

## RICE GROWING IN CEYLON

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IN considering the question of rice growing we should at the outset guard ourselves against impressions we derive from our contact with highly organised industries. In Ceylon, rice is grown primarily to supply the immediate food needs of the cultivator. It is a primitive industry dependent largely on the labour of the cultivator. The industry is therefore one of low efficiency. Any attempt to raise the industry to higher efficiency must fail if we neglect to realise the principle that progress in agriculture has to be a progress of growth.

There is no justification for the belief expressed in many quarters that the inefficient state of the industry is due to the apathy and laziness of the cultivator. That belief is based on ignorance of existing conditions, and has been responsible for the failure of many attempts made for promoting rice growing in Ceylon. The "apathy and laziness" theory hitherto has resulted in introducing two undesirable elements in dealing with rice growing: attempts at artificial stimulation and at restriction of freedom of the cultivators.

Rice cultivation cannot be taught. It has to be practised, and this practice requires a fairly long apprenticeship. A process or method which succeeds under particular conditions does not succeed under other conditions. As an illustration one may cite that deep ploughing which succeeds in good deep soils gives bad results in light, superficial soils; transplanting that succeeds in good loams and clays gives bad results in other soils; thin sowing that succeeds in rich soils becomes a failure in poor soils; fertilisers that give good results in one place give indifferent results in another; varieties of paddy that thrive well in certain localities give poor results in other localities.

The cultivation of rice is not a whole-time occupation. The season for cultivation is restricted; the amount of labour required, even during this limited season, varies very much from day to day. The cultivator must also be prepared for bad seasons and failure of crops. He has to utilize his spare time in growing other crops and in domestic, and industrial occupation if he is to produce sufficient food for the maintenance of his family and to furnish himself with the necessities of life. A cultivator cannot live on rice alone even when he has a large supply of it. Other food is required to supplement it. Grains

and pulses, vegetables and fruits, have to be grown. Some of these products are less exacting than rice in the attention required for their success. If rice growing is to prosper the cultivator has to insure himself against the failure of his rice crop and also to find work during the period when his attention is not required for his rice crop. This indicates that he should have plenty of land for dry cultivation. The cultivation of other food products besides rice should receive every encouragement.

The principal crops that are grown on dry lands are kurakkan, meneri, mun, and tala, besides vegetables and fruit. Kurakkan yields an average of 15 bushels per acre. Meneri 8 bushels. Tala 6 bushels, and mun 4 bushels. The growth of these crops requires very much less labour than the cultivation of rice. These crops do not depend on irrigation; they do not require the use of cattle or buffaloes which is a very essential factor in rice growing.

A successful rural settlement as it existed over two thousand years ago is described by Rhys Davids in his book "Buddhist India." I quote it as it indicates the economic conditions under which a rural community could thrive:

"The houses were all together in a group separated only by narrow lanes. Immediately adjoining was the sacred grove of trees of the primeval forest left standing when the forest clearing had been made. Beyond this was the wide expanse of cultivated field usually rice field and each village had grazing ground for the cattle and a considerable stretch of jungle where the villagers had common rights of waste and wood. The cattle belonged severally to the householders of the village, but no one had separate pasture. After the crop was cut the cattle roamed over the fields. When the crops were growing they were sent all together under the charge of a herdsman, hired by the village collectively, to the village grazing grounds beyond the field."

The conditions described above have continued to exist in Ceylon as instanced by many villages to-day and others that existed up to very recent times as described by the late Mr. R. W. Levers in his "Manual of the North-Central Province."

There are three main conditions under which rich land is held in Ceylon.

The first is where the fields are situated in thickly populated areas and where the owners of such land cultivate the fields, but do not depend on them for their livelihood. The second is the tenant cultivator who cultivates a field and pays a share to the landlord. The third is the cultivator in the tank areas who depends for his livelihood on the cultivation of paddy land by irrigation, supplemented by the cultivation of other products on dry land.

For improving the conditions under which cultivation takes place the main consideration should be the provision of facilities for a freer and liberal access to both irrigable and unirrigable land. Restrictions and control in regard to cultivation with innumerable rules and regulations instead of promoting cultivation, retard its progress. The greater the number of prohibitions and restrictions are in any public undertaking whether it is Agriculture, Sanitation, Education, or Local Government the greater the chances of failure. Regulations are a necessary evil and the success of any undertaking is in inverse proportion to the number of regulations and restrictions imposed on it.

The present Vel Vidane system and the Huvandiram tax should be completely done away with. The cultivators should elect their own Vel Vidane as their representative or spokesman. They should remunerate him or accept his voluntary services as they wish. No outside influence should be brought to compel them to be under a Vel Vidane or to pay a share of their crop to such a Vel Vidane.

There should be a definite understanding regarding irrigation facilities. The cultivators should know well ahead of the season whether they have a prospect of getting irrigation water during a particular cultivation period. If as is often the case at present they are kept in suspense till within a few weeks of the time of sowing, no good work can be expected on the land. A man cannot spend his labour unless he knows that he has a fair chance of utilizing such labour in a useful purpose.

Rice cultivation cannot be carried on without a sufficient number of cattle or buffaloes for use in its operations. The extent of land cultivated and the thoroughness of cultivation depend entirely on the number of buffaloes available. Two measures are urgently needed in regard to cattle and buffaloes if we are to look for progress in rice cultivation; the provision of communal grazing land whenever possible, and, the re-enactment of the regulations prohibiting the sale of buffaloes for slaughter. If the present rate of slaughtering buffaloes continue, rice cultivation will be confronted with a crisis from which it may not be able to recover.

The next important measure that requires attention is the improvement of facilities for transport and sale of produce. The establishment of depôts for the purchase of paddy, gingelly, kurakkan, etc., at fixed prices similar to what has been done on a limited scale in regard to tobacco in Jaffna and cotton in Hambantota, would go a great way to encourage the cultivator who in remote villages finds it impossible to sell his produce at a fair rate.

Special facilities should be afforded by the Railway to convey local produce, both by providing suitable wagons, and, by charging such rates as could stand competition. This aspect does not seem to receive the attention of our Railway. It does not provide sufficient facilities for the conveyance of perishable agricultural produce, nor does it seem to be prepared to attract new produce for transport by means of propaganda.

One of the anomalies of the working of the Ceylon Railway is its encouragement of foreign agricultural produce to the detriment of local agriculture. Rice and other agricultural produce from India is carried by the Ceylon Government Railway at 4 cents per ton per mile whereas they charge 10 cents or 150 per cent. more for Ceylon produce. The Railway also seems to discourage the cultivator and encourage the large dealer by offering special rates for produce in large quantities, for long distances.

These then are some of the economics in rice growing that require immediate and earnest attention. Research and improved methods no doubt can contribute their share, but before the industry can take advantage of improved methods these preliminary conditions of rice cultivation should receive attention.

#### DISCUSSION

HIS EXCELLENCY thanked Mr. De Silva for his interesting and instructive paper and added that they were very much indebted to him for it. Mr. De Silva's enthusiasm for the care of the villager was well known as he had not confined himself merely to words. Anybody who had visited his properties at Anuradhapura would see that he carried out his experiments on lines designed to be of real assistance to small cultivators. HIS EXCELLENCY then invited comments.

MR. W. L. KINDERSLEY said that although he was not a cultivator himself, he would make bold to put forward a definite proposal which would conform to the requirement laid down by His Excellency not to impose undue burdens on the taxpayer, and also conform to the requirement laid down by Dr. Youngman that criticisms should be constructive, and not destructive. The present policy of paddy cultivation was ridiculous. From inquiries he made, he was able to gather that the return on a bushel of sown paddy was ludicrously inadequate. In Italy and Spain, the return on a bushel of seed ranged from 60 to 80 fold. In Ceylon, he was informed that the return was 12 fold as a rule to 24 and 30 fold except in a few cases where the yield was 40 fold and this was where the fields had benefited from the washing of estates which brought down a considerable amount of well-manured silt.

The question was how to increase the yield. The ordinary villager had not the means to buy large supplies of manure, but the co-operative movement enabled him to expend a certain amount of money on manuring his fields. But they had to bear in mind that manure which was suitable for a field in Gampola was not suitable for a field in Kurunegala. Therefore, whenever, a man asked for a loan from the co-operative society for the purpose of manuring his fields, the request should be communicated to the Agricultural Department so that advice might be given on the best form of manure and the methods of manuring to be adopted.

It was most essential that the report of the Chemist should be prompt. In this way, he saw no reason why the output of paddy in many of the existing fields should not be doubled, trebled or even quadrupled. He hoped that the suggestion would be found to be practicable.

DR. R. V. NORRIS, Director of the Tea Research Institute, expressed himself as doubtful as to the utility of such a procedure, and considered that the results would bear no proportion to the labour involved. He thought that, in the present state of affairs, reliable information as to the best manurial practice for paddy could only be obtained by definite manurial trials in different types of soil. The response of a soil to manures was conditioned by many factors, at present imperfectly known, and such factors were in general not capable of elucidation by mere analysis.

MR. H. L. DE MEL said that as an unofficial member of the Railway Advisory Board, he and his colleagues had pressed on the Railway to afford sufficient facilities to enable the food produce to be transported. As the Railway had been commercialised, any question of bounties and preferences was being stoutly resisted but it would interest them to hear that the last recommendation of the Board in regard to that matter had been accepted by the Government, and a rule would shortly be formulated that rice and paddy should be carried at 4 cents per ton mile for distances of 150 miles and over.

MR. W. A. DE SILVA: What about short distances ?

MR. DE MEL said that the railway was of the opinion that it would be unprofitable to these commodities for short distances at the concession rates.

The HON. MR. E. R. TAMBIMUTTU said that the matter of the question of freight was of immediate importance. The reduced rate applied to only a minimum of eight tons, and the small man was not benefited by it. He thought that the overhead charges on the railway was exceedingly high, and they should see that the people were not mulcted. There was a time when rice was carried free on the railway. It was not merely a question of whether it would pay the railway, but it was a question of whether it would encourage the cultivators if concessions were given.

MR. R. C. PROCTOR said the statement that the villager was lazy and apathetic was far from true. The villager had been cultivating all these days for his own consumption, and if they wanted to make him an agent for extensive cultivation, they should give him all the facilities.