period of flooding by helping the water to drain off rapidly. It is proposed to effect the first of these objects by relieving the rivers of the surface water as soon as they rise to danger point by means of flood escapes at suitable places on all the embankments. The effect will be not only to relieve the river when it is in high flood, but also to produce a deposit of silt on land which ordinarily does not get the benefit of it. These escapes will act both as sluices and escapes. The sluice will act when the river is below danger point, and will enable a comparatively small quantity of silt-laden water to pass on to the protected land. As soon as the river rose to danger point the sluice gate would be closed and the surface water would pass over the crest of the escape.

" The most efficient form of escape would be a spill-way syphon but the cost of this type would in most cases be prohibitive.

" The district of Puri has always suffered more severely from flood than either Cuttack or Balasore. This is due to the fact that in addition to the river channels in the delta being unable to carry off more than a small proportion of the discharge entering at the head, the exits to the sea are almost completely blocked. The only two connections with the sea are the Niakia mouth of the Kushbhadra river and the connections between the Chilka lake and the sea at Harchandi. The possibility of reducing the discharge entering the Kuakhai to 45,000 cusecs was considered in Mr. Rhind's report which has been referred to in paragraph 4. The cost of this scheme would be prohibitive and it has the disadvantage of merely transferring the damage to another area of 200 square miles elsewhere. The area in the Puri district which suffers most severely during floods is the Dhanua basin in the delta of the Kushbhadra and Bhargavi rivers in thanas Gop, Nimapara, Sadr and Balipatna. The crops on 175 square miles in this area were completely damaged in 1919 and again in 1920. A survey was made after the flood of 1919 by Mr. R. M. Ray who prepared a scheme for a drainage channel from the Sur lake to the sea at a cost of Rs. 52,000. This scheme was considered and rejected. The channel passes through fine sand and would be 20 feet deep in places. There is no doubt that it would be completely filled up with sand during the months of April, May and June and would require to be re-excavated in July when no labour would be available.

" The committee after a full consideration of the question has come to the conclusion that a complete remedy is not possible. The removal of all embankments in the vicinity and of the portions of embanked district board roads which obstruct the flow of water will reduce the area subject to damage. The Committee also recommends that the Government should give an annual grant through the district board for the clearance by hand of the Niakia mouth of the Kushbhadra river during the flood season. The comparatively small area on which paddy cannot be grown should be reserved for the growth of *rabi* crops.

" The next area in the Puri district is in thanas Astrang and Kakatpur—200 square miles adjoining the Bay of Bengal were flooded out in this area in the flood of 1920 by spill water from the Kushbhadra and Devi rivers. The area only suffers in years of high and prolonged flood.

" The Committee are unable to recommend any measures for relief during high floods. The raising of the Devi embankment and closing of the Ramchandrapur escape would only transfer the damage to some other locality.

" The third area in Puri which suffers in high flood is the area lying on the right of the unembanked portions of the Daya river in thanas Satyabadi and Brahmagiri. In this area damage is done during high floods. The key to the situation is the level of the Chilka lake. In the absence of a direct outlet to the sea the Chilka lake acts as a balancing reservoir during the flood season. In high floods the water rises steadily.

" The question of cutting a direct channel from the lake to the Bay of Bengal was considered some years ago. It was not proceeded with owing to the difficulty in keeping the mouth open without a powerful dredger. In view of these facts the Committee do not recommend any scheme for improving the conditions in this area."

Rents in flooded areas.

During the revision of the revenue settlement which began in the sadr subdivision in 1923, the question of the damage caused by flood came into prominence, because it happened that in the year when the settlement of rents began there had been severe floods in the low-lying parts of the subdivision, and protests were made in the press and the council against the proposal to raise rents in the affected areas. It was proved, however, by statistics collected during the preliminary stages of the settlement, that in many of the villages affected by an exceptional flood, the selling value of land was actually higher than in villages that are free from flood: it is only in the villages that are frequently flooded that land becomes less valuable; because an occasional flood increases the fertility of the soil by the deposit of silt, and the extra fertility more than compensates for the loss of crops which sometimes occurs. A very gloomy picture of distress in the affected areas had been painted by the Rev. C. F. Andrews, who visited them during the latter part of the monsoon of 1925, and, partly as a result of this, insistent demands were made for relief on a more extensive scale. During the cold weather the Governor himself visited the area near the Chilka lake, and the Revenue Member of Council made an extended tour there, and were satisfied that the measures taken were adequate.

As regards the settlement of rent, the general principle adopted was that, while in the rest of the subdivision the old

rents of thirty years' standing were enhanced by four annas in the rupee (an enhancement which was more than justified by the rise in prices), in the villages which were liable to injurious, i.e. too frequent, floods, the standard enhancement was only two annas in the rupee; and in the worst areas there was no enhancement at all. In settling the rents in each village, the flood of the previous year was not alone taken into consideration, but it was also seen whether the village lay in the tracts which are frequently flooded, and the existing rents and selling value of land were given due consideration; as a result, in three more or less well-defined blocks, corresponding to the three tracts referred to above, near the Chilka, near Gop, and near Kakatpur, rents were enhanced to this modified extent. These tracts, together with the Sar lake and the Samang Pat, form an almost continuous low-lying trough, parallel with the sea; but in the Samang Pat and the Sar lake nothing but spring rice is grown, and for this, flood water is not only beneficial, but necessary.

Expert Committee on Floods, 1927.

After a disastrous flood in the Baitarni river in 1927, an expert committee of three engineers was appointed, with Mr. Addams-Williams, Chief Engineer of Bengal as Chairman, to examine the whole problem of floods in Orissa, and to suggest remedies. At the same time an air survey was made of the whole coast line up to the Dhamra river. The report of the Committee has been recently published, and it is impossible to give more than a bare outline of it. It is pointed out that Orissa is a deltaic country, that floods are nature's method of building new land by the deposit of silt, and that it is useless to attempt to thwart this process. To protect one area by a high embankment only has the effect of throwing more water elsewhere. It is therefore recommended that no new embankments should be built, and that some of those already in existence should be gradually abandoned; and that no reclamation of land for cultivation should be allowed in the tidal portions of the big rivers, as this tends to stop the discharge of flood water. In particular, the embankments near the mouth of the Devi and of the rivers flowing into the Chilka should be gradually abandoned; reclamation of land in the Chilka and at the mouth of the Mahanadi should be stopped; experiments should be made in opening mouths for the rivers of Puri through the sand dunes; and the mouth of the Chilka should be kept open.

CHAPTER IX.

RENTS, WAGES AND PRICES.

CASH RENTS.

CASH rents are paid for almost all the land under cultivation, and produce-rents are far less important than they are, for instance, in the districts of South Bihar. In the temporarily-settled and Government estates, rents were settled in the revenue settlement of 1897. In the estates of the headquarters subdivision that settlement was made for a period of thirty years, expiring in 1927; the record-of-rights was revised in 1912, but few of the landlords applied for an enhancement of the rents, which therefore remained practically unchanged; a second revision began in 1923 as a preliminary to the settlement of revenue to be paid after 1927; and in the course of that revision, the rents to be paid were settled under Chapter XI of the Orissa Tenancy Act. In the Khurda Government Estate the settlement of 1897 was made effective for fifteen years only, expiring in 1912, after which a fresh settlement was made expiring in 1929, when a further settlement was to be made.[1] In the permanently-settled and revenue-free estates, of which the latter form a considerable part of the district, rents are fixed either by contract, or by a court on the application of the parties; unless such an application is made they are not altered during the course of the preparation of a record-of-rights and they have for the most part remained unaltered since 1897.

Khurda Subdivision.

By the settlement of 1897, the gross rent roll of the Khurda estate, which was fixed at Rs. 3,01,000 in the settlement of 1882, and had risen to Rs. 3,09,000, was further raised to Rs. 3,77,000.

The rate of rent assessed was based on that imposed at the previous settlement, an enhancement of three annas in the rupee being made in the rents paid for old cultivation, while a rate of 14 annas 10 pies per acre was imposed on new cultivation. The enhancement on old cultivation was granted

[1] The rents to be paid after 1929 were eventually fixed by agreements executed by the tenants, at an enhancement of two annas in the rupee.

solely on account of the increase in the price of crops; the assessment on the small area of new cultivation was based on the universally accepted rates of the country.

The greater portion of the net increase of Rs. 68,000 was due to the general enhancement of the old rents. The average incidence of raiyati rents after the settlement was Rs. 1-10-6 per acre, or about one anna less than the average in the head-quarters subdivision. In addition to these rents, the raiyats pay half an anna in the rupee for road cess and an equal amount for certain forest privileges. About one-third of the agricultural under-tenants pay on an average Rs. 2-3-0 per acre as cash rents, and of the remainder half pay mixed produce-rents and cash-rents.

Banpur Mals.

In the Banpur Mals the rents fixed were specially light. This tract consists of wild hilly country inhabited by aboriginal Khonds, who were for the first time assessed to rent at the settlement of 1882.

The rents fixed then were nominal, varying from about one to two annas per acre, payable through the sarbarakars. On the conclusion of the settlement of 1897 the Khonds accepted an enhancement which resulted in an average rent rate of just under three and a half annas per acre. In the case of the non-aboriginal inhabitants of the tract, a more rigorous policy was adopted. The former rate of rent was about three and a half annas per acre, and this was raised to eleven and a half annas.

Settlement of 1912.

Between 1897 and 1912 the sum total of rents fixed in Khurda increased by about Rs. 9,000 by extension of cultivation. In the revision settlement, carried out between 1911 and 1913, the maximum legal enhancement on the ground of the rise in prices would have been four annas per rupee on the rents fixed in 1897; actually the rents were enhanced by two annas per rupee. Excess area or land found to be cultivated, though not included in the raiyats holding, was assessed at the rate payable for similar land in the vicinity. The result of these proceedings was an increase in rents of about Rs. 47,000. The gross rents payable amounted after the settlement to Rs. 4,34,000. The whole of these rents do not go to Government, as the sarbarahkars' commission is deducted. The actual land revenue, excluding cesses, was fixed at Rs. 3,51,000.

Puri Subdivision.

In the headquarters subdivision, at the time of the settlement of 1897, sixty years had elapsed since the last settlement, for the settlement of 1837 which was originally made for thirty years, expired soon after the great famine of 1866, and was therefore extended for another thirty years.

In the resettlement proceedings rents were settled for all the tenants in the temporarily-settled estates, including those who had held at privileged rents for the term of the expired settlement. The most important classes of tenants were those known as *thani* and *pahi* raiyats, *i.e.*, resident and non-resident tenants. The rents of the latter had not been fixed for the term of the previous settlement, but the zemindars had enhanced them considerably during its currency, so that they were practically competition rents. The *thani* tenancies, embracing the best lands of the villages and carrying many important privileges, such as heritability, fixity of rent for the term of settlement, etc., had been assessed at higher rates than the holdings of the *pahi* tenants. In these circumstances, the general principle adopted for the settlement was that existing *pahi* rents should generally be assumed to be fair and equitable, and should be left unaltered, and that *thani* rents should only be enhanced when they fell below the *pahi* rents by a considerable margin. At the same time excess areas, whether held by *thani* or *pahi* tenants, were assessed to rent. The nett result of the operations was that the average incidence of rent over the raiyati area was Re. 1-11-7.

Settlement of 1927.

The rents so settled remained practically unaltered by the revision of the record-of-rights in 1908 to 1912, for few applications were made for settlement of fair rents at that time. A second revision of the survey and record-of-rights began in 1923, and rents in the temporarily-settled estates were fixed, to become payable on the expiry of the term of the revenue settlement in 1927. There is now no legal distinction between *thani* and *pahi* raiyats; raiyats (except for certain privileged classes), are classed mainly as settled (sthitiban), occupancy (dakhal satwa bisishta) or non-occupancy (dakhal satwa sunya); and their classification does not depend on their place of residence. Under the Orissa Tenancy Act, anyone who has cultivated land as a raiyat in a village for twelve consecutive years becomes a settled raiyat of that village, irrespective of his place of residence, and has a right of occupancy in his land; his rent becomes liable to enhancement only according to certain conditions, and to a certain extent,

specified by the law. Settled and occupancy raiyats form an overwhelming proportion of the raiyats of the temporarily-settled estates; their rents were in almost all cases enhanced on the ground that since they were last settled or fixed, there had been a rise of almost a hundred per cent. in the price of staple food crops. In such circumstances the law directs that the average price of rice in the last ten years, should be compared with that of the ten years preceding the former settlement, and that rents may be enhanced proportionately to the extent of two-thirds of the rise in prices. In fact, however, though the legal enhancement on this ground was about twelve annas in the rupee on rents current since 1897, and five annas in the rupee on rents current since 1912, it was considered expedient to enhance the former by only four annas in most cases, and the latter by only two annas in the rupee, with even greater concessions in villages where rents are already high, or crops are liable to damage from flood or drought; while in a few villages slightly higher enhancements were made where rents were unduly low. On the other hand the rents of certain privileged classes of tenants, viz., *bajyaftidars*, were enhanced by fifty per cent. subject to the limitation that the rate of rent should not exceed two-thirds of the average rate of raiyats' rents in the village. Final statistics are not yet available, but it appears that the average incidence of rent for the non-privileged raiyats will be about Rs. 2-6-0 per acre.

Although as is natural at the time of a settlement of rents, protests were made that rents in Puri, when the productivity of the land is taken into consideration, are unduly high as compared with rents in the rest of the province, this contention can hardly be supported in the light of the figures of the registration offices. These show that in 1924, the average price of whole holdings sold in Puri was Rs. 125 per acre, and the rental Re. 1-15-0 per acre; whereas in the whole province the average price was Rs. 111 per acre, and the rental Rs. 3-0-0 per acre. Thus in Puri the proportion of rent to selling value, as determined by those best competent to judge, viz. the buyers and sellers themselves, is less than two-thirds of the proportion in the rest of the province. Moreover, statistics showing the price of raiyati land were collected in the Puri subdivision during the course of the settlement of 1897 and the two subsequent settlements. These statistics in 1897 were not very full, but they show that in the three previous years the average price per acre in each year had varied from Rs. 33 to Rs. 42 in Puri

thana, and from Rs. 45 to Rs. 54 in Pipli thana. The average of the three years cannot have exceeded Rs. 50 at the most. In the two subsequent settlements the statistics collected show the average price in the whole subdivision for the preceding ten years, viz. Rs. 69 per acre in the first of these decades, and Rs. 102 per acre in the second. Thus in the period of nearly 30 years, the enhancement of approximately twenty-five per cent. in the rents, is very much less than the rise in the market value of land.

Produce rents.

The cash-rents in the temporarily-settled and Government estates, described above, form the bulk of the rents in the district. Produce-rents are also important, particularly in the revenue-free estates.

The commonest form is that known as *dhulibhag* (literally a sharing of the dust), which implies an equal division of the grain as well as of bye-products. Under this system the entire cost of cultivation is borne by the tenants, and when the crop comes to maturity, it is reaped in the presence of the landlord's agent and is carried by the tenant to the threshing floor, where an equal division is made in the presence of both parties. Sometimes, however, instead of the crop being actually divided, it is appraised on the ground, and half the estimated value in cash is taken by the landlord as his share. A less common form of produce-rent is that designated *phalbhag*, i. e., a division of fruit and grain only, the straw and other bye-products being retained by the cultivator,

Another form which is common in the district, is that known as *sanja*, a term (literally meaning a contract) which is applied to the payment of a fixed quantity of agricultural produce. Such rents appear to be highest where there is most land available for cultivation, as in Nij Khurda and Banpur. Another form of the latter system of rent payment found only in this district is that called *dekhamana*. Under this system a fixed proportion of the produce is given, if the outturn is normal, but, if the crop is scanty, remissions are allowed. The only other class of produce-rent calling for mention is that called *panidhan*, i.e., an arrangement by which a portion of a cash-rent is payable in kind, e.g., a tenant with nominal rent of four rupees may have to pay three rupees in cash and one rupee in grain. The landlord fixes the rate, so that the tenant generally has to pay something more than he would obtain for his grain in the open market.

Of these systems of rent payment, the dhulibhag system is fairer than the sanja system, for under the latter the amount to be paid is not varied according to the season, and therefore presses more heavily on the raiyat in bad years, when prices are high; under the former system the demand, measured in grain, is less in a bad year than in a good. The amount of sanja rent is generally about six to eight maunds of paddy per acre; the amount of a dhulibhag rent would be theoretically about the same, but in practice is probably less, mainly because the raiyat pays less attention to a field of which he gets only half the produce, than to a field for which he pays a cash-rent. The average local price of paddy in the last ten years has been about Rs. 2-4-0 per maund, so that the nominal value of a produce-rent, paid in full, is about Rs. 14 to Rs. 16 per acre. This is probably an overestimate as produce-rents are difficult to realise; for purposes of road cess assessment they are valued at Rs. 8 per acre.

Produce-rents, so far as settled raiyats are concerned, are not of the same importance as in Bihar, where sometimes whole villages are held on this system of rent, and the system itself is elaborate and complicated by many minor allowances and deviations from the "half and half." But a considerable area is held by under raiyats on produce-rents, and it must be admitted that much of the land which is claimed, and has been recorded, as in the direct cultivation of the landlords, is really cultivated by tenants in this way; this is particularly the case in some of the revenue-free estates. The idea that a cultivator can have a right of occupancy in land which he cultivates on a produce-rent is really foreign to the custom of the country, and many will not claim such a right even when it is explained to them that they legally possess it. Some are undoubtedly deterred from doing so owing to the influence of landlords or their agents.

Wages. The wages commonly paid in the district have risen considerably in the last twenty years. The daily wage of a male coolie in the towns is six to eight annas, and of a woman or child from three to six annas. Skilled labourers such as masons, carpenters or blacksmiths earn more, from ten annas to one rupee daily. Contractors in Orissa usually pay the wages daily, and enforce some standard of work by a system of monthly advances, and an occasional distribution of "bakshish." There is very little tendency on the part of the labourer to work harder, in order to earn more and so

raise the standard of living. Among the literate classes, the supply of persons wanting clerical posts is greater than the demand, and for any post with a pay of twenty to twenty-five rupees per month there are numerous applicants.

In the rural areas, artisans are not remunerated entirely by a cash wage. They are the servants of the village and perform such services as are necessary to the community in consideration of holding service lands and recovering contributions in kind from each tenant. Thus the carpenter, blacksmith, washerman, barber and astrologer are maintained by small grants of land, known as dessheta jagirs, and by contributions levied from the tenants. These grants are of ancient origin, and the right to hold them passes from father to son, so long as the services are performed. As the landlord gets no direct income from them, they are not taken into consideration in fixing the revenue payable on the estate. Some lands which were formerly of this nature have, however, passed into the hands of others who no longer perform the services, and these have been assessed to rent, and therefore to revenue. The contributions paid by the villages vary considerably from village to village, but the carpenter and blacksmith receive about five gaunis of paddy per plough every year, and the washerman and barber five gaunis per head A gauni, it may be explained, is a varying measure of grain averaging about three seers. Field labourers are paid sometimes in cash and sometimes in kind, the daily cash wage of a man being usually four or five annas.

Labouring classes.

Daily labourers are known as *mulias*, and farm servants in permanent employment as *kothias* or *halias*. Almost every cultivator who owns more than five acres of land employs the latter, generally keeping one for every five or ten acres under cultivation. As a rule, they sleep on the premises of their masters and are paid twelve to eighteen rupees per annum, besides their daily food and an annual supply of clothing valued at about three rupees. Sometimes, however, they do not mess at their masters' houses, but take instead half the wages paid to an ordinary day labourer in money or kind. *Halias* are recruited from the poorer cultivators, who have sold all their lands or retain only a few plots, and from among the Bauris or Savars. It is evident that their existence is a hard one, and that they stand as close to the margin of subsistence as is well nigh possible. If a *halia* has a wife and family, he has to support them on an allowance of

about two rupees a month. The women and children of the family eke out this amount by such small earnings as they can obtain from occasional employment in the fields in busy seasons, and from collecting jungle roots, fruits and fuel. *Halias* have nearly all taken advances from their employers, and find it difficult to free themselves from such bondage when once assumed. They are in fact practically serfs, who may be described as *ascripti domino* rather than *ascripti glebae*.

Rise in prices.

The figures in the margin will show how enormously the price of rice, the staple food of the people, has risen during the last century in Orissa.

Price of rice in seers per rupee.	
1837-51	49.8
1852-66	42.7
1867-81	24.8
1892-96	19.8
1896-1905	17.7
1906-1915	11.7
1916-1925	9.3

It will be seen that the greatest increase took place after 1866, as after that time came a period of great activity in the improvement of the roads and harbours, the construction of canals, and the gradual development of foreign trade; and a steady rise of prices set in. Since the opening of the railways the process continued; the highest prices were reached in 1919, and since that date they have never gone back to the pre-war level.

There has also been a great increase in the price of other agricultural produce, of pulses, ghi, tobacco and raw sugar; in the last twenty-five years the price of sugar has been doubled, and of ghi and tobacco considerably more than doubled. In the same period the price of imported articles such as kerosine has increased by about one hundred per cent. and the price of salt, after considerable fluctuation, has gone back to about the same as it was at the beginning of the period.

MATERIAL CONDITION OF THE PEOPLE.

Landlords.

Writing more than a century ago, Mr. Ker described the landlords of Puri as follows:—"The land-holders are needy and indigent, especially the smaller proprietors, who constitute at least half of the whole number. Their improvidence of disposition is commensurate with their inferiority in the scale of civilization and refinement, and with this is combined a propensity to wanton extravagance, which would appear

inveterate." It is said that even to-day the landlords as a class are ignorant and ill-educated, and exhibit a small degree of public spirit. On the other hand they are not on the whole oppressive. The main complaints are that they do nothing for the improvement of the conditions of their tenants or estates; they deny to their tenants, in many cases, their legal rights of occupancy in lands cultivated on produce-rents; they commonly exact various forms of "*abwab*" or illegal additions to the rent; and they commonly exact more than the legal fee for giving consent to the transfer of an occupancy holding. Still it would be true to say that the relation between landlord and tenant is in the main good; where oppression does occur in the larger estates, it is, as usual, principally due to the presence of the low paid estate official, who is insufficiently controlled, and against whom the tenant exhibits little power of resistance. The landlords are generally divided among themselves by family disputes and involved in debt. The result is that about half of the zamindari interest in the district has now passed from the old landlord families to the great religious foundations and priestly classes of Puri, or into the hands of the larger *mahajans* and usurers of this district and Cuttack.

Professional classes.

The priestly class and the writer class form small sections of the community. The opening up of the country has benefited both classes, while the latter have also profited by the greater complexity of zamindari management and of office work generally. There is one section of the priestly class which calls for special notice—the Sasani Brahmans, who are dependent on cultivation. They form close Brahman corporations, formerly owning whole villages, which were granted to them free of rent or at quit-rents by the Raja of Khurda. They still hold these villages at favourable rates, but the natural increase in their numbers, the absence of room for expansion of cultivation, and the gradual disintegration of the communal system have been sapping their prosperity. Though their numbers have increased, they have to maintain themselves out of the proceeds of the same amount of land. Their caste prevents them from cultivating their lands themselves, and they are obliged either to sublet their lands or employ *kothias*, and thus incur extra expense. The Sasan villages used to belong solely to them, but most of their property has now passed into the hands of outsiders, chiefly *mahajans*. Pilgrim

hunters are now recruited from among the poorer of these Brahmans.

Mercantile classes.

The prosperity of the trading class has undoubtedly increased with the development of communications and the introduction of the railway. But the chief merchants are not natives of the district. The rice merchants are mostly Muhammadans from Bombay, the cloth merchants Marwaris from Jaipur and Marwar, and the hide dealers Kabulis from Afghanistan. The Oriya has, as a rule, little idea of trade and little commercial enterprise, his horizon being bounded by petty retail trade or by usury, which requires the expenditure of little energy.

Cultivators.

The cultivating classes have, on the whole, benefited by the rise in prices and the increase in the area under cultivation. Rent, which formerly absorbed at least one-third of the produce, does not now absorb one-tenth. Moreover, the general improvement in communications and the development of the country not only prevent the possibility of widespread famine, but also open up to the inhabitants of the district the chance of employment beyond its borders, and afford them opportunities for disposing of their surplus produce at good prices. The census shows that thousands go away to Bengal in the harvesting season, and to Calcutta, and this is particularly the case in years of scarcity. The earnings of these labourers are a valuable addition to the income of the district. Unfortunately, it is stated that this emigration breaks up the family life, as the men, being separated from their wives, get into evil ways.

Indebtedness.

There is heavy indebtedness among the agricultural population, the cultivators being in debt both to their landlords and to professional money-lenders. A practice exists among the larger landlords of keeping granaries which are filled with the produce of their own land, of lands let out on produce-rent, and with the interest in kind derived from loans of paddy to their tenants. These loans bear compound interest at twenty-five per cent. recoverable at harvest time. The interest is high; but it is not higher than the rate of interest on money loans, and the paddy at harvest time is less in money value than the paddy at sowing time. At any rate the practice at present forms an essential part of the economics of the district. There is also the professional money-lender, but he does not appear to be so prominent in the village life as the money-lender

in Bihar. The presence of co-operative credit socieites now forces the money-lender to be somewhat more moderate in his demands, since they lend money at the comparatively low rate of Rs. 15-10-0 per cent. It is difficult to tell, however, to what extent the real spirit of co-operation has got hold of the members, and to what extent it has succeeded in reducing their indebtedness; for there is some ground for supposing that the result has been in many cases to convert indebtedness to the money-lender into indebtedness to the society; it is not clear that the members have used the reduction in their payments of interest to liquidate their debts.

Generally speaking it may be said that although in the sadr subdivision the state of the cultivating classes cannot be described as one of plenty, yet certain sections enjoy a fair measure of prosperity; and there is a greater power of resistance to and recovery from the effects of agricultural calamities than in the past. In Khurda, where the soil is fertile, and rents low, and the tenants do not suffer from any of the exactions of the ordinary landlord, the agricultural classes are comparatively well off.

Labourers.

While traders and agriculturists have prospered, and the wages of artisans have increased, the wages of labourers have not advanced in proportion to the rise in prices. So long, however, as the labourer is paid in kind, as is frequently the case when he works for an agriculturist, his actual earnings are not affected. This class is increasing not only by the natural growth of population, but also by recruitment from among the smaller peasantry. This is due to the decrease in the size of the holdings, which makes men who were previously peasants supplement their reduced incomes by working for others, and also to the smaller tenants selling their holdings. The result is a tendency for the labouring class to increase more rapidly than the local demand for their services. There are happily certain safety valves available, such as railway work and service in Calcutta and its neighbourhood. There is also emigration to the extensive waste lands in the Garhjats, and to the unoccupied culturable land in the hilly tracts in the north-west of the district.

CHAPTER X.

OCCUPATIONS, MANUFACTURES AND TRADES.

Occupations.

According to the census of 1921, 619,418 persons or 65 per cent. of the population are dependent on ordinary cultivation, viz., 10,900 as rent receivers, 506,000 as ordinary cultivators, 6,000 as agents, 4,100 as farm servants and 92,300 as field labourers. Besides these, 2,367 are engaged on special agricultural products, 337 in forestry and 18,300 on raising farm stock; while 13,217 are fishermen and 57 are dependent on hunting.

The number engaged in industry is 114,360 or 12 per cent. of the population; of these, 17,699 are engaged in textiles (including 11,100 weavers and 4,800 rope makers); 12,556 are workers in wood and basket work; 7,641 are metal workers; 7,403 work in lac, glass, etc.; 28,826 are engaged in the preparation of food, rice pounding and so on; 26,968 are makers of dress, tailors, etc.; and the rest are in miscellaneous trades such as building, bangle-making, etc.

The transport of goods and passengers employs 6,126 persons, of whom 2,807 are on the railway and 2,742 are engaged in road transport.

The number of persons engaged in trade was returned as 80,759 or nearly 9 per cent. of the population; of these 53,894 are traders in food stuffs, grain, oils, sweetmeats and the like, and nearly 19,000 are traders in wood and fuel, indicating the importance of the forests in the economic life of the district. The above figures all include not only the actual workers, but also their dependants; and includes those who, while principally engaged in trade or industry or transport, are also partially dependent on agriculture.

Other important classes, including dependants, are 1,545 police, 4,406 village watchmen, 3,740 engaged in public (both state and local) service, 20,929 priests and temple servants, 964 lawyers and their clerks; 1,046 doctors, midwives, vaccinators, etc.; 4,245 teachers; 3,259 musicians and actors; 12,624 domestic servants and 34,694 miscellaneous

labourers. Lastly there are 7,673 beggars, vagrants and prostitutes, of whom 2,914 are men, 2,215 are women, and the rest are dependants of both sexes.

MANUFACTURES.

The proportion of the population dependent entirely on agriculture is less in Orissa than in any other division of the province, while that engaged in commerce and the professions is higher. Nevertheless, as the above figures indicate, agriculture is the mainstay of the population, and such traders and artisans as there are, are almost entirely occupied in supplying the needs of the agricultural population. The district contains only one town, Puri, and Puri is mainly a town of pilgrims and priests, monasteries and lodging houses. In no sense of the word can it be described as a manufacturing town or industrial centre. In the rest of the district, the villagers for the most part grow their own food, grind their own grain, and build their own houses. The blacksmiths and carpenters are members of castes which from time immemorial have been the servants of the people, remunerated partly by the possession of rent-free land on which the landlord pays no revenue, and partly by small annual payments, generally in kind, at fixed rates, by the cultivating raiyats. The needs of the villagers are few and simple; brass and earthenware utensils, coarse cotton cloths, ploughs and other instruments of agriculture supply almost all their ordinary wants. Practically nothing is manufactured for export; the statistics of exports by rail and by sea show that the only export of any importance whatever is that of agricultural produce, mainly rice and paddy; even timber does not figure largely in the returns, and stone only to a small extent. The only important industry which appears ever to have been exploited is that of salt manufacture, and is now prohibited by law. At an early age, however, stone-carving must have been an important industry, if we may judge from the exquisite memorials still remaining, such as the great temples of Bhubaneswar and the solitary fane of Konarak; but this art is now confined to a few skilled craftsmen.

Salt manufacture.

More than a century ago Stirling said that the finest salt of all India was manufactured in the wild inhospitable tract along the sea-board of Orissa, and that the East India Company obtained from it, under their monopoly system, a net revenue falling a little short of eighteen lakhs of rupees. In the statistical account of Puri published fifty

years ago, salt was described as the chief manufacture of Puri, the centres of the industry being Parikud and the tract to the north of the Chilka lake. Thirty years ago it was still of some importance, 195,000 maunds of salt being manufactured in 1896-97, and the Collector reported that there were two salt-producing areas, viz., the tracts at the mouth of the river Devi and the country lying on the borders of the Chilka lake. But the work of manufacture was already confined to Tua and Gurbai in the latter area, and the industry was fast declining, owing to the fact that salt could be brought by rail from Madras and sold cheaper than that manufactured locally, which had to be carried across the Chilka lake by boats. The manufacture was finally stopped in 1899-1900, and with it died an indigenous industry which supported a large number of people.

Weaving and Spinning.

Cotton-weaving appears never to have had the same pre-eminence as in the adjoining districts of Cuttack and Balasore, and while the English merchant adventurers established factories in those two districts in the seventeenth century, they found no such flourishing trade in cloth as would promise success in this district, and consequently left it severely alone. Nevertheless it is interesting to note that the number of cotton weavers has increased by 35 per cent. since 1901, and now with dependants stands at about 11,000. This is partly caused by the attempted boycott of mill-made cloth, and is accompanied by an increase of about 30 per cent in the import of raw cotton into Orissa, shown by a comparison of the returns with those of twenty years ago. Weaving is not carried on as an organized industry, but in the homes of the weavers themselves, who are also frequently agriculturists. When the yarn is purchased the women and children do the winding and warping and often assist in the winding of the warps; and this is no mean contribution, for the warping of sufficient ends for one warp alone involves a walk of eight or ten miles. There is no regular system and no fixed hours of work; the weaver often works early and late, but seldom in the heat of the day. It is estimated that a family which uses the ordinary type of loom earns on the average from ten to twelve annas a day. Most of the looms are of antique design, but attempts have been made to encourage the use of the fly-shuttle loom, as well as to increase the local growing of cotton, by the co-operative societies.

Fisheries.

Fishing is the occupation of an important section of the people of Puri. This district is the only one of the old province of Bengal with an open coast, from which deep-sea fishing can be carried on. There is a District Fishery Officer, whose headquarters were at Puri, but were recently shifted to Balugaon on the Chilka lake. The deep sea fishing is limited in extent, and is carried on not by local Oriya fishermen, but by Telugu settlers from Ganjam, called Nuliyas, who are found in Puri, Nuagaon, Arakhkuda, Khirisai, Sahadi, Ramlenka and Manikpatna. They use both the Oriya and the Telugu languages; those living near the Chilka as a rule pay no rent for their houses; those living in Puri pay a rent and a municipal tax. Each household has its own *thakurani*, and, to a limited extent, worships its ancestors. The men are extremely hardy, and can work for hours in an open boat swamped by the seas; swimming is almost as natural to them as walking, and it is usual for bathers at Puri to have a fisherman in the vicinity in case they should get into difficulties in the strong currents; lives are saved every year by their efforts. For fishing, during the calm months, they use the seine net, and at times make excellent hauls of bijram (Madras seir, Cybium guttatum), pomfrets, small soles, etc.; a kind of herring is also found in abundance. With the seine net the fisherman cannot go far out, as one end of the rope to which the net is attached is left on the beach, where the net is eventually hauled. With small gill nets or hooks and lines the Nuliyas go to a distance of two or three miles in calm weather in catamarans, but their hauls are small. During the prevalence of the south-west wind, when the seine cannot be used, a little fishing is done with gill nets not far from the beach; but all deep-sea fishing practically ceases from about the middle of March to about the middle of September. During the cold weather fresh fish is exported from Puri town to Calcutta; the rest is either sold locally or dried for export. The abundance and variety of sea fish caught with the rudest and most primitive of appliances indicate the wealth of marine life that may reasonably be looked for in the deep sea, for big shoals seldom come quite close to the beach, and the catches merely represent stragglers from schools and younger members of the larger kinds.

The Chilka lake also forms a most valuable fishery. It abounds in fish of all kinds, chiefly mugils and perch,

besides prawns and crabs, which grow to a large size; there is also a small oyster bed at Manikpatna. The best fishing grounds are situated on the south side of the lake near the sea, along the numerous creeks and channels, and round the low uninhabited island known as Nalbana. The fish are caught in the shallow water near the banks from October to November by means of fixed cruives (*jans*), each of which is over a mile long and several hundred yards wide. Prawns are caught in abundance from January to March in bamboo traps fixed to screens of the same material. They are boiled and dried for the Burma market, or are simply dried for consumption in Orissa. Nets are also used in the creeks, as well as in the Chilka itself throughout the year, and very large hauls are often made. Shoals of *hilsa* are found in the rainy season near the north-east corner where the Daya falls into the lake. Owing to the absence of any large markets in the neighbourhood, most of the fish is dried, but the larger varieties are salted and exported to Cuttack, Puri and the Tributary States, while some are exported by rail on ice to Calcutta.

The lake is now largely fished, and the introduction of any improved methods of capture, without anything being done to increase the supply, would probably lead to the speedy depletion of the waters. It is connected with the sea by a very narrow mouth, which is frequently liable to obstruction, and its enormous water area is thus imperfectly replenished, so that overfishing would soon exhaust it. On the other hand, it affords an ideal ground for the artificial propagation of various kinds of estuarine fish, especially perch, shads and grey mullets, whose favourite haunt it is; and it is believed that its supply of fish could be very largely increased by the establishment of hatcheries. At present, the lower classes inhabiting the banks of the Chilka collect the frothy spawn and eggs (*sridhar*) that float near the edge during the monsoon, and fry them or put them in their curries. A morsel of this stuff means the destruction of thousands of fish.

Dry salting is the method most commonly employed for preserving fish. The fish are ripped up in two from the snout to the tail, the entrails are taken out, and the inside washed and cleaned. Salt is rubbed both inside and outside, and the fish placed in small rows under some pressure, such

as that of a plank, and the juice allowed to exude for a little time. They are next spread out in the sun for a few days until they are quite dry. Dry salt is then put inside, the quantity varying according to the size of the fish, and the halves which remain joined at the back are then folded, and the fish is ready for despatch. The fish keeps good for several months and is sent to different parts of Orissa, including Sambalpur, and is similar to that which is known as Bombay duck. *Hilsa, bhetki* and all other large kinds, as well as the roes of certain varieties of mugils, are treated in this way. Boiling and drying in the sun is followed only in the case of prawns intended for the Burma market. This process is employed during the season, i.e., from January to March, by a Muhammadan trader from Ganjam, who also exports to Burma. The prawns are merely boiled and dried in the sun, no artificial heating being practised. This form of preserving, though very effective, is unacceptable to the Hindus, as the fish being boiled cannot be eaten by them without loss of caste.

The most common method of catching fish in inland waters is by means of the *jan*. This is an extensive bamboo enclosure, by which the fish that come for shelter and food in the shallow water near a bank are cut off from the rest of the water, and are kept confined for daily capture, until the enclosure dries up and the whole of the fish is caught. This method is much in vogue on the Chilka, a single *jan* often covering more than a square mile. Another common method of catching fish is the erection of a *baja* or *patta*, i.e., a screen of split bamboo is set up in shallow water, with a small space left in the middle where a bamboo trap is placed, in which the fish are caught as they go through.

The cast net with iron weights is in common use for smaller catches. It can be worked by one man either from a boat or on foot. It is dexterously whirled over the head and then cast, when it falls in the form of a circle. Drag nets are often used with boats, and a good many of them are provided with a purse; one of these nets, the *bara jal*, though a drag net, has as its main portion a large pocket, and may, therefore, also be termed a purse net. For deep-sea fishing the fishermen use a large net called a catamaran *jal*. One corner of the latter is held by a rope from the catamaran, the opposite corner is heavily weighted, and the rest of the

net is kept stretched by means of floats and weights carefully arranged. When a shoal of *kaula* (clupea fimbriata) pass through, many get entangled in the meshes, the floats sink, and the net is drawn up with the fish all hanging by their gills. Among other contrivances are baited hooks. There is a spot close to the Puri beach, which is named Pedraya by local fishermen, where ballast used to be thrown in the days when ships came in ballast. At this place lines, sixty feet long, are cast from catamarans to catch big botton fish, two men with four hooks fishing from each catamaran, and using cuttle-fish as bait.

Another ingenious device is the *phand* or noose used at the Nalbana island in the Chilka lake. This is a cord made of fibre extracted from the stalks of palm leaves. A series of loops of gradually diminishing diameter are made of the twisted fibre, which are joined at equal intervals by a thin string of the same material. The loops look like tapering bags, which are attached to the reeds just a little below the surface of the water. Fish come to Nalbana through the shallow channels to feed, but having entered the thick reeds, lose their way and make for any openings they can find. Once a fish puts its head inside a *phand*, it is unable to recede, and in its mad struggles gets more entangled and is often killed at once.

Another curious method which is sometimes employed in small tanks of shallow water, is a kind of conical basket, open at the mouth, having also a small opening at the smaller end, through which an arm can be thrust. The villagers sometimes turn out in a body armed with these contrivances, and systematically fish the pond. The man, woman or child walks through the water, placing the open end on the ground just in front of this feet, he then thrusts his arm through the smaller opening and catches in his hand any fish that happen to have been imprisoned.

In concluding this sketch of the fisheries of Puri, mention may be made of those in the Khurda estate. These are :— (1) Village tanks and reservoirs, for which no rent is paid; the fish are divided among the villagers and *sarbarahkars* in the proportion of seven to one. (2) Small nullahs and streams, which are leased annually to the highest bidder. (3) The extensive deep-water and foreshore fisheries of Tua and Satpara on the south-eastern shore of the Chilka, which are

leased by auction for periods varying from one to five years. (4) The fisheries, called the Banpur-Chilka fisheries, along the north-western shore of the Chilka from Bhusandpur to the Ganjam frontier. The fisheries last named, extending along the foreshore of *zilas* Rameswar, Kuhuri and Banpur, include a certain area of deep water, but exclude all creeks and channels. They have been from time immemorial in the possession of the Khurda fishermen-tenants of the villages adjoining the lake, who paid no rent for the privilege of fishing until the settlement of 1896-97, when a rent of eight annas a house in each fishing village was assessed. The most valuable fisheries are those round the islands of Tua and Satpara on the eastern shore of the Chilka lake, where mixed fish and prawns are caught in large numbers.

Stone-carving.

Puri is one of the few districts in the province in which stone-carving of any merit can be found. The industry was described as follows by Mr. E. B. Havell in a monograph, *Stone-carving in Bengal*, published in 1906 :—" Within the area in Bengal which may be described as a stone-building country, it is practically only in Orissa, under the flourishing native dynasties first established in the early centuries of the Christian era, that a great style of stone architecture and stone-carving has developed. The splendid antiquities of Orissa have often been described. In the ornamentation of the hundreds of temples, monasteries, and other works of stone which were built in the course of many centuries in the districts of Cuttack and Puri, the Orissa carvers acquired the most extraordinary technical skill in architectural decoration Hindu art has known. There is a pitiable remnant of this splendid art still struggling for existence all over the Orissa Division, but unless Government adopts some more effective measures for preserving it than those hitherto employed, it is not likely to survive many years.

" There are carvers still to be found whose work, in spite of all the discouraging conditions which surround them, is hardly inferior in artistic perception and technical skill to that of their predecessors. A few of them have been lately employed by the Archæological Department in restoring ancient carvings at Konarak and elsewhere; and the Director-General, in his report for 1902-03, says that ' the work of the modern stone mason, a native of Bhubaneswar, does not

fall much behind the old work, except that modern restorations of human and animal figures are less graceful than their old models.' If this employment were of a permanent kind, no better means could be found for reviving Indian stone-carvers' art, but unfortunately there is no prospect that it will afford them anything but temporary existence.

"I am able to endorse fully Mr. Marshall's appreciation of modern Orissa carving. It is often not very inferior to the old work. In style it is much more interesting than the better known sand-stone carving of Rajputana and the Punjab, which is often monotonous and more suggestive of furniture than of architectural decoration. While the Orissa carvers are in no way inferior to those of North-West India in delicate surface ornamentation, they have not hampered themselves by the limitations of a wood carver's technique, but have fully realized the technical possibilities of their material for producing bold effects of light and shade suitable for architectural work.

"I will take the work of a carver named Chintamoni Mahapatra, of Pathuriasahi in Puri town, to illustrate the present condition of the craftsmen and the style of their art. I found him and his sons employed in making small soapstone-carving by the sale of which they now earn a living. They generally work in soapstone obtained from Dompara near Cuttack, because it is the easiest material to work with and because the prices their work obtains in the bazar are generally very small. Occasionally, however, they work in a potstone obtained from the Nilgiri hills near Balasore, which is much more difficult to carve. The soapstone-carvings are generally coloured black to make them resemble the more expensive work in sandstone, a process which depreciates the real artistic merit which many of them possess. I purchased from him for a rupee and a half a charming little sculptured group of Krishna and the Gopis, which he had just finished in soapstone. Fortunately the blacking process had not been applied. The carving only represents two or three days' work, but it is full of animation and artistic feeling, while the composition and the combination of gradations of relief are admirable. There are five or six other families of stone-carvers in Puri who live by the same kind of work, as there is now no demand for the really fine architectural carving which they

can produce. There are several splendidly carved stone doors in Puri town, executed within the last fifteen or twenty years by Chintamoni and two other stone masons or carvers, called Mahadeba Maharana and Kapil Mahapatra, also of Puri."

Mr. Havell goes on to say that one of the doorways of Emar Math, a Vaishnavite monastery, would bear comparison with the carving of the mediæval Gothic cathedrals in Europe. "The delicate surface carving in low relief is admirably contrasted with the bold cutting of the pilasters supporting the projecting cornice over the doorway. It is altogether a fine piece of work, worthy of the best traditions of Orissa architecture." He also mentions another example of the same men's work, one of a series of columns supporting the verandah of a private house, and says that since these were completed, the men have been compelled to subsist on the cheap soapstone work before described, as there is now no demand for finished sculpture of a better class.

"It is deplorable, that the standard of public taste in Bengal should have fallen so low that skilled artists of this stamp have no employment for their best talent, while the lowest class of commercial Italian statuary, incomparably inferior to the art which these men can produce, is in regular demand at prices which would make all the sculptors in Orissa rich beyond their wildest dreams. The very fine carved doorway referred to above, which is an incomparably finer example of architectural decoration than any to be found in Calcutta, is said to have cost only about Rs. 1,200, or less than is often paid for a common garden statue, a simpering Venus, or a vulgar ballet-girl in marble.

"In other places in the Puri district a certain number of stone-carvers have found employment lately in the building or restoration of Hindu temples. At Bhubaneswar, Rajarani, Mukteswar, Sidheswar, Bhaskareswar, Brahmeswar, and Parasurameswar have been recently restored, and various sculptured figures have been replaced. The Collector reports that at Tangi and Bolgarh in the Khurda subdivision two temples have recently been built in which there is a certain amount of carving. Stone-carving is also carried on to some extent in Haldia, Ghatikia Tangri, Narangarh, and other villages in the Khurda subdivision.

"Besides stone-carving proper, there is a good deal of architectural work carried on in Puri in a kind of conglomerate stone, too coarse-grained for fine carving, in which the ornamental details are roughly blocked out by the chisel and afterwards finished by a layer of fine stucco or chunam. The process of applying fine plaster to stone work is a very ancient one in India, and is used for figure sculpture as well as for ornamental details. The chunam often serves as a ground for fresco painting, as in the well-known decoration of the Buddhist carvers of Ajanta. In Puri I noticed a number of finely designed pedestals or altars for the *tulsi* plant executed by this process, which in former times reached a very high degree of perfection. It is quite a distinct art to stone-carving and is not practised by ordinary stone masons. For a damp climate like that of Bengal this plaster work has the practical advantage of preventing moisture from penetrating through bricks and porous kinds of stone."

Brass and bell metal utensils and ornaments are made in a few places, and to a limited extent exported to the Feudatory States and elsewhere, though for the most part they are sold locally. The industry, however, has declined in importance and only 4,361 persons are now dependent on it. Brass Work.

Rope and twine making affords a livelihood for nearly 4,300 persons, and there is a small export trade in rope made from coconut fibre. Earthenware utensils are made by village potters, numbering 7,352 with their dependants. Rice-pounding was returned as employing about 17,000 persons, of whom only 184 actual workers were men, while 11,900 were partially agriculturists; grain parchers (mainly women) and their dependants number 11,170. There are no toddy tappers in the district. Washermen, cleaners and dyers number 12,366, and barbers 13,739. As regards organized industry, in 1924 a company was formed for the manufacture of matches and received State Aid under the State Aid to Industries Act. The factory is now working in the town of Puri. An ice-making factory has been started at Balugaon, to supply ice for the export of fish to Calcutta. The Co-operative department is endeavouring to organize the fishing industry on co-operative lines. Other Industries.

The internal trade is mainly in the hands of petty dealers and shopkeepers. The principal classes of traders are dealers in wood and fuel, fish, oils, milk, vegetables, grain, betel-nut TRADES.

and *pan*, and tobacco. They are scattered throughout the district in the larger villages; and the small turnover of the average shopkeeper is indicated by the fact that only 272 persons in the district are assessed to income-tax.

External Trade.

The trade of Puri is of far less importance than that of Cuttack or Balasore. The principal article of export is rice or paddy, and therefore the volume depends largely on the character of the monsoon.

The quantity of rice and grain exported by sea, which is carried in small coasting steamers to the Madras ports, or to Rangoon or Ceylon, is subject to great variation. In the ten years immediately preceding the war the average annual value of the exports by sea was Rs. 3,56,000. During the war years and until 1921 the trade disappeared altogether, but since then there has been a marked revival, the average of the last seven years being nearly Rs. 13,50,000. Even allowing for the fact that prices are about fifty per cent. higher than before the war, the difference in volume is remarkable. The export trade by sea consists entirely of grain, and there are no imports.

By rail, too, rice forms the main article of export, the other principal exports being other food grains, and, a long way behind, coconuts, brass, stone and timber. The chief imports are salt, kerosine, cotton, sugar and drugs. The greater part of the goods traffic is to and from the stations of Bhubaneswar, Khurda Road, Puri and Balugaon. The goods traffic at Puri is almost entirely inwards, and consists mainly of grain and other foodstuffs, salt, coal and building stone; of these the building stone comprises more than a third of the total weight. The annual goods traffic at Khurda is composed of ten thousand tons inwards and twenty-five thousand tons outwards, the former consisting of salt, foodstuffs, cotton and kerosine, and the latter of grain and stone. From Balugaon and Kalupara Ghat the greater part of the traffic is the export of fish and grain. A comparison of the railway statistics of the present day with those of just before the war does not indicate any remarkable fluctuation in trade, except an increase in the inwards traffic at Puri, and of the outgoing traffic at Khurda Road, Kalupara Ghat and Balugaon.

Apart from the sea-borne traffic, nearly the whole of the import and export trade has now been absorbed by the railway. In the rains a certain amount of traffic passes up and down

the rivers in country boats, but after the rains the rivers soon dry up and the traffic ceases A small trade is also carried on with the adjoining Tributary States of Nayagarh, Ranpur and Khandpara, but it is gradually decreasing. The local merchants carry on operations on only a small scale, traders from up-country monopolizing the more important branches of trade, e.g., the rice merchants are Muhammadans from Bombay, and the cloth merchants Marwaris from Jaipur and Marwar. The local mercantile classes are members of the Teli, Guria and Tanti caste, the majority of whom are petty dealers rather than merchants.

Markets.

The chief centres of trade are Puri, Khurda, Satyabadi, Pipli, Balkati and Banpur. The greater portion of the local trade, however, is carried on at various markets (*hats*) usually held twice a week in villages in the interior. At these markets villagers dispose of their surplus stores of rice, grain and other local produce, and make purchases of cotton or piece-goods, ornaments, metal utensils, spices, sweetmeats, tobacco, kerosine oil, and the like. The *hat* consists usually of a group of ricketty stalls huddled together in a convenient mango tope, for the use of which the stall-keepers and vendors of wares pay fees in cash or kind to the owner. In the larger *hats* the attendance of the villagers frequently rises to over a thousand. A great deal of the local barter of the district is also carried on at the great religious gatherings, such as the Jain Jatra held in March before the shrine of Mangala Thakurani in Kakatpur, the Chandrabhaga and sun festival at Konarak, the Thakurani festival at Satyabadi, and all the great Puri gatherings, like the Rath Jatra, the Chandan Jatra, the Snan Jatra, etc.

Weights and measures.

The standard weight in common use is the Cuttack seer of 105 *tolas*, which is used by all classes of traders dealing in indigenous goods. For imported goods, traders use the standard seer of 80 *tolas*, which is also known as the Balasore seer. For weighing vegetables, turmeric, fish and brass utensils, the unit is the *bisa*, which is equivalent to 27 *pals* in the Khurda subdivision, to 20 and 24 *pals* in different parts of the headquarters subdivision, and to 30 *pals* in the Banpur thana. A *pal* is equal to 6 *tolas*. The most usual measure of capacity is the *gauni*, the capacity of which varies very much, for the *gauni* is merely a basket which easily loses its shape, while its capacity also depends on how much the grain

is pressed, heaped up, or filled in loosely; it varies, in fact, from 2 to 9 Cuttack seers. For measuring country cloth the unit of length is the *hath* or cubit, which varies from 18 to 22 inches, while for foreign cloths the English yard of 36 inches is used. The local land measure used to be the *man*, of which there are several varieties, the commonest being almost equal to an acre; the cultivating classes are, however, now nearly as familiar with the acre and decimal system of measurement as with the local measure. They are certainly more familiar with it than are the cultivating classes of Bihar.

CHAPTER XI.

MEANS OF COMMUNICATION.

DEVELOPMENT OF COMMUNICATIONS.

THE state of internal communications at the time of the British conquest has been well described by Mr. Toynbee in his Sketch of the History of Orissa. "When we took the province in 1803, there was not a road, in the modern sense of the word, in existence. What were then called roads were mere fair-weather cart-tracks without bridges and without proper ferry arrangements for crossing the numerous water-courses which they intercepted; they passed, however, for the most part over high ridges of uncultivated land, and were thus more practicable than they would be at the present day, when cultivation has been so enormously extended. The traffic from the south to Cuttack passed along the eastern shore of the Chilka lake, between it and the sea, to Puri and thence followed exactly the line of the present great Jagannath road. It now all passes through Khurda along the Ganjam road, the old route being abandoned to Nuliya fishermen and antelope. The ruins of the old rest-house for pilgrims still remain—the only visible record of its former existence. Another line from Puri passed through Khurda and the Barmul Pass into the Central Provinces *via* Sambalpur. Proceeding northwards, the line from Puri passed through Cuttack, Padampur, Arakpur and Barambardah to Jajpur (then generally spelt Jehajpur), and thence to Bhadrak through Dhamnagar. Thence the line followed as nearly as possible that of the present road. It was not, however, until 1804-5 that this line was adopted. The former route was through Nilgiri and Mayurbhanj. It passed in many places through dense jungle infested by tigers and other wild animals, and to keep down these the Mughals and Marathas used to give grants of land rent-free to individuals on condition of their reclaiming the grant."

The construction of the Jagannath road was not sanctioned until the year 1811, and in October 1812 Captain Sackville was appointed to superintend the work. The greater part of the earth-work of the section between Cuttack and Puri was completed in 1813, but it was not reported

passable until 1817. In 1819 an attempt was made to improve and extend communication by sea by the appointment of a Master-Attendant at Manikpatna. The first incumbent of the post was Lieutenant Minchin of the Bombay Marines. The object of the appointment was the double one of improving and encouraging trade, and of saving the lives of persons shipwrecked on the coast. The Collector and Salt Agent were appointed a committee for superintending and controlling the Master-Attendant's department. Two surf boats were constructed at Puri, and an establishment of boatmen sanctioned to work them. In 1827 a bungalow for the use of the Master-Attendant was built at Manikpatna, and a surf boat was also stationed there with a crew. All these measures, which were undertaken with a view of improving the trade of the province and reviving its former comparative commercial prosperity, were of little or no avail. The establishment of the Government salt monopoly was a fatal blow to the private export trade which formerly existed, and the internal land communications of the province were so deficient that a new one was not to be so easily or rapidly developed as seems to have been expected by the Government and the local authorities.

The grave deficiency of communications which still existed as late as 1866 was made apparent in the great Orissa famine, when it was said that "the people were shut in between pathless jungles and impracticable seas, and were like passengers in a ship without provisions". The state of affairs at that time was graphically described by the Famine Commissioners of 1867 as follows :—"The whole province is geographically isolated to an excessive degree. To the north and north-west the hill tracts merge into countries more hilly, wild and inaccessible, by which they are separated effectually from Central and Northern India. On the other side, the nature of the coast and the sea is such as effectually to stop all native traffic for the major part of the year. With one exception—False Point—there is no protected anchorage of any kind, and that exception may be said to be in some sense almost a recent discovery. Such being the difficulties on either side of the length of Orissa, the only ordinary mode of communication with the outside world is by the route traversing its length. That, however, is so much intersected by the streams already mentioned, and has been hitherto so little rendered practicable by art, that it is comparatively little used by wheeled carriages; pack-bullocks still predominate at all

times; in the rainy season wheeled traffic is quite impracticable; and when the rains are heavy, even pack-bullocks cannot be used. At this day the European officer who cannot obtain a special steamer must find his way into Orissa slowly and tediously, as ancient officers may have travelled in the days of Asoka, and the very post takes several days between Calcutta and Cuttack."

The famine of 1866 directed attention to the state of the Orissa districts, and measures were taken to prevent the recurrence of a similar disaster, roads being opened up, the coast surveyed, and canals constructed. The communication with the outside world which was thus established effectually broke in upon the isolation of Orissa, and more recently the Bengal-Nagpur Railway has extended its system through the district. The district is now fairly well supplied with means of communication by the railway and roads, especially in Khurda, but in some parts internal communications are still deficient. The eastern portion towards Astrang, Kakatpur and Nimapara is inaccessible for months, owing to the want of culverts and causeways; while the area round the eastern end of the Chilka lake is still almost without communications of any kind. In Khurda, which is mainly a high and well-drained tract, with ridges and uplands connecting the villages, there is little difficulty in making roads, and the subdivision is now well supplied. Laterite gravel for metalling is plentiful everywhere except in the south of Banpur. Besides the roads maintained by the local authorities, there is a large number of village cart-tracks, and the forest department also maintains a number. The case is different in the headquarters subdivision, which is a deltaic tract intersected by a net-work of rivers, many of which cannot be bridged except at a prohibitive cost, and which periodically overflow their banks and inundate the surrounding country. The main arteries of communication have no feeder lines in the eastern and larger half of this subdivision, and though there are everywhere cart-tracks, which are passable in fair weather, they all disappear in the rains. Foot passengers then use the crests of the river embankments as the main avenues of communication, and when they leave them, have to stumble along the *hiras* or ridges dividing the fields, or wade knee-deep through mud and puddles.

The district roads maintained by the district board have a length of 351 miles, of which 139 are metalled and 212 are ROADS.

unmetalled; and there are also 148 miles of village roads in its charge. The Public Works Department maintains 114 miles of road, all metalled. The following is a brief account of the main roads of the district.

Jagannath road.

The most important road in the district is the Cuttack-Puri road, also known as the Jagannath or Pilgrim road, of which 39 miles lie in this district. As mentioned above, the portion of this road in the Puri district was stated to be passable in 1817; but the whole road was not complete until 1825, and it was not metalled till nearly 50 years later. The construction of the road was a difficult task, as the greater portion rests on an embankment raised high above the level of the surrounding country. The bridges were built almost entirely of stone taken from the ruined forts and temples in which the province then abounded; the cost of their construction being met by a Bengali gentleman, who took this excellent opportunity of helping pilgrims on the road to Jagannath. His name is commemorated by an inscription on a bridge three miles from Puri, in Persian, Hindi, Bengali and Sanskrit, which says :— "The late Maharaja Sukhmay Ray of Calcutta having presented a lakh and a half of rupees towards the construction of this road and the bridges on it, the Governor-General in Council has ordered these inscriptions on stone to be set up to mark his generosity and renown. Date A.D. 1826." Before the completion of the railway the road used to be thronged with a continuous stream of pilgrims on their way to Puri, but foot traffic has now declined considerably, and cart traffic is also growing less. It is, however, one of the most perfect roads to be seen in the province, and in portions is lined with an over-arching avenue of trees, which afford grateful shade to the foot-sore pilgrim.

It is open to motor traffic between Cuttack and Puri from the beginning of January to May. At other times of the year the crossings of the Katjuri, the Kushbhadra and the Bhargavi are impassable for motor cars.

Cuttack-Ganjam road.

The Jagannath road is maintained by the Public Works Department, which is also in charge of the Cuttack-Ganjam road, a metalled highway passing through the whole length of the Khurda subdivision, whose length within the district is 68½ miles. It is open to motor traffic throughout its length from January to May, and passes through some beautiful scenery, connecting the south-western end of the Chilka lake

with Khurda. In the rains motor cars are held up by the Katjuri and Kuakhai near Cuttack, and by the Managuni near Jankia; this latter river, it is expected, will be bridged in the course of the next few years. The Ganjam road and the Jagannath road are linked together by two cross-roads, the Pipli-Khurda road and the Patnaika-Khurda road. The former, which is fourteen miles long, leaves the Pilgrim road at Pipli and runs due west through Khurda Road station to Khurda. The other takes off at Patnaika, fifteen miles from Puri, and runs north-west to the same place through Jagdalpur and across the Barunai pass. Both these cross-roads are metalled, and both are intercepted by the Daya river, which is fordable in the hot weather and is crossed by a ferry in the rains.

A temporary bridge is made over the Daya at Kanti on the Khurda-Pipli road, which is thus rendered passable to motor cars throughout its length from January to May. On the Khurda-Patnaika road, the Daya is fordable in the hot weather and is crossed by a ferry in the rains; but the river is a bar to motor traffic. The Cuttack-Ganjam road has also a small branch from Tangi to the Chilka lake.

Other roads.

Khurda is really the main centre of communications of the district, with Pipli as a minor centre. Besides the above roads which pass through Khurda, is the metalled road to Nayagarh Feudatory State, through Baghmari. This road is open to motor traffic throughout the year and is used by a motor lorry service. It is intended to make it a through road to Sonpur and to Sambalpur. From this road, at Baghmari, runs another road to Kalapathar, just over the frontier of the Nayagarh State, which is also metalled. Yet another metalled road leaves the Cuttack road two miles from Khurda, and runs to Khandagiri and Bhubaneshwar; from Bhubaneshwar it runs to Sardeipur on the Pilgrim road; this portion is also metalled, but is not passable for motors except in the dry months, as the Daya river intervenes. Khandagiri is also connected by a metalled road, to Chandka on the Cuttack-Ganjam road. The last important metalled road is that from Balugaon on the Chilka lake to Baghura *viâ* Banpur.

Pipli thus stands at the junction of the Pilgrim road and the road from Khurda mentioned above; and from Pipli runs an unmetalled road, open to motors in the winter months, through Nimapara to the east end of the district. From Nimapara there are two branches, one to Astrang and the other

to Gop; and from Gop it is usually possible, in the winter months, for motor cars to reach almost as far as the Konarak temple. These roads are almost impassable even to cart traffic in the rains, owing to the presence of large and unfordable rivers.

From Puri run two roads, east and west along the shore, which are little more than cart-tracks through the sand for the first few miles of their course; they are quite unfit for motor traffic and afford heavy going, even for carts. That to the west runs to Bramhagiri, and thence to the western end of the Chilka lake at Barkudi; that to the east runs to Gop, and is the old Cuttack-Puri road; from Gop it runs to Phulnakhra on the Pilgrim road.

These are the chief roads of the district; the others are mainly branch roads of a few miles in length, connecting these with the villages in the interior.

Railways.

The main line of the Bengal-Nagpur Railway between Calcutta and Madras runs through the district throughout its length for a distance of 64 miles, entering it near Bhubaneshwar and leaving it a short distance from Barkul. From Khurda Road station a branch line, 28 miles long, runs almost due south to Puri town. There are thirteen stations on the main line and five, including Puri, on the branch line, the most important being Puri, Khurda Road, Satyabadi, Bhubaneshwar, Delang and Balugaon, in point of passenger traffic, and Khurda Road, Bhubaneshwar, Kalupara Ghat, and Balugaon in point of goods traffic. The programme of future railway construction includes a proposal to build a line from Khurda to Sambalpur *via* Sonpur, but it is not likely to materialize for some years to come.

Bungalows.

The district is well supplied with inspection bungalows and dâk bungalows, belonging to the Public Works Department, the Forest Department, the District Board and the Khas Mahal. The Public Works Department has eight inspection bungalows situated at intervals of about ten miles along the Cuttack-Ganjam road, six on the Cuttack-Puri road (of which it is proposed to sell one) and one at Konarak; and seven embankment bungalows, at Mukameswar, Jankadeipur, Balipatna, Nimapara, Balighai, Kanti and Kanas, besides five rest-sheds. The district board maintains eleven bungalows, viz. Balianta, Bhubaneshwar, Baghmari, Jagdalpur, Pichkuli,

Khurda, Gop, Astrang, Bolgarh, Balugaon and Kalapathar, besides a rest-house at Pipli. There are Forest Department bungalows at Puri, Balukhand, Derras, Muktapur, Rajin, Pratap, Berbera, Dhuanali and Bhaingot. There are inspection bungalows maintained by the Khurda Government Estate at Khandagiri, Jatni (Khurda Road), Bhusandpur, and Hantwar.

FERRIES. Belonging to the district and local boards there are ten ferries in the Puri subdivision and two in Khurda. Besides these there are one hundred and thirty-seven privately-owned ferries scattered throughout the district. At the places where the main roads cross those rivers which dry up after the rains, it is usual to put tracks of earth and rubbish across the sand, and a temporary bridge across the water, for the use of which a toll is, in some places, charged by the owner of the ferry. Illiterate cartmen and others are subjected to a good deal of harassment and extortion, as no proper scale of fees is maintained.

WATER COMMUNICATIONS. The sea along the coast is fairly deep, and vessels can go close to the shore; but there is no place where a vessel, even of small draught, can take refuge in bad weather, and during the greater portion of the year there is a heavy surf through which only *masula* or surf boats can pass. The only port in this district is that of Puri, but this unfortunately is only an unprotected roadstead. Owing to the difficulty of landing in the high surf, passenger traffic by this port is very limited, and the trade is not of much importance. In the interior there is a considerable amount of traffic along the rivers during the rains, but in the hot weather they all cease to be navigable for more than a few miles above their mouths, except the Devi, by which rice finds its way by boat to the Taldanda canal and Cuttack. The three great rivers of the district, the Kushbhadra, Bhargavi and Daya, are navigable throughout for several months of the year. The Kushbhadra is the first to dry up in its upper reaches, but in its lower reaches it is navigable by small country boats the whole year round. The Daya and the Bhargavi are usually navigable throughout till about the month of January; even in the hot weather country boats may be seen along their banks for at least ten miles above the point where they enter the Chilka. The boats belong chiefly to Ganjam traders, who bring loads of bamboos and other goods and in return carry off the surplus rice of the southern *parganas*.

They come *via* the Ganjam canal and the Chilka lake, which is available for boat traffic the whole year round.

Boats.

No account of the water communications of Puri would be complete without a mention of the boats in use. On the rivers, dug-outs and ordinary country boats are in use, which call for no special description. On the Chilka boats called *patwa* are used; these are flat-bottomed boats specially suitable for shallow water. On the sea the fishermen use *masula* boats and catamarans. The *masula* boats have been introduced by the Nuliya fishermen from Madras. They are large flabby flat-bottomed crafts of planks sewn together with cane strips, which are eminently adapted for crossing the surf as they give to the waves. They can, however, only be used in good weather close to the beach, and are not fit for going out to sea. Catamarans are also largely employed by the fishermen. They are composed of four tree trunks held together by wooden pegs, the two trunks in the middle acting as a keel.

POSTAL COMMUNICATIONS.

There are thirty-two post offices and branch offices in the district, and six telegraph offices, an increase of two in the last twenty years in each case. The following table shows the growth in postal traffic in the same period in round figures :—

	1906-07.	Present day.
Postal articles delivered ...	888,000	1,200,000
Telegrams issued	13,000	17,000
Money orders issued ...	Rs. 6,50,000	Rs. 14,00,000
Money orders paid ...	Rs. 9,00,000	Rs. 31,00,000
Number of Savings Bank accounts.	1,700	3,865
Value of Savings Bank accounts	Rs. 52,000	Rs. 3,50,000

The growth in money orders received, and in the excess of receipts over issues, is a remarkable indication of the extent to which the income of the population is assisted by remittances from emigrants, while the increase in savings bank accounts though the amount is still small in proportion to the population, is a satisfactory sign.

CHAPTER XII.

LAND REVENUE ADMINISTRATION.

HINDU REVENUE SYSTEM.

DURING the time of the Hindu kings of Orissa the country was divided into two administrative divisions—the military fiefs and the Crown lands. The former, which comprised the hilly tracts to the west, a strip of land along the seacoast to the east, and some portions in the interior, were divided among a number of military chiefs, on condition that they protected the country from foreign invasion, maintained peace within their borders, and furnished contingents of troops when called upon. These chiefs in their turn distributed the land among *paiks* or peasant militia, who tilled the land during peace and took up arms in time of war. In the Crown lands, which consisted of the fertile alluvial zone between the hills and the sea, part of the land was assigned in grants to the ministers and servants of the king, and the rest was divided into several circles, called *bisis* and *khands*. Each circle was managed by an officer, called *bisoi* or *khandpati*, who had the chief control of local affairs and supervised the police administration. Under him was an officer called a *khandait*, who was in direct charge of the village police, besides an accountant who superintended the collections of revenue, drew up accounts of produce and cultivation, and kept a register of all the particulars of the fields. Each of these fiscal divisions contained several villages, which then, as now, formed the unit of administration. In each village there were a headman and an accountant who were responsible to their divisional superiors for the revenue of the village.

MUGHAL REVENUE SYSTEM.

After the Mughal conquest a regular settlement of the Crown lands was taken in hand, being begun in 1581 by Todar Mal, Akbar's general and finance minister, and concluded in 1591 by the Viceroy, Man Singh. Todar Mal retained intact the old division of the province into military fiefs and Crown lands, which were henceforth called respectively Garhjats and Mughalbandi, contenting himself, in regard to the former, with a verbal allegiance and a nominal tribute. He also respected the provision made for the royal household and great officers of the court under the Hindu dynasty, and left 1,547

square miles as the undisputed demesne of the Khurda Rajas and their dependants, the Raja retaining Khurda, Rahang, Sirai and Chaubiskud, or more than half of the present area of the district. The remaining portion of the Crown land he managed through the old Hindu officers, only changing the names of divisions and divisional officers. The *khands* and *bisis* were now called *parganas*, the *khandpatis* and *bisois* were styled *chaudhris*, the accountant received the appellation of *kanungo wilayati*. The portion of the *pargana* under the immediate charge of each of these officials was called a *taluk*, and the managers generally *talukdars;* the territories of the great military chiefs were called *kilas*, and for their Hindu title of Bhuiya was substituted zamindar, an appellation which was originally restricted to the Rajas of Khurda, Aul, Sarangarh, and the Garhjats.

The fiscal officers of the Mughalbandi or revenue-paying tract had no proprietary right in the soil, and were not zamindars in the modern sense of the term. The Musalmans had no leisure for or knowledge of the details of administration. What they wanted was a body of powerful native middlemen, who would relieve them from the trouble of dealing with the people, and have both power and local knowledge enough to enforce the revenue demands. In the Hindu fiscal officers they found such a body ready to their hands; but this body, as it became more and more necessary to the foreign rulers, also grew more and more powerful. It soon lost its character as a staff of revenue officers, and split up into a number of different landholders, each with more or less of admitted proprietary right, according as each individual had strength and opportunity for asserting himself; but none possessed anything like a full ownership in the land. This state of things continued till the year 1751, when the province passed into the hands of the Marathas.

MARATHA SYSTEM.

The Marathas retained the old political division of the province into military fiefs and royal domain. The former, comprising the hilly country on the western frontier and extensive marshy woodland tracts along the sea-shore to the east, was parcelled out amongst certain Rajas, chieftains, or zamindars; and the latter, comprising the central plains, was divided into four *chaklas* or divisions, viz., Cuttack, Bhadrak, Soro and Balasore, each of which was subdivided into about 150 *parganas*. The revenue administration of the whole area

was entrusted to thirty-two officials called *amils*, each of whom was individually responsible for the revenue assessed on his division. He was remunerated by grants of land which he held rent-free, and by certain other perquisites on account of collection charges. He was assisted by a *sadar kanungo*, under whom were employed a number of *gumashtas* or agents in each *pargana*. Each *pargana* was again divided into one, two, three or more divisions, classified according to the rank of the officer responsible for its revenue.

This system led to the weakening of the position of the *talukdars*. The one object of the *amils* was to realize the revenue by hook or by crook; and they soon found it convenient to recognize only those *talukdars* who paid without trouble, and, when they had any difficulty with the intermediate officials, to treat with the village headmen and accept their engagements for the payment of a lump sum. The latter thus began to develop into small landholders, and at the same time the *gumashtas*, from being mere office accountants and collecting agents, began to usurp the functions of the *talukdars*, whose collections of revenue they were supposed to supervise. A noticeable instance of this process is afforded by the acquisition, in 1775, of the zamindar's title to Kotdesh, Kalijori and Antrodh by Trilochan Patnaik, an Oriya Karan, who was originally an agent under the Faujdar of Pipli, but eventually succeeded in founding the largest zamindari family in the district.

Thus the result of the Mughal administration was that the divisional officers gradually became quasi-proprietors of extensive estates and divisional landholders. Under the Marathas, the village headmen, dealing directly with the treasury officers, developed into village landholders; and after the British conquest, claimants belonging to both classes came forward with conflicting titles. It may be safely stated, however, that, during the confusion that prevailed, there was no class to whom a proprietary right can be said to have been allowed. The State owned the land; while the divisional officers and the village headmen exercised such rights within their respective limits as they chose to assume, so long as they met the demands made upon them. Numerous alienations were made by all classes, but there was nothing like an acknowledgment of such a privilege by the Maratha authorities. Those who then or subsequently chose to arrogate to themselves the title of zamindar were either principal *mukaddams*

or headmen with a hereditary right of collection, but without any right, title, or interest in the land itself; or fiscal officers, chiefly *chaudhris* and *kanungos*, in charge of the collections. Some of them, however, such as the zamindar of Kotdesh, had zamindari *sanads* or grants and were designated as such; but they had very few of the rights of a zamindar in the present sense of the term.

EARLY BRITISH ADMINISTRATION.

When the British conquered the province, they found that the land revenue was being paid by the various revenue agents enumerated above, some of whom represented large tracts of country, and others single villages and plots of homestead land. The same treatment was meted out to all, irrespective of individual history, rights or origin; and in Regulation XII of 1805 the whole body of revenue agents were comprehensively styled zamindars. The officers in charge of the administration were enjoined to make the settlement of the land revenue with the zamindars or other actual proprietors of the soil, except only when the property in land was disputed, in which case it was to be made provisionally with the person in possession. But there was no body of landholders with well-defined rights, such as existed elsewhere, and the local officers had no means of knowing what were the rights and titles of the different landholders. No revenue documents could be obtained except some records of previous assessment. The different classes of revenue officers were all intent on preserving for their own use the information which should have been in the hands of Government. Some were busy in establishing a proprietary title which had never existed, others in furthering a claim to hold rent-free lands which were liable to assessment. In the end, engagements were taken from the parties in possession, who had been responsible for collecting the land tax and paying it into the treasury; all such persons, under whatever designation they had discharged this function, became under our system landholders; and this was the origin of the Orissa zamindars.

A proprietary body was thus created out of the various intermediate holders between the ruling power and the actual cultivators. All were now given the same rights, their quasi-hereditary, quasi-transferable office of managing the land and transmitting the land revenue being converted into a full proprietary title. The abstract ownership had always been vested in the ruling power; and this was made over to the landholders, except that the power of increasing the land

revenue was retained. In this respect, the revenue system of the greater part of Orissa differs from that of the rest of Bengal and Bihar inasmuch as the settlement for the Government land revenue is not of a fixed and permanent character, but is made for a term of years only, subject to an increased assessment at the end of every fresh period.

A different policy was pursued with the Raja of Khurda, who paid only a *peshkash* or quit-rent, like the Khandaits or feudal chiefs, who held large estates along the sea-board and paid but a little tribute, kept bands of *paiks*, and were bound to render military service when called upon. Upwards of fifty estates of this nature at one time existed in the province, but under the Maratha rule few of them had maintained the privilege of paying only a quit-rent, and most had gradually been reduced to the position of ordinary zamindars. These petty chiefs, at the time of the British conquest, made some attempt at resistance; but they gave way on the approach of the troops and were pardoned. In recognition of their ancient lineage, and in order to secure their loyalty, Government by Regulation XII of 1805, confirmed in perpetuity the tribute of seven estates, of which Khurda and Marichpur are in Puri district. This arrangement, however, was immediately upset in respect of Khurda, the most important of these estates, for the Raja rebelled and his estate was confiscated in 1805, since when it has been held direct by Government.

SETTLEMENTS.

The first settlement of the province, which was for one year only, was concluded early in 1805 and was followed by a number of temporary settlements. The history of these early settlements is an unfortunate record of assessment on insufficient enquiry and of the enforcement of inelastic rules for the realization of inequitable revenues. The Collector had no reliable information as to the real assets of the estates, for the zamindars and revenue officers combined to withhold all papers, and he had to proceed on a very rough estimate of the quantity of land in cultivation, and on the reports of interested subordinates. The evils arising from such ignorance of the real circumstances of the people, from the general disorganization of administration, and from the severity of the assessment, were aggravated by the stringency of the Bengal regulations and sale laws, which are more suited to permanently-settled tracts with a low assessment, such as the

rest of Bengal. Under the rule of the Mughals and Marathas, the persons who were recognized by the British as proprietors of the soil were, in theory at least, officers of Government, responsible to it for the revenue they collected, and were not entitled to any remission. But, when droughts or serious floods occurred, the cultivator did not pay his rent, and there is reason to believe that the rulers recognized such calamities as a valid excuse for short payments, so that the actual collections always fell short of the full demand. In the early days of British administration the Bengal regulations were enforced, the assessment became a fixed and invariable debt, which the zamindar had to discharge to the day on pain of losing his estate, in spite of the fact that Orissa is peculiarly liable to suffer from the extremes of drought and flood. The consequences of this attempt to engraft the rigid administration of a permanently-settled province on a country and people wholly unsuited to it were disastrous. Arrears accumulated rapidly, and in 1806 began the system of putting up defaulting estates for sale in Calcutta, a policy which allowed Bengali speculators to buy valuable properties at low prices. Some of the oldest families of Orissa were ruined; their estates were sold up and passed into the hands of Bengali adventurers; sometimes even these failed to pay the revenue, and the collections fell far short of the demand.

The Khurda rebellion of 1817 served to bring home to the authorities the deep discontent and real grievances of the Oriyas; and in Regulation VII of 1822 Government shortly afterwards proclaimed its intention of concluding a settlement based on a detailed investigation into the circumstances of the province and a determination of the rights of all parties. Preparations for this settlement were commenced as early as 1830, and it was held to run from 1837, although the proceedings were not finally completed before 1845. The settlement thus concluded was made for thirty years, and should therefore have expired in the year 1867, but the state of exhaustion in which the great famine of 1866 left the province rendered it inadvisable to undertake a resettlement. It was felt that the minute investigations necessary would have been distressing to the people, and consequently it was decided to grant an extension of the settlement of 1837 for thirty years, without any enhancement of revenue. The next settlement was concluded in 1899, with effect from 1897, expiring in 1927. Proceedings for a resettlement began in

1923, and the new revenue settlement runs from 1927 for thirty years.

The above settlements were confined to the headquarters subdivision; and the Khurda estate, which is under the direct management of Government, has had a number of separate settlements. The first settlement was made in 1805, but was of a summary nature, being a mere valuation of produce. Another settlement was made in 1806, after which summary settlements and various experiments in the farming out of the estate were tried with disastrous results. These experiments continued up to 1817, when the rebellion of the *paiks* completed the temporary ruin of the estate. Parts of Khurda were almost depopulated, large tracts of arable land were thrown out of cultivation, and all revenue work came to a standstill. At the conclusion of the rebellion, another settlement was made in 1818, and this was followed by various short settlements, viz., in 1822, 1824, 1837 and 1857. On the expiry of the last of these, a cadastral settlement was effected by Mr. W. C. Taylor in 1882; on its expiry a resettlement was made by his son, Mr. J. H. Taylor, which was completed in 1898, the new assessment coming into force in December 1897 and being sanctioned for 15 years. A fresh settlement was again made between 1911 and 1913; rents were enhanced by two annas per rupee, and the new rents were fixed for fifteen years, expiring in April 1929. Before the expiry of that period, a proposal was made that the tenants should be asked to agree to an enhancement of two annas per rupee of rent, an enhancement which is far less than that which could be legally obtained on account of the rise in prices which has taken place since 1914. On the execution of these agreements by the tenants, a regular survey and "settlement" became unnecessary, and has therefore not been undertaken.

REVENUE-PAYING ESTATES.

Khurda.

The Khurda estate is the largest in the district, having an area of 565,000 acres, and lying almost entirely in the Khurda subdivision. It is, as stated above, held directly by Government, and it forms the greater part of the subdivision, the rest of which is composed of the revenue-free Ekhrajat estate, and other smaller estates. It is managed by the subdivisional officer of Khurda, under the control of the Collector. He is assisted by two tahsildars or sub-deputy collectors, the estate being divided into two "tahsils", one with the headquarters at Khurda, and one at Banpur, where offices and quarters have been built. The collection of rent

is done by village officials known as sarbarahkars, who hold *jagirs* or grants of land, and pay into the treasury the rents which they collect from the tenants, deducting their commission of twenty per cent. Their *jagirs* are not held rent-free, but the rent on them is deducted from the commission of the sarbarahkar. There are now 475 sarbarahkars, or one for every two or three villages in the estate. These sarbarahkars have the duty of reporting any extension of cultivation, which they survey and mark on the village maps. They are in no sense landlords, and though their office descends usually from father to son, they are liable to removal for misconduct or mismanagement. There is a training class for the sons of sarbarahkars at the high school at Khurda, at which they are taught the elements of survey. The gross rental of the estate after the settlement of 1913, including the sarbarahkar's commission, was Rs. 4,34,000, and the number of tenancies is over 200,000. Of the 1,377 villages composed in the estate, 68 lie in the headquarters subdivision.

Puri Subdivision.

In the headquarters subdivision more than two-thirds of the land revenue is derived from ten temporarily-settled estates, viz., Kotdesh, Krishnanagar, Rahang, Krishnachandra, Delang, Kokal, Kotsahi, Pipli, Rorang and Golara. There are two Government estates, the Kodhar estate in thana Gop, and the Balukhand estate in Puri town. Of the former a part has been assigned for the maintenance of the Uttarparsa and Jagannath Ballabh maths on fixed quit-rents, so that that part has practically ceased to be held under direct management. The Balukhand estate comprises the valuable residential part of Puri town, containing the Circuit House and other Government buildings.

Marichpur.

The only permanently-settled estate is that of Marichpur, with an area of sixty-seven square miles, lying on the seacoast in the corner of the district bordering Cuttack. At the time of the British conquest there were a number of estates on the seacoast, of which Marichpur is one, whose chieftains held on payment of a quit-rent to the Mahrattas, and were bound to render military service when called upon. On the approach of the British these petty estates made some show of resistance, but gave way and were pardoned; the British Government, in view of their ancient lineage, and to secure their loyalty, fixed their revenue in perpetuity, at the same fixed tribute which they had formerly paid to the Mahrattas.

The permanently-settled estates of Orissa differ from the temporarily-settled estates in an important respect besides that of fixity of revenue. When the Orissa Tenancy Act, which governs the relations between landlords and tenants, was framed and passed, most of the permanently-settled estates of Orissa had not been cadastrally surveyed, and no record-of-rights had been prepared in them, whereas in the temporarily-settled estates there had been such a survey and settlement, and in most of the estates there had been two such surveys. Therefore, though the customary rights of the tenants in the temporarily-settled estates were well known, this was not the case in the permanently-settled estates, and for this reason, though the main provisions of the Act apply to all classes of estates, certain of the provisions were made to apply only in the temporarily-settled estates; and in those respects the permanently-settled estates are still regulated by custom. In the latest survey of Orissa, all the permanently-settled estates which had not been previously surveyed, were included, and there is now no reason why the main provisions of the tenancy law should not be the same in all the estates.

REVENUE-FREE LANDS.

The free grant of land for the maintenance of Brahmans, for the endowment of monasteries, and for the upkeep of shrines, has always been regarded by Hindus as a becoming act of piety. It is no matter for wonder then that in Puri, with its large Brahman population, its numerous monasteries, and the holy shrines of Jagannath and Bhubaneshwar, such assignments of land should have been very numerous. The various Muhammadan and Maratha officials also alienated land freely, and the result was an enormous number of revenue-free lands, called *lakhraj*, meaning " without revenue ". On the acquisition of the province in 1803, the British found these in existence, and as a preliminary to an enquiry into the validity of their titles, all who claimed to hold land revenue-free were required to register their claims and deposit their deeds of grant in the central office at Cuttack. For five years this office was kept open, and in that time upwards of 128,000 claims were registered. In 1815 the registry was reopened, with branch offices at Balasore and Puri, and 30,000 more *sanads* were filed. Many of these claims were known to be fraudulent, but no attempt was made to sift them till 1837. The enquiries then lasted ten years, and the claims which were confirmed may be classified broadly as follows :— Grants made by the Raja of Berar to the temple of

Jagannath; other grants, made before 1803, provided that the grantee had actually obtained possession and held the land without payment of revenue, and provided that the grant was made or admitted by the Government in power before that date; grants made or confirmed by the British Government after 1803; and lastly small plots of ground for village idols.

The result of the enquiries was, so far as Puri is concerned, that over 23,000 estates were confirmed as revenue-free, with an area of about 92,000 acres. It will thus be seen that each estate is small, the average being only 4 acres; and if some of the large estates such as the Satais Hazari Mahal, be excluded, the average of the remainder is smaller still. The lands so confirmed are generally known as *lakhiraj bahal*, i.e., "confirmed without revenue," or more shortly *bahal*, as opposed to the resumed or *bajyafti* land.

The revenue-free lands fall under two main heads, according as they are the absolute property of an individual or assigned in trust for a charitable or religious purpose. The first class includes land originally assigned for the support of Brahmans, grants to mendicants and other poor Hindus, and *khushbash*, literally comfortable dwelling, i.e., grants made to Brahmans and other respectable cultivators for their houses. Land of this class is the absolute property of the grantee. He can sell or give away the whole or any part of it and grant mortgages and perpetual leases. He pays rent to no one, and only renders to Government taxes and cesses according to the value of his property. Lands of the second class consist mainly of *debottar* or "lands bestowed on the gods", by which term are known all lands assigned for a religious purpose. Among such grants may be mentioned *amruta-manohi* or charitable endowments for the support of the Jagannath temple. Properties of the second class are all of the nature of trusts; the land becomes the absolute property of temple, idol, monastery or saint, while the management is vested in a trustee who is generally called the *sebait* or *marfatdar*, or *mahant*.

In practice, however, these trustee grants have largely been treated as the private property of the trustee, and have been freely bought and sold. It is not uncommon to find a grant of land belonging to a Hindu idol now in possession of a Muhammadan, and in other cases the original charitable

object of the grant has been entirely lost sight of. The following is an extract from the Settlement Report of Mr. Maddox in 1900 :—

"The British Government endeavoured to remedy the abuses of the system by constituting the Board of Revenue into a Court of Chancery, under Regulation XIX of 1810, for the supervision of the endowments in the province. To each district one or more local agents, one being the Collector, were appointed, to make recommendations and suggestions for the proper management of these institutions and to carry out the Board's orders, while any individual who thought himself aggrieved had a right to bring a suit before the Civil Courts to have the order set aside.

"These provisions had some salutary results, but were not so efficacious as they might have been.

"Owing to the objections of certain religious bodies this regulation was subsequently repealed by Act XX of 1863, which freed both religious and charitable endowments from Government supervision, substituting, for certain classes only, the control of a committee of management. These committees have no doubt done their best, but they have been hampered by the want of any accurate definition of their powers and they have only been appointed for a few large endowments, such as the Bhubaneshwar Temple and the Qadam Rasul. The committee of native gentlemen who in 1869 reported on the administration of charitable endowments in Orissa advised the appointment of a central committee with stronger powers to supervise all local committees and endowments throughout each district : but their suggestions were not accepted, the abuses have been allowed to go on, and at the present day we have found many instances in which lands have been illegally alienated in whole or part, or the proceeds misapplied. The deeds of sale by which such lands are alienated do not indeed profess to transfer the land itself, but only the trusteeship, and recite the fact that the assignor, being unable to perform properly the service of the idol, has alienated the land for the benefit of his trust, or for the discharge of a debt incurred on account of it, and not infrequently the purchaser binds himself to perform part or the whole of the service, or worship. The practical effect is, however, to permanently divert the land from the purpose for which it was assigned, and in some few cases *debottar* lands have actually passed

into the hands of Muhammadans. *Debottar* lands are also mortgaged, nominally of course in the idol's interest; but a more effective and commoner means for alienating trust lands than either sale or mortgage is to grant a permanent lease, taking a large premium and reserving but a very small rent, sometimes only a small contribution to the expenses of the shrine. These abuses are of course most common in small grants, where there is no committee of management. The only check on them is the power of the zamindar, for the permission given by Act XX of 1863 to any member of the public to sue the misappropriator of funds remains a dead letter. We find that zamindars consider themselves to have a right to dispossess a shebait who does not do his duty, and to appoint another in his place."

There is, it is true, a vague public opinion against the mismanagement, and misapplication of the funds, of these revenue-free endowments, but it is no one's business to take a lead in taking active steps in individual cases; it is rare even to find zamindars taking the action mentioned by Mr. Maddox. Government would have no power to resume and assess to revenue such estates on the ground of mismanagement, but only to make arrangements for their proper management. The nett result is that there is practically no check on the misapplication of the profits of these numerous petty revenue-free grants.

HISTORY OF LARGER REVENUE-FREE ESTATES.

The most important of the revenue-free properties are the Jagir Mahals of Malud and Parikud and the endowments of the Jagannath temple. These latter include the Ekhrajat Mahal in the Khurda subdivision, and the Satais Hazari Mahal, of which a large portion is included in the headquarters subdivision. These properties have an interesting history, of which the following sketch may be given.

Satais Hazari Mahal.

The Satais Hazari Mahal forms a revenue-free property made up of villages and shares of villages and of money assignments. After the conquest of Orissa by the Marathas, the Raja of Khurda was forced to surrender to them, in lieu of payment for military services, the *parganas* of Rahang, Sirai, Chaubiskud and Lembai, although these formed a part of the land excluded from the Mughal settlement. Out of these, the Marathas assigned the revenues of certain lands for the support of the temple of Jagannath at Puri, making good from the public treasury the annual deficit. This

endowment the British Government recognized, and further undertook the management of the temple and the payment of the expenses connected with it; but in 1848 it withdrew from the management and made it over to the Raja of Puri, who had been appointed Superintendent of the temple, and at the same time gave him the Satais Hazari Mahal, which was the last remaining portion of the endowment at the time of the conquest in 1803.

The greater part of the revenue of the Satais Hazari estate, which amounted to about Rs. 17,000, is derived from certain villages or portions of villages held directly by the estate. The great majority of these lie in Puri thana, and three only lie in Cuttack district. The rest of the income has been the cause of some difficulty; because, although it was held at the settlement of 1897 to be a mere money assignment from the revenues of the Rahang estate, carrying with it no real proprietary right, yet in practice the sum was paid, not from the revenue of the whole estate, but from the particular villages in the estate; in fact in the majority of holdings in those villages the tenants paid part of their rent to the Rahang estate and part to the temple, the proportions varying in different holdings. The temple was thus practically exercising part of the proprietor's right in those holdings, in spite of the facts recorded in the settlement of 1897, and in spite of the fact that the proprietary right of the temple was denied by the Rahang proprietor. A different arrangement has been made at the new settlement, by which this portion of the income of the Satais Hazari Mahal will be paid in a lump sum from the revenues of the Rahang estate. An interesting item of the assets of the Satais Hazari estate comprises certain lands in the Daspalla Feudatory State, from which timber for the cars used in the Car festival is supplied.

Ekhrajat Estate.

The other large estate belonging to the temple, viz., the Ekhrajat estate, lies mainly in the Khurda subdivision and is revenue-free. It covers an area of 68,000 acres, and originally formed part of the Government estate. Even after handing over the Satais Hazari estate, Government continued to make certain cash payments to the Puri Temple, which was held in high respect by the Hindu communities throughout India. In 1858, in deference to very strongly expressed views in England that the Government should divest itself of all connection with religious endowments in

this country, it was decided to grant certain lands in lieu of cash payments. Accordingly, in 1858 and 1863, the villages of the Khurda estate which now comprise the Ekhrajat Mahal, were granted revenue-free to the Raja of Puri, in lieu of the cash payments formerly made to the temple. The estate lies chiefly in the neighbourhood of Tapang and has a rent-roll of about Rs. 38,000.

Malud Jagir Mahals.

When the British conquered Orissa in 1803, the Malud *jagirs* were held by one Fateh Muhammad Khan, to whom the first Commissioners granted a *sanad*, entitling him and his heirs to hold their *jagir* revenue-free in perpetuity, in consideration of their services to the British. It is said that when the British troops marched from Ganjam in 1803 to conquer Orissa, Fateh Muhammad undertook to guide the army across the swamps of the Chilka, and tradition says he was promised every village through which the troops passed; their route was in consequence somewhat circuitous. The *sanad* granted to him was confirmed; but he was afterwards dispossessed of a large area by the Raja of Parikud. The total area is seventy-two square miles, while the Parikud estate extends over sixty-seven square miles. The Raja of Parikud still pays a quit-rent of Rs. 1,600 per annum to one of the descendants of Fateh Muhammad.

INTERESTS IN LAND IN PURI SUBDIVISION.

The different interests in land in Orissa were formerly extremely complicated and various, with minute distinctions between the rights of the different classes; but modern law has considerably reduced the number and variety, in such a way that though the old names are still recognized locally, the interests generally can be, and have to be, classified under the following heads :—

(1) Proprietors of estates, who are directly responsible to the State for the revenue of the land they own.

(2) Revenue-free proprietors, holding their lands free of revenue in perpetuity.

(3) Sub-proprietors with semi-proprietary rights, holding under the proprietors; among the sub-proprietors are included the *tankidars*.

(4) Tenure-holders having certain privileges in the right of transfer and other rights.

(5) Other tenure-holders, both temporary and permament, without such privileges.
(6) Raiyats, i.e. the actual cultivators, subdivided into the various classes, viz. settled, occupancy, non-occupancy.
(7) *Chandnadars.*
(8) Jagirdars.
(9) Under-raiyats.

Sub-proprietors.

An account of the proprietors of revenue-paying and revenue-free estates has been given above. The sub-proprietors are of two kinds, viz. the *tankidars* on the one hand, who pay a quit-rent fixed in perpetuity; and on the other hand the sub-proprietors in the temporarily-settled estates, whose rent or revenue is assessed at each revenue settlement.

Tankidars

The *tankidars* are descendants of certain persons, mostly Brahmans, to whom grants of land were made by former Rajas. Originally these were grants assigned for the support of idols, priests, courtiers, members of the royal household and others who had claims to be supported from the public property. Numerous alienations of this nature were made not only by the Rajas of Khurda, but by their representatives and by landholders of all descriptions. It is sometimes stated that the grants were originally made rent-free and were only assessed to rent when, after the conquest of the province, the Rajas found their revenues reduced. Support is given to this theory from the fact that these *tanki* holdings are numerous in Khurda, which remained in the possession of the Rajas till its conquest by the English, and in the parganas of Rahang, Lembai, Sirai and Chaubiskud, which were ceded to the Marathas long after they had taken possession of other parts of the province. But it may have been that the grants were originally made on a quit-rent, because there was a religious objection to making grants rent-free. Whatever was the case, at the time of the British conquest these people were paying quit-rents for their holdings, generally amounting to a few annas per acre; and in 1805 the British confirmed their right to continue to hold at that quit-rent, except in the case of some whose title was found to be vague. In subsequent settlements these *tankidars* were placed under the proprietors of the neighbouring estates and paid their rent or revenue through them, while the proprietor was allowed ten per cent. for expenses of collection.

Under the Orissa Tenancy Act the *tankidars* have been classed as sub-proprietors; but as their private land is given no protection against raiyati rights, as is that of other sub-proprietors, the status gives them no privileges. The *tanki* tenures vary greatly in extent; some consist of entire villages, while others are small detached pieces of ground measuring a few acres altogether. In the case of entire villages the number of shareholders is now extremely large, and the *tankidars* consider it a grievance that they have not the right of dividing their tenures, since there are some who are dilatory in the payment of the rent, and the remaining co-sharers are therefore compelled either to pay up the full amount or run the risk of being proceeded against.

Other sub-proprietors.

Under the Orissa Tenancy Act, a sub-proprietor is, briefly speaking, defined as one who has, in the course of a land revenue settlement, executed an agreement to pay revenue for his estate through a proprietor, or other sub-proprietor. The second part of the definition includes the *tankidar* as a sub-proprietor, although the *tankidar* executes no such agreement. In previous settlements of the land revenue the descendants of the village headmen and minor revenue officials, the *mukaddams*, *padhans* and *sarbarahkars*, who, as described above, were found at the conquest in enjoyment of a *de facto* proprietary right in the soil, had been permitted to engage in this way; and these, therefore, are the sub-proprietors.

The Hindu name of the village headman was *padhan*, and this term is generally used in those parts, to the west of the Cuttack to Puri road, which were left, with *kila* Khurda, to the Raja of Khurda as his personal demesne, when Orissa came under the Mughals. In the tracts taken over by the Muhammadans the name was changed to *mukaddam*. Under the Mughal administration the rights of the *mukaddams* developed, and became superior to those owned by the *padhans*, who still remained in the four parganas of the south. In 1760 the Raja of Khurda was compelled to relinquish these *parganas* to the Marathas, by whom they were brought under direct management; and they continued to be so managed when first taken over by the British in 1803. During this period the *padhans* acquired more than equality with their brother headmen in the Mughalbandi, and their claims to be regarded as proprietary tenure-holders were fully acknowledged at the settlement of 1837.

Similarly the sarbarahkars gradually acquired separate tenures, just as their masters, having been originally rent-collectors of a higher grade, acquired the substantial interest of zamindars. Some sarbarahkars were originally servants of the zamindars, who collected their rents from the cultivators and enjoyed *jagirs;* some obtained possession of their villages as farmers only, but gradually obtained a prescriptive right to the tenure, as it descended from one generation to another; while others again were *sardar paiks*, who were bound to attend the summons of the chief, and paid rent for that part of their village lands not occupied as *jagir*.

In the case of a certain number of the sarbarahkars there is some disagreement as to whether their right is hereditary and permanent; certainly the right has descended in the ordinary way for the last ninety years or more. The great majority are definitely hereditary, and as a class they are not to be confused with the sarbarahkars of Khurda, who have no hereditary right, and are liable to dismissal for misbehaviour. Unlike other sub-proprietors, sarbarahkars have not the right of transferring their estates without their landlord's consent.

With these qualifications the sub-proprietors may be described as follows:—The area of their estates is limited, i.e. the zamindar cannot create new sub-proprietary interests, as he can create tenures. Their interests are heritable and transferable; they (except the *tankidars*) have proprietor's private land, with privileges against the acquisition of occupancy rights by tenants, an advantage which other tenure-holders do not enjoy; and their rent, or revenue, is fixed by calculating the total assets of their tenures or estates, of which a certain percentage goes to Government, and a certain percentage to the superior landlord; the remainder constitutes the sub-proprietor's allowance. Under one of the clauses of the agreement which the sub-proprietor executes, he makes himself responsible for the preservation of the land reserved for grazing, just as the proprietor makes himself responsible, where there is no sub-proprietor. Of the different classes of sub-proprietors only the *padhan* is held to have a right to *malikana* in the event of recusancy. Nearly one-half the area of the temporarily-settled estates is under sub-proprietors; of whom *mukaddams* are the most numerous, and sarbarahkars the least. The *padhans* are almost confined to the area lying to the west of the Cuttack-Puri road. The total number of sub-proprietary tenures is nearly two thousand.

The sub-proprietary interests have undergone minute division and as a result the sub-proprietors are somewhat losing their importance. The devolution of property obeys in Orissa the Mitakshara law, and the constant splitting up of the shares, which this system involves, has a continual tendency to make the tenure insufficient to support the family. The result is that either the sub-proprietors gradually oust the raiyats and cultivate the lands themselves, or they are forced to sell their ancestral rights. When the proprietor purchases the interest of a sub-proprietor under him, his two interests do not merge, and he is permitted to hold the sub-proprietary interest as a separate estate. A full description of the customary rights of each class of sub-proprietors, as they existed in the past, is given in Mr. Maddox's Settlement Report of Orissa paragraph 278 *et seq;* at the present day the chief differences are those which have been described above, and the fact that the proportion of revenue paid varies among the different classes of sub-proprietor. The proprietors and sub-proprietors have about fifty-one thousand acres in their own cultivation, or about twelve per cent. of the cultivated area of the temporarily-settled estates.

Privileged tenure-holders.

It is a curious anomaly that though the sub-proprietor ranks in importance next below the actual proprietor, and though the right of executing an agreement for payment of revenue as a sub-proprietor is a much-prized privilege, yet the rent or revenue payable by the sub-proprietor is sometimes higher in proportion to the profits of his estate, than the rent paid by the classes of privileged tenure-holders. The anomaly is only one of the results of the complications in the different rights in land, which were preserved rather than simplified in the earlier settlements of the district.

The two chief classes of privileged tenure-holders are the *kharidadars* and the *bajyaftidars*. The former originated as follows. It was customary in the days of the Mughals and Marathas for the superior revenue officers to recognize a species of sale, by which those who engaged for the revenue transferred small areas of waste land and jungle to persons who undertook to bring it under cultivation or to found villages. The areas were supposed to be small and worthless, but fraud was practised in many cases, and valuable lands were frequently alienated for a small consideration; it is to these tenures that the term *kharida jamabandi* is generally applied.

Bajyaftidars are the descendants of those persons who were holding land free of revenue, or at a low rate, at the time of the conquest, and whose title to hold on such terms was declared invalid by the regulations of 1805, 1819 and 1825. All persons claiming to hold land on privileged terms were invited to make their claims in the office of the Collector, and such claims were investigated during the settlement of 1833; those whose grants were held to be valid under the terms of the Regulation of 1805, were confirmed as revenue-free, while the others were resumed (*bajyafti*). In order to reconcile them to the sudden change, those who had been holding for many years were assessed only to half rates, while others were assessed nominally to full rates, which were, however, actually very low. These rates continued in force till the settlement of 1897, when an attempt was made to bring the half rates more into line with the others. The rents of all *bajyaftidars*, as well as those of the *kharididars*, still remained much below the general level of rents, and in the most recent settlement the lenience of Government was continued, the rate of the rents assessed being limited to two-thirds of the average rate of raiyati rents in the village. The other chief privileges enjoyed by the tenure-holders of these classes are that their rights are permanent and heritable, and transferable without the consent of the superior landlord. Where such a tenure is purchased by the superior landlord himself, it does not merge, but he continues to hold it as a separate right. The total area held by these classes in the Puri subdivision is about sixty-six thousand acres. *Bajyaftidars*

The other tenure-holders are those who have taken leases of the zamindari right, or portions thereof, either permanently or temporarily, and who enjoy no special privileges such as the right of free transfer, and who have not been recognized, as a class, as being entitled to hold at a low rate of rent. The area held by them is about twenty-two thousand acres. Other tenure-holders.

The great bulk of the rural population consists of the raiyats of different classes, viz. settled, occupancy and non-occupancy. The term implies one who takes land to cultivate it himself, as opposed to a tenure-holder who takes it for the purpose of leasing it to others. Raiyats

At the British conquest it was found that the cultivated lands of the Mughalbandi were tilled by two classes of raiyats—*thani* or resident cultivators, and *pahi* or non-resident

cultivators. The *thani* raiyat had a hereditary right of occupancy in his lands, while the *pahi* raiyat was a mere tenant-at-will. The advantages enjoyed by the former were briefly as follows. He held his homestead and garden land rent-free; his lands were the best in the village; and he had the preference in the reclamation of new lands. He had communal rights to pasture, fire-wood and thatching grass; he had a hereditary right of occupancy; and he could not be ousted so long as he paid his rent. The possession of these advantages increased his importance in the eyes of his neighbours and strengthened his credit with the money-lender. On the other hand, his rent was much higher than that paid by the non-resident raiyat and he groaned under the extra contributions and impositions exacted from him by his landlord. These demands were often so excessive as to swallow up all the profits of cultivation, and the *thani* raiyat, reduced to despair, was often compelled to abandon his home and the doubtful advantages of his position. The *pahi* raiyat paid a much lower rate of rent, but, on the other hand, he was liable to be turned out of his holding at any moment.

After the settlement of 1837, the *thani* rents remained almost unchanged, while the rents of *pahi* raiyats, which for years were not regulated by law, rose as the competition for land became keener. At the settlement of 1897 the rents of the two classes were brought approximately to the same level, and as the law now does not distinguish between the rights of the two classes, the names have become obsolete; the *pahi* raiyats have now acquired the status of settled raiyats, with all the privileges which that confers. The vast majority of raiyats pay rent in cash; a few pay rent in kind, sometimes half the produce, and sometimes a fixed amount of paddy per annum. It is unfortunately true that a considerable proportion of the land which is claimed and recorded as being cultivated by the landlord by his own servants, is really cultivated by raiyats on produce rents, who are either afraid or unwilling to be recorded as such. Altogether about 300,000 acres are held by raiyats in the Puri subdivision, at an average rent of about Rs. 2-6-0 per acre.[1]

Chandnadars.

Shop-keepers, artisans and labouring classes, who, having no arable land in the village, paid rents for homestead lands only, were called *chandnadars*. The term originally implied inferiority, as on this class fell the obligation of supplying

[1] After the resettlement of 1927.

forced labour or porterage when required by Government officials ; but this obligation having fallen into disuse the unpopularity of the term passed away, and it came to be used for all homestead land paying rent separately from the arable land. The *chandnadars* were given a definite status in the Orissa Tenancy Act ; but the incidents of the status are still chiefly regulated by custom ; and though people known as *chandnadars* existed in permanently-settled and revenue-free estates, they do not come under the definition now given, which is applicable only to the *chandnadars* in temporarily-settled estates.

Jagirdars.

The *jagirdars* are of two kinds, those holding lands rent-free in return for services rendered to the community, and those holding lands rent-free for services rendered to the landlord. The *jagirs* of the former kind, which come down from time immemorial, are not valued nor assessed to revenue ; they are held by carpenters, barbers, washermen and others who have to serve the village community, in return for their *jagirs* and a small annual payment by the different families. Formerly also the chaukidars used to hold *jagirs*, but these were resumed and assessed to rent and revenue in the settlement of 1897 ; the Chaukidari Act was introduced, and the chaukidars now receive a monthly wage. At the same settlement the *jagirs* of *paiks* and *khandaits* were resumed by agreement and leniently assessed to rent. It is found that some of the *jagirs* of the village servants have passed into the hands of others, who no longer perform the necessary services ; where this has occurred the holding is now assessed to rent and revenue. The *jagirs* held by the servants of the landlord, such as ploughmen and labourers, are of a different class; the services are enjoyed only by the landlord and not by the community, and the *jagirs* are held in addition to, or in lieu of, wages, which the landlord would otherwise have to pay ; such holdings are therefore valued at the prevalent rate for land, and the landlord pays revenue on the valuation.

Under-raiyats.

Some of the raiyats are unable to cultivate their holdings entirely by themselves or by hired labour, the reason in some cases being that they are actually prevented by caste rules from taking an active part in cultivation. These generally lease out their holdings, in whole or in part, to their poorer neighbours, either on produce or cash rent, and these are known as under-raiyats.

Interests in land in Khurda.

Revenue-free lands.

One of the most influential classes in the Khurda estate consists of the holders of revenue-free lands. Their estates are of the same two main kinds as in the rest of the district, that is, those held by personal right, and those held by trustees. The position of the latter was defined as follows in the resumption proceedings of 1843 :—"*Marfatdars* or trustees of endowments, and *sebaks* or priests and other attendants at temples holding endowment lands for their remuneration, or holding such lands in trust for the benefit of the endowments, have no rights in Khurda to transfer their trusts or services, or to alienate the lands attached to the several endowments. All such persons are classed at the settlement under which they hold the lands as mere servants of the idols, and liable to dismissal by the Collector for misconduct." After the settlement of 1899, however, it was decided that, as the right given to the Collector by these proceedings had not been exercised and Act XX of 1863 put the religious endowments in Khurda on the same footing as elsewhere in Orissa, it was not expedient for Government to interfere. The area of revenue-free lands thus held in Khurda is over five thousand acres, besides the Ekhrajat estate, and thirteen revenue-free villages with an area of about five thousand acres.

Altogether over four thousand acres are held rent-free as service lands, and as homestead. The varieties of service lands are numerous. There are grants held by ferrymen, who have to supply boats for crossing rivers. There are two cart chaudhris, who hold land rent-free, and in return have to supply carts to Government servants and travellers. Other grants are held by *tandkars*, criers or assistants to the sarbarahkars, or village headmen. *Dalai Jagirs* are held by the descendants of the headmen of the old native militia, who are now chiefly employed on revenue work, such as escorting treasure, and summoning tenants. In the Banpur Mals there are no chaukidars, and their place is taken by the holders of the *paik jagirs*, whose chief duties are to escort treasure, act as guides, and escort and attend upon Government servants on tour. In other parts, holders of such grants act as forest watchmen. There are also certain grace jagirs, held rent-free in return for past services, for which no service is now required. Besides these there are the usual village servants, potters, barbers, blacksmiths, etc., holding their land rent-free. The homesteads of the sarbarahkars are held

free of rent; and certain of the poorer classes of landless labourers are exempted from payment of rent for their houses. The total areas held free of rent by the above classes is proportionately small, when compared with the area held in some of the large zamindari estates of Orissa, where the proprietors endeavour to keep up a show of feudal dignity, and are surrounded by large numbers of interesting but useless dependants.

Sarbarahkars.

The sarbarahkars in Khurda, as described above, do not hold their office by hereditary right, though the office as a rule is permitted to pass from father to son. The number has in recent years been considerably reduced, as it was necessary to increase the importance of the office and to redistribute the *jagirs* so as to make each one of a reasonable size. The sarbarahkars now number 475 as against 915 in 1908. Their *jagirs* are assessed to rent, but are nevertheless purely service holdings.

Rent-paying *Khandaits.*

Altogether nearly ten thousand acres are held by *khandaits*, i.e., superior service tenure-holders holding at a fixed quit-rent. The former duties of these *khandaits* were the arrest of dacoits and bad characters, and the reporting of offences, but these services are no longer rendered. The *khandait jagirs* pay quit-rents in perpetuity subject to the condition that they may be resumed in case of misconduct, this proviso being expressly stipulated in the terms of the grant.

Raja tankidars.

Over twenty-seven thousand acres are held by *raja tankidars*, holders of invalid grants, who formerly held on a quit-rent amounting to about eight annas per acre, who agreed to have those rents enhanced at each settlement in the same proportion as the enhancement imposed on ordinary rent-paying tenants. The average rent paid is still less than a rupee per acre. A small area is held on quit-rents fixed in perpetuity. Besides these there are two tenure-holders having lands in twelve villages, under leases granted for the reclamation of waste lands.

Raiyats.

The settled raiyats in Khurda are for the most part the descendants of those who were there at the time of the conquest, and who entered into agreements for the first time in 1820. There are now over 160,000 such tenancies with a total area of over 210,000 acres, held at an average rent of Rs. 1-12-6 per acre. Besides these there are the usual classes

of occupancy and non-occupancy raiyats, and *chandnadars*. The latter term generally includes only landless people such as shop-keepers and artisans, but in Khurda the term is also applied to a privileged class of tenants, such as Brahmins, Rajputs and Karans. Even when the new rents come into force in Khurda during 1929, the average will be only about Rs. 2 per acre, which is much lower than the rents in the temporarily-settled estates of the headquarters subdivision; the rents in Khurda are, it appears, lower in proportion to the productivity of the land, than the rents in any other large estate in the province.

CHAPTER XIII.

GENERAL ADMINISTRATION.

ADMINISTRATIVE CHARGES AND STAFF

THE administration of the district is in charge of the Collector under the Commissioner of the Orissa Division. For general administrative purposes it is divided into two subdivisions with headquarters at Puri and Khurda. At Puri, besides the District Magistrate and Collector, are a Deputy Collector in direct charge of the subdivision, and a staff of four to six Deputy Collectors, besides one or two Sub-Deputy Collectors; at Khurda there is a Subdivisional Officer, who is sometimes a member of the Bihar and Orissa Civil Service and sometimes of the Indian Civil Service; he is assisted by a Deputy Collector, and two Sub-Deputy Collectors, who are in subordinate charge of the Khurda estate, under the Subdivisional Officer and the Collector. The District and Sessions Judge for the district is the District and Sessions Judge of Cuttack; there are two munsifs stationed at Puri, but none at Khurda. There are a Superintendent of Police, a Civil Surgeon, a Superintendent of Excise and Salt, and a District Inspector of schools at Puri; and a Divisional Forest Officer at Khurda. The Collector is also ex-officio Assistant to the Political Agent of the Feudatory States of Orissa, and Port Officer for the port of Puri; in the latter capacity he receives notices of accidents to ships for communication to the local Government, and also collects port dues.

REVENUE.

The revenue of the district amounted in 1906 to Rs. 11,40,000, excluding Public Works cess, which was then credited to general revenues, but is now the main source of income of the district board. The corresponding revenue in 1929 will be between sixteen and seventeen lakhs of rupees.

Land Revenue.

The rise in the land revenue is indicated by the following figures. Previous to the settlement of 1897, the nett demand amounted to about five and a half lakhs of rupees. In the settlement of 1897, the revenue of the temporarily-settled estates was increased from Rs. 2,93,000 to Rs. 3,77,000; and of the Khurda estate the nett revenue (excluding the commission of the sarbarahkars) was increased from Rs. 2,51,000 to Rs. 3,05,000. The total increase due to that settlement was

therefore Rs. 1,38,000. In 1914, the nett revenue of Khurda was again increased to Rs. 3,51,000, and the land revenue of the whole district was about Rs. 7,40,000, while in 1926-7 the demand was Rs. 7,53,000. As a result of the recent resettlement proceedings of the Puri subdivision, there should be an increase of nearly one lakh from the temporarily-settled estates. With an increase of two annas in the rupee to be made in the rents of Khurda from 1929, the increase there should amount to Rs. 45,000; so that the land revenue of the district should be nearly nine lakhs of rupees from 1929. The revenue is derived from one permanently-settled estate, 547 temporarily-settled estates and four Government estates, and is rather more than one-twentieth of the land revenue of the province.

Excise.

The next important source of revenue is excise, the nett receipts from which were Rs. 2,03,000 in 1906-7, and Rs. 5,27,000 in 1926-7. It must not be concluded from this that there has been a proportionate enormous increase in the actual consumption of intoxicating drugs and liquors, nor that the excise revenue of Puri is high compared with that of other districts in the province. Though there has been some increase in the consumption of opium and country spirit, yet there has been a considerable decrease in the consumption of *ganja*; and the increase in the total revenue is due to the enormous rise in the rates of duty, license fees, and prices, which has taken place in pursuance of the avowed policy of Government of getting the maximum revenue while reducing consumption. Any increase in consumption which has taken place, has been in spite of this policy, under which the increase of prices has been accompanied by a reduction in the number of shops, of the hours during which shops may remain open, and of the amount of opium which may be possessed at any given time. The following statistics of the district will illustrate the point :—

	1906-7.	1926-7.
Toddy shops ...	103	80
Tappers' licenses ...	328	185
Ganja shops ...	47	35
Ganja issued ...	3,535 seers.	2,885 seers.
Ganja revenue ...	Rs. 66,000	Rs. 1,29,000
Opium shops ...	39	35
Opium issued ...	3,139 seers.	3,502 seers.
Opium revenue ...	Rs. 1,07,000	Rs. 3,71,000
Country spirit shops ...	15	11
Country spirit consumed	5,070 proof gallons.	6,774 proof gallons.
Country spirit revenue	Rs. 24,000	Rs. 60,000.

The figures for consumption of opium include the issues of opium to certain of the Feudatory States, which took 583 seers out of 3,502 in 1926-7. The fact that expenditure on opium has increased from Rs. 1,07,000 to Rs. 3,71,000, and that the consumption has increased in spite of the raising of the price from Rs. 35 to Rs. 120 a seer, affords another proof of the fact that the Puri raiyat has more money to spend than he had twenty years ago, a fact which is otherwise indicated in the increase in the importation of other minor luxuries, the increase in the value of land, and the increase in postal communications and savings bank accounts. It will be seen that the revenue from opium constitutes over two-thirds of the excise revenue from Puri; and the district is second only to Balasore in the consumption, per head, of this drug. The annual consumption in Puri is nearly one-third of a seer per hundred of the population; in Balasore it is over half a seer; and in the province as a whole it is one-fourteenth of a seer. The high consumption of opium in Orissa has drawn the attention of Government, and a committee has been appointed to investigate the causes. Some expenditure on opium is reported to be incurred by almost every family in the district, and Puri is one of the districts where the practice of giving opium to children is prevalent. The high annual consumption is popularly attributed to the fact that the enervating climate renders the stimulant necessary.

The consumption of hemp drugs amounts also to just over one-third of a seer per hundred of the population; consumption is as high or higher in Monghyr, Purnea, Sambalpur, and all the districts of the Patna Division; but the average consumption in the province is only one-fifth of a seer per hundred of the population. The consumption of country spirit in Puri is only three-quarters of a gallon per hundred of the population, which is less than in any district except Cuttack and Balasore, and is only one-fifth of the average consumption in the province as a whole. The receipts from toddy are less than in any district except Balasore, Angul and Palamau, and are very small compared with those in most of the Bihar districts. In short, the excise revenue per head is in Puri exactly equal to the average of the province (between eight and nine annas); the consumption of opium and hemp drugs is high, and of country spirits and liquor is low.

The sale of country spirit in this district, as in the greater part of the province, is carried on under what is known as the contract supply system, which was introduced in 1905. Under this system the local manufacture of country spirit is prohibited, and a contract is made with certain distilleries for its supply. The contractors are forbidden to hold retail licenses for the sale of the spirit, but are allowed the use of distillery and depôt buildings for the storage of liquors. The spirit is brought from the distillery to the depôt and is there blended and reduced to certain fixed strengths, at which alone it may be supplied to retail vendors and sold by the latter to consumers. Opium is obtained from the Government of India, the price in 1926-7 being Rs. 26 per seer; it was sold at the treasuries at Rs. 81 per seer, and the retail price was Rs. 120 per seer. *Ganja* is obtained from Naogaon in Bengal and Nowlakha in Bhagalpur, where it is grown under Government supervision. The licenses for the country spirit and drug shops used to be sold by auction, but as this system was held to lead to speculation and a consequent endeavour to push up consumption, this system was abolished and the sliding-scale system was introduced, under which the fees are fixed and the licenses are not put up to auction.

This system has worked satisfactorily, though there is reported to be greater danger of corruption among the subordinate excise staff, which has to be checked; the system is not looked upon with favour by capitalists, who used to hold a number of shops, but are not permitted to get more than one shop under this system. The nett excise revenue amounts to three per cent. of the nett excise revenue of the whole province.

Stamps.

The revenue derived from the sale of stamps was Rs. 1,63,000 in 1906-7 as against Rs. 94,000 in 1896-7. The increase was due partly to the growth in the number of rent and civil suits, and partly to the fact that mutation fees were taken in the Khurda Government estate in court-fee stamps, while the previous practice was to take them in cash. The receipts now amount to over two lakhs of rupees per annum, of which court-fee stamps account for a lakh and three-quarters. The rates of court-fees were increased in 1920, which accounts for the increase in revenue. The revenue under this head is a little over two per cent. of the total stamp revenue of the province, and it is less than in any other district except Angul, Sambalpur, Palamau and Singhbhum.

Forest Revenue.

The average gross revenue from the forests in the five years ending in 1925-6 was one lakh of rupees, and the nett annual revenue amounted to Rs. 20,000. The gross revenue includes the income from timber, firewood, bamboos, grazing fees and minor produce.

Income-Tax.

The income-tax yielded Rs. 26,000 in 1906-7, when the minimum assessable income was Rs. 1,000 per annum. The minimum limit is now Rs. 2,000; and the yield in 1926-7 was Rs. 49,000, of which Rs. 10,000 was assessed on salaries of Government servants, and Rs. 33,000 was on income derived from business. This sum amounts to one-eighteith of the total income-tax collections in the province.

Registration.

There are five offices for the registration of documents, one at the headquarters station and the others at Gop, Tangi, Khurda, and Pipli. At Puri the district sub-registrar deals, as usual, with the documents presented there and assists the District Magistrate, who is ex-officio Registrar, in supervising the proceedings of the sub-registrars in charge of the other registration offices. In the five years 1895—9 the average number of documents registered annually was less than 13,000. The following statement compares the statistics of 1906-7 with those of 1926-7 :—

	1906-7.	1926-7.
Documents registered	19,612	23,279
	Rs.	Rs.
Income (gross)	19,069	38,487
Expenditure	8,421	22,761
Net income	10,648	15,072

The total number of documents registered was higher in 1926-7 than in the previous year, and the increase was attributed to the previous flood followed by drought, which increased the number of transfers of immoveable property; this is hardly borne out by the fact that in the headquarters subdivision taken by itself, the number of registrations in 1926-7 was 2,000 less than in 1906-7; the increase which has taken place is confined to Khurda subdivision, where there is one more registration office than formerly. The rise in the number of registrations as compared with the years before 1900, is chiefly attributable to the fact that the settlement which closed in that year, placed in the hands of the raiyat

a record clearly defining the position and legal status of his holding. Armed with this, the raiyat more freely resorted to transfers in case of necessity. The right to transfer occupancy rights in temporarily-settled estates is now recognized by law, on payment of a sum equal to one-quarter of the consideration money to the landlord. In other than temporarily-settled estates the right to transfer still depends upon custom. In the Government estates there is no restriction, and there is no fee. The vast majority of the purchasers in all estates belong to the cultivating rather than the money-lending class.

CIVIL JUSTICE.

The staff in the district for the administration of civil justice consists of two munsifs stationed at Puri, subordinate to the District Judge of Cuttack. There is no munsif at Khurda. In 1926 the number of cases disposed of amounted to 1,080, besides 1,680 small cause court cases. These cases include title suits and money suits, but not rent suits, which in Orissa are tried by the revenue officers, Deputy Collectors and Sub-Deputy Collectors. If the Hazaribagh district be taken as typical of Chota Nagpur, and Darbhanga as typical of Bihar, the corresponding totals are 1,146 and 583 in Hazaribagh and 1,846 and 1,786 in Darbhanga; so that in proportion to population, Puri must be considered a litigious district. Twenty years earlier the number of suits was 1,961, besides 2,454 small cause court suits, so that this form of litigation in Puri has decreased by over one-third.

The average annual number of rent suits decided in the five years 1923—7 was just over six thousand, compared with three thousand one hundred, which was the average twenty years earlier. The increase is remarkable, and it is attributable to the greater independence of the raiyats, and their unwillingness to pay until compelled to do so, rather than to an inability to pay. These rent suits apply to the sadr subdivision only, and in proportion to the three and a half lakhs of tenancies, they are about as numerous as the sixteen thousand and odd suits in Darbhanga, where there are nine lakhs of tenancies.

CRIMINAL JUSTICE.

Criminal justice is administered by the District Magistrate and the magistrates subordinate to him. Cases triable by the Court of Sessions are tried by the Sessions or Assistant Sessions Judge of Cuttack, whose circuit includes this district as well as that of Balasore. The Deputy and Sub-Deputy

Magistrates at Puri and at Khurda exercise magisterial powers of the first, second or third class, and the Subdivisional Officer of Khurda is a Magistrate of the first class. Besides these stipendiary magistrates there are honorary magistrates at Puri, Khurda and Bhubaneshwar, some empowered to sit singly, and some as members of a bench.

CRIME. So far as serious crime is concerned the Oriyas generally are a law-abiding people; there are occasional dacoities but they are uncommon. Thus in the year 1926 the number of offences against the public tranquillity (nineteen) was less than in any district save Singhbhum. The number of offences affecting the human body was less than in any district save Singhbhum and the Santal Parganas. On the other hand though the number of burglaries is very low, yet the total number of offences against property was higher than in any of the Bihar districts, which are far more heavily populated, and was distinctly above the average figures of the province in proportion to population. Most of these thefts are petty thefts, and the statistics show that the percentage of true cases withdrawn, or otherwise disposed of without trial in Puri, is higher than in any other district, which seems to be an indication of the tendency to go to Court over petty matters, which would not be reported at all in other parts of the province. It is noticeable that the percentage of cases in which the police refused to investigate, on account of the petty nature of the reported crime, is higher in Orissa than in any of the other divisions of the province. Occasional cases of infanticide have occurred, and in 1903 a case of human sacrifice occurred. A man, who was a follower of one of the degenerate forms of the Tantric faith and had obtained a reputation for occult knowledge, induced three boys, who had attached themselves to him as his disciples, to sacrifice another boy as an offering to the goddess Aghortara; the belief being that the goddess, propitiated by the offering, would grant them the fulfilment of all their desires. The body was never found.

POLICE. For police purposes the district is divided into twenty police-stations or outposts, viz., Gop, Kakatpur, Satyabadi, Krishnaprasad, Delang, Puri, Puri Town, Pipli, Nimapara, Balipatna, Balianta and Brahmagiri in the Puri subdivision, and Khurda, Jatni, Bhubaneshwar, Chandka, Begunia, Bolgarh, Tangi and Banpur in the Khurda subdivision. Two stations were abolished in recent years, viz. Jankia and

Kanas. The regular police force under the control of the Superintendent of Police consists of 6 inspectors, 38 sub-inspectors, 56 head-constables and 435 constables. The proportion is one policeman to every 4.6 square miles, and one to every 1,778 of the population. The corresponding proportions for the whole province are 1 to 5.8 and 1 to 2,376. The village watch consists of 1,515 chaukidars, under the supervision of 166 dafadars. The proportion of village watchmen is thus about one in 560 of the population, which is very nearly the same as in the rest of the province. The chaukidars are paid from the chaukidari taxes raised by the village panchayat, under the Chaukidari Act of 1870, which was introduced about the time of the settlement of 1897. Till that time, the chaukidars held rent-free *jagirs*, or service grants in lieu of wages. The revenue derived from these grants, which were resumed at that settlement, is now used for the payment of dafadars.

JAILS.

There is a district jail at Puri, and a subsidiary jail at Khurda. The latter has accommodation for ten prisoners. It is merely a jail for under-trial prisoners, all but very short term convicts being sent to the district jail at Puri. The district jail has accommodation for 153 prisoners, including accommodation for male and female and juvenile prisoners. Besides this there is a hospital ward and observation cells. The manufactures carried on in the jail are oil-pressing, and the making of coir yarn. The average earnings from the manufactures amount to about eleven rupees per head of the jail population.

CONSTITUENCIES UNDER THE REFORMS, 1919.

The Non-Muhammadan rural population is represented in the Provincial Legislative Council by two members, representing the constituencies of North Puri and South Puri. The district also forms part of three other constituencies, viz., the Orissa Division Muhammadan Rural, the Orissa Division Non-Muhammadan Urban, and the Orissa Division Landholders' constituencies. Orissa returns two Non-Muhammadans to the Legislative Assembly, and forms part of the electorate for the member representing the Patna and Chota Nagpur *cum* Orissa Muhammadans, and for the member representing the Bihar and Orissa Landholders. In the Council of State there are one Muhammadan and three non-Muhammadans representing the province as a whole.

CHAPTER XIV.

LOCAL SELF-GOVERNMENT.

District Board.

Outside the municipality of Puri the administration of local affairs, such as the management of roads, pounds, ferries, dispensaries and sanitation, rests with the district board, with a local board in each subdivision, and five union boards under the Village Administration Act in Satyabadi, Delang, Pipli, Bhubaneshwar and Khurda.

The district board consists of twenty-eight members with an elected non-official chairman. Only seven of the total number are nominated, of whom two are officials.

Income.

A comparison of its present income under certain heads, with that of 1906-7, is interesting.

	1906-7.	Average of 1926—8.
	Rs.	Rs.
Road or local cess	33,000	1,12,000
Government grants	24,000	2,27,000
Total income	89,000	3,82,000

The income from ordinary sources, i.e., excluding Government grants, has thus risen from Rs. 65,000 to Rs. 1,55,000, nearly 140 per cent. Besides local cess, the principal sources of ordinary revenue are pounds, ferries, school fees, rent of roadside land, etc., while about Rs. 20,000 represents the transactions in grain golas financed by the board. The Government grants were made for education, medical relief and civil works. Road or local cess is levied at the rate of half an anna per rupee of rent from each tenant, and half an anna per rupee from the landlord. The incidence of taxation is under two annas per head of the population, or almost exactly half of the average rate of local taxation per head in the province.

Expenditure.

The expenditure under some of the main heads compared with that in 1906-7 was as follows :—

	1906-7.	1928-4.
	Rs.	Rs.
Civil works	44,000	1,05,000
Education	25,000	1,37,000
Medical	9,000	32,000

In the former year the board maintained 108 miles of metalled and 140 miles of unmetalled roads. It now maintains 139 of the former and 212 of the latter, besides 148 miles of village roads. Twelve dispensaries are maintained, and two are aided, whereas twenty years ago only four were maintained. As regards education, an account of the schools maintained by the board is given in the following chapter. The expenditure on education as compared with the Bihar district boards is high, whereas that on public works, roads and buildings, is low. A health officer and staff are maintained for the supervision of sanitation and water-supply, the treatment of epidemics, and the education of the people in matters of hygiene.

LOCAL BOARDS.

The local boards of Puri and Khurda subdivisions consist of seventeen and ten members respectively. The functions of these bodies consist mainly of the administration of village roads, pounds and ferries; the Puri local board also manages the stipendiary schools under the district board in the Puri subdivision.

UNION BOARDS.

The five union boards, which were constituted under the Village Administration Act of 1922, and exist mainly for the purpose of training the rural population in local self-government under the control of the district board, are still in their infancy. Their combined income amounts to about Rs. 5,000 and they are charged principally with the duties of conservancy and sanitation. That they are created not without opposition is evident from the Annual Report of the District Officer in 1927, which states as follows:—"It will take time for the people to realize the importance of these boards, which are intended for training the people in the art of self-government. The sporadic instances of opposition to the creation of these boards will, it is hoped, gradually disappear and the benefits of these institutions will be properly appreciated." The district board and some of the union boards have taken some steps to combat the increase of water hyacinth in tanks and ponds, a pest which is rapidly spreading in Orissa. By-laws have been passed, and the district board has power to compel owners of tanks to clear them of the weed, but a systematic and energetic campaign will be necessary if it is to be prevented from becoming a serious danger.

MUNICIPALITIES.

The Puri municipality is the only one in the district. It was established in 1881, and covers an area of about four

square miles. Its affairs are administered by a board of twenty members, of whom sixteen are elected and four nominated, with a non-official elected chairman. The number of rate-payers is just over seven thousand, or nineteen per cent. of the population. The incidence of taxation is Rs. 2-2-0 per head, the total income from taxation being about Rs. 86,000. The income from other sources is about Rs. 40,000, excluding grants from Government and local bodies for special purposes; the total income including such grants is about Rs. 1,40,000. The income twenty years ago was only Rs. 64,000; and the remarkable increase in the value of house property is shown by the rise in the proceeds of the house tax from Rs. 20,000 to Rs. 44,000 in the same interval, the rate of the tax (7½ per cent. on the annual value) being the same in each case. In the same period the population of the town has risen by about 22 per cent. Out of this income about 40 per cent. is spent in conservancy, 17 per cent. on medical relief, 15 per cent. on public works and 7 per cent. on education, the remainder being spent on establishment and minor heads. There are three hospitals or dispensaries in the town, including the cholera hospital, where twenty-six thousand patients in all were treated in the year 1927; and seventeen primary schools are managed by the municipality. The administration of the Puri municipality is always a matter of difficulty, owing to the influx of pilgrims throughout the year. The opinion of the Director of Public Health has already been quoted, to the effect that the overcrowding during melas, the debilitated state of the pilgrims, and the inadequacy of the conservancy arrangements, all combine towards the production of epidemic cholera, which cannot be prevented without comprehensive permanent improvements in the water-supply and drainage of the town. With the assistance of liberal Government grants much has been done in recent years, and the drainage scheme has been partly completed. But much remains to be done, particularly the installation of a proper water-supply, which has not yet materialized, though land was acquired for a pumping station over twenty years ago.

CHAPTER XV.

EDUCATION.

PROGRESS OF EDUCATION.

NOTHING perhaps illustrates the progress of Orissa under British rule more clearly than the history of the spread of education among its people. The contrast between the low estimation in which early observers held their intellectual capacities and the standard which they have now reached is very striking. Orissa was described as the Boeotia of India, and its people as equally ignorant and stupid. It was cited as a proof of the poverty of their qualifications that the principal official posts had to be filled by foreigners; and it was stated that it was impossible to find Oriyas of sufficient ability for positions of responsibility and trust. When the British first acquired the province in 1803, there was scarcely a single native of Orissa in Government employ. The language of the courts and public offices was Persian, and it was not till 1805 that orders were passed that in all written communications with the inhabitants of the province the subject should be written in Oriya as well as in Persian. This order necessitated the employment of Oriya scribes, who, though skilful enough with their iron pen and bundle of palm-leaves, were almost helpless when required to write on paper with an ordinary pen. They are said to have been slow in acquiring any facility in this method of writing, ignorant of business in general, and especially of the new English method of revenue accounts. All the best ministerial appointments were consequently in the hands of Bengali clerks, who, attracted by the high pay that had to be offered to procure the requisite standard of efficiency, left their homes in Bengal, and bringing their families with them, settled in the province and became naturalized Oriyas. Matters appear to have improved, but slowly, as time went on; and in 1821 the Magistrate reported:—"Scarcely a single real Oriya receives a salary of more than ten rupees per mensem, but several are naturalized Bengalis or Musalmans. I always give a preference to Oriyas, but at this moment I scarcely

know a single Oriya possessing qualifications to fit him for being a common scribe."

The backwardness of education in Orissa during the first half century of British rule has been graphically described by Sir William Hunter :—"Government," he wrote, "not less than the missionaries, long found itself baffled by the obstinate orthodoxy of Orissa. Until 1838 no schools worthy of the name existed except in the two or three little bright spots within the circle of missionary influence. Throughout the length and breadth of the province, with its population of two and a half million of souls, all was darkness and superstition. Here and there, indeed, a *pandit* taught a few lads Sanskrit in a corner of some rich landholder's mansion; and the larger villages had a sort of hedge-school, where half a dozen boys squatted with the master on the ground, forming the alphabet in the dust, and repeating the multiplication table in a parrot-like sing-song. Anyone who could write a sentence or two on a palm leaf passed for a man of letters. In 1838 Government entered the field, and opened an English and a Sanskrit school at Puri. But these institutions proved altogether unable to make head against the tide of ignorance and bigotry and presently sank beneath the flood. In 1841 we opened a higher class English school at Cuttack, which after a long series of conflicts and discouragements still survives as the principal seat of education in the province. During Lord Hardinge's administration two vernacular schools were set agoing in 1845; another one in 1848; and in 1853 an English school was founded in Balasore, while the one at Puri was resuscitated. In 1854 arrived the famous Educational Despatch which was to bring western enlightenment home to the eastern races. Yet for several years afterwards, the increase of schools throughout vast provinces like Orissa has still to be counted by units. In three great Government estates (Khurda, Banki and Angul) we managed between 1855 and 1859 to set on foot nineteen elementary schools; but in the latter year the total number for all Orissa, with close on three millions of people, amounted to only twenty-nine. The truth is the whole population was against us. Such little success as our schools obtained they owed, not to the Oriyas themselves, but to the Bengali families whom our Courts and public offices brought into the province. Thus, of the fifty-eight Orissa students who up to 1868 reached even the moderate standard exacted by the Calcutta University at its

Entrance Examinations, only ten were native Oriyas, while forty-eight belonged to immigrant families."

The Brahmans, with the Karans, had hitherto held the monopoly of education. They kept it strictly in their own hands; and caste prejudice and religious superstition were great obstacles in the way of progress. The Government schools were looked upon as infidel inventions; and even as late as 1860, a learned Oriya, on being appointed to the orthodox post of Sanskrit teacher in the Puri school, was excluded for a year or two from the Brahmanical orders, and stormy discussions took place as to whether he should not be formally expelled from his caste. In spite, however, of such opposition, State education slowly, but surely, made its way in Orissa. In 1848-9 there were but nine schools, with a total attendance of 279 pupils, out of a population of three million souls; but during the next ten years the number of schools increased to twenty-nine, and of pupils to one thousand; while at the close of the third decennial period, i.e., in 1868-9, there were sixty-three schools with four thousand pupils.

Until 1869, however, no machinery existed in Orissa for training teachers, and the lack of qualified instructors was one of the greatest difficulties experienced in establishing and maintaining schools. In that year Government opened a school in Cuttack town, at which young men were instructed with the object of qualifying them to become teachers in their turn. On the conclusion of the course of training, these young men dispersed through the province, and settling in the villages, did much to bring education home to the ignorant peasantry. Each teacher collected as much as he could in money and rice from the villagers who sent their children to his school, and received a small weekly stipend from Government so long as he discharged his duty properly. A considerable number of schools of this sort were gradually opened, and no measure was more successful in popularizing education.

General Statistics.

The contrast between the present state of affairs and that depicted above is illustrated clearly by the following figures, which shew some of the available statistics of the last fifty or sixty years, beginning from 1872-3, when the diffusion of vernacular education was first taken systematically in hand by extending the grant-in-aid rules to hitherto unaided schools.

Number of pupils attending school.

	Boys.	Girls.	Total.
1872-3	...	...	2,800
1875	...	...	4,155
1881 (census) ...	15,000	1,000	16,000
1906-7	26,000	3,000	29,000
1921-2	29,500	5,500	35,000
1926-7	32,000	6,000	38,000

As regards boys alone, forty-seven per cent. of those of school-going age now attend school. The percentage of the population returned as literate in the censuses of 1881, 1901 and 1921 was four, six and five, respectively. The apparent falling off between 1901 and 1921 is due to the fact that a higher standard was fixed in the latter year. In 1901 anyone who could read and write at all was returned as literate; in 1921 the standard was, ability to read and write a letter to or from a friend; this cannot be called a high standard, and it must be admitted that while much has been done, a vast amount more remains to be done, especially in female education. The district board is spending a high proportion of its income on education, as compared with the boards in Bihar, and it is something to be able to note that the percentage of girls of school-going age who attend school (eight per cent.) is higher than in any district outside Orissa, except Ranchi.

Primary schools.

There are 1,462 primary schools in the district, including ninety-eight girls' schools and seventy unrecognized schools. This includes eleven schools for aboriginals, and also twenty-one schools for untouchable classes. There are also untouchables in certain other schools, where they generally have to sit apart and are not allowed to mix with other children. Teachers serving in these schools have to be given special rates of pay or special rewards. Seven hundred and thirty of the primary schools are maintained or aided by the district board. The total number of pupils at primary schools is about thirty-six thousand, including boys and girls.

Secondary education.

There is no college in the district. There are altogether twenty-three secondary schools attended by 2,200 pupils, as against 1,380 in 1906. Of these schools, two are high schools, nineteen are middle English schools, and two are middle vernacular schools. The two high schools are the Puri zila school, maintained by Government, and the Khurda

high school, which is an aided school. The number of pupils at these two high schools is about six hundred, and at the census of 1921 nearly three thousand persons in the district were returned as literate in English.

Special Schools.

There are now four schools for the training of elementary school teachers, all maintained by Government. In the last five years the number of trained teachers employed in the schools of the district rose from 460 to 675. There are twenty-seven Sanskrit *tols*, one of which, the Puri Sanskrit College, is managed by Government. There are forty-five *maktabs* for Muhammadan pupils, and the percentage of the Muhammadan population attending school is higher than the percentage of non-Muhammadans.

Girls' Schools.

There are 102 girls' schools in the district, of which one is a middle vernacular school, and the rest are primary schools. The pupils attending these number about 2,500; but in addition to these, about 3,500 girls attend the boys' schools, a fact which seems to show that the Oriya is not prejudiced against coeducation. The system of purdah among the higher classes, and the fact that the mothers among the lower classes generally desire their daughters' help in their houses, prevents many of the girls from pursuing their education up to the end of the primary stage.

Co-operative Societies.

It is convenient to include under this chapter an account of the co-operative movement, which has practically come into being since the Act controlling it was amended in 1912. The Societies consist chiefly of agricultural credit societies and are grouped under, and financed mainly by, two central banks and one central union, viz., the Khurda Bank which came into existence in 1912, the Puri Bank which was founded in 1918, and the Nimapara Union which sprang from the Puri Bank in 1924. The following figures will show the expansion of the movement in the last three years :—

	1923.	1926.
Number of societies of all kinds ...	345	466
Number of members	5,241	8,627
	Rs.	Rs.
Paid up share capital and reserves of Central banks and unions.	67,150	1,17,385
Total liabilities of Central banks and unions (mainly loans from provincial banks and deposits).	5,82,000	9,40,000

Of the total number of societies, 363 are agricultural societies; there are societies among the fishermen of the Chilka Lake for the co-operative export of fish; societies among artisans and weavers for the financing of their operations; a few societies for the depressed classes in Banpur; and one grain gola. Agricultural sales societies and stores have, as elsewhere, proved failures and have for the most part been closed down. The agricultural societies in Puri, and more particularly in Khurda, have had some success in introducing or encouraging the use of new crops or improved seeds, such as Darjeeling potatoes, sugarcane and ground nuts. The educative value of well-run societies, in the improvement of agriculture, the encouragement of thrift, the relief of indebtedness, and the training they give to members in the joint management of their affairs, cannot be over-estimated. The opinion of the Royal Commission on Agriculture in India, 1927, in which special emphasis might be laid upon the adjectives, was that, "The greatest hope for the salvation of the rural masses from the crushing burden of debt rests in the growth and spread of a healthy and well-organized co-operative movement, based upon the careful education and systematic training of the villagers themselves."

INDEX

GLOSSARY.

A

Alamkara, carved ornaments of different kinds.

Amalaki, a coping stone, shaped like the amalaki fruit (phyllanthus emblica).

Amil, see page 225.

Amruta Manohi, see page 232.

Arati, waving of lights.

Arhat, a superior divinity of the Jains.

Asvamedha, a horse sacrifice.

B

Bahal, confirmed, fixed.

Bajyafti, resumed.

Balia, sandy.

Barkandaz, a guard, a watchman.

Bena, a coarse thatching grass.

Bhoga, food offered to the gods.

Bhogmandapa, a platform for sacred food.

Bioli, autumn rice.

Birhi, a pulse.

C

Chaitya, an altar, place of worship.

Chaudhri, a grade of revenue officials under the Mughals.

Chaukidar, a watchman.

Chauth, tribute (literally, one-fourth).

D

Dafadar, a leader of a small group, a head chaukidar.

Dalua, spring rice.

Debottar, dedicated to a god.

Deva, a god.

Dhamma, see page 282.

Dhol, a drum.

Dhupa, literally smoke; a meal.

Dwari, a door keeper.

F

Farman, a decree, an order.

G

Gauni, see page 213.

Gotra, a family, or sub-caste.

Gumashta, a minor official, a village agent.

H

Hira, a ridge between two fields.

J

Jagir, land held in return for services rendered.

Jajna, sacrificial rites.

Jamabandi, rent roll.

Janta, see page 167.

K

Kalasa, crowning stone.

Kamasutra, different forms of coitus described in the Kamasutra, or sexual treatise.

Kanungo, a class of revenue official.

Khandait, literally a swordsman, a leader of Paiks.

Khatidadar, literally a purchaser.

Kila, the territory of a semi-independent chief under the Mughals.

Kothbhoga, offerings provided by the temple.

Kshetra, sacred precincts.

Kulthi, a pulse.

L

Lakhraj, revenue-free.

Lena, residential cell.

M

Mahajan, literally a big man, a money-lender.

Mahanth, head of a Hindu religious foundation; an abbot.

Mahaprasad, sacred food.

Makara, a sign of the Zodiac, viz., Capricornus.

Maktab, literally a writing place, a Muhammadan school.

Mandap, a platform or dais in a temple.

Mangala, auspicious ceremony.

Marfatdar, a representative, a trustee.

Math, a Hindu religious foundation.

Mela, a meeting; a fair.

Mridanga, a drum with tapering ends.

Mukaddam, a headman, now a sub-proprietor.

N

Nadu, a ball-shaped sweetmeat.

Natmandapa, a platform for dancing.

Navagraha, nine planets.

Nazarana, a propitiatory present or tribute.

Nazim, a governor or official.

Nigrantha, Buddhistic scripture.

Nirmalya, dried boiled rice.

Niti, a ceremony.

Nunia, salty.

P

Padhan, a village headman, now a sub-proprietor.

Paik, an armed retainer.

Pan, leaf chewed with betel nut.

Panda, a Brahman priest.

Pandit, a learned man, an expounder of religion.

Pargana, an obsolescent term denoting a collection of villages or tract of land, comprising a revenue unit.

Puja, a religious service.

R

Rabi, spring harvest.

Rishi, a sage.

S

Sadharana, public.

Sakala, early.

Sakha, a sect.

Sanad, a deed of grant.

Sandhya, evening.

Sannyasi, an ascetic.

Sarad, winter rice.

Sarbarahkar, a revenue official, a rent collector, now having usually a hereditary right in land in Puri, but not in Khurda.

Sasan, a village granted to a group of Brahmans.

Sebait, a trustee, a priest.

Sebak, a minister or servant in a temple.

Sena, see page 167.

Sraddha, funeral ceremony.

Sthavira, a Jain ascetic.

Subahdar, governor of a subah or province under the Muhammadans.

Surya, the Sun.

Swastika, a sacred symbol.

T

Taluk, see page 224.

Tankidar, literally, one holding at a quit rent.

Tatwa, probably a corruption of Tatan, a wag-tail.

Tenda, see page 167.

Thakurani, a goddess.

Tirtha, a sacred place.

Tirthankara, a Budhhist ascetic.

Tithi, a period from moon rise to moon rise.

Toila, superficial cultivation in jungle.

Trisula, a trident.

V

Vidyadhara, a demigod, an attendant in the celestial courts.

Y

Yaksha, a demigod, an attendant of the god of riches.

Z

Zila, an administrative division of land (obsolete).

B. & O. G. P. (Edn.) no. 13—400—8-1-1930—M. M. G. and others.