CHAPTER 1

PHYSICAL ASPECTS

GENERAL DESCRIPTION

BANKURA, the westernmost district of the Burdwan Division, is situated between 22°38' and 23°38' north latitude and between 86°36' and 87°46' east longitude. It has an area of 2,621 square miles, and, according to the census of 1901, contains a population of 1,116,411 persons. The principal civil station is Bankura, situated on the north bank of the Dhalkisor river in 23°14' N. and 87°4' E.

According to local tradition, the town was named after its reputed founder, a chieftain called Bānkā Rai, from whom the Rais of Badrā, a small hamlet of Bankura, claim descent. Another local legend is that the town is so called after Bir Bankura, one of the twenty-two sons of Bir Hāmbir, Rājā of Bishnupur, who divided his kingdom into as many tarafs or circles and gave one to each of his sons. Taraf Jaybelia fell to the lot of Bir Bankura, who established himself at the present site of the town, which was then in the midst of thick jungle. It may, however, be suggested as a simpler hypothesis that the name is a corruption of Bānkunda, meaning the five tanks. The name Bānkunda is found in a Sanskrit verse by Edu Misra (a genealogist of the 15th century, now regarded as an authority on the history of Bengal families), which records the fact that the great poet and ascetic, Śrīharsa of the Bhāradwaja gotra, lived in Kanka in Bānkunda to the west of Burdwan. The name Bākoonda is also found in old official records, and as late as 1863 we find the town referred to as “Bancoorah or Bacoondah.”

On the north and north-east the district is bounded by the district of Burdwan, from which it is separated by the

Dāmodar river; on the south-east by Hooghly; on the south by Midnapore; and on the west by Mānhūm. In shape, it resembles an isosceles triangle wedged in between Mānhūm and Burdwan, with its apex nearly opposite Rāngīnaj, and with an irregular base line resting on Midnapore and Hooghly.

CONFIGURATION

Bānkurā may be described as a connecting link between the plains of Bengal on the east and the Chota Nāgpur plateau on the west. To the east and north-east the land is a low-lying alluvial tract, presenting the appearance of the ordinary rice lands of Bengal. Towards the west the surface gradually rises, and the level plain, green in its season with paddy, gives place to a undulating country, interspersed with rocky hillocks and broken up into low ridges and valleys. Here the face of the country is still largely covered with jungle, but in many places the surface has been denuded, leaving exposed extensive areas of hard rocky soil. To the extreme west these undulations become more pronounced, as the fringe of the Chota Nāgpur plateau is reached; and this portion of the district consists of broken rocky country with numerous groups of hills and isolated peaks. Taken as a whole, the district consists of a wide expanse of gently undulating ground, intersected by rivers and streams flowing from north-west to south-east, which divide it into a number of parallel strips. This rolling country merges in the Gangetic delta on the one side and in a hilly broken country on the other; but the ground rise irregularly from the alluvial plain, and there is no marked ridge of hills.

NATURAL DIVISIONS

The district thus consists of two distinct tracts. The western portion marks the first step of the gradual descent from the tableland of Chota Nāgpur to the delta of Lower Bengal, consisting as it does, in great measure, of the spurs projecting from the western tableland and of low swelling ridges of laterite. In the central portion of the district the country is more open and consists of a series of rolling downs, which eventually merge in the alluvial plain formed by the silt brought down by the great Gangetic rivers. The difference between the deltaic tract to the east and the rolling uplands and isolated hills to the west has been well described by Sir William Hunter, who writes: "In Bānkurā the alluvial flats end in the undulations, isolated peaks, and short, low ranges which form the advanced guard of the hill system of the central Indian plateau. A poor, ferruginous soil and hard beds of laterite here take the place of the fertile deltaic detritus, with expanses of scrub-jungle and sal woods for the closely-tilled village lands of the east. Instead of a wealthy and well-educated population of Hindus and Muhammadans, the western tract is comparatively thinly inhabited by races or castes of a less advanced type, and into whose constitution the aboriginal or semi-Hindiized element strongly enters."

SCENERY

In the eastern portion of the district, and in the tracts adjoining the Dāmodar river, the scenery is on the whole tame and monotonous, for the eye constantly rests on wide expanses of rice fields green in the rains but parched and dry in the hot weather. These fields, however, are fringed round by villages, encircled by clumps of bamboos, mango groves, plantain gardens and palm trees, which have a quiet beauty of their own and relieve the monotony of the scenery. Leaving the alluvial flats, the ground gradually becomes more broken, more elevated, and at the same time less cultivated. Rocks crop out, and small boulder-covered knolls make their appearance. Long broken ridges now meet the eye, either bare or covered by low jungle, from which all the largest timber has been removed, though a few trees are left to show the noble forest growth that once existed. These ridges are divided up by irregular patches of more recent alluvium, which extend into the higher ground and form narrow strips of cultivation between the uplands. During the hot weather the dry red soil and scarcity of trees give this part of the country a scorched and dreary appearance, but in the rains the fresh green of the young rice in the hollows and the foliage of the scrub-jungle form attractive contrasts of colouring.

The scenery in this part of the district has a distinctly parklike aspect. A traveller suddenly brought here might almost imagine himself transported to some English park, and in other places is agreeably surprised to find a long vista of trees stretching along a red laterite road, which now passes into the hollows and again mounts the slopes. In the western and southern portions of the district the country is more broken and the scenery more

*Preace to Volume IV of the Statistical Account of Bengal.
picturesque, as the upland ridges are succeeded by low forest-clad hills and wooded glens in the south, while further to the north the Susunia and Biharinath hills stand out as commanding features in the landscape.

**HILL SYSTEM**

The hills of the district consist of the outliers of the Chota Nagpur plateau, and only two are of any great height, viz., Susunia and Biharinath. Susunia, which is about 14 miles north-west of Bankura, runs almost due east and west for a length of 2 miles, and rises to a height of 1,442 feet above sea-level. It is still almost entirely covered with thick low forest; and at the foot of the hill is a ruined bungalow erected by a stone company, which used to quarry stone here. The Biharinath hill is situated in the north-east corner of the district and rises to a height of 1,469 feet. There are several low hills in the Siltor area of the north-west, but the only other hills in this part of the district that call for separate mention are Megjia and Korai (or Karo, also called Kanraj). The Mejia hill is situated on the south bank of the Damodar river, nearly opposite the town of Ranchi. Its height is inconsiderable, being only about 200 feet above the level of the surrounding country. In shape it is comical, with a spreading base and a rather sharp apex. The Korai or Karo hill, with a height of about 350 or 400 feet, lies about half-way between Mejia and Bankura town, and close to the Bankura-Ranchi road. It is of an elongated contour, running east and west; the west side is steeply scarped, and the north and south sides are also precipitous. On the east, however, the hill rises from the ground with a very gentle and long ascent, reaching its greatest height just over the precipitous western face.

To the south in Thansa Khattri and Rapiur are a number of low but picturesque hills, of which one, known locally as Masaker Phajar, to the east of Khattri, is the subject of a curious legend. It contains a cave, which the people long believed no one dare or could enter. Local tradition relates that this cave was the residence, in former times, of a muni or sage, who used to reward the visits of his patron, a neighbouring Rajja, by a present of a gold mohur every time he came. He always seemed to draw this coin out of his matted hair, and the Rajja, came to

the conclusion that his head was full of gold. He accordingly had it cut off, but obtained nothing but the curse of the dying muni, which long clung to his descendants in the form of hereditary insanity.

**RIVER SYSTEM**

The district is bounded on the north by the Damodar river, and is intersected by a number of rivers flowing from north-west to south-east in courses roughly parallel to one another. They debouch from the western hills, and are nearly all hill streams, which come down in flood after heavy rain but subside as rapidly as they rise. Their beds are sandy, and in the summer months nearly everywhere dry up. The banks are well defined, and are chiefly composed of clay and sand mixed with kankar, with laterite rocks cropping up here and there. The following is a brief account of the most important of these rivers.

**DAMODAR**

The Damodar takes its rise in the hills of Chota Nagpur, and touches upon the Bankura district just after it has received the waters of the Barakar. It then flows in a south-easterly direction, forming the boundary between Bankura and Burdwan for about 45 miles, and enters Burdwan near Sansarpur in Thrissur in this district. The course of the river is tolerably straight, but it is full of sand banks, with a fall of 3-40 feet per mile. During the rains, or from the middle of July till the middle of October, it is navigable by country boats; but the rapidity of the current and the sudden freshets and floods to which it is liable render navigation hazardous. In the hot season the river dwindles away into an insignificant stream, fordable nearly everywhere and in many places not a foot deep. There is no river-borne traffic worthy of the name, with the exception of large rafts of timber floated down the stream. During the rains, numbers of logs are fastened together by ropes to form rafts, locally called murs, with three or four men to steer them. The rafts so formed are sometimes 50 to 60 yards long, and generally flotillas of 10 or 12 rafts are launched together from the timber-yielding tracts higher up the river.

The Damodar is liable to heavy floods in the lower portion of its course. The size of the channel of the river in its lower part being much less than in its upper part, it is impossible to retain within its banks the whole volume of water which
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comes down when the river is in flood, and the greater part
of the flood discharge must pass out and spread over the country.
As the floods in the Dâmodar do not last long, and as the quality
of the silt which this river carries is good, the mere inundation
due to the flood does good as well as harm, and is certainly
not a serious evil. There is, however, in all such cases a danger
of the flood water cutting channels through the soft banks of
the stream and forming branch streams, which continue to flow
after the flood has subsided and which tend to alter the regime
of the river.

Though the floods of the Dâmodar rarely do great damage
in this district, much distress is sometimes caused by the
formation of great head-waves. At times of flood, the rain water
pours off the hills through hundreds of channels with such
a dangerous head-wave, called the hurpâbân, which is not unlike
the bore or tidal wave of the Hooghly, but of greater breadth,
extending nearly from bank to bank. This head-wave presents
the appearance of a wall of water, sometimes five feet in height,
and may cause loss of life and considerable damage to property.

The Dâmodar is the terrestrial object most venerated by the
Santals; and the country that is most closely associated with
their name, and which they apparently regard as their fatherland,
lies between it and the Kâsai. They speak of it as their sea,
and the obsequies of their dead are considered incomplete till
some charred fragment of the burnt body is committed to the
stream, to be borne away to the ocean.

SÂLI

The chief tributary of the Dâmodar is the Sâli, which rises a
few miles west of Korâ hill and falls into the Dâmodar at the
village of Samsâr in thâna Indâs. This river drains a large portion
of the north of the district.

DHALKISOR

Of the other rivers flowing through Bânkurâ the most important
is the Dhalikisor or Dwârkeswar. This river takes its rise near
the Tilâbani hills in Mânîhâm district, and flowing south-east
enters the district of Bânkurâ near Dumâ in pargana Chhâtâna.
It pursues a rather tortuous course to the south-east, with several
bifurcations through the Bânkurâ, Ondâ and Bishnupur thânas,
and leaves the district near Huzrâ in thâna Kotalpur. In the lower
portion of its course, after its confluence with the Silâi on the
borders of Midnapore, this river is known as the Rûpnâbâyân.
Its fall is less that of the Dâmodar, and its current is hardly
perceptible from the end of November to the beginning of June,
but in the rains it is subject to heavy floods and is often an
impassable torrent.

GANDHESWAR

The Dhalikisor has many branches or old beds in thânas Ondâ
and Bishnupur, most of which meander about for some distance
and then rejoin the parent stream. They dry up in the hot weather,
to be again replenished in the succeeding rains, and are known
as kânâ nadsâ or dried-up rivers. The principal branch is the
Jasadâ Khâl, which separates from the Dhalikisor near Abantikâ
in the Bishnupur subdivision.

During its course through the district the Dhalikisor receives
many tributaries, the principal of which are the Gandheswar,
the Kukhrâ and the Birai, all small streams with rocky beds.
The largest of these is the Gandheswar, which, flowing
south-west of Susunâ hill and north of Bânkurâ, joins the
Dhalikisor near Bhûtsahar, a village two miles from the town.
Like the Dhalikisor, it is subject to sudden freshets; and before
now officers returning to Bânkurâ from tours in the north of
the district have had to wait till the waters fell and so enabled
them to cross over by the causeway laid across its bed.

SILÃI

The river Silâi or Silâbaft rises in the Mânîhâm district, and,
entering Bânkurâ near Sîlînapur in thâna Khâtâra, has a short
course in the south of the district, through that thâna and the
Sîmâlpâil outpost, before it passes into Midnapore, where it joins
the Dhalikisor. It is liable to heavy floods, although at most
times, even during the rains, it is easily fordable. There are
some small but picturesque waterfalls along its course near
Hârmâsrâ. Its principal tributary is the Jaypândâ or Jaykhâl, which
rises near Bagâ in thâna Khâtâra.

KÂSÂI

The river Kâsâi or Kansâbaft enters the district near Bâmândîhi
in Khâtâra, and, after receiving the waters of the Kumârât at
Ambkânhagar, flows through thânas Khâtâra and Râipur, leaving
the district near Bara Pôkhrâl in Râipur. Just above Râipur
of the district nothing but stunted jungle now remains, all else having been cleared away by the woodman or charcoal burner. Even now, though the larger trees have been felled long ago, the latter, wherever they can, dig up and burn down the roots and stumps for their charcoal kilns. The consequence is that, where no restriction is placed upon indiscriminate clearance, the soil is rapidly becoming barren. Here and there, it is true, a scanty herbage still springs up under the slight cover afforded by the stunted bushes remaining. But so insufficient and coarse is it, if left to itself, that the inhabitants resort to the expedient of forcing it by firing the scrub in March and April. With the first shower of rain, the grass again shoots up, and being of a finer and better quality, affords a little more nutriment to the half-starved cattle. But unfortunately at this time the young sāl is just putting forth new leaves and shoots, and, these being destroyed, its growth and spread are effectually retarded. The surface soil of the uplands, being thus deprived of the protection which Nature would otherwise afford, is washed away by every fall of rain, leaving exposed large areas of hard compact ferruginous soil, on which nothing will grow. In this way, the district is being slowly but surely denuded of its forests.

In spite of this, the sāl forest growth, which has been left or is springing up, is of some economic value, and there are several jungle estates, which are cropped either yearly for firewood or at larger intervals for the sake of saplings. The jungles also produce a small quantity of tusser cocoons, which are reeled into thread by women of the weaver class, and some medicinal plants, which are used by native physicians for medicinal purposes.

**GEOLGY**

The greater portion of the district consists of a rolling country covered by laterite and alluvium, which, it is believed, was originally a region, or if, as is highly probable, it was subaqueous, a sea-bottom formed by an undulating surface of rock, from which rose numerous rocky islands, themselves the relics of a former denudation. To the east there is a wide plain of recent alluvium, while metamorphic or gneissose rocks are found to the extreme west, which includes a few of the more easterly projecting headlands of the immense area of gneissose rocks comprised in Choṭā Nāgpur. These outliers are numerous in the south-west of Bānkurā, while in the north-west, and across towards Māliārā, metamorphic rocks stand up boldly in
well-marked ridges or bands, the prevailing character of which is hornblende, associated with granitoid gneiss. Strong massive tolerably continuous lines, the general strike being nearly east continues southwards to the small hill of Kora, which is composed is in the same line as the more marked rise of Susuni to the line of faulting or disturbance. There is a marked change in the direction of the rocks north and south of this line, which seems to confirm such a supposition. Close to Kora hill on the south-west, hornblende schists occur, traversed by numerous veins of pegmatitic granite. They seldom exceed one foot in the fleshy white colour of the felspar contrasting strongly with the dark greyish-green of the decomposing hornblende rocks. They frequently form a little sharp ridge, and look like a great them and, with a pinkish felspar and pure quartz, forms the entire rock.

As one approaches the town of Bänkura, the rocks become more massive laterite, The ferruginous gravels in some places seem to pass by almost imperceptible changes into the solid laterite, and in a few instances have become recremented into a mass not easily distinguished from that rock. On the other hand, they pass by equally insensible gradations into a coarse sandy clay containing only a few of the ferruginous nodules of laterite, which are barely sufficient to give a red tint to the whole. In this case also calcareous kankar is frequently associated. It may be mentioned that locally the nodular ferruginous rock, known as laterite, is generally called kankar, while the calcareous concretions, commonly used as the source of lime, which a geologist would call kankar, are known as ghatin.

In the north of the district laterite does not cover any great area between the alluvial flats along the river Dámador on the one hand and the gneiss on the other. It is seen near Barjor and in thin patches of no great extent nearer to the town of Bänkura. In the higher and more broken ground extending to Sonāmukhi and the Dhalkisor, it covers the greater part of the swelling coppice-covered ridges, and is for the most part gravelly in character, but here and there forms thick, solid and massive beds. Towards the west, it becomes thinner and less marked, and gradually more mixed up with the debris of the gneiss. The flats of the Dhalkisor now intervene, and south of that river laterite again shews, forming similar low swelling ridges of broken ground, which extend from Bänkura to Midnapore.

Wherever it has been seen, the laterite is detrital, i.e., it contains pebbles of quartz and often of other rocks also, but chiefly of quartz. Not infrequently these imbedded pebbles and fragments increase in number, until the rock becomes a coarse ferruginous conglomerate. Layers of sandstones are frequently found with this conglomerate, irregular in their development and arrangement. Near Sonāmukhi to the east, this recent conglomerate, which forms an upper cake-like coating where the laterite rocks occur, rests upon a bed of loose quartz pebbles forming a coarse clean gravel. Most of the pebbles are well rounded, some of them being as big as a man's head. Another point of interest connected with these laterite deposits is that, as we approach the gneiss rocks to the west, the number and the size of the fragments of quartz, felspar, and other debris
of those rocks increase, clearly indicating the source from which they have been derived. The laterite itself gradually thins out and dies away towards the west, becoming broken up into isolated patches of smaller and smaller extent and thickness, until at last a few loose blocks may be the only trace of its former occurrence. On the other hand, the deposit becomes more continuous and thicker towards the east, until it is covered up by clays. Widely spread over these laterite rocks, there is a sandy clay often composed to a large extent of the small rounded nodular concretions of the laterite, and passing from this into an ordinary sandy clay with calcareous kankar.

The Gondwâna system is represented in the northern portion of the district south of the Dâmodar river between Mejâ and the Bihârînâth hill. The beds are, however, much covered by alluvium. They belong to the Rântganj group, and may contain useful seams of coal.*

**BOTANY**

The eastern portion of the district forms part of the rice plains of Western Bengal, and land under rice cultivation contains the usual marsh weeds of the Gangetic plain. On ponds, ditches and still streams, float aquatic plants, accompanied by many submerged water weeds. Round villages, and in the neighbourhood of towns, there are the usual shrubberies of semi-spontaneous, often sub-economical, shrubs and small trees, which are occasionally of considerable extent. The more characteristic shrubby species are Glycosmis, Polyalthia suberosa, Clerodendron infortunatum, Solanum torvum, and various other species of the same genus, besides Trema, Sterebus and Ficus hispida. Some other species of figs, most notably the pîpal and banyan, with the red cotton tree (Bombax malabaricum), mango (Mangifera indica) and jiyal (Odina Wodier), make up the arborease part of these thickets, in which Phoenix dactylifera and Borassus flabellifer are often present in considerable quantities. Hedges and waste places are covered with climbing creepers and various milk weeds, and also harbour quantities of Jatropha gossypifolia, Urena, *Heliotropium, Sida* and similar plants. Roadsides are often clothed with a sward of short grasses, and open glades with taller grasses of a coarse character, while in dry places there are several kinds of grasses peculiar to dry regions that have wandered from the west to this district. Where there are patches of forest or scrub-jungle, other than those of the village shrubbery class, the more striking constituents are Wendlandia exserta, Gmelina arborea, Adina cordifolia, Holarrhena antidysenterica, Wrightia tomentosa, Vitex Negundo and Stephanye parvifolia.

The rest of the district is higher, and here the uplands are bare or covered with a scrub-jungle of Zizyphus and other thorny shrubs. This scrub-jungle gradually merges into forest, where sâl (Shorea robusta) is gregarious, while the low hills are covered by a mixed forest containing species of Miliusa, Schleichera, Diospyros and other trees.

The following is a brief account of the most common trees and plants of economic use found in the district. Alkusht (Mucuna pruriens) is a leguminous creeper, the seeds and seed-vessels of which are pounded and used as a blister; the seed-vessels are covered with fine hairy spines, which are highly irritating to the skin when handled, causing inflammation and swelling. The amâlta (Cassia Fistula) is one of the handsomest trees in the district, having large pendulous bright yellow flowers, which have given it the name of the Indian laburnum. The pulp, which is of a dark-brown colour and sub-acid taste, serves as a laxative, while the leaves and seeds are pounded and used as a purge. The wood is much sought after by the poorer classes for props to their houses, as it is hard and durable, and is not easily affected by damp, or readily attacked by white ants. The âsin (Terminalia tomentosa) is another valuable tree, yielding a good wood, which is chiefly employed for making lintels and door-posts. The leaves furnish one of the chief supplies of food to the tusser silkworm, which spins its cocoons on the small branches or twigs; and its branches are frequented by the shellac insect. The bûbûl (Acacia arabica) is common in the district. The flowers and seeds are used for medicine; the seeds are given to cattle as fodder in bad seasons; the gum exuding from the bark is collected and sold in the bazaars. From the wood, which is valued for its durability and hardness, cart-wheels and ploughs are made, while the bark yields a good tan; a decoction of it is often used to harden the soles of the feet.

BĀNKURĀ

The bair (Zizyphus Jujuba) yields a small, round, acid and astringent fruit, which the poorer classes gather when ripe, dry on the roofs of their houses, and use as food. The wood is of little use, but fences round the fields are made from the smaller branches. The bel (Aegle Marmelos) grows freely in Bānkurā, and often attains a large size. The natives bake the fruit in its rind or shell, and administer it for dysenteric affections; a decoction of the bark and root is sometimes used by them in cases of palpitation of the heart, and a decoction of the leaves in asthmatic complaints. The plant called bāg bherendā (Jatropha Curcas) grows round most of the village gardens. The seeds, from which oil is also expressed, are used as a cathartic, and the leaves for poultices; the milky juice that exudes from the stem when cut forms, with oxide of iron, a good black varnish. The roots of the bichuti (Tragia involucrata) are employed by native doctors as an alternative medicine, while the sharply stinging spines on the leaves are sometimes wetted and applied to paralyzed limbs to excite sensibility. The fruit of the baherdā (Terminalia belerica) is also used medicinally on account of its astringent and tonic properties. Infused in water, it is given as a cooling draught in fevers, and the expressed juice forms a basis for several colours in dyeing. The seeds are used for making ink, and oil for burning is extracted from them.

The rank poisonous plant called dhatūrā (Datura stramonium) may be seen growing in the vicinity of many villages. As is well known, it possesses narcotic qualities, and the seeds, when eaten, produce intoxication with fierce delirium. They are sometimes mixed with sweetmeats, and secretly administered, in order to facilitate theft or other criminal designs. The leaves smoked with tabacco are said to be useful in asthma. The dhāman tree (Cordia Macleodi) is found in the western jungles, and yields a hard, close-grained and elastic wood used for bānghis, and, by the Sāntals, for bows, ploughs, etc. The gāth tree (Diospyros Embryopteris) is chiefly valued on account of its fruit, the expressed juice of which, boiled down to a thick consistency, is used as a varnish to protect boats from decay and from the attacks of worms. The juice contains about 60 per cent of tannic acid, and is a valuable astringent and styptic, which finds a place in the native pharmacopoeia. When ripe, the fruit forms an article of food, which is much esteemed by the country people. The fruit of the harrā (Terminalia chebula) is also used medicinally as a purgative. Mixed with catechu, it is a favourite remedy for ulcer in the mouth. The inlī (Tamarindus indica) is common all over the district; the fruit is dried and used in curries, or mixed with water for sherbet, but the natives believe that, unless drunk very sparingly, it induces rheumatism. The wood is hard and close grained, and is used for making oil-presses, sugar mills, etc.

Kuchilā (Strychnos Nux-vomica), which yields the common Nux-vomica poison, is common in the jungles to the west and south, and is also found near the town of Bānkurā. The seeds act as a stimulant tonic in small doses; and it is not uncommon to find cows eating the leaves, the result being that their milk has a sharp bitter taste for several days. The Mahuā (Bassia latifolia) is very common and furnishes an important part of the food supply of the poorer classes. When its thick waxy-leaved flowers begin to fall, the people gather them up carefully, and dry them for food or sell them for the distillation of country spirit. The seeds yield an oil and a kind of buttery substance, both of which are used to mix with and adulterate gāth, while a decoction of the bark and leaves is said to be useful in cases of rheumatism. From the palās (Butea Frondosa) the gum called “Bengal kino” is produced. It is rich in tannic and gallic acids, is a powerful astringent, and is very useful in cases of diarrhœa. The sajinā (Moringa pterygosperma), commonly called the horse-radish tree, is a common tree in Bānkurā. The flowers and young pods are used in curries, the pods also making a good pickle with vinegar and salt. The roots, which have a pungent taste, furnish a substitute for horse-radish, and are also considered useful in cases of paralysis. A limpid oil called ben is extracted from the seeds, which is used in perfumes and also by watch-makers. The kend (Diospyros melanoxylon) is found in most of the uncleared jungle. It yields a very hard, close-grained wood, the centre or core being very hard and black, and, in old trees, similar to ebony; this black heart-wood is in fact, known as Bengal ebony. Besides the above, the mango, date-palm, nim, pīpal, banyan, red cotton tree and jīyal are common.
FAUNA
WILD ANIMALS

Though the physical features of a large part of Bānkura resemble those of the adjoining districts of Chotā Nagpur, it is far from being so well stocked with game. This is due to the gradual thinning out and, in many places, the entire extermination of the extensive sal jungles which once covered the uplands, and to the continued extension of cultivation, which have gradually driven big game westwards. It is also due, in a large measure, to the ruthless destruction of animal life by Santals and other forest tribes, who never lose an opportunity of killing whatever living thing they come across. This is especially the case in the course of their large annual beats, which take place at certain festivals in the hot weather. On these occasions they gather in hundreds, and the jungles are practically denuded of all game, for nothing comes amiss to their bows and arrows or sticks, their aim with those weapons being marvellously accurate. It must not be supposed, however, that the district has been altogether denuded of big game, for both leopards and bears are still found in the more remote jungles and even occasionally in the vicinity of the town of Bānkura. But they are becoming scarcer year by year, as cultivation expands, the need for fuel becomes greater, and the jungle becomes thinner.

According to a report furnished by the District Officer, tigers still occasionally frequent the jungles at Sālkor in the north-west and in the Raipur thana to the south-west. A few man-eaters are also said to be found in the extensive jungles of Kuinā, Kama, Chālā and Jōb in thana Khātrā, which have an aggregate area of 12 square miles; in 1904 two persons were reported as having been killed by them. Leopards, wild bear and hyaenas are said to be found in the jungles at Birsinghā, Sātgachi, Mānkārī, Bānsi in the Jāyāmpur outpost; at Hābārī, Krishnaganj, Jādāhār and Jīmhāna in the Kotalpur thana; at Bēbbōnd, Beślā and Kamārna in the Bishnapur thana; in the low jungle-clad hills of thana Raipur; at Saulā, Joykrishnapur, Dhabānī and Belatore in the Bājorā outpost; at Slālpāhar, Kochdāngā, Dhānsīmlā and Dhandol in the Sonāmkhīr thana; and in the jungles to the south of the Tālādāngā outpost. Spotted deer are reported to have their habitat at the Turā hill and in the jungles of Jhārī, Tālgārī and Dubrāpur in thana Raipur. It should be added, however, that there are no well-authenticated instances of tiger being found in the district since the early sixties, and that the natives often use the term bāra bāgh for large leopards or panthers, which are still plentiful in parts of the district.

Wild elephants were formerly fairly numerous, but have now disappeared. The last occasion on which wild elephants visited the district was in 1898-1900, when three of these beasts roamed through the south-western portion of the district and gradually worked their way to within 12 miles of the town of Bānkura. They were eventually proclaimed by Government in consequence of their having caused great damage to the crops and proved dangerous to human life; and two European sportsmen succeeded in shooting one enormous male, by a single well-placed bullet from an eight-bore paradox, and in wounding a second, which killed a boy in his wild career westward. Since that year wild elephants have not appeared in the district, though it is possible that a few may still find their way to their former haunts and visit the extreme south-west from neighbouring districts.

The common black or sloth bear in still fairly plentiful, though not found in the same numbers as 40 or even 30 years ago, when there was scarcely a large patch of jungle that could be beaten without one or two, or even more, being turned out. Now, except in the more remote jungles, it scarcely pays to have a beat, jungle after jungle proving blank; and the best way of securing a bear is to wait till news is brought of a she-bear with cubs having taken up quarters in a den. They are very destructive to the maize and sugarcane crops, and are often found stripping mahā trees of their flowers, of which they are exceedingly fond; the mother generally climbs the tree and shakes the branches in order to make the flowers fall down to her cubs below. They frequently attack harmless men and women, who happen to cross their path while engaged in burning charcoal or gathering fuel; and it is not an uncommon sight to see patients in the dispensaries who have suffered severe maulings from them, the head being frequently badly damaged by their attempts to tear off the scalp.

Leopards are still found, though in decreasing numbers, and here as elsewhere are particularly destructive to smaller cattle, sheep, goats and dogs. They are commonly tamed in cages.
There is a well-authenticated instance of a remarkable capture of a leopard at Raipur, which is worthy of mention. Two young Sāntāl rākhaś or cowardly boys were returning home after grazing their cattle, when they caught sight of the tail of a leopard protruding through the trellis work of the cowshed. One of them dashed forward and caught hold of the tail, pulling the leopard towards him, while he told his brother to run into the cowshed and belabour the brute with a thick stick. This his brother did, and with such effect that the beast was soon hors de combat and ultimately killed outright.

Among other carnivorous animals the following are fairly common: hyaenas, jackals, fox, civet cats, and wild cats of several species, as well as the ubiquitous mongoose. Wild pig and wolves are rarer, but are occasionally met with, and wild dogs are still more uncommon. It is somewhat surprising that wild pigs are not more numerous, considering the area of jungle still left, but their paucity is probably due to their destruction while still young by leopards, hyaenas and wolves, as well as by the jungle tribes, who are particularly fond of their flesh and never lose an opportunity of catching them irrespective of sex or size. Deer are rare, and can only be found in the extreme west, on the borders of Mānhbām, where a few spotted, hog, barking, ravine, and dwarf deer are occasionally seen, but the noble sambar seldom, if ever. Other common animals are monkeys, chiefly the large black-faced hanumān, squirrels, porcupines, and rats and mice of every description, including the odoriferous musk rat.

GAME BIRDS

Pea-fowl are still fairly numerous in some parts of the district. Among other game birds are grey and black partridge, jungle fowl, quail, pigeons and an occasional lesser florican. On the Dāmodar and Kāśī rivers several species of wild goose, duck, snipe and ordinary water-fowl are found in fair numbers, but are not so common as in other districts. Other common birds are those usually met with in other parts of Bengal, ranging from the vulture and fish-eagle to the bulbul, sparrow, honey-sucker, and other birds too numerous to mention in detail.

FISH

The fish found in Bānkūra are the common ones met with in other parts of Bengal and are mostly caught in tanks or irrigation reservoirs (bāndhs). The most common species are the rui, mrigel and kāttā. During freshets hīls find their way up the Dāmodar and some of the hill-streams, and in the dry season large prawns (chingī) are caught in the shallows of the rivers. Here, as elsewhere, every pool of water is ruthlessly fished, and even the smallest fry are not spared.

REPTILES

Snakes are not very numerous, but several varieties are found, including the cobra and karait (Bungarus coeruleus), the dhāman, which grows to a large size, an occasional python in the hilly and rocky parts and the ordinary grass and other harmless snakes.*

CLIMATE

The climate, especially in the upland tracts to the west, is much drier than that of Eastern Bengal. From the middle of March to the beginning of June hot westerly winds prevail, and the heat during the day time is oppressive, the thermometer in the shade rising as high as 110° to 115° F. These westerly winds generally die away during the afternoon, after which a cool breeze sets in from the south about sunset, and lasts until early morning, when another lull ushers in the scorching westerly breeze again. North-westers, however, are frequent during these months, and help to mitigate the excessive heat of the day. They are accompanied by more thunder and lightning, but far less rain, than is observed with such storms further to the eastward. Indeed, they often pass over without any rainfall, and in such cases the thunder and lightning, and the force of the wind, are violent. During the rains, which set in during the month of June and last until the middle of September, the climate is comparatively pleasant, for it is not so sultry, damp and steamy as in other Bengal districts at the same season of the year. The cold weather is also far more bracing and enjoyable, the air is clear, and fogs are rarely seen.

In Bānkūra, like some of the more westerly districts of South-West Bengal, where the surface soil is composed of red laterite and the hot westerly winds from Central India

* The above account of the Fauna of Bānkūra has been prepared from a note kindly contributed by Mr. W.C. Lydiard of The Manor, Bānkūra.
at times, exceptionally high day temperatures are a feature of the hot weather months. The mean maximum temperature, which is on an average below 80° in December and January, rises to 82° in February, 93° in March and 102° in April. Thereafter, there is a steady fall until the monsoon is established. The mean temperature for the year is 80°.

The monthly rainfall is less than an inch from November to January, and between one inch and two inches from February to April, after which there is a rapid increase owing to the occasional incursion of cyclonic storms in May. During the monsoon season climatic conditions are very similar to those obtaining in other parts of South-West Bengal. The rainfall is maintained chiefly by cyclonic storms, which form in the north-west angle of the Bay of Bengal and influence weather over the whole of the south-west of the Province, and also by inland depressions, which form over the central districts of Bengal and move slowly westward. As the district is more in the line of advance of these latter disturbances, rainfall is not so appreciably lighter as might be expected from its inland position. The average fall in June is 10.8 inches, in July 12.2 inches, in August 11.9 inches, in September 8.7 inches, and in October 3.1 inches. The total average fall for the year is 55.26 inches.

The following table shows the rainfall recorded at each of the registering stations during the cold, hot and rainy seasons, the figures shown being the averages recorded in each case:

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<th>Station</th>
<th>Years recorded</th>
<th>November to February</th>
<th>March to May</th>
<th>June to October</th>
<th>Annual average</th>
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<td>5.79</td>
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