JUTE IN BENGAL

UNDER the above title, Srijut Nibaran Chandra Chowdhry, a travelling Inspector of the Bengal Agricultural Department, has brought out a useful book which is a compendium of the reports and suggestions of Government experts on the subject of jute-growing and the jute trade. The book is of special interest to the foreign jute merchant. Mr. Chowdhry deserves the best thanks of the public for thus placing before them, the results of 30 years of labour of the Bengal Agricultural Department on jute improvement, attained at the cost of several crores of public money,—jute being next to paddy, the most important crop of Bengal.

All agricultural publications by or on behalf of the Government, labour under one
serious disadvantage. The jute-growing farmers, the Rayats of Bengal, who are the parties most interested, are not in touch with the work of the Department. The Agricultural Department does not recognise the necessity of giving, if they do not think it beneath their dignity to give, any importance to the experiences and opinions of the jute-growers themselves, regarding the improvements suggested by the experts, although it is an essential condition of success in the work of all agricultural improvement. In all civilised countries, the Government Departments are fully aware that they exist for the benefit of the public, and that the public are their masters. In America, the suggestions of the experts are first placed before a few practical farmers for trial—the State giving every possible help; if a series of trials at different centres prove the suggestions to be of value, they are published for the benefit of the general public. There each discovery rises or falls as the great body of practical farmers give their verdicts for or against it. To take an example: soil-inoculation by cultures of nitrifying bacteria, on a limited trial, was found valuable, and farmers in all parts of the world went in for it; on a more extensive trial, however, it proved of questionable value, and has now been almost abandoned. Here in Bengal the case is entirely different: the public has merely to cry ditto to the findings of the experts, who seem to act as if they are not the servants but hakims or masters of the public. It would be so singular here if the Departments were to seek for and give their due weight to the verdicts of the jute-growing farmers, or their representatives, on the economic value of the suggestions for improvement made by the Agricultural experts. The experts are here as it were to write agricultural Vedas or to deliver agricultural Gospels which the Rayat farmers are to accept with unquestioning faith. The Rayats on their part also seem to retaliate. They receive with utter indifference, if not supreme contempt, the suggestions for improvement made by the so-called experts, whom the Rayats regard more or less as impudent dabblers in agriculture. They even attribute sinister motives. There is thus a great gulf to be bridged between the expert on the one hand, and the jute-grower on the other, and till this has been done books like the one before us, whatever their value to the jute-merchant, or the official, will be of little real value to the jute-grower.

Nibaran Babu has put forward some important suggestions for the improvement of the existing methods of jute-cultivation. Judging theoretically, they seem likely to benefit the jute-grower, but theory and practice do not always harmonize. Until the suggestions put forward, have been tried by at least a few representative jute-growers, on a business scale and their verdicts taken, it will be premature to pass any opinion on their economic value. But who will “bell the cat” without an assurance that any loss they may incur in faithfully carrying out the suggestions, will be made good by the Department?

The largest part of the book is given to a discussion of the various races and varieties of jute under the two species of corchorus capsularis and corchorus olitorius, and the experts are unanimous in declaring that “there is no particular variety or race which is the heaviest yielder.” The subject is therefore more of botanical interest than agricultural,—and in that view the discussions of Messrs. Prain and Burkill as to the effects of cross-fertilization and kindred points are quite out of place. Mr. Burkill surmises:

“It is by no means improbable that seed of Kakya Bombay and Toshar red from Sirajganj and sown in Tipperah would in a few generations become Dhoi Dhoti and Fullesvar; brought back again in a few more generations they would return to Kakya Bombay and Toshar.” P. 86.

It reminds one of the time-honoured story of ‘mouse-enlarged’ or ‘elephant-reduced’ disquisitions regarding the pig. To the practical agriculturist, and specially the jute-grower, such subjects have very little interest. Dr. Prain’s suggestion that “seed of a strain natural to, or naturalized in a particular district gives better results in that district than any freshly imported seed”—pp. 79-80, does not harmonise very well with the experts’ recommendation that “the cultivators of East Bengal where land is inundated, should always indent good seed from elsewhere”? “Na buddhi-bhedam janayet ajñānānām”—Not to bewilder the ignorant by giving ill-assimilated information, is surely a wise rule.

Again, for jute-farming, Mr. Choudhry says “loamy soil is preferred to stiff clay”
(p. 19). This recommendation of his is very summarily disposed of by Mr. Mollison, Inspector General, saying:

"It has been asserted that sandy soil produces coarser jute than loamy soil. This is not borne out by experiments at Burdwan.... The actual character of the soil is of minor importance" (p. 97)

Mere doubts and surmises of the experts, if published, serve merely to make "darkness visible," and can be of no use to the jute-grower. It is very essential that the jute grower be invited to supplement by trials on a business scale the work of departmental experts.

As regards the time of cutting jute, Mr. Chowdhry says (p. 30) that the heaviest yield of fibre of good quality is attained by cutting down the plants when the fruits fully develop. Mollison however says—

"The experiments have not determined the exact state of growth at which the plants should be cut to yield the most valuable fibre." (p. 99).

Thirty years of experimentation has not determined finally this most important point with regard to the second most important crop of Bengal! The public will draw their own inference as to the return they get for the money they pay. Fortunately the jute-growers decided the point in favour of Mr. Chowdhry’s finding long before the experts had leisure to take it up. As regards the water for steeping the jute after it is cut, any recommendation on the subject is almost useless. Although clear, stagnant and deep water is the best, the jute-grower seldom gets such water for his own drink. If such water, where it exists, is permitted to be used for steeping, the decomposing organic matter will form a suitable nidus for the growth of malaria and other disease germs, notwithstanding Mr. Chowdhry’s assurance to the contrary (p. 4). The great bulk of the crop also precludes the idea of its being carried any distance to secure clear, deep and stagnant water, as the cost would be prohibitive.

Mr. Chowdhry gives the outlines of some schemes of rotation for the jute-growers which with some modifications he may adopt to his own advantage. The main points in a scheme of rotation is to follow up an exhausting or nitrogen-consuming crop, as a cereal (e.g. paddy), by a restorative or nitrogen-accumulating crop, such as a pulse, e.g., Khesari (Lathyrus Sativus)—or following a surface-feeding crop by a deep-feeding one. Jute is an exhausting crop, but much less so than paddy. The following up of a jute crop immediately after it is harvested by a crop of transplanted aman paddy as suggested by Mr. Smith (p. 133) is both theoretically and from the practical experience of the jute-grower, ruinous husbandry, and Mr. Chowdhry is quite right in condemning it as "a most exhausting method" (p. 22). Jute should be followed up by a papilionaceous crop—a pulse which will restore to the soil much of the nitrogen taken up by jute. Mustard and rapeseeds which are among the most quick-growing of crops would be off the ground by the time field operations for jute or paddy begin,—but they are not nitrogen-accumulators. Khesari and peas would do better—as they, like all pulses, accumulate nitrogen in the soil through the action of bacteria found in their root-nodules: but they do not ripen fast enough to leave the field in time for field operations for jute. Mr. Chowdhry suggests that they should be "grown for feeding cattle." In a country like ours where the farmers themselves are starving, growing special crops for fodder is out of place. Phasolus radiolus (Mug and Kalai) and also cow-pea (Barbati) for green pods among the pulses, have the advantage of becoming ready for harvest earliest; three months, from October to December, being found sufficient to mature the crop. They are off the ground in good time for beginning field operations for jute. For lowlands which do not become fit for cultivation before Kartik (October)—Kalai which is the quickest growing among the pulses, would do best, and for the comparatively higher jute-lands which become fit for cultivation in Asvin (September), Mug or Barbati for green pods would be the most profitable. As regard Mr. Chowdhry’s two years’ scheme of following jute (Kharif or rain crop) and mustard or rape (rabi or dry crop) of the first year by paddy (Kharif) and peas (rabi) in the second year, I have to remark that the Rayat’s means for manuring his crops are so very limited that the paddy succeeding the jute would leave the soil so impoverished that it is not likely without heavy manuring to be fit for the next year’s jute crop, in spite of the recuperative action of the pulse intervening in the rabi season. In the opinion of the jute-grower, even jute
after jute is not so bad as jute after paddy. Until we are able to place at the disposal of the jute-grower cattle-dung in sufficient quantity, for application at the rate of 75 mds. per acre (p. 26) — not to speak of Mr. Smith's rate of 5 tons (p. 134) equal to 135 mds. per acre — at a cost not prohibitive — the rotation of jute with paddy as the Kharif crop is not to be thought of. Jute may perhaps be rotated with greater advantage with sunn-hemp (crotolaria juncea), — a restorative fibre-crop for the following Kharif season, if jute is not to succeed jute on the same field year after year.

A great deal of frivolous hair-splitting has been carried on among the experts with regard to the spacing of jute. Securing an even distribution of jute seed so as to allow a distance of 6 ins. between plants in the case of C. capsularis, and 8 ins. in the case of C. Colitorius is practically impossible. The jute-growers own plan of thick-seeding (8 lbs. to the acre) and then thinning out to the extent required for the healthy and vigorous growth of the plants, without running to the opposite extreme of causing the plants to branch too much, which would spoil the length of fibre, — is the only one feasible. The following learned disquisition on the spacing of jute by two great experts of the department cannot but excite sardonic laughter among the jute-growers.

"Different degrees of spacing the plants apparently has had no effect in improving the seed... The spacing experiment did not tell so far as the quality of fibre went." (pp. 89-90). "The experiments in spacing i.e. thick and thin sowing and thinning out have not given conclusive results. Mr. D. N. Mukerji explains that it is difficult at Burdwan (Government Farm) to get evenness of distance between plants when seed is broad-cast, and when seedlings are thinned out by hand...... Drilling might be tried as suggested by Mr. Mukerji. I do not think, however, that greater accuracy in spacing would thus be secured." Pp. 97-98.

Wasting time and money in trying to secure a mathematical accuracy in things practical, does well when others have "to pay the piper"!

Mr. Chowdhry has suggested an ingenious and less expensive method of extraction of fibre by means of a piece of bamboo or wood provided with 8 or 10 pegs to take the place of the human fingers. Unless and until this device has been tried by a few jute-growers on a business scale, and their opinions secured in its favour, it is impossible to form an estimate of its economic value. One can hardly believe that a few pegs can be made to perform that dexterous movement of the human fingers required for the extraction of jute-fibre. Mr. Chowdhry's one testimony alone that it is "able to strip about two maunds of dry fibre in a day" will not convince people to run a risk of loss.

With regard to the manuring of jute, Mr. Chowdhry recommends "75 mds. of cow-dung or 6 mds. of castor-cake each containing about 30 lbs. of nitrogen" (p. 26). But he is also fully aware that "Farm-yard manure will not be available in sufficient quantity. Saltpetre may prove most useful" (p. 70). Again in a foot note he says: —

"Unfortunately the results of the experiments at the Burdwan farm, show that saltpetre, super, or bone-meal are not suitable manures for jute" (p. 70). "Cow-dung again gave the highest out-turn at the least cost, as it did in the two preceding years. The bonemeal plot actually gave less than the unmanured plot" (p. 110).

There is nothing new in this finding of the experts that cattle-dung is the best and cheapest manure for jute. What Mr. Chowdhry considers 'unfortunate' (one would suppose he means for his Department) is really most fortunate for the jute-grower, for he is saved the possible temptation of throwing away money in the purchase of "saltpetre, super, or bone-meal" — as jute manures. Mr. Chowdhry recommends castor cake at 6 mds. per acre as a good manure for jute and he thinks it can be had at Rs. 2 per md. (p. 39). Castor-cake is not a thing to be had in the jute-growing villages unless imported from Calcutta. The Calcutta price itself we know is not less than Rs. 2-8 per md., so that adding to it the cost of transport, &c., the price for the jute-grower will be about Rs. 3-8. But he can get rape-cake in his village at Rs. 3 per maund; so that if he can afford to use any oil-cake for manure, he will prefer rape-cake — which in addition to a manural value almost equal to castor-cake, has insecticidal properties. Jute at this time (November) sells in the villages at the rate of Rs. 2-8 to Rs. 3 per maund, and the idea of using either the castor-cake or rape-cake for it, worth Rs. 3 per maund, would be simply ridiculous. The use of 75 maunds of cattle-dung per acre for the jute crop,
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involves a similar impossibility. Such a large quantity is not procurable in the villages, and cannot be until the Rayats are also dairy-men. Next supposed the quantity to be procurable—the cost of collecting it by a house to house search, carrying it on the shoulder in small loads of a maund each time, would be simply prohibitive. All that is possible for the jute-grower to do in this connection, he has all along been doing. He applies 20 to 30 mds. of cow-dung per acre from his own dung-heap. Again, Mr. Smith says (p. 134) the Burdwan experiments of 1905 show that the increase of yield from the manured plot over the un-manured is nil, though 5 tons equal to 135 maunds, of cattle-dung per acre had been applied. Surely the jute-grower has the good sense not to be led astray by mere agricultural witt o’ the wisps.

Mr. Mollison’s report of jute deterioration (p. 90) gives us only a few of his doubts, not his findings: “It is commonly believed that the latest ripening jutes produce the best fibre. This has not yet been proved by the Burdwan experiments.” He holds out promises of what he will get done at Pusa, saying “experiments will be carried out at Pusa” &c. and that “the start has been made at Pusa” (p. 93) (p. 97),—but his performances have not yet seen the light.

The next point to notice is jute-farming. Here we differ as the poles asunder. Mr. Chowdhry shows a profit (in paper of course) of Rs. 72 per acre for the unmanured crop, and another 38 Rs. per acre, if manure is used—(p. 39), making up a total of 110 Rs. profit per acre. Mr. Smith even goes further and would show a profit of Rs. 127 per acre, and if immediately followed by a crop of transplanted aman—Rs. 150 a per acre. (p. 135). This is almost Utopian. Let us first see what the cost of cultivation comes to. Mr. Chowdhry says:

“In North Bihar and Orissa labour is available at the rate not exceeding 3 annas per diem, while in Bengal the rate of the labour during the jute season varies from 4 to 6 annas;”

adding that “in an East Bengal district labour is dear.” (p. 37). East Bengal is the great jute-growing centre, and in all calculations regarding the cost of jute-growing, we should take the rate of wages prevailing in East Bengal during the jute season. Even after the admission about labour being dear in East Bengal, in framing his “table of costs for an East Bengal District,” he assumes the rate of wages for the jute season at 5 annas per diem. This is curious, to say the least. The truth about the wages of labour is that it is subject to the law of supply and demand and fluctuates from month to month, especially in the jute districts, as the demand for labour rises or falls. In the jute season in the jute districts you have to pay a laborer from 6 up to 12 annas daily as the demand rises, and in addition you have to supply the laborer with two meals daily—a small breakfast at 9, and a full meal at noon. This means an addition of another 3 annas to the daily pay—bringing it up to from 9 to 15 annas daily. The average daily wages cannot therefore he taken at less than 10 annas daily for the jute season, say from March to July. When the season is over, you can get a man for much less— even for half the amount. Similarly with regard to the hiring of ploughs, you have to pay 12 annas daily for each plough, if you want efficient work during the jute season. When the season is over, and there is no demand for the men and the bullocks, you can hire a plough for 5 annas, or even 4 annas, or merely the wages of a man for half a day. It may occasionally be possible for you to get a plough to hire in the jute season even at 8 annas daily, but “penny wise pound foolish.” Half-hearted laborers, with half-starved bullocks, will turn out very careless and inefficient work to make you repent in the end.

The wonder is not that the charges for labour are so much as 10 annas, and for the plough so much as 12 annas daily—but just the other way—that the charge is so little. The Rayat disclaims your officious patronage; but give him his dues, give him only to ‘earn his bread by the sweat of his brow.’ He claims to be fed,—he and his little ones, and to hide his primitive nakedness,—in return for his honest labour from sunrise to sundown. Neither he, nor his bullocks, can be fit for efficient work unless they have their full rations—be it of the coarsest stuff. A hard-working farm laborer requires two seers of rice daily in 3 meals, and 6 chhataks of dal for himself alone. The coarsest rice costs 2 annas a seer; and a seer of the coarsest dal costs 3 annas. It will cost him 4 annas for the
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rice and 1 anna for the dal and also 1 anna daily for sundries, fuel, salt, oil, &c. This alone comes to 6 annas, for himself alone. He has to provide for seasons when the demand for his labour will fall. He has besides a wife, and some children, and perhaps an aged mother. Surely a labour rate of 10 annas daily for the jute season is not high. The standard of wages for a free laborer during the working season ought by no means to be lower than the cost of maintenance of a slave. Your kitchen servant costs you Rs. 7 to 8 a month on his feed alone, besides his pay. Starve the laborer and he will steal or otherwise deceive his employer—a fact of very common experience. Indeed once in the habit of stealing, he will not easily give up the habit, even if his wages should be raised. He will snore comfortably in his bed, though a heavy shower in the midnight should call for his presence in the field to save the seedlings by opening a drain. 'The way to a man's heart' it is said 'is through his mouth.'

If you want full and efficient work, you must give the laborer his full ration. Half rations for both man and beast, will give careless half-hearted work, which will tell seriously on the yield. Ruling over the laborers with 'whips of scorpions' though it will increase the labour of supervision, will not mend matters. While a whole family is starving or famine conditions prevail, you may get a laborer for only half a meal. But agriculture will not thrive on such abnormal conditions.

What again would be the daily charge for a plough with two bullocks, and a driver during the jute season? Nibaran Babu allows only eight annas daily. With half-starved bullocks, and a half-hearted driver, you may get a plough for eight annas daily, or even less,—but the work done will be inefficient, and will tell on the out-turn. Good jute farmers keep their own bullocks, feed them properly, and they themselves serve as drivers. You cannot estimate the cost of ploughing at anything less than the actual cost incurred by the farmer. Each bullock consumes not less than 6 seers of straw-chaff daily, which in the Calcutta market costs, at 2 pice per seer, 3 annas. If fresh grass is substituted it can be replaced by 20 seers, to allow for the moisture in fresh grass, which will cost about 3 annas to collect. It will require also 1½ seers of rape-cake, which, at not less than Rs. 2-8 per md., would cost 1½ annas.—Thus the two bullocks together would cost 9 annas daily for feed. To this you should add something on account of interest on the capital, about 80 to 100 Rs., laid out on the purchase of the two bullocks—and also half a day's wages for the driver. Thus 12 annas daily would be an extremely moderate estimate of the cost for each plough. Nibaran Babu's eight annas daily for each plough for the jute season is altogether out of the question.

The figures in Nibaran Babu's table of costs (p. 38) are recast on the lines indicated above and the two tables presented below for comparison:—

<table>
<thead>
<tr>
<th>Operations and rates</th>
<th>Revised Mr. Chowdhry's figures</th>
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<tbody>
<tr>
<td></td>
<td>Rs. As.</td>
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<tr>
<td>8 ploughings, 1 ploughing requiring 3 ploughs, at 12 annas a plough</td>
<td>18 0</td>
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<tr>
<td>4 seers ( 8 lbs. ) seed at 4 annas a seer</td>
<td>1 0</td>
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<tr>
<td>2 Rakings with achrab or bide (4 rakings = 1 ploughing = 3 ploughs)</td>
<td>1 11</td>
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<tr>
<td>First weeding 24 men at 10 annas each</td>
<td>15 0</td>
</tr>
<tr>
<td>Second weeding 12 men</td>
<td>7 8</td>
</tr>
<tr>
<td>Thinning 6 men</td>
<td>3 12</td>
</tr>
<tr>
<td>Cutting and steeping 24 men at 10 annas each</td>
<td>15 0</td>
</tr>
<tr>
<td>Stripping at Rs. 1 per md. for 12 mds. (if unmanured)</td>
<td>12 0</td>
</tr>
<tr>
<td>Collecting and tying 2 men at 10 annas each</td>
<td>1 4</td>
</tr>
<tr>
<td>Rent</td>
<td>6 0</td>
</tr>
<tr>
<td>Total</td>
<td>81 3</td>
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In the above table the reader will notice that no allowance has been made for the cost of insecticides which Nibaran Babu recommends for use (p. 40). He also makes no allowance on account of loss from such accidents as prolonged drought and floods, commonly known as Hajā Sukhā. He notices the rent, but does not notice the interest on capital, which is well-known to be not less than 70 per cent per annum for the 5 jute months, from March to July. Of course it is an inconvenient item, if our object is to show a paper-profit, as it would increase the cost by about 50 % and at once demolish all theories as to the profits of the
jute-farmer. But it is a stern fact that no honest man should ignore.

Now what is the quantity of fibre obtained from an unmanured crop? The results obtained on the Government experimental farms can be no guide, as within their limited area a plot manured this year has to be taken as unmanured next year, so as to vitiate all their results. A general manure like cattle-dung, once applied, will continue to show its beneficial effect for some years after, owing to what is called the residual effect of previous manures. This is a most important fact to be reckoned with in judging of the manure-experiments on the Government farms,—and affords a very easy explanation of the anomalous fact like the one noticed on p. 134 that while the unmanured plots yielded 17 two-fifths mds. of fibre in 1906, the plot manured with 5 tons of cow-dung gave only 16 mds. The Rayat’s experience is that an unmanured plot does not yield more than 10 to 12 mds. of jute fibre—a great deal depending on a seasonable rain-fall. An allowance has to be made from Mr. Chowdhry’s estimate of yield of 16 mds. from unmanured crops in consideration of the residual effect of previous applications of manure on Government Farms—the amount of which can not be defined. We shall not be far wrong either way if we estimate the yield at 14 mds. per acre. Even in spite of the residual effect, the output in the Burdwan farm in 1904 is seen to have been 1230 lbs. or 15 mds. (p. 110). Furthermore on Government farms, where the men in charge have no personal interest in securing accuracy, the work of weighing may be left to illiterate sardars and kulis who dictate from memory if not from imagination, such figures as would agree with the expectations or wishes of their superiors. So that it would be a great mistake to rely on them alone.

No crop is so unreliable as regards the prices in the market, and regarding no crop is the Rayat so much in the dark as to what the price is likely to be. Paddy has a great advantage over jute in this respect, and always commands a market; this cannot be said with regard to jute. For paddy the local demand is always very great, which for jute is almost nil. The price of jute, high or low, is regulated by the demand abroad—at Dundee or Hamburg, of which the jute-grower has no conception. In these days of international boycott for political purposes, the jute-industries of Dundee or Hamburg, may be paralysed at any moment and the price of jute may go down to any extent. It will come like a bolt from the blue upon the jute-grower, for which he should always remain prepared, and never grow more jute than he can help—at the sacrifice of his paddy; paddy he can use for home-consumption but the jute he can not. At this very moment (middle of November) jute cannot be sold by the grower for more than 2-8 to 3 Rs. per maund, though Mr. Chowdhry would value it at Rs. 8 per maund. The highest price reached this year was Rs. 6-8 per md. only for a few days between July and September. As a rule, the higher value of jute lasts not more than 2 months, from the middle of July to the middle of September, and then the price steadily goes down. Nibaran Babu himself at pages 163, 164, and 165 of his book gives the selling price of jute in the villages at Rs. 4-7, Rs. 4-4, Rs. 3-12, Rs. 3-4 and Rs. 3-4. At p. 122 Mr. D. N. Munkerji says “At the time of my visit northern jute was selling for Rs. 5-2-3 against Rs. 5 for Mymensingh jute—the average of the market being no higher than Rs. 4-4.” In the face of these statements and facts Mr. Chowdhry’s valuation of the yield at Rs. 8 per maund cannot be considered as reasonable. Probably Mr. Chowdhry has been guided by the Table of Calcutta prices given on p. 53. Accepting those figures as correct, to determine the average price per maund of jute of ordinary quality, we should take the average of the last decennial period (1898 to 1907) and I find that the average Calcutta price is Rs. 6-13 for January and Rs. 7-8 for July. To deduce from this the price paid to the jute-grower you have to deduct the conveyance charges by boat or cart and payments to middlemen as fees, wages, profits, or bribes—to the Faria, the Bepari, the Mahajan, the Aratdar, the broker, &c. A reduction of at least 1 Re. per maund should be made on this ground—so that the January price would be Rs. 5-13 and the July price Rs. 6-8—the higher price lasting only for a month or two. Thus in fairness the jute cannot be valued at more than Rs. 6 per maund, and the value of the yield of 14 maunds of
fibre comes to Rs. 84. The cost of operations has been shown to be Rs. 81. The profit comes to Rs. 3 per acre.

One would ask, why people take to jute growing for such a small profit as Rs 3 per acre? The Rayats, as a class, never keep any accounts, and have no idea as to what profit means. If you ask him to state the cost he incurs in jute-farming, he will invariably exclude the money value of the labour of himself and members of his family, the cost of the meals he supplies to his fellow-labourers, and the money value of the labour of his neighbours which he secures by way of badla or exchange. The jute-grower will not employ hired labour as long as he can secure service by badla or exchange of service. He seldom hires a plough, but employs his own plough—or his neighbour's by exchange, starving both himself and his bullocks and living in a state of chronic indebtedness to the village Shylocks. Whenever you ask him about costs, he thinks merely of the cash he actually pays. The Rayat takes to jute growing not for the sake of any possible profits, but because he is thereby able to find employment for himself and his family. He works for the wages of labour without profit. He even works for much less than the wages due to him to keep his body and soul together: as he holds some of his land at a fixed produce rent giving to his landlord for rent 6 or 7 maunds of jute fibre per acre, out of the total yield of 14 maunds—which means that the total yield becomes 7 mds. and its total value Rs. 42 although the cost he incurs is Rs. 81. Let any man try jute-farming by hired labour, and it is ten to one he will fail. Many a gentleman of education has tried the experiment, and has given it up as a losing concern. If the Government really believes in the promises of large profit held out in the Government reports (page 136), the Government should undertake to open a few model jute farms worked for profit entirely for its own justification, as suggested by the Hon'ble Mr. J. N. Ghosh in the Bengal Council.

Now to conclude. We have tried to expose the error that often prevails among laymen that the jute-grower derives a large profit, and shewn that he works for the wages of labor only, and often fails even to secure his due wages. In spite of this fact he is treated all round as a sort of sponge for every man to give a squeeze. The land-lord screws up his demand by charging whenever he can, half the produce as his rent. The village Shylock realises his pound of flesh in the shape of interest at 70 p. c. per annum during the jute season. The lawyer fattens on his litigation, which the small size and scattered situation of his plots, render unavoidable. Surely the jute-grower deserves the sympathy of every honest citizen.

DVIJADAS DATTA.