



east parts of the district; the natives reported that it was nearly the same. There is however a most essential difference between these two vicinities. The quantity of seed reared here is very great, and Mr. Smith states, that for every 100 rs. which he advanced, he received back on an average 50 rs. worth of plants, and 25 rs. worth of seed, on which he had a very considerable profit; the remainder was repaid in money, or went to the advances of next year, the use of it having been a bonus to induce the farmer to undertake the culture. Without some such inducement, indeed no one in his senses would cultivate indigo for these factories, where the price allowed is only 1 ana a bundle. It is by no means the whole land sown that is kept for seed. The greater part as usual, gives a winter crop; and the crop of seed, where preserved, is usually of fully equal value. No October indigo, so far as I heard, is sown in that part of the country. These factories contained 21 pair of vats, and the whole of the others in that vicinity contain nearly as many, not above one less or more. The annual produce of the whole may therefore be 170,000 bundles of weed; of which about one-half is delivered at 16 bundles, and the remainder at 12 bundles the rupee. The seed in the former amounts to about one-half of the value of the plant, or to about 800 *mans* at 3 rs. a *man*, on the latter there may be about the same quantity. The average quantity of indigo will be about 670 *mans*.

With regard to the other parts of the district, including no less than 50 factories, I am not prepared to enter so fully into a discussion. Several of the factories I know are small, and in a bad state, and on the whole I do not think, that they can yield more in proportion to their number than three-fourths of the four larger in Gondwara; and the land may on the whole be nearly equally productive. I have indeed been favoured with an estimate, which apparently makes the produce greater; as it states the average produce of a Calcutta bigah to be 18 bundles of $3\frac{1}{2}$ cubits. The gentleman who gave me this estimate, however, employs people to measure the land just before it is cut, and his estimate is similar to that of the natives, who when they speak of the produce, only estimate the land which they reap. What is totally lost they do not introduce into the account; nor in stating their profit

and loss, is there any necessity for so doing, as the field is sown with something else, and the culture given to the indigo serves in part, for what would be necessary for the crop that comes in its stead. Allowing for this, there will be found no material difference in the produce, as estimated at Gaur on the land actually sown, at Ronggopoor on the land for which advances are made, and at Puraniya on the land actually reaped. The whole indigo reared by these 50 factories may therefore, on an average of years, be about 3000 *mans*, and the land in actual cultivation may be 60,000 bigahs. In this part of the country also much seed is preserved; nor is there any seed sown in October. The land being higher, a larger proportion gives two cuttings of plant. In some places a good deal is sown among the broadcast winter rice, which would otherwise have been intermixed with summer rice. The indigo is cut early, and the winter rice is then allowed to grow alone.

The manufacturers seem to incur a greater expense than they do in Ronggopoor. Their buildings are more expensive, and they keep an enormous establishment of oxen and carts for carrying home the plant. They almost all cultivate more or less, these cattle being idle at the ploughing season. The land, which they cultivate, being carefully ploughed and weeded, is vastly more productive, than what is neglected by the natives, and were the indigo planters, more generally men who could attend to the details of agriculture, and were they allowed to rent land contiguous to their works in a quantity sufficient to supply them entirely with weed, I have no doubt, that the land would be vastly more productive, and failures from the seasons less common. The habits and experience, however, of the greater part would render any undertaking of that kind ruinous; and there are strong reasons for the prohibition that exists against their acquiring such property. Except in the south-east corner of the district, the planters usually take all the seed at 3 rs. a *man*, and charge the farmers for what they require at the market price, which is a heavy loss to the cultivator; but the planters are at the whole expense of cultivating and carrying home the weed, which no doubt saves them from some fraud, and preserves much plant, that the listlessness of the people



would allow to perish; but it is attended with an enormous expense.

Two Hindus* and one native Portuguese have seven factories, and these ought by all means to be encouraged, especially the Portuguese. No objection can arise to his holding lands by any tenure; and I doubt much, if ever the natives will pay sufficient attention to the quality of the manufacture; while in the hands of the landholders, by whom chiefly it will be undertaken, it will be made an additional means of oppression.

About 1000 bigahs of indigo are cultivated for the original native manufacture, which is now entirely confined to the eastern skirts of the district near the Nagar, where no European manufacturer has settled. The produce was stated on an average at 20 sers worth from $2\frac{1}{2}$ to 3 rs. the bigah, and the whole being made by the farmer, is looked upon as the net proceeds of the land. One man indeed informed me, that the produce was just double of what the people who made the above statement allowed; and I suppose, as his account agrees with what was stated in Ronggopoor, that it is accurate.

In this district Safflower (Kusum) is an object of some little more importance than towards the east. It is never sown by itself, so that no estimate can well be formed of the expense attending its cultivation; but in the tables will be seen an estimate of the quantity of land, that it in part occupies, and of the value of its produce. The great difference in the produce as stated in the tables, depend on the various proportions of the Kusum, that enter into the mixture of crops with which it is sown, and to the various soils that are adapted for each mixture. In this I have only included the flower and oil, although the leaves are also used as a vegetable in cookery; but as this in general is done by the cultivator, and does not become an object of sale, it is too trifling to deserve particular notice. The collecting the flowers does no injury to the seed, as they are pulled off while naturally separating from the young fruit. The oil is always extracted by the farmer, and the seed does not therefore come to mar-

* Several Hindus have now factories for the preparation of indigo, sugar, &c.—[ED.]

ket, so that in the tables, I have calculated the produce by the value of the oil. The seed is put into an earthen pot, which has a hole in the bottom, and is placed over another that is sunk in the ground. A cover is then put over the mouth of the pot containing the seed, and a fire is kindled over and around it. As this burns, the oil falls into the pot below. It is therefore an empyreumatic oil, and is fit only for the lamp of the poor. The seed here is never eaten.

Plants used for rearing Insects.—In the division towards the north-west is reared a little *ricinus* for feeding the worm, that spins a coarse silk. I have nothing to add to what I have already said concerning this subject. In the ruins of the suburbs of Gaur, about 1000 Jujub trees (Bayer) are employed to rear the lac insect. I have not given these a place in the table, partly on account of their being of a very trifling consideration, and partly because they are so much intermixed with other articles, that for a very insignificant article I should have added much to the size of tables, already too voluminous. These trees are scattered through the fields, and the shade which they produce from frequent pruning is so trifling, that they seem to do no injury to the crops by which they are surrounded. The trees are allowed to be eight years old before the insect is applied, and afterwards each tree is pruned once a year, an operation by which in 10 or 12 years it is killed. About the 1st of November from 5 to 20 small twigs impregnated with the insects are applied to each of one-half of the trees, according to its respective size. The insects soon extend all over the tender branches, and cover them with lac. The branches are pruned about the 1st of June, and the trees are allowed until the beginning of next November to recover. About the 1st of June twigs impregnated with the insect are applied to the other half of the trees, which by the beginning of November are covered with the lac, and are then pruned. Thus one-half of the trees is always breeding, while the other half is recovering vigour, and each tree annually produces a brood of insects. A tree gives from 2 to 25 sers (4 lbs.—50 lbs.) and it sells at from 4 to 6 rs. for 40 sers of 72 s. w. that is from 6 to 9 rs. a cwt.; but it is ungarbled, and quite unfit for a foreign market. It is considered as of a quality very inferior to what comes from Asam, and the consumption here does not exceed 200 *mans*,



which may now grow. Formerly it is said, the produce considerably exceeded that quantity, and the overplus was sent to Moorshedabad; but for the three last years, the southerly winds, which are highly injurious to the insect, have been uncommonly prevalent. The tree grows so well every where, and even in the most wretched soils, that the insect not having been carried to places, exempt from southerly winds, is a proof of the slow progress of any improvement in this country, and of the want of enterprise among its inhabitants.

The only cultivation of this class, that is of the smallest importance in this district, is the mulberry, and this is entirely confined to three small divisions in the south-east corner. The quantity reared there is however exceedingly great, and some of the lands are remarkably favourable for the production. In treating this subject also I feel myself much indebted to Mr. Ellerton.

The extreme uncertainty, which attends the profession of rearing silk worms, renders it difficult to form any general estimates concerning the value of the produce. In the account, which I gave of this employment, when treating of it at Maldeh in Dinajpoor, I have mentioned, that the price of the basket of leaves varied at different times from 1 to 30 rs. I then attributed this to variations in the quantity of leaves produced, and in the demand for silk; but from Mr. Ellerton I have learned, but there is another cause, which operates to a much greater extent, and which no doubt prevails in the adjacent parts of Dinajpoor, and, although I did not hear of the circumstance, in all probability operates also in Ghoraghat. He says, that without any obvious difference of management, the worms of a whole vicinity almost entirely perish in certain seasons, and almost all again succeed in others. The extent, in which such failures happen, often reaches over a whole Pergunah or estate, but seldom to such a large measure as to affect the whole lands dependant on a factory, which is probably the reason, why I did not hear of the circumstance, the merchant by means of his agents procuring the cocoons, that he wants, from one place or other; and, if one brood fails with a breeder, his engagements are completed by the next. It thus however often happens, that all the breeders of a vicinity have a most abundant crop of leaves, where there are no worms to feed; so

that the leaves must be sold for a mere trifle, the expense of carrying them to a distance being very great. Again it also often happens, that there is a vast number of worms and a bad crop of leaves, in which case, as the breeders never kill any worms, the leaves rise to an enormous price, having to be brought from a considerable distance. Again sometimes both plants and worms fail, and the cultivator cannot compensate for the scantiness of the crop by its high price, as happens with most other productions. All these circumstances render the value of the leaves totally uncertain; and this seems to be a strong reason why the breeders should never cultivate: for when a breeder cultivates, he seldom has any other means of subsistence, so that one year he may starve, and next year be wallowing in abundance: whereas a man may raise one or two bigahs of leaves, and may besides cultivate a farm with grain, which will ensure him in a subsistence; while the average produce of his mulberry for 3 or 4 years would enable him to clear any arrears of rent, that he might incur, and yield him a handsome profit. The breeder might also no doubt avoid in a great part his uncertainty by never attempting to rear more insects than those, for which he could procure leaves at a reasonable price. He might indeed thus raise less silk, but his returns would be more regular, which in the economy of life is the object of principal importance.

On this account it would seem to be highly desirable, that both cultivators and breeders should chiefly occupy the immediate vicinity of navigable rivers, so that the leaves might be transported in canoes, at a moderate expense, to the villages in which the worms happen to thrive. On this account, as I have said before, the banks of the Mahanonda are peculiarly favourable, and were they cultivated with care, from the Kalindi to the Punabhaha, might probably supply all Bengal. There are no doubt many other situations equally favourable, but by far the greater part of the silk belonging to the Company's factories is reared in situations, that are far less advantageous.

The cultivation is managed exactly on the same plan, that I have mentioned in my account of Dinajpoor, at least near the Mahanonda, and where attention is bestowed; but near the Ganges, especially in the division of Sibgunj, the people



seldom enclose their gardens, many of which, in most seasons are flooded for two months, and although this does not altogether destroy the plantation, one or often two of the cuttings are lost. Neither do the people in that vicinity bestow so much pains on weeding their mulberry, and many seemed contented with merely ploughing the field after the plant had been cut, which is done twice a year down to the ground.

On the left of the Mahanonda it was estimated, that 4 bigahs were sufficient to supply a breeder with the usual quantity of leaves, that he required. In this district I heard it stated, that 5 bigahs were necessary for the purpose, which difference may be explained by attending to the want of care and uncertainty just now mentioned. Notwithstanding this want of care Mr. Ellerton states the expense of forming a new plantation at more than double of what I was informed at Maldeh. The expense was estimated to me at 9 rs. a bigah, while Mr. Ellerton allows 19 rs. The subsequent charges are nearly the same, amounting to between 7 and 8 rs. but then on the total a vast difference arises. Mr. Ellerton allows, that the mulberry lasts only 3 or 4 years; so that even in the latter case the whole charge will be as follows.

First expense, 19 rs. 4 years annual expense, 30, total 49 which divided by 4 years, makes the annual expense $12\frac{1}{4}$ rs. Whereas the people of Maldeh allowed, that their garden, with the care which they bestow, lasts 20 years, which will reduce the annual expense to 8 or 9 rs. a bigah. Perhaps the people here act judiciously, in often rooting up the mulberry, and planting it again in fresh earth, by which the crops are probably more luxuriant: but I am at a loss to account for the enormous expense, which Mr. Ellerton states for the first planting an acre. In no part, that I saw in this district, does there seem to be so much pains bestowed as in Dinajpoo: and in many parts the field is neither enclosed nor hoed. I must however admit, that in this district every operation of husbandry is performed at a more than usual expense, the people getting such low wages, that they have no inducement to exertion. Whatever difference in the expense of cultivation there may be, would appear to be amply compensated by the produce stated by Mr. Ellerton as the average of one bigah of land, which is as follows.

Cuttings, or Seasons. 15th Oct. to 15th Nov.—Leaves, 12 Bundles, value 6 rs. Cocoons, 32 sers. value 16 rs. amount 12 rs. 12 anas 9 pice.

15th Nov. to 15th Dec.—Leaves, 6 Bund. value 4 rs. Cocoons, 20 sers. 16 ½ rs. amount 8 rs. 6 anas.

15th March to 15 April,—Leaves, 8 Bund. value 4 rs. Cocoons, 32 sers. 13 rs. amount 10 rs. 6 anas 5 pice.

15th April to 15th May,—Leaves, 6 Bundles, value 2 rs. Cocoons, 21 sers. value 10 ½ rs. amount 5 rs. 8 anas 2 pice.

15th June to 15th July,—Leaves, 12 Bund. value 3 rs. Cocoons, 30 sers. value 10 rs. amount 7 rs. 8 anas.

15th July to 15th Aug.—Leaves, 12 Bund. value 4 rs. Cocoons, 36 sers. value 9 ½ rs. amount, 8 rs. 8 anas 9 pice.

Total—Leaves, 56 Bund. value 23 rs. Cocoons, 171 sers. amount, 53 rs. 2 anas 1 pice. Average cost, Leaves, value 12 rs. Cocoons, average amount 34 rs. Gain, Leaves, 11 rs. Cocoons, 19 rs 2 anas 1 pice.

The produce of leaves at Maldeh was stated to be 60 loads, not very different from the 56 here allowed, as the rope there was 80 cubits, while here it is only 75; so that ¼ nearly must be added to Mr. Ellerton's calculation, to bring it up to the produce, expense, and gain of a bigah Calcutta measure. At Maldeh these leaves were only valued at 15 rs. while here they are valued at 23, leaving an enormous net gain of 11 rs. a bigah, supposing the farmer to hire men to perform every part of the labour; so that a person, who rented 5 bigahs (about 1 ½ acre), without any farther labour than superintendence, might live like a very easy farmer.

In Maldeh it was allowed, that 1 bigah produced on an average 82 ½ sers Calcutta weight of cocoons, which, to say the truth, I was almost then afraid to mention, but here the produce amounts to 171 sers. I allowed a man, who reared worms, in addition to the value of the plant, 4 rs. a bigah for extra charges, besides his own labour, and that of his family. Mr. Ellerton allows 11 rs. a bigah for this head, probably charging the wages of the family, and yet leaves a net gain on every bigah of 19 rs. on the cocoons, and 11 on the leaves or in all 30 rs. on the bigah. I confess, that this far exceeds any estimate, that I procured from the natives, or any that, until I was informed by Mr Ellerton, I considered as probable. The highest account, that I received in this district was from a chief breeder (Mandal Basaniya) at Bholahat, and will be afterwards detailed. He allowed 21 rs. for the produce of leaves from one bigah; and 134 ½ sers (75 s. w.) of silk worth 40 ½ rs. and equal to 126 sers



Calcutta weight; but were I to take the average of the accounts, that I received, it would not differ much, from what I have stated at Maldeh as the produce of cocoons. These here would amount to 85 Calcutta sers a bigah, in place of $82\frac{1}{2}$ which were there allowed. The opportunities of being informed, that Mr. Ellerton had, were so much better, than those which were offered to me, that I would willingly adopt his opinion in preference to that, which I had previously formed, were it not for one circumstance. Mr. Ellerton in forming his estimate seems to have proceeded merely upon the number of Bigahs of leaves, that were actually cut for feeding worms, and does not include, what was totally lost by being flooded, or by want of demand, owing to the failure of the worms, in which case the leaves are often not saleable, and are given to the cattle. Making a deduction for these, I do not think, even allowing for the difference occasioned by a more frequent renewal of the plant, that we can allow more in Bholahat and Kaliyachak for the produce of a bigah than 20 rs. worth of leaves, and 4 *mans* of cocoons worth 50 rs.; and in Sibgunj, where the land is low and badly cultivated, $\frac{1}{2}$ less may be fairly presumed to be reasonable.

The Company's factories at English Bazar and Junggipoor are said by the natives to make advances to about one half of the breeders in this district, who are stated to amount to 4700. At the former factory, I believe, none but the best cocoons are at present taken, because the resident deals only on the Company's account. Whether or not the Resident at Junggipoor deals in silk on his own account, I did not learn; nor had I any opportunity of knowing, whether or not he took any cocoons of an inferior quality. As the Company takes none but the best cocoons, it pays 16 rupees for the *man* of cocoons; but the native merchants of Bholahat say, on an average of good and bad, that they give 12 rupees exactly as was stated at Maldeh; but the weight there was 85 s. w. the ser; here it is 75.

All the cocoons, that are rejected at the factories, and the whole of that is reared by those who take no advances, is spun by the natives after the manner, which I have described in giving an account of Maldeh. Their filature machine (Gayi) wants the improvement for twisting the fibres, as they are wound from the cocoon, which has been introduced

in the Company's factories; but in other respects is on the same plan, and the old Bengalese fashion of small hand reels (Layi) has been totally abandoned. The cocoons wound by the natives, as in Maldeh, are most usually, if not always killed by exposing them to the heat of the sun, a practise that is condemned by the Company's instructions. In order to shew the various produce and value of cocoons, managed according to the native manner of filature, I give the following table procured at Bholahat from a principal breeder, who rears plants, feeds worms, and spins the silk. This he gives as the produce of a bigah less than that of Calcutta, so that to procure the produce of one of these we must add one seventh part to what is here stated.

Cutting season, 15th Oct. to 15th Nov.—Leaves, 10 bundles, value 5 rs. Cocoons, 18 $\frac{1}{2}$ ser. 75 s. w. value 7 r. 8 a. Silk, 1 ser 80 s. w. 4 chht. value 9 rs.

15th Nov. to 15th Dec.—Leaves, 10 bund. value 5 rs. Cocoons, 18 $\frac{1}{2}$ ser 75 s. w. value 7 r. 8 a. Silk, 1 ser 80 s. w. 4 chht. value 9 rs.

15th March to 15th April.—Leaves, 12 bund. value 2 r. 4 a. Cocoons, 25 ser 75 s. w. value 7 r. 14 a. Silk, 1 ser 80 s. w. 8 chht. value, 11 rs.

15th April to 15th May.—Leaves, 6 bund. value 1 r. Cocoons, 13 ser 75 s. w. value 2 r. 6. a. Silk, 9 chht. value, 3 r. 8 a.

15th June to 15th July.—Leaves, 20 bund. value 5 r. Cocoons, 40 ser 75 s. w. value 10 r. Silk, 1 ser 80 s. w. 12 chht. value 14 rs.

15th July to 15th August.—Leaves, 10 bund. 2 r. 12 a. Cocoons, 20 ser 75 s. w. value 5 r. Silk, 14 chht. value 7 rs.

Total, Leaves, 68 bund. value 21 rs. Cocoons, 134 $\frac{1}{2}$ ser 75 s. w. value 40 r. 4 a. Silk, 7 ser 3 chht. value 53 r. 8 a.

In the amount of the different cuttings there is an apparent contradiction between this and Mr. Ellerton's table; but this arises from that gentleman's table being constructed from the books of a factory dealing only in the better kinds; so that his produce in the October and November cuttings is greatest, while, the Company taking a large proportion of the fine cocoons, very few of these go to the native traders. It must farther be observed, that here it is alledged, that about 17 $\frac{1}{2}$ ser of cocoons give only 1 ser of silk, while at Maldeh about 15 were reckoned sufficient, which will of course make the profits of winding less than was there stated. The wound silk was there also valued higher, and the cocoons lower, which will make a still greater reduction on these profits.



I shall suppose, that one half is wound in this manner, and partly manufactured and partly exported. A considerable part of the cocoons, go from this district to Junggipoor; and, as I am not acquainted with the charges, incurred at the factory in English Bazar in preparing the silk spun there, I shall consider one half of the cocoons as exported from hence to the Company's factories.

This being premised, the value of the leaves at 20 rs. a bigah for Bholahat and Kaliyachak, and at 16 for Sibjung will be 4,40,000 rs. The whole quantity of cocoons will be 88,000 mans worth 11,00,000 rs. Of these I allow one half to go to the Company's factories. The remainder is spun by the native flature, and, according to the estimate given at Bholahat, rejecting small numbers, will produce about 79660 sers of silk, worth 5,93,000 rs.

Plants cultivated for Fattening Cattle.—Under this head I might no doubt have included several of the grains, the straw of almost all which, in some parts of the district, is given to cattle, and some few are fed with pulse or the cake from which oil has been expressed; but as these grains are chiefly reared for the use of man I shall here confine myself to the carrot. In a few places, and to a trifling extent, as will appear from the tables, this is reared, almost entirely for the use of the milch cows or carriage oxen, that are kept by the wealthy. The custom might become highly advantageous, were the natives sensible of the importance of manure, and were the cattle fed entirely in the house, so that all the manure might be preserved. The carrot is well known to be an excellent food for cattle; but it does not seem to thrive so well here as in Europe. Turnip I have no doubt would thrive much better; but whether or not the natives would like the taste, which it communicates to milk, I cannot say. It is probable, that it would not be perceived, as the people here never use milk, but what has been boiled and kept in such dirty vessels, that it has acquired a flavour strong enough to overcome that communicated by the turnip.

While on this head I may observe, that two plants grow spontaneously on the fields of this district, and flourish in the early part of spring, and end of winter, when the pasture is most scarce. Both seem admirably fitted for making artificial meadows or pastures, and might supply the wants of



the cattle, which are to the utmost degree urgent. One of these plants is the *Medicago lupulina*, well known to the farmers of Europe; but for which the natives have no name. The other is the *Melilotus alba* of the Encyclopedie, which the natives call Ban Methi.

Implements of Agriculture.—The plough does not differ materially from that of Dinajpoor,* and nearly about the same proportion have no iron. A small number is wrought by cows, and a great many have for each four or even six cattle, and the cattle are somewhat better. The ploughmen are here exceedingly slothful, and I believe all the operations of husbandry are more expensive than in Dinajpoor or Rongopoor. If there are two cattle only for the plough, the cattle labour only until noon, usually beginning at nine o'clock. In the afternoon, in the rainy season, the ploughmen cut grass for the cattle, at other seasons they repair the houses, and do small jobs; and, when there is no work for the cattle, they occasionally weed or sow. If there are four cattle, the ploughmen in common only work these, and assist to procure grass. If there are six oxen, they give no assistance to the farm, except on days when the cattle do not work, and a person must be kept to cut grass and tend the cattle. The usual rate of labour for each pair of oxen is three hours a day, and nine hours ploughing a day is considered as exceeding hard work, without any additional labour.

In the eastern parts of the district the implement like a ladder, called Mayi, is used to smooth the field; but in the western parts a thick narrow plank, eight or nine feet long, is used in its stead, and is the most awkward machine that I have ever beheld. There is no handle to it, as there is to the planks used for a similar purpose in the south of India; nor have the natives had the ingenuity to fasten a beam to it, by which it might be drawn. They tie ropes to the necks of the cattle, usually two pair to each plank, while two men stand on this to give it weight, and to save themselves the trouble of walking; and they secure themselves from falling by holding an ox's tail in each hand; and by twisting this they can guide and accelerate the motions of the cattle. So totally devoid of ingenuity have they been, that they have

* See Vol. 2, Book 3.



not fallen upon any contrivance to fasten the rope to the upper side of the beam, so as to prevent it from rubbing on the earth; but fairly tie it round the plank, so that, owing to the friction, an ordinary rope would not last a moment. They therefore have been under the necessity of employing the tanners to make ropes of hide, which resist the friction; but come high. The tanner is usually paid in grain, and the making these ropes is the chief employment that they have. This plank is called a Chauki.

The Bida or rake drawn by oxen, in this district also, is in universal employ, and in some stiff soils the natives have given it iron teeth. These are a great deal too slight, and one of the greatest improvements, that could be made on their manner of tillage, would be to add strong teeth to this instrument. The implement, however, with iron teeth costs $1\frac{1}{2}$ r., which is a very serious expense, where stock is at so low an ebb.

The reaping hook (Kachiya), the weeding iron (Pasan), hoe (Kodali), hatchet (Kurhali), and bill (Dao) are much the same as in Dinajpoor. A large wooden pestle and mortar (Ukhali) is the implement most commonly used in families for separating the husks from rice, and it is chiefly those, who clean rice for exportation, that use the mortar (Dhengki), the pestle of which is raised by a lever. The latter performs the operation with less labour, but is more apt to break the grain. The sugar mill and boilers are of the same kind as in Dinajpoor.* Although there are many carts, they are never employed in agriculture, either to carry out manure, or to bring home the crop. The oxen, as in Dinajpoor and Ronggopoor, everywhere draw by a yoke passing over their neck. There is no contrivance to prevent it from galling them, and they usually suffer much.

Manure.—This most valuable branch of agriculture is almost as totally neglected, as in the eastern parts of Ronggopoor. Cow dung is the most common fuel. Nor is its quantity for manure ever augmented by litter. In most places, therefore, the greater part, and in some places the whole of what can be collected, is reserved for burning, and the usual manner of manuring the few fields, where any such thing is

* See Vol. 2, Book 3.

attempted, is for two or three successive nights to gather a herd of cattle on a narrow space. This is continued in turns, until the whole field receives a scanty supply. Tobacco, kitchen gardens, mulberry, and sugar-cane, are generally allowed a little cow dung and ashes, but not in every place, and everywhere in so scanty a proportion, as to produce very little good. Oil cake and fresh earth are given to betle-leaf; and the latter to mulberry. The ashes are given to the crops of grain that grow in winter; but in some places are totally neglected.

The spring rice is watered by the rude machine called Jangt, which I described in the account of Dinajpoor,* and gardens are watered by the lever called here Dab, constructed on the same principle with the Pacota or Yatam of Madras, but infinitely more rude, and less powerful. No other kind of artificial watering is used. It appears to me very practicable, in seasons when the rains were scanty or failed to effect much good by throwing dams across the smaller rivers, which come from Morang, and spreading their water over the fields by means of canals. In ordinary years even this might be applied, to great purpose, in rearing winter crops of high value, such as cotton, which would then be in a great measure independent of season. A work of such extent, however, could only be raised by the Zemindars, and those of this district must acquire habits very different from what they now follow, before any such laudable exertions could be reasonably proposed.

Floods and Embankments.—In this district there are no embankments made on a large scale with a view to exclude floods from the fields; and, as I have said in Dinajpoor, there is no reason to regret the want. The tenants in some places have united to form small banks, on the plan which I mentioned in Dinajpoor, and which answer very well; but were the Zemindars to exert themselves, much advantage might ensue from extending the practice.

In a few places towards the north-west the people, in imitation of those in the adjacent parts of Ronggopoor, have paid some attention to making banks to secure the more equal distribution of water, by preventing it from draining soon

* See Vol. 2, Book 3.



from the higher lands, and from drowning the lower. For Bengal, in general, this neglected kind of economy would be the most valuable improvement, and in no part would it be more useful than in the north-west and central parts of this district, where it is totally neglected. I have nothing to offer on this interesting subject, in addition to what I have already mentioned in the account of Ronggopoor.

Domestic Animals.—In the account of the condition of the people, and in the Appendix will be found an account of the tame elephants and horses, that are kept by the natives of this district as belonging to their personal equipage. Here a good many ponies are used for the carriage of goods. They are the most wretched creatures that I have ever seen, and are valued at from 3 to 5 rs. They carry from 2 to 3 *mans*, or from 164 to 240 lbs. Their keeping costs nothing, except a rope to tie their feet together, when they are turned out to pasture. Their number, and that of all the other kinds of cattle will be seen in the Appendix.

At Puraniya, and at the cantonments at Krishnagunj, from 15 to 20 asses are kept by the washermen as beasts of burthen. There are few countries in India where the stock of cattle of the cow kind is of more value. They are of the same species with those of Dinajpoor, but in general are of a much superior breed. There are many small cattle for the plough, but the number of those fit for carrying loads, or for going in a cart is much greater than towards the east, and a great many of such as draw the plough would there be considered as too valuable for that purpose, and would be reserved for carriage. The pasture and other means of subsistence, which the natives afford them, would appear to be still more inadequate to their support, than what falls to the share of the cattle in Dinajpoor, on which account their strength is not in proportion to their size: but the oxen of this country, when tolerably fed, become strong, and supply the greater part of Bengal with cattle for carts, and with the better kind that are employed by traders to carry loads. I had been led to expect, that the fine cattle, which are employed for draught in the Bengal artillery, were bred in this country; but I saw scarcely one such, and the people said that they come from the west. The number of such must therefore be at any

rate trifling, although these cattle are usually said to come from Puraniya.

In the western parts of the district the people give good prices for breeding bulls, that is from 12 to 15 rs.; but this is little more than what a good ox will cost, the bulls, however, are fine animals, one will serve 100 cows. The breed would still improve more, did not the Hindus of rank work many bulls, which often, when very young, impregnate the females, and produce a puny breed. A few of these people consecrate bulls, which turn out fine animals for breeding, although they are not quite so pampered as those of the lower parts of Bengal, and are not numerous. In the eastern parts bulls usually sell lower than oxen, and in many parts there every one is wrought. Except towards the north-east cows are not used in the plough, which tends very much to improve the breed. Wherever this practice exists to a considerable extent, the cattle are of the same kind as in Ronggopoor, and those of the south-east resembles those of Dinajpoor.

An estimate of the whole quantity of milk, that the owners get, will be seen in the Appendix, together with its value. In this table I have not thought it necessary to divide the cows into three kinds, as I did in Ronggopoor, because in the first place there are very few cows, which are kept up, and regularly well fed on grain; and secondly because there are no cows, which are constantly kept in the Bathan, and very few that are not kept in that manner for some part of the year.

The pasture in this district consists of the following descriptions: 234 square miles of high fallow land, and 482 square miles of high land, that is not cultivated, with about 186 of broken corners, roads, burial grounds, and the like, that are among the higher fields. All this is high, and produces little or nothing from December until May; but in the interval is pretty good. Some of the high waste land is preserved from being pastured, and the grass is reserved for thatch. This may amount to about 80 square miles, and must be deducted from the above, leaving about 822 of clear high pasture. Besides in the high lands, there may be 93 miles covered with woods and bushes, which at all times preserve some moisture, but at no season give good pasture.



Then there are about 78 square miles of low land that is clear, or that has been deserted, and has not yet been overgrown, and 100 miles of roads and broken corners in the low parts of the country. In the floods a great part of this is useless, but it sooner becomes good, and it retains its vegetation longer than the higher land, so that upon the whole it is as useful. Then there are 389 miles of low land covered with reeds, bushes, and trees. Some little part of the former, in the rainy season, produces fresh shoots, that are highly seasonable; but the remainder is then totally useless. In the dry season again this is a grand resource, as the higher plants preserve a moisture, that enables a low vegetation to subsist; but it never becomes so good, as the clear pasture is in the rainy season. Finally, in December and January, the rice stubble is a grand resource, especially in the low rich lands near the Mahanonda and its branches. These resources would be totally inadequate for the immense stock that is kept, were it not for the wilds of Morang, belonging to Gorkha. The woods there, at the foot of the mountains, always retain some degree of freshness, and the rains of spring are there usually early and copious, which brings forward a very strong vegetation, while almost every thing here, even to the bamboo, is perfectly withered. In Morang the owners of kine give a male calf to the Gorkhalese officer for each herd (Tatti) of 5 or 600 head. Each pair of buffaloes pays from 16 to 10 anas. In some parts also of this district, the Zemindars, although in other respects rigid Hindus, have had sense to take a rent for pasture. This custom prevails all over the parts that belong to Serkars, Puraniya, and Mungger; but in Jennutabad, Tangra, and Tajpoor, no rent is taken for the pasture of kine. It is perhaps to this circumstance, that a good deal of the quality of the cattle is owing, at least, where the rent is taken, it so happens, that the cattle are by far the best.

In the rainy season almost all the cattle live in the villages; and, where the pasture is plenty, they are allowed no addition, except such as are used in carriages, or a very trifling number of milch cows, that belong to very rich men. Cattle of both these descriptions are allowed a little straw, grain, or oil-cake. At this season the cattle are in very tolerable condition.

In parts, where the country is very low, as many cattle as can be spared, are sent in the rainy season to higher parts, where they pay for pasture. The remainder is kept at home, and is fed on grass, which grows chiefly on the little banks that confine the water on the plots of rice, and which springs with great luxuriance, and is not very coarse, being mostly different species of *Poa* and *Panicum*, that are of a soft succulent nature. In these parts there is also a greater abundance of rice straw, and some low lands near the great rivers produce reeds, which, when young, are a valuable fodder, and pay a high rent.

In the dry season the high pastures become perfectly brown and naked, and afford little or no nourishment. Such of the cattle as can be spared are then sent away from the villages, and do not return until the early rains of spring have restored vegetation. A part of the cattle from the higher parts of the country, go then to the low banks of the Ganges and Kosi, where there are many reeds and tamarisks, that shelter some short herbage from the scorching rays of the sun, and afford a scanty pasture; but by far the greater part is sent to Morang. None are kept at home; but those absolutely necessary for labour, and the cows which are in full milk. These are fed evening and morning, and necessity in many parts of the district, has induced the natives to give them all sorts of straw, even those of different kinds of pulse, which in any other part of India that I have been, and in some parts even of this district, would be considered as insanity. In the eastern parts of the district the people strongly adhere to these prejudices, and never give any forage, except rice straw, and the empty pods (*Legumina*) of pulse; but they venture to cut the stubble (Nara) of rice for their cattle, and do not hesitate to give them the tops (Poyal) of summer rice, after the grain has been thrashed.

From the inundated parts of the district there is less occasion in the dry season to send away their cattle, and those which were sent away in the floods, return as these subside. The wastes are then accessible, and retain a moisture that enables them to produce a wretched pasture, and the quantity of rice straw is very great.

The cattle when not at home, even in the rainy season lie out, although the keepers are paid higher wages than are



allowed in Dinajpoor and Ronggopoor, where they always construct good sheds, but here materials are scanty. In some parts, especially towards the west, even the cattle that are in the villages are not brought under cover, but are tied in the farm-yard, and fed from a large trough of clay or basket-work into which their straw or grass is put. In most places the cattle occupy as many houses as the people.

The cattle which are absent from their village, are entrusted to men of various castes, that make the tending herds, and preparing milk the principal means of their subsistence. Sometimes they are paid by so much the head for each grown cow, the young cattle going for nothing. The rate in the south is 1 pan of cowries a month. This is commonly the case when several small farmers unite to hire a man to tend the cattle, which they send to the wilds. The great proprietors who have a sufficient stock to employ one or more men, usually pay them by yearly wages, which in the south are usually 3 or 4 rs. a year with almost 11 *mans* (1 ser 96 s. w. a day) of rice, a blanket, a Dhoti, a turban and pair of shoes. Each man takes care of 50 head.

The cows in full milk are seldom entrusted to these people; but are kept at home, until the quantity of milk is reduced, to what is considered as alone sufficient for the nourishment of the calves; and where the breed is good the natives allege, that they take very little milk at all, leaving almost the whole to the calf; for the price of oxen has of late risen so much, that it is considered more profitable to rear these of a good quality, than to attend chiefly to the milk. Even in the rainy season in Dimiya, where the herds are immense, cows' milk is extremely scarce, and is seldom sold. Most of what can be spared from the calves is used in the families of the proprietors.

The cows in the western part of this district produce less advantage to the farmers by their milk, than those of Dinajpoor, but a great deal more by their calves. If we reckon the expense of pasture, forage and tending, with the interest of the price of the stock, there will little remain. The selling cattle being considered by the natives of rank, who in these parts are the chief owners, as very shameful, if not sinful, no satisfactory account of the profit from rearing young oxen could be obtained.

The low castes in general have not so many cows as will keep up their own stock of labouring cattle, and it would be as uncivil to ask a man of rank the profit that he made by such means, as in England to ask a gentlemen the sum he had procured for a rotten borough. Sixteen cows, however, will on an average produce 80 calves, of which perhaps 64 may come to maturity. Of these perhaps 36 may be oxen, and as the good cattle kept by rich people, may be considered as worth 8 rs. a head, the whole value may be 288 rs. or 18 rs. for each cow. She is kept for this 14 years. The female calves keep up the stock, the milk will do no more than defray the expense and interest of the capital, so that $2\frac{1}{2}$ rs. may be taken as the usual annual profit on each of these good cows mostly belonging to the high castes; or to those who tend cattle. In the east part of the district the people take more milk from their cows; but have less profit from the calves, and indeed in some parts these do not keep up their stock.

The cattle are here subject to the same diseases as towards the east, but the violent attacks do not seem to be quite so frequent. The people give them a small quantity of salt, and could more be afforded, it would probably contribute to render them more healthy. Property in buffaloes is considered as highly respectable, more so even than that in kine; because no man now a days, can treat the sacred animal in the manner that is its due. Rajas, totally forgetful of their duty, charge rent for pasture, the herdsmen defraud the owners so much, that no profit is to be made of the milk, which is the only lawful advantage, and the owners have therefore been under the necessity of selling the calves, and in order to render them more fit for labour, have even consented to their being castrated; some have even proceeded to such lengths as to have sold cattle that were useless, as not breeding, or as being too old for labour, to monsters, who they had sufficient reason to think, would again sell them to those who might murder the innocents for the sake of satisfying their shocking appetites for flesh. Brahmans resist all these innovations, as far as they conveniently can, but with no great success, the lucre of gain in these degenerate times, too often overcoming the sense of propriety. It is however to the sacred order, that most of



the bulls wrought in the plough, owe the preservation of their sexual dignity.

The buffalo is the animal, which chiefly supplies the people of this district with butter. They are not in general so fine as those of Ronggopoor, which seems to be owing to fewer of them being impregnated by wild males. In the south-east corner, where no tame males are kept, the buffaloes sell from 32 to 40 rupees a pair, while those, that go to Morang attended by tame males, average no more than 28 rupees. On the borders of Dinajpore they are only valued at from 16 to 20 rupees, although they are of a very good breed. They are managed much in the same way as cows. In the rainy season they are kept in the villages: in the dry most are sent to Morang, or to the reedy banks of the great river, and never receive any food except pasture. Many of the females however, which are in full milk, are kept at home, the people having little confidence in the honesty of those who tend them. Buffaloes are always reckoned by the pair, consisting of two adult females with their calves, and the males that are necessary for breeding, so that young and old, male and female, every pair may amount to 3rs. a head. The male calves that are born, are said to be considerably more numerous than the females, and are usually killed, soon after they are calved, very few being here reserved for sacrifices, or for labour. The female buffaloes, therefore, that have had male calves, give much more milk to their owners, than those which have had females, because the latter are kept, until they grow up, and are allowed a great part of their mother's milk. In the south-east corner all the males are preserved for sacrifice, until their horns shoot. The females therefore, in that part, apparently give less milk, although they are finer cattle. A flock of 40 pair of buffaloes in the south, requires the following charges:—

2 Keeper's wages, 8 rs.; Rice, 18 mans, 10 sers 12 rs.; 2 Blankets, 2rs; 2 Wrappers, 2 rs.; Salt for the buffaloes, 12 rs; Bells and rent 1 to 1½ rs. 10 rs. Total 46 rs.

Out of 100 female buffaloes, 40 give annually milk, on an average 7½ mans, (80 s. w. the ser), worth so many rupees. The whole net proceeds therefore amount to 300 rs., deduct

the expense of care, and there remains 254 rs. for profit and interest on a capital of 1200 rs. This is so much less than the account, which I procured in Dinajpoor, and that given in the remarks on the husbandry of Bengal, where for every full grown female buffalo in a herd, the owner is supposed to receive 10 *mans* of milk, that I imagine the natives have concealed part of their profit, which in that case would be enormous. In every part it was generally agreed, that the buffalo produces a calf once in the two years only, while in Dinajpoor I allowed six-tenths to be in milk, and the author of the remarks allows two out of three; nor any where here would the owners allow more than $7\frac{1}{2}$ *mans* of milk for the average produce of each buffalo cow in milk, that is of $3\frac{1}{2}$ *mans* of milk for each adult female in the herd, and in many places, they reduced the produce to 3 *mans*. Although in the tables of produce I have adhered to the reports of the natives, because I have no sort of proof of its being erroneous; yet I have little or no doubt of the accuracy of the opinion of the author of the remarks, not only out of deference for the opinion of a person exceedingly well informed, but because it agrees so well with what the people of Dinajpoor admitted.

In the Appendix I have estimated the value of the dairy by the milk; but it is usual with the owners of buffaloes to receive 1 ser of Ghi or prepared butter for every 12 sers of milk. The Ghi is delivered to him at his house; and is often paid for by the merchant, before he receives it.

In common years the young female buffaloes, that arrive at maturity, are more numerous than those which die, and the herds increase; but now and then distempers occur, which reduce the flocks far below the medium standard. Goats are pretty numerous, and are of the same kind with those in Dinajpoor. I have nothing to add, to what has been said concerning them, in giving an account of the districts already surveyed. The kids for sacrifice, and a few wethered males are the only source of profit, and in general sell lower somewhat than in the two last mentioned districts. In this district there are two breeds of sheep. The Bhera Bheri, or male and female of the one kind, are the same with those of Dinajpoor, and are of the kind, that seems original to Bengal. They are diffused in small numbers through most parts of



the district, are managed as in Dinajpoor and Ronggopoor, and the value almost entirely depends on the young males produced for sacrifice. The people never castrate them. The lambs are nearly of the same value with kids.

In a few parts their wool is made into blankets, for which it is very fit, as the finest in Mysore is made from the wool of this breed. This kind, as less subject to disease than the following, deserves encouragement.

The other kind of sheep called Garar has a long tail, and resembles the European breed more than any sort, that I have seen in India, except some of the kinds in Nepal. The Garar has small horns, and differs chiefly from the European breed in the form of its head. This sheep, so far as I can learn, is originally from the hilly country south from Mungger, which forms part of the Vindhya mountains, but whether the breed extends all over the tract so named, I have not yet learned. As this is the only breed, of which Europeans can procure wethers, large herds are sent to Moorshedabad and Calcutta, and some have from thence been sent to Madras, Bombay, and other places, where tolerable mutton was not otherwise procurable, and were there called Bengal sheep, although they are not of that country, but are imported from Behar. In the parts of Serkar Behar, that belong to this district, are a good many flocks, belonging to people, whose ancestors came from the vicinity of Mungger. Last year by far the greater part was carried off by a very fatal distemper, so that the number in the Appendix appears trifling; but probably in a few years, all the females being reserved, the number will be considerable.

The management of these sheep is conducted on a much better plan than that of the small sheep of Bengal, and is nearly on the same footing with that adopted in Mysore. The shepherds all weave blankets, and they castrate the male lambs to sell, usually when they are rising three years old, and they procure from the females a small quantity of milk.

A tup is kept for each score of breeding ewes, and a young male is kept to supply his place. The ewes have their first lamb, when two years old, generally in the beginning of the fair season. They breed once a year, and very seldom have at a birth more than one lamb. They breed until 7 years of

age, and are allowed to die a natural death. Each gives 4 or 5 lambs. The males are castrated at 4 months old, and, when rising 3 years old, are sold, at about 14 rs. a score, to traders who come from Moorshedabad. Older are seldom procurable. At 2 years old these sheep have 4 cutting teeth, at three years old they procure 6, and at 4 years they acquire 8; but here such wethers can very rarely be purchased. In spring the lambs are shorn, and each gives $\frac{1}{4}$ ser of wool, which is much finer than the subsequent shearings. The second shearing also is not bad; but all the following are very coarse. The grown sheep are shorn three times a year, each giving on an average $\frac{1}{2}$ (72 s. w. the ser), which sells at three sers the rupee. Each sheep therefore gives annually about 22 ounces of wool, worth 4 anas.

In the vicinity of Sayefgunj a large village of these shepherds, before the distemper, had about 4000 breeding sheep. They sold annually about 1000 wethers worth 700 rs., and their wool, at the above rate, would be worth 1000 rs. They had besides a little milk, but scarcely deserving notice. Their principal profit, however, was in the manufacturing of the blankets, to which I shall have occasion to return. During the rainy season the sheep are kept on the dry high pastures, in the dry they are driven to the banks of the great rivers, where they find, among the reeds and bushes, some short herbage. They receive no other food, but each sheep gets monthly one-sixteenth ser (Ziis) of a coarse Glaubers salt (Khasi Nemak), which comes from Tirahut. Its price is about 50 sers a rupee, so that 66 sheep cost about one rupee a year. The whole village gives for pasture to the value of only 8 rupees, paid in blankets. A man takes care of 300, and is allowed 36 rs. a year. The charges therefore come to about half the value of the wool. The remainder, and the wethers sold off are the profit.

An estimate of the number of swine will be seen in the Appendix. Curs on the same footing as in Dinajpoor are very numerous in this district. A few have been trained to pursue the wild hog, and to bring him to bay, until their masters come up, and spear him. This sport is entirely confined to the lowest castes, who hunt for the pot. Near the capital several natives keep lap-dogs, of the European breed, of which they are very fond. Poultry are much



scarcer than in Dinajpoor; geese are almost entirely kept as pets, there are very few ducks, and it is only the Moslems, who will contaminate themselves by keeping fowls. In most places however pigeons are procurable.

Fences.—Still less attention has been paid to this valuable part of husbandry than in Dinajpoor; so that in most places there is no sort of attempt to enclose any thing but the yard, which surrounds the hut; and the fences, for that purpose, are usually very slovenly, consisting of dry reeds placed on end, and tied very rudely together. This is intended more as a screen to obtain privacy, than for any other purpose, and assists powerfully in spreading the flames from one hut to another. In many parts kitchen gardens are quite defenceless, or are guarded merely by a few dry bushes, stuck upon a small bank, that has been thrown from a ditch, and is of little or no efficacy. In the south east corner, however, there are round the mulberry fields many excellent ditches and banks, and some of them are planted with a kind of quickset hedges; but, although the returns are so great, and are so much increased by fences capable of excluding floods, in many parts the mulberry is left quite open. It is only in a very few other places of the district, that some quickset hedges are to be found about villages, and the plants, that are most commonly chosen, can scarcely be said to make a fence; for the only two that I observed at all common, were the *Jatropha Curcas* (Vagh Erengri) and *Justicia Adhatoda*, (Harbaksa, or Tusi, or Rosa) both thin growing bushes without thorns, Near Bholahat the trees called Mangdar (No. 84) Jiga (No. 90) and Amra (No. 92) are also used. Cuttings readily take root; but they do not make close fences. In the same vicinity the Ratan and Jujub, both prickly shrubs, are sometimes used in the hedges; but both grow in a straggling manner, and do not appear to be well fitted for the purpose. To enclose a field of one bigah ($\frac{1}{2}$ of an acre) requires there 5 rs. for a ditch, and 2 rs. for a hedge. To keep the fence in repair will annually cost half as much. This is the statement of the natives, who here exaggerate the expense of every operation. I no where saw round the same field a hedge and a good ditch; nor did I ever see a hedge, that was a good fence.

The want of fences is a great evil, and the cattle commit



uncommon depredations. A large proportion of them belong to the pure castes, who in this district enjoy high privileges, and are uncommonly insolent to the vulgar. Their cattle trespass with much impunity, and the poor of course retaliate, as far as they dare, by stealth, so that the community is a great sufferer. The people, who tend the cattle, seem to be sent rather with a view to prevent them from straying, than to keep them from destroying the crops, at least I saw many instances of a most culpable neglect. I have here very seldom observed cattle tethered, which in an open country is a very useful practice.



CHAPTER VII.

FARMS, RENTS, TENURES, &c.

In this district the nature of farms is very much affected by the rank of the tenant. All the high or pure tribes, that is, Brahmans, Rajputs, Kayasthas, Saiuds, Pathans, and Moguls, have a right to occupy, whatever lands they require for their houses and gardens, free of rent; and the same indulgence is granted to men of both religions, who pretend, that they are dedicated to God, such as Vairagis, Sannyasis, Vaishnav, and Fakirs. Were these men to confine themselves to the duties of their profession, and to qualify themselves, by the nature of their studies and pursuits, for being useful in the instruction of the people, in the management of police, revenue and justice, and in the exercise of arms, such an indulgence might be highly commendable, and was probably granted on such principles; but as matters stand at present, the indulgence seems to be thrown away, or rather to be highly injurious to the state. Perhaps of the whole people of this class in the district, not one person in three can read even the vulgar tongue, and the numbers of those, who have received any thing like a liberal education, even according to the ideas of the country, is altogether insignificant. They are totally destitute of military spirit, even sufficient to induce them to act as private soldiers; and those, who are most distinguished, acquire only the art of keeping accounts, or perhaps the knowledge of a few forms used in the inferior courts of justice, and of some marvellous legends, and an abundant stock of chicane. By far the greater part are mere illiterate peasants, with however a great degree of haughtiness towards their inferiors, and a very uncommon share of indolence and timidity. As however they are highly respected, and as most of the lands are under the management of such of their kinsmen as can keep accounts, under this pretext of land for houses and gardens,

besides the large proportion of land free of taxes, which they possess, they have contrived to seize on a great deal belonging to the assessed estates. In Gorguribah I was assured by the native officers, that they thus held one-fourth part of all the cultivated land, that belonged to the Zemindars. This was probably a great exaggeration; but there is no doubt, that they have become a heavy tax on these proprietors; and justice would seem to require, that some stop should be put to their progress. Every man, who has of his own lands free of taxes, might be prohibited from availing himself of his privilege, and some reasonable modus for the extent might be perhaps fixed. They are not indeed considered as entitled to plough any fields, which they thus hold, but they form plantations, which they call gardens, and which yield them a small profit, though to the public this occasions the loss of what the land might have yielded, had it been cultivated, and which would have been much more valuable.

The respect, shewn to the privileged orders, has however been productive of a much greater evil to the landlords, and to the public. I do not indeed know, that this has been sanctioned by any law; but in practise it is universally admitted, that such persons, when they rent land, and are to pay a less rate, than has been fixed, or is usual for farmers of a low birth. The reason assigned for this is, in my opinion, a sufficient argument for totally suppressing, or at least discouraging the practise. It is alleged, that, as they cannot debase themselves by personal labour, and must hire servants, they cannot afford to pay so much rent as low fellows, who are born to labour. This, I would say, implies that they never should undertake the business.

In Ronggopoor I have indeed stated, that such persons, with great advantage to all parties, have taken leases of a large extent of land; but then they do not attempt to cultivate themselves, and let out their lands at rack rent, and they pay much more to the Zemindars, than, considering the usual inactivity of such people, they could otherwise secure. Here on the contrary under tenants are seldom allowed, especially where this practice is carried to the greatest extent. These tenants of high birth keep large stocks of cattle, and hire servants to labour their farms. Owing to their pride and sloth, they are in general so excessively de-



frauded, that they could not afford to pay a fair rent, and even at the low rate, which they give, they could not live, unless their herds of cows and buffaloes gave them assistance, and unless many of them found a resource in begging, which according to their ideas, it must be observed, is the proper and most honourable manner, in which many of them can live, and perfectly consistent with their notions of dignity. Their herds of cattle are a great nuisance to their low neighbours, who presume not to complain of the encroachments, which they make; their lands are badly cultivated; and they live at the expense of the landlords, as paying a very trifling rent; yet, as destitute of science, of activity, or of the wealth which encourages the industry of a country, they are a mere useless burthen of society, without contributing to its splendour. This practice should therefore, if practicable, be discouraged, as a disgraceful and pernicious departure in these high castes from the duties of their station; but the Zemindars, while so much under the control of these peoples relations, as they are at present, will never affect such a good piece of economy; and, unless government interferes, the evil will probably continue increasing.

The next class of tenants in this country are the tradesmen, who in general hire small plots of land for the same purposes that I have mentioned in Dinajpoor, and which does no injury to any one. The only thing additional, that I have here to notice, is that some persons included in this class, that is the Goyalas who prepare milk, would in Europe be reckoned mere farmers. Some of them have very considerable farms, like the high ranks; but, although they cultivate them by servants, and pay a heavy rent, they make more profit, because they attend more carefully to their affairs. The expense of hired servants on the large scale is however so great, that their cattle form the principal resource, which these people have, and the farms are chiefly kept for the accommodation of their herds. It is this class of the artists, that possess by far the greater part of the agricultural stock, that belongs to the tradesmen; and some of them are very wealthy. I heard of one, who had 1000 head of cows. The other tradesmen chiefly cultivate by means of those, who receive a share of the crop.

The third class of tenants are called Chasas or plough-



men, but among these are included not only tenants, who lease lands, but those who cultivate for share of the crop, or for wages. In the eastern parts of this district, there are many of those, especially Muhammedans, who have large farms, and abundant stock, although very few are so wealthy as the great farmers and traders of Dinajpoor; but their stock enables them to trade to a certain extent, and to supply the wants of their poorer neighbours. In the western parts again there are many fewer of the labouring tribes, that lease considerable farms, most of which are occupied by the high tribes and cowherds. The tenants of these labouring castes always pay a much higher rent than the others, and this indeed often amounts to such an intolerable height, that the poor creatures, who have no other resource, are obliged to run away, after having parted with their whole property. Few or none of the Zemindars condescend to bestow a greater care in the management of their estates, than to inspect, in a general way, the annual account of the settlement, that has been made. If the amount is kept nearly the same, with what it was last year, they give themselves no farther trouble. Now the manager, who wishes to oblige a friend, whether from corruption or kindred, gives him a deduction, and places the amount on the lands, that are held by the low or poor tenant, so that it very often happens, that in the same village the rate of rent for a bigah is to one man, two anas, and to another 2 rs. These are extremes; but smaller, though still enormous differences, such as 4 anas and a rupee, are almost universal; and this is totally independent of the nature of the soil; nay in general the best land is occupied by the highest castes, and pays the lowest rent. In the course of one or two years the low tenant runs away in arrears; and as a deduction of rent must be made to induce a new settler to come, an addition is made on those who remain. The runaway labourers, having lost their little stock, are now reduced to take service from the high castes, and naturally enough fleece them, not only by indolence, but by petty embezzlements; and the proud indolence of their masters, gives ample room for both.

A fourth class of tenants are the Kolayit or under tenants, who have no lease nor possession from the Zemindars, but hire land at rack-rent from the tenantry. Under existing



circumstances, no means for the improvement of the country appear to me so likely to have effect, as the encouragement of large tenants, who should have reasonable long leases, and who might re-let to under tenants at rack-rent. This, as I have before said, is just exactly opposite in its effects, to the present plan of employing an immense number of petty tenants, whose rents are farmed, for short periods, to agents, that are invested with all the power of the landlord. The leases ought not to be in perpetuity, otherwise the landlord's increasing interest ceases, and the farms subdivide among heirs, so that the expense of collecting becomes intolerable, as has happened in the estate called Boda of Rong-gopoor. But the leases ought to be for such a length as to induce the tenant to lay out money on improvement. With this view leases for life are by far the most advantageous; and the landlord in prudence should extend them to the tenant's son, whenever he offered a reasonable addition of rent. Large farms cannot be instantly produced, because there are great numbers, who hold petty possessions in perpetuity: but this might be gradually overcome. All the waste lands, which a man possesses, may be divided into farms, and let at whatever they will bring to individuals, whose farms might be enlarged, as tenants, who occupy in perpetuity, became extinct, or ran away. This would require the removal of all sort of shackles, whether from custom or settlement. Rich men would offer for such lands, were the custom of farming rents to Mostajirs or Izradars totally prohibited, which it certainly ought to be, as ruinous and oppressive.

The expense of implements is here nearly the same as in Dinajpoor, and amounts to a mere trifle. In some parts towards the N. E., where no iron is used in the plough, it is next to nothing. Where the soil is stiff, and where iron teeth are used in the rake drawn by cattle, the expense is rather heavier. The principal stock in both districts is cattle, and here this charge is comparatively heavy, although a good deal of the land near the Ganges requires no assistance from the plough, and the only expense attending its cultivation is the sowing and reaping.

In the eastern parts of the district the labouring cattle are small, and of about the same value with those in Di-



najpoor, that is on an average are worth about 3 rs. a head.

In the western and greater part of the district, the cattle are much superior, their average value being nearly double, of what is above stated. Two or four oxen there no doubt plough a good deal more, than the same number of poor cattle do towards the east: but this excess is by no means in proportion to the difference of price, especially where a ploughman is hired, and his master, as usual, is indolent.

In the eastern parts, where 2 cattle are employed, being there mostly of a poor breed, they cultivate about the same quantity as in Dinajpoor, that is a pair plough about 5 acres. Where many cows are employed in the plough, some less must be allowed; and, where the soil is very light, or towards the Ganges, where much is sown without culture, a pair of oxen will serve for a farm, that contains more than 5 acres of land under crop.

In these parts, where 4 cattle are allowed to the plough, they cultivate nearly double the above extent, and there is a trifle less expense bestowed on implements. Where cattle are kept for each plough, it is no where expected, that they should plough 3 times as much as one pair, because the ploughman has not time, and especially as a large proportion of ploughs, with such a stock, belongs to idlers. This reduces very much the average rate; and as this practice is most common, where the cattle are best, if we take it into the account, we shall scarcely find any where, including all the plough cattle of a division, that they plough at the rate of more than 5 or 6 acres a pair.

On the farms, where 4 or 6 cattle are kept for each plough, there no doubt is a great saving in the wages of the ploughmen. Where however there are 4 oxen, the ploughman can do little more than plough and feed his cattle, and when there are 6 oxen he even requires some additional assistance, while in Dinajpoor the ploughman, except with rich crops, does every labour that attends the farm, and sometimes more. In these cases therefore, a great expense is incurred in hiring people to weed, transplant, reap and thrash. No regular establishment being kept, for performing these operations, and every one being eager to procure servants at the same time, as the seasons press, the wages



given on such occasions have become extremely burthensome; while the want of care in the greater tenants has given rise to a system of embezzlement at harvest, that would be ruinous to the poor farmer, who did not either avoid it by his own labour, or by taking a share from the rich. On this account the estimates usually given of the expense attending any species of cultivation, in this district, are liable to great doubt. They are commonly procured from the rich farmers, as being the most intelligent men; and who could not live, were they to pay a full rent. The account is swelled out by numerous idle fellows, who are hired at a high rate to weed and plant, and whom their employer is too lazy to superintend; and an enormous charge of one-seventh is made for reaping, while the produce is diminished by what the reapers pilfer. The account, so far as it affects the profit of the rich is true; but the poor man, who labours with his own hands, if he hires in men to carry on any operation with dispatch, carefully superintends their labour; and he is hired in turn to assist his neighbours. His harvest, it is true is pilfered, owing to the prevailing example set by the rich; but he in his turn shares in the spoil of his neighbours. Without taking this into consideration, it would be impossible to explain, how so many poor men live, and pay a heavy rent, while they have no resource from cattle, nor from any other means but the rearing grain, nay, who must usually borrow part of their stock at a most enormous rate. Two calculations given by rich men at Nehnagar, may suffice for the rate of expense.

A plough with 4 oxen will plough about 32 bigahs, Calcutta measure:—

Ploughman 18 rs.; Boy to tend the cattle 1r. 8 anas; implements 1 r. labourers hired to weed and transplant 7 rs.; seed 3 rs. 8 anas; The average gross produce, as by the tables, of 32 bigahs, 38 rs. 3 anas, 4 pice; one-seventh for harvest 12rs. 9 anas, 12 pice; Total 43 rs. 9 anas, 12 pice.

A plough with 6 oxen will cultivate 38 bigahs:—

Ploughman 18 rs.; Boy to tend the cattle 2 rs. 4 anas; implements 1 r.; Labourers hired 10 rs.; seed 4rs 2 anas; The gross amount, as by tables, 94 rs. 11 anas 16 pice; deduct for harvest 13 rs. 8 anas 10 pice; Total 48 rs. 14 anas 10 pice.

In treating of the condition of labourers, I shall have again occasion to resume the subject of the expense incurred in cultivation. The custom farther of cultivating for one-half of

the produce is here also common, and those who carry on all the operations except harvest, and who furnish all the stock, are by all admitted to live better than common labourers, or hired servants; the whole expense of cultivation cannot fairly, therefore, be estimated at more than one half of the produce with the expense of reaping it, and the difference between that and the rent ought to be considered as the net gain of the farmer. If the whole rent paid were only taken into consideration, I am persuaded, that this gain would appear much greater here than either in Dinajpoor or Ronggopoor, and therefore the profits of the profession ought to be considered as higher. It is very true, that a Mogul or Brahman may give a very fair account of his profit and loss, and by that it may appear, although the rent he pays is a trifle, that he has little or no profit on the grain which he rears; yet he still continues to follow the business, which is highly degrading to a person of his rank. The reason is, that he has a large herd of cattle, which without a farm he could not maintain; he makes no allowance for what is given to them, and endeavours to show that all his profits arise from the cattle, and that he is totally unable to pay a higher rent. Such tenants, as I have already said, should by all fair means be discouraged, and those only ought to be employed, who are not too high for a careful discharge of the duties of their profession. These would cultivate with more economy and industry, would pay a higher rent, and still would become richer; for notwithstanding the large herds, which many of the high castes possess, they are in general extremely necessitous.

A great proportion of all manner of produce, grain, milk, cocoons, indigo, &c. is usually spent, before the person who rears it has brought it to market, so that the system of advances is carried to full as great an extent as in Dinajpoor, and a large share of the farmers, high and low, could not carry on cultivation without receiving them. The liberal terms on which the Company deals, make all desirous of receiving their assistance, and renders it very difficult for the agents to prevent heavy losses from the balances. The very advantageous terms given by the indigo planters, induce the natives to cultivate the plant at a lower rate, than they could otherwise afford, and both these means extend some way in carrying on the cultivation; but are very far from being adequate



to supply one-third of the demand. The remainder is given by merchants and frugal farmers, mostly Muhammedans, and I had occasion to mention, when treating of indigo, that the terms are uncommonly hard, which shows the urgency of the want.

No attempt, so far as I heard, has been made in this district to regulate the size of farms, which after all are nearly of about the same sizes as those in Dinajpoor, where attempts of the kind have been made; for there being few under tenants there are few very large farms. Where the custom of keeping four or six cattle for each plough prevails, many poor farmers have not such an extent of capital, but two or three join in a plough, which goes alternately to their respective fields.

A large proportion of the farmers are in debt, chiefly to merchants of various kinds, who make advances for their produce, silk, indigo, grain, and butter. The quantity of arrears of rent is not considerable, and the total loss by a deficiency of payment to the landlord, is very trifling. Formerly, it is said, this loss was very heavy; when harvest came, the tenant could not sell his grain, and was under the necessity of running away. For the last few years there has been a constant demand, and the tenantry are improving very much in their circumstances. This is usually attributed to the crops, having formerly been much more copious, so that there was no one to eat them; but the crops for some years have, it is said, been uncommonly scanty. I rather imagine, that the demand is owing to an overflowing population, which has now recovered from the effects of the dreadful famine in the 1177 (A. D. 1770). On this account the labourers are suffering, while the tenantry are less oppressed by debt.

On most estates it is customary to assist new tenants by a little money advanced. If he brings implements and cattle, the landlord or his agent, advances grain for seed and food. The latter is paid back from the first crop, with an addition of 50 per cent.; twice as much is required from the former. As the loan is seldom for more than six months, this is an enormous usury.

In this district I have not been able to learn anything satisfactory concerning the common rate of rent, which is kept a profound secret by the Zemindars and their agents. They will readily acknowledge the actual different rates, that are



in use on their lands, for instance from 1 or 2 anas to 4 rs. a bigah, but without knowing the proportion of each rate, this is telling nothing, and the agents will universally admit, that these rates give no idea of the respective value of the produce, the best lands very often paying the lowest rate. Where the lands equally and fairly assessed, I have no doubt that they should be able to pay nearly at the same rate as in Dinajpoor, that is on an average 10 anas a bigah Calcutta measure.

In Dinajpoor and Ronggopoor, I have mentioned, that under different pretexts various charges are besides paid by the tenants; and these charges being illegal, or at least not recoverable by law, are enacted by various indirect means. What I have said before on this subject is pretty nearly applicable to this district only, as the Zemindars, and still more their agents, would abhor the idea of fleecing the high castes, so the complaints of the poor are more urgent, and appear to me more fully established, than those which are made in Dinajpoor. Mr. Ellerton, in whose experience and moderation I have great confidence, seems to think, that these additional charges raise the rent three-tenths more than the engagement; but, I have said, the real extent and nature of these abuses, could be ascertained only by a most patient legal investigation, and that conducted with a skill not only in avoiding chicane and the influence of corruption, but also in country affairs, that few possess. I here commonly heard of a Hakimi and Grihasthi price for almost everything. The former is the price which the Zemindars and all their servants choose to pay for what they want; the latter is what other people must pay, and generally is about double the former. This however, I am afraid is not all. In several cases I had proof, which appeared to me satisfactory, that the agents used various false pretexts, such as supplying my wants, and that of other travellers for fleecing the people to a considerable amount without paying anything at all.

The total produce of the arable lands being estimated at 2,10,97,192,6 rs. allowing one-half for the fair expense of cultivation, and one-half of the remainder for the net profit of the tenant, we may judge somewhat of the extent of the fair demands, which the Zemindar might make, and which probably very far exceeds what they receive, after making every deduction for free estates.



The whole rent is paid in money by various instalments, and as in Dinajpooor is usually collected in trifling fractions by means of ignorant messengers (Mahasel), who cannot give receipts, and are a dreadful charge to the tenantry, as they pay the whole expense of such messengers. Although I am aware that the nature of the people, little inclined to discharge their legal debts, requires constant dunning, and that this expense ought to induce them to be regular in their payments at the office (Kachahri) of the landlord; and although it seems hard to proceed to recover payment by legal distress, without previously endeavouring by more lenient steps to recover arrears; yet I am persuaded, that the true interest of both landlords and tenants require, that this practice of sending messengers with the bills should be entirely prohibited, that the tenants should be made to know that they must either come voluntarily to the office (Kachahri), and pay their rent at the stated period, or there obtain from their landlord a legal delay, or that he is at liberty to recover his rent by distress. The agents are the only persons who gain by these messengers, all of whom pay one way or other for their employment, and all that they take is a clear loss to the landlord and tenant. Messengers therefore should be totally prohibited from receiving rents, and from taking any hire from tenants; and, as such people are extremely daring, nothing less than severe corporal punishment, in case of legal conviction, would deter them from such practises. The order of their superiors should of course be no legal excuse.

The tenures, by which farmers in this district hold land, are extremely various. Some parts of this district belonged to Dinajpooor, when Mr. Hatch made the settlement of the Raja's estates, and are rented in the same manner as the other lands of that district. In the other parts of the district there may be said to be four classes of tenants. One are by the natives usually called Estemurars or Chakbandi, and may be rather considered as proprietors; for they pay a fixed rent to the Zemindar, which can never be raised, and in general they can sell their farms to whomsoever they please. In other cases, however, this is not allowed. Why they were not placed on the footing of the Murzkuris, who held lands of a superior lord, I do not know. Their rent is in general very low; and some of their possessions are pretty consi-

derable. The second class, nearly approaching to the above, have leases, which were signed by the gentlemen who made the settlement with the Zemindars. These leases are perpetual, even if the lands should be sold for arrears of revenue, and the rate is now considered very low, the price of all kind of grain having risen prodigiously since the settlement was made. Thirdly, those who possess lands in perpetuity from the owners; but whose right of possession becomes void, should the estate be sold for the arrears of revenue. Such possessions in this district are most usually called *Mududi*. Some of the tenants have leases, others have not, but their names and rents are entered on the books of the estate, and by its customs these have an undoubted right of possession at the same rate. In some cases, however, as will afterwards be mentioned, means are taken by the landlords to make evasions. Fourthly, those who possess on short leases, at the expiration of which, they may be deprived of their lands, and these in fact compose by far the greater part of the tenantry. In no case, however, is it customary to turn a tenant away, who would give as much as any other offerer; nor is a man ever deprived of his house and garden, nor is the rent of these ever heightened, so long as he chooses to occupy them.

As it has pleased government to vest the property of the lands in the Zemindars, and as this act is now irretrievable, I am persuaded, that this tenure is by far more advantageous for the community, than any other, by which the tenants could hold their lands. As however, I admit, that most of the lands in this district are held by this tenure, and that the people are not so industrious as in Dinajpoor, where a different tenure prevails, many may naturally think, that there is here a practical proof of my being mistaken. I endeavour to account for appearances as follows. First, wherever this custom prevails in this district, the people are more industrious, and the land is better cultivated than where the leases are perpetual. Secondly, the leases are too short, seldom exceeding three years. Thirdly, the high castes, that is the most indolent, are encouraged by paying a very low rent, while those, who are industrious, are reduced to beggary by enormous exactions. To give an idea of these I shall mention what is said to be an usual practice. The leases on an



estate having expired, the manager assembles the people, and speaking to all kindly, encourages them to commence the cultivation with spirit, and talks to them of his moderation and justice. He finds various pretexts for delaying the leases; one of the most usual of which is, that he does not know the value of lands, nor the extent to which the people will be able to cultivate; and he assures them, that when he has seen the real condition of affairs, everything will be settled to their wishes. When a considerable part of the cultivation has been performed, he calls the people together, and fixes the rent, at whatever he pleases, and the people must either accept of his terms, or lose the whole crop on the ground. This practice I was assured is very common, and it may seem extraordinary that the people should so often be duped; but I know of none so easily misled by promises as the natives of this country, and even the most acute foxes of Calcutta or Madras are often beguiled by the high prospects of gain, which a known rogue has held out.

It cannot be imagined that I should propose to render void such leases in perpetuity as now exist, which would be an act of intolerable injustice; but the Zemindar should be perhaps restrained from granting any such to new tenants, except for houses and gardens, the rent of which, to all castes, should be fixed at double the actual average rate of fields in the estate where they are situated, to be ascertained by its books. Each of these kind of leases or rights of possession may be of two natures. First, the rent may be fixed upon the extent or number of bigahs occupied, and the tenant may cultivate them in whatever manner he pleases, or may allow them to be fallow; but he must pay the rent. This kind of tenure in various parts is called Mokurruri, Juma Zemin, Kumkasht, Bigahti, Kumdur, &c.

In the leases or agreements, which are granted for land in this manner, the number of bigahs is usually mentioned, and the rate of rent for each is stated. The landlord may at any time measure the field, and, if he finds more than the lease states, he can only charge the surplus at the same rate, that is mentioned in the lease or rent-roll of the estate. In many parts of India it is usual to fix the rent of land according to its value, and to divide the lands of a village into three, four, or more qualities, each of which is to pay a certain rate.



This plan, which I confess appears natural enough, is followed in a very few places of this district; but in most is totally rejected. In all villages, indeed, you find lands rented at very various rates, but these are totally unconnected with the quality of the soil, and depend entirely on the influence, which the person, who obtains the lease has over the person who granted it, and the best lands are often the lowest rented. In other places again no measurement is attempted; but the master and tenant agree upon a certain rent for the farm taken in a general way, whatever may be its extent, or in whatever manner it may be cultivated. This kind of agreement is called *Guzbundi*, in opposition to *Darbundi*, where a certain rate on the *bigah* is specified. Were the *Zemindars* to attend to their affairs this is the most rational method, as preventing the constant oppression to the tenants, and the enormous expense to the master, that arise from measurement; but in general, especially where the leases are perpetual, this would prove totally ruinous to the owner, as his agents would contrive to let the whole for a trifle: a certain rate on each *bigah* is some check on their villany. In the second case the tenant pays only for what he actually cultivates. A certain rate is fixed for each species of crop, according to its supposed value or profit; and, if the land gives two crops in the year, it pays two rents. This tenure in various parts is called *Husbulhaseli*, *Halhaseli*, *Kasht*, *Pordur*, *Darbundi*, &c.

From the *Ayeen Akbery* it would appear, that in the time of *Abual Fazil* this mode was very common, that is to say on the face of the public accounts; for at all times, I suspect, it must have been totally nominal, as at present it no doubt is. It implies, that every field in an estate, should be measured at least once a year, and often two or even three times, which on any estate of considerable size lays open such room for fraud, as would be totally impossible to keep within sufferable bounds, except perhaps by a severity of punishment, that would be a greater evil. The usual practice is therefore, when a new tenant enters, and has cultivated his farm, to ascertain the rent by the rate contained in his agreement, and he continues afterwards to pay the same rent, subject, however, at any time to a re-measurement, if he increases his cultivation, or if any part of his land should be carried away



or destroyed. In many parts it is usual to fix the rate of the land, that is occupied by houses, gardens, and plantations, (Chandri, Bastu, Ud Bastu, Bagat), in the first of these manners, while the fields (Kohet) are valued by the second. In all parts the high ranks pay nothing for the former description of land; and in some parts of the district all those, who rent fields, are also exempted from paying for lands of this description.

In some places I was told by the agents of the Zemindars, that there was a customary Dar or rate fixed for each species of crop or land, and that more could not be exacted; but the collector assured me, that, if any such settlement had been made, he knew of no evidence of it upon record. I am, however, told, that in some cases the judge had found sufficient evidence of such a rate being fixed, at least by custom, and in consequence had determined, that the parties should adhere to it as a rule. Where sufficient proof exists of any such rate having been established by legal authority, there can be no doubt of the necessity for every upright judge to enforce obedience, nor could the government, with any sort of justice, alter the regulation, so as to affect tenants now in possession; but I have already had occasion to represent, that in a view of real improvement such tenures are injurious to the country, and that landholders should on all occasions be permitted to let unoccupied lands, on such terms as they please, only rendering all such leases void, on the estate being brought to sale for the arrears of revenue. The utmost caution is also required in admitting the proof of a customary rate; for both landlord and tenant may have an interest in fixing it so low, as may affect the public revenue. In by far the greater part of the district, however, the agents of the Zemindars alleged, that government had fixed no rule, and that they might let their lands at whatever rate they and the tenants could agree; and this appears to me, as I have frequently stated, by far the best footing on which the affair could be placed.

Having now finished, what I have to deliver concerning the tenantry, I proceed to give an account of those who cultivate lands in which they have no property. I have already, when treating of domestic slaves, said all that has occurred to me concerning such of those unfortunate men as are employed in

agriculture. I now therefore shall give an account of those who cultivate for a share of the crop, of those who are hired by the month or season, and of those who are usually hired by the day, premising that the same person joins often two of these employments, and that many small farmers, who have less land than their stock will cultivate, employ part of their time in cultivating for a share, while many others, who have not stock for one plough, join with neighbours to complete what is wanting, employ it by turns on their respective fields, and when they are not engaged in using it, hire themselves out as day labourers.

A man who has stock sufficient to keep a plough, but has no land, and cultivates that of others for a share of the crop, is here also called Adhiyar, and is much on the same footing as in Dinajpoor and Ronggopoor. In general, however, their reward is higher, as they do not reap the share of the crop that goes to the proprietor of the land; or, if they do, are paid for their trouble. They either, however, furnish the seed, or if they borrow it, as almost always happens, they repay it with interest at the rate of 100 per cent. They pay all other expenses of cultivation, and take a half of the crop. Their condition is very generally admitted to be better than that of hired servants, or daily labourers. They are chiefly employed by the high castes, by tradesmen who hire land, and by proprietors who reserve land to cultivate on their own account.

The servants, who are hired by the month or season, are chiefly ploughmen, and those who tend cattle. The former are usually badly paid, but are only engaged for nine months in the year, and are allowed the harvest for themselves. It is true, that they do little work, and are allowed time to repair their huts, and do other little jobs for themselves. They are of course generally married, and have families, which may usually consist of four persons, that is a wife and two children. The expense of such a family was said on an average to be 24 rs. a year. Now his allowances are usually as follows. Money $4\frac{1}{2}$ rs., food or grain (at $\frac{1}{4}$ ser a day) $1\frac{1}{2}$ r., leaving a balance of 18 rs. The low allowance given to women for beating rice in this district, cuts off a great part of that grand resource, which the poor in Dinajpoor and Ronggopoor enjoy, and which almost always ensures them of



subsistence. I have stated, that according to the native accounts, a woman cannot in her usual morning rate of working procure more in the 10 months, which, allowing for sickness, she may be allowed to labour, than 6 rs.; and by spinning the remainder of the day, she cannot well clear more than 4 anas a month, or $3\frac{1}{2}$ rs. a year. Whatever deficiency there may be, it is said is made up by harvest, and the average rate of gain by this, including the presents called Lora and Kuri, was stated at no less than $5\frac{1}{2}$ sers of rice in the husk daily, so that in three months the man may gain 12 *mans* of grain, worth about $4\frac{3}{4}$ rs., leaving still a balance of $3\frac{3}{4}$ rs., which is supposed to be either made up by pilfering in harvest, or otherwise the man borrows from his master from year to year, until he can get no more, and then runs away. The women here, however, make much by weeding; and at that time in many places clear $1\frac{1}{4}$ r. a month. It would thus appear, that, notwithstanding the low price of cleaning grain, the women actually earn more than the man. This is the usual rate of hire about the middle of the district, but of course there are many variations. In some parts they are nearly on the same footing as in Dinajpoor, receiving throughout the year 8 anas a month, with food and clothing or 12 anas and food; but then they have no profit from harvest. I have nowhere in this district heard, that this class of men have mortgaged their services, as is usual in Ronggopoor.

The person who tends plough cattle is allowed 2 anas a month, and 2 Chhataks of rice for 6 head, and a boy of 14 or 15, who might plough, can tend 24 oxen, so that he has 8 anas a month and half a ser of grain a day, a higher allowance than is given to the ploughman; but he has no harvest. A very young boy or an old man is, however, able to provide for himself by tending six cattle, and is no burthen on his kindred. Almost all the servants are however in debt to their masters, and without discharging their arrears cannot legally enter into any other service.

There is, however, in many parts of the district, especially towards the west, another class of monthly servants called Athoyaras or Chautharis, who neither receive wages nor food, except as a loan. These men have a house, and rent some land. The master furnishes the implements and cattle, and the Athoyara ploughs 20 days in the month on his mas-

ter's field, eight on his own, and two on that of the boy who tends the cattle, and who is either his own son, or that of one of his neighbours. Thus, the use of a wretched stock of perhaps 40 rs. in value, for 8 days in the month, is reckoned an adequate reward for 22 days' labour. Each party pays his own rent and seed, and weeds and reaps his own field. In some places these servants have a little stock, and keep one or two oxen, in which case they are called Bahaniyas, and are allowed for each an addition of three days' ploughing in the month, so that we have the following estimate. Six strong oxen, such as are usual in that part, will cultivate exceedingly well 45 bigahs of land or 15 acres. Their hire is equal to $\frac{1}{3}$ of the whole expense, the ploughman's hire $\frac{2}{3}$, the hire of the boy who tends the cattle $\frac{1}{3}$, and the cost of the implements $\frac{1}{3}$. The boy, if hired by the month, would receive $2\frac{1}{2}$ rs. a year; so that the expense of these operations, at this rate, would be $37\frac{1}{2}$ rs. The weeding costs 20 *mans* (64 s. w. the ser) of the coarsest grains, worth 5 rs. The transplanting costs 5 *mans* of grain, worth $1\frac{1}{4}$ r. The seed will cost $4\frac{1}{2}$ rs., total expense $46\frac{1}{4}$ rs. The average produce of a grain farm of this size in the south-west part of the district, where this estimate was made, when fully cultivated with a proper stock, may be taken at 104 rs. 2 *anas*, deduct $\frac{1}{7}$ of the whole for harvest and thrashing, and there will remain for rent and profit 41 rs. 6 *anas*.

The people who are hired by the day to weed and transplant, or to supply the place of ploughmen that are sick, get usually three *pan* of cowries a day, or three sers of grain. In some places the wages are considerably higher. A man, in the former case, allowing him to find work, and to be able to perform it for 270 days in the year, will gain 20 *mans* of grain or about 12 rs. a year. His wife often labours at the same employments, and will make fully as much. They would thus appear to be better provided than the monthly servants; but they have less advantage in harvest. These men also are usually extremely necessitous, and I know that many of them are so imprudent as to anticipate their wages, by taking money from indigo works four or five months before they are to earn it. Without, indeed, paying them in advance, no men can in general be procured, and this in fact adds very highly to the price of their wages; because they



seldom perform the contract honestly, and generally contrive to be paid for many more days than they work. This is especially the case towards Europeans, and the indigo manufacturers find this loss a pretty considerable charge. Owing to the ploughmen, that are hired to work by the high farmers, performing no other part of the work, and the necessity of finding people to weed and transplant, the number of day labourers is here much more considerable than in Ronggopoor, and perhaps even than in Dinajpoor, where the farmers, who live on stiff clay land, act six months in the year in this capacity. Here there are no extensive tracts of such land: it is generally so much intermixed with land of a different nature, that each man's farm gives him constant employment.

*Estates.**—In this district the free estates, so far as I can learn, amount to a much greater proportion than in Dinajpoor and Ronggopoor; but the actual extent is not known, for a great part of the register, which was in the collector's office, has been lost. I was assured by the various people, whom I consulted, that in almost every part of Serkars Puraniya and Mungger the lands claimed as free amount to one fourth of the whole. In Jennutabad, Urambar and Tajpoor the claims it was said do not exceed 1-16th. This would seem to require an investigation; for I have no doubt, that many are putting up claims, who have no just title. There are various means, by which they can obtain possession; and if their claims come to be challenged, they will say, that their papers have been lost; but that they were entered in such and such a number of the register, which is known to have been lost. This and actual undisturbed possession, would render the resumption difficult. One obvious means for obtaining possession, which is said to be now practising, is for a Zemindar to give some man lands, as a free possession, after allowing him to retain the lands for some time, he enters a suit for their recovery, and allows himself, by some error, to be nonsuited. The new proprietor has thus obtained possession confirmed by legal decision, which would be a strong point in his favour, were an investigation to take place. It may be supposed, that the Zemindar would not, for his own sake alienate his lands: but we well know, what influence the supposed efficacy of supposed pious deeds have had in Europe, and the large alienations, which on that account have been formerly made. The natives are very strongly disposed to act on such principles; but they are liable to be actuated by more immediate interests than the expectation of future divine favour. They may be in debt, and may wish to raise money, and a rich man may wish to purchase a free estate; for, as I have mentioned in Dinajpoor, there is no necessity for lands, that have been granted for pious uses, being applied in that way; and the lands, which have been granted to support a Brahman, may be sold, and belong to a cobbler. Besides there is nothing to hinder a Brahman, after holding the lands for some time, to return them to the donor. In fact much free land now belongs to the Zemindars, who are of course taking every means

* As the management of private Estates in India is a point on which, every information is desirable, the greater part of this section is retained.—Ed.

at the expense of their assessed estate, to increase its value: bad lands are exchanged for good, the nominal measure of the estate is gradually increased, and lands are added, so that a right of occupancy by prescription may be acquired.

It has been customary, on the failure of heirs to a free estate, to allow the Zemindar of the estate, to which they formerly belonged, to resume them. These portions, instead of being added to the estate, as a security to the public for the revenue as they ought to be, are often still considered as free, and extended at the expense of the assessed lands by all possible means; and I am told, that some estates are now so much impoverished by this means, and by the lands let at a low rent to the high castes, as scarcely any longer to be worth the holding, and are merely kept in order to strengthen the rights to these lands by a longer possession, so that no evidence could be procured concerning the above mentioned circumstances. I am also persuaded, that many owners of small free estates have found means to procure an exchange for the lands originally granted; and have in their stead procured land of the best quality: for in the adjacent district of Dinajpoor, the free estates are notoriously of the worst soil in their vicinity, and here they are generally the very best. The whole of this subject therefore requires a careful revision, and it cannot commence too soon; lest the witnesses should all have died. It is also probable, although the Collector is not aware of it, that on examination there might be found many native papers, which would enable, at least a part of the lost register to be restored.

The free lands have been granted on a variety of pretexts, which it would be unnecessary to relate, as it is universally admitted, that the owner is in no respect bound to apply them to these purposes, and may alienate them in whatever manner, and to whatever person he pleases. Very few of the grants have originally been of such a size, as to enable the possessor to live with the splendour becoming the rank of a gentleman, such a manner of living is not indeed suitable to any subject of a despotic government, who is not a servant of the prince; and the habit of a mean appearance has been here so long rivetted, that now, when the government has been anxious to bring up a respectable gentry, and for that purpose has made a vast sacrifice of revenue, neither those, who have been secured in free nor in assessed estates, have ventured to emerge from their dens of obscurity, sloth, and ignorance.

The free estates in this district, contrary to what is the case in Dinajpoor, are rather the best cultivated. Part of this is generally, and justly, attributed to their being of a better soil, than those which are assessed. Another reason is usually assigned; but it appears to me, that the people who assign it, are totally mistaken, and that what happens, and what actually encourages the cultivation, is just diametrically the opposite, to what they imagine. It is supposed, that the free estates are more fully occupied, because they are lower let; and on enquiry you will be shown poor land on an assessed estate, which is let at 2rs. a bigah, while the best and highest on a neighbouring free estate does not pay more than a half of that amount. At first I gave way to this opinion; but on farther inquiry I found, that it was entirely fallacious: that on the free estate the whole land was let at a rupee a bigah, while the greater part of the good land on the assessed estate was let at 4 anas, and in order to keep up the last years rental, large sums were placed on the poor, many of whom, being unable to pay the demands, deserted their possessions. The good state of cultivation on the assessed estates is therefore owing to the rent being fair, and to the tenants being obliged to make some exertion to pay it, while at the same time it does not exceed the bounds, that industry can discharge. The generality of free estates being small,



and easily inspected even by the most indolent, the losses, which arise from the mismanagement of agents, are avoided, and the greatest of these consists in the unequal assessment of lands. The very worst managed land in the district is either free, or may be said to be such, as being granted in perpetuity for a trifle. Wherever the size of such is considerable, it is as much neglected as the assessed estates, and is managed in the same way.

The owners of the free estates are here, in general, very prudent frugal men, and live within their income. The land is very seldom sold: nor indeed are purchasers readily procurable. I am told, that in many parts it could not be sold at more than a rupee a bigha.

What I have said, concerning the manners, conduct and education of the Zemindars in Dinajpoor, is applicable to those here, only that in this district there are fewer new men, the Zemindars are more proud, ignorant and slothful, live with much less splendour in every thing but equipage, delight more in a crowd of parasites and religious mendicants, are more grossly defrauded, act more meanly and oppressively towards their tenants, and are more devoid of politeness towards strangers. So far as I can learn, the Muhammedans are in general more exempt from these faults than the Hindus. In the eastern parts of the district the Zemindars are fond of the title Chaudhuri; but, where the Hindi dialect of Mithila prevails, this is a low phrase, bestowed on carters and such vulgar people. There such Zemindars, as cannot obtain the title of prince (Raja), content themselves with that of Lion (Singha). This is given even to new men; but in the eastern parts no one, except their servants, will bestow on such persons the title of Chaudhuri.

The general system of the management of estates is the same in both districts, only here a much greater proportion of the rent is farmed out, from 3 to 9 years, to persons, who here are called Mastajirs. These often let out their bargains to under renters, who still rent their portions to others, and these settle with the tenants, each making an agreement with such as have no leases, or taking a sum of money to decline all investigation for the term of his engagement. People are exceedingly eager to obtain these appointments, and I have no doubt in general pay for them: the Zemindars being desirous, as in Ronggopoor, to keep a rental apparently as low as possible. The avowed allowances of the renters are in general very trifling, and I have been assured by persons, who have had access to see some of their books, although they had no reason to suspect the fairness of these, as representing the receipts and disbursements, that there did not appear to be any profit. Such may be the case, where Europeans were security for these renters, and thus procured a view of their books, because, in some cases at least, the European had guaranteed the renter against loss; and had probably made a very imprudent bargain: but even in such cases we are not to suppose, that the renter was without a very solid profit. In letting the lands he secured for his own family, or for that of some friend disposed to act reciprocally, leases, which were highly advantageous, and which a sense of common interest would secure from subsequent renters, for many years after his engagements ceased. In many places the renters, I am persuaded, are not contented with such gains; but obtain large profits in money; for the establishments, which I learned several of them maintained, far exceeded the whole amount of the allowances, that were avowed. I have no doubt in recommending, that the custom of farming rents nominally or virtually should be totally prohibited, under the penalty of forfeiture. I am aware, that many careless lazy Zemindars might be ruined by this means; but it would either compel the remainder to be more active, or it would throw the property into the

hands of active men, and prevent a vast deal of oppression, which the mass of the people now suffer.

All actual inspection into the conduct of their agents, on the part of the Zemindar, is considered as highly derogatory to his rank. He may superintend the general accounts, and inquire into the nature of the business, that he has with the judge, collector or his neighbours, for they are mostly on very bad terms; or he may exact money from the farmers of the rents, when a new engagement is made: but he is disgraced, and considered as a mean fellow, if he at all interferes in the inspection of his farms or tenants. Their chief object seems to be to maintain an enormous establishment of dependents, from whom they receive adulation and presents, which do not appear on their rental; and for the same reason, they assign, for the maintenance of their relations, and even for their family expenses, lands which they call Kamat, and which are cultivated on their private account: so that very probably the actual profits, that may appear on their books are very trifling. Still however, they are so distrustful, that it has been impossible to induce them to make the annual returns concerning their estates, that government required. They are so indolent and such a prey to their servants, that it would be impossible to say, what their profits are. The principal estate in the district now pays its supposed net profits into the courts of justice, until it is decided, to which of the numerous claimants they are to belong. They amount to only 130,000 rs. a year, which in my opinion implies a mismanagement, that is altogether enormous. I do not by this mean to say, that the present manager may be found culpable. The evil may have been done before he took charge, and with great propriety he may not think himself warranted, under present circumstances, to attempt a reform of long established abuses; nor, considering his other avocations, may have leisure to attempt so arduous a task.

Although the produce here is great, and the revenue paid to government small, I do not know, that even, if the estates were equally well managed with those in Ronggopoor, that they would be so productive to the landlords: because I believe, that the free lands are a much heavier drawback, and to these we must add the privileges of the high castes, and a most enormous establishment. I was in general assured, that the collection of the rents, usually amounts to one-fourth of the whole gross rental, and Mr. Ellerton assures me, that on one estate, which as a security he had a right to ascertain, he found, that this was actually the case. To this we must add the expense of agents with the collector and judge, and the expense of the law suits, in which almost every landlord is engaged, and in which I believe almost every one endeavours to succeed by corruption: and, I have no doubt, so far succeeds as to pay its price, though I believe it seldom, if ever, reaches the hands, for which it was intended, or produces the smallest effect except by influencing the chicanery of council (Vakils).

The enormous amount of charges attending the collection, seems to have originated in the plan of levying the revenue by an actual measurement of every field and crop. Although this as I have said, probably was never carried into regular execution, yet even the modification, which I mentioned as practicable, is attended with enormous expence; and for reasons above-mentioned the Zemindars are by no means desirous that this charge should be diminished, and the renters are therefore carefully restricted from any such economy: nor can they in general dismiss any servant without the Zemindar's consent. Some restriction is indeed necessary, because the accounts kept by some of these servants are a kind of check on the conduct of the renters, and are the only document used in farming the estate to a new man; but many of these servants are of use