

was no necessity for any irrigation. The cost of cultivation on this account was considerably less than that of the previous year namely Rs. 55—13—4 per acre. The green leaf obtained worked out at 36,436 lbs. per acre in $2\frac{1}{2}$ months' time or 1410 lbs. per rupee spent on cultivation. In this case, the sunnhemp was pulled out instead of being cut and hence the entire plants including the roots were included in the weightage. If the crop had been pulled out in the previous year, the yield might have gone up by one-fifth more and the production per rupee might be 1150 lbs. instead of 950 lbs.

PRACTICAL AGRICULTURAL CO-OPERATION *

By Mr. K. UNNIKRISHNA MENON, Dip. Agri.

Deputy Director of Agriculture, IV Circle, St. Thomas Mount.

As I have been studying co-operation with particular reference to agriculture I am here attempting to place before you some of my views on the subject. My claim as an outsider to speak on co-operation before an audience of co-operators is the fact that the man in the forest can see only trees, whereas the man outside can see the forest as a whole. Before coming to the point I shall attempt to describe the present position of co-operation in this country in the broadest way possible and contribute my mite by way of suggesting methods for improvement.

In the history of any organisation a few definite stages of growth can be noticed. With a number of enthusiasts who do propaganda work in favour of a movement and under their guidance new organisations are started as the first step in their existence. Secondly, there is a period when people are busy forming organisations and their number easily mounts up. Good reports commenting on the encouragingly large number of organisations formed during the period please the public as well as the Government. This is followed by a third period of working difficulties due to practical inaccuracies in the programme of work forecasted for the organisation to follow. The original scheme was probably suited to the conditions which were available at the outset when the propagandist studied the question. There must have been some changes, as a result of which the needs of the country and the population must have undergone considerable change. Later on comes the more difficult and annoying period of stagnation which is marked by inactivity. The next stage is one of fear of the authorities that helped the formation of the organisations as to whether they are any good or can serve any useful purpose, and so forth.

* Paper read before the North Arcot District Co-operative Conference in May 1932, held at Pallikonda.

It will be evident to them that these organisations can do little, and the question of winding them up will then be looming large in their minds.

This is the economic principle on which all organisations in this world have been found to work and I fear that it will be unnecessary for me to explain to you now as to the stage in which we stand with regard to the co-operative societies in this country. Therefore, without commenting upon this aspect of the question, I directly come to consider as to how an organisation can continue to remain useful to the public even though it was instituted scores of years ago. What I would consider necessary for an institution to live long and be useful to the public is that its organisers must study the changing conditions of the country and the needs of the people who are members of the organisation and adopt changes in the scope and work of the organisation. Any organisation which is prepared to expand according to the changing needs of the people for whose benefit it is formed cannot fail to become useful. For this purpose again, we have to consider as to what the members of these organisations want them to do as different from what they have been doing hitherto. Putting these questions side by side with the directions in which the organisations should expand, we shall be able to get at the solution of the difficulties which present themselves in our co-operative movement of the present day. I leave this question more for the kind consideration of the co-operators before me for solution, with special regard to the needs of the particular society or union which has deputed them to this conference. However, I shall make some suggestions of a practical but general character.

Co-operation was worked as a purely credit movement in the rural areas with a fair amount of success at the beginning. Later on, it fell into inactivity. A condition of stalemate was created by the large overdues and the panchayat not being bold enough to take any action. This is a proof to show that it has failed to function as a pure credit movement.

The society with overdues is considered to be a bad society. It has to be reconstructed. We have to look at the causes as to why the overdues accumulated. In general terms the people may easily attribute it to the inefficiency of the managing committee, but the members can easily find out the special reasons which contributed to it in each case and end or mend them as far as possible. The cause of the overdues is generally found to be that the loan was not used for productive purposes so that the borrower might become financially stronger to be able to pay back the loan. Even the worst usurer in the country has been found to help his client with additional loans when he realises that the debtor is a man of character and that by only helping him with additional loans that he can enable him to

pay back the money which is long overdue to him. Taking the cue from the village banker, the societies have to help the members with further loans in order to strengthen the financial position and more particularly see that they utilise the present loan entirely for productive purposes. Therefore, what may be necessary in the case of co-operative societies will be to find further funds for giving cheap credit to the member suffering from overdues, provided that the man has character. Such may be special loans for special purposes given with due regard to the purpose for which one must use the loan. The return of such loans with interest in moities or as a whole in due time must be very vigilantly looked for and effected. If things are arranged by the society to do so, the overdues can be slowly reduced.

The Townshend Committee found out that the overdues were due to short term loans having been used for long term purposes. This Committee, as well as the Royal Agricultural Commission, were not well satisfied with the kind of supervision exercised on the societies. The educative work done in the rural areas was found inadequate and the Provincial Union deputed a number of gentlemen to do propaganda work very recently. When I had occasion to speak to a fairly enlightened co-operator, he was not able to understand that a co-operative loan is money borrowed by a member from his own assets. The full significance of the term unlimited liability was not understood by most members until the liability of a society was actually demanded from the more well to do out of them. Such being the state of affairs one can hardly think that supervision of the work of a society or societies can be every efficient if done by the ordinary run of members of the rural credit society. More educative propaganda of an intensive nature is evidently needed, while the closer examination of the purpose of a loan must yet be done by some uninterested agency. As rural credit is mostly meant to finance cultivation, I mean to emphasise that the supervision must be done by one who has a full knowledge of the life and requirements of a farmer. From our old experience we have to see that the supervision must be more liberal but accurate. This is a difficult one. Unless we are able to carry out this in the best way the economic progress of the villager which is the aim of the co-operator as well as the agriculturist cannot be effected. Without improving the economic position of the villager we cannot expect him to clear the overdues. The chief productive work for which a society may finance a member of the village is agriculture, and in the fitness of things it devolves on the members of the staff of the Agricultural Department to examine the purpose of the loan and give the society and the party who takes the loan sound advice on the economic aspect of it and how best it can be utilised. The Director of Agriculture, Mr. S. V. Ramamurthi I. C. S., aptly puts it as "prevent the co-operative

hen laying infertile eggs by fertilising her with agriculture, when the eggs she lays will lead to chicken and further multiplication of life". I have got a full staff of agricultural graduates who have been studying the economic life of the farmer and I believe that none else can be more competent to do both the educative propaganda work and a close examination of the purpose of such loans. If you, as co-operators are prepared to try the experiment with a few societies in each taluk, I shall be glad to offer the services of my staff for the purpose so that our joint work may bring about more satisfactory results.

It is found difficult to get a gathering or a quorum to hold a general body meeting in a society. This is due to the lack of interest on the part of the members in the affairs of the society, which in other words means that the society is not functioning in such a way as to benefit the members. This is a practical proof of the statement I made at the beginning. Therefore, the society must form the organisation of the village for various other purposes which are now found necessary for the villager as a result of the change in his outlook. Whatever is useful of the new ideas and informations for the progress of the villager must be made available at the society centre, such that the villager must be satisfied by the fact that the society is worked entirely for his benefit. If such a feeling is created in the minds of the members, no co-operative society can become unpopular. The practical working aspect of it may come to mean that the society must be almost a rural reconstruction centre of the village. It may have to function as an agricultural improvement society to work up the economic advance of the villager besides attending to health, education, sanitation, medical aid, etc. of the village. The society may be required to go so far as to take up the question of settling disputes of all kinds in the village. In order to effect the joint purchase of the requirements of the village and the co-operative sale of the produce, the society will have to function as a trading body. The society may have to serve the village even as a news agency, since the villager of the present day is found interested even in such affairs as the Sino-Japanese relations. If there should be a separate institution for each one of the above items of work it will make matters very complicated with sometimes conflicting interest that may paralyse work and progress.

THE ORGANISATION FOR ENTOMOLOGICAL RESEARCH IN THE UNITED STATES OF AMERICA

BY M. S. KYLASAM, B. A. (Hons.),

Assistant in Entomology, Agricultural Research Institute, Coimbatore.

In this note an attempt is made to give a picture of how entomological research is being carried on by the Bureau of Entomology in the U. S. A. That the importance of research in this direction has