

Reorganisation of Agricultural Education in India

by

DR. T. M. PAUL,

Indian Dairy Research Institute, Bangalore

About 90 percent of the population of India is concentrated in the villages. Of this, over 80 percent is dependent on agriculture for its livelihood. So, about 75 percent of the total population of India is directly or indirectly living on agricultural operations. Besides, agriculture is the largest industry of the country and quite many of the other industries are dependent on agriculture. In spite of this paramount position agriculture occupies in the national economy of the country, little attention was paid to this industry till recently. During the days of foreign rule, agriculture was looked upon as a source of raw materials for the industries of the ruling country. That is how India had to be importing food even in normal times, inspite of its immense agricultural potential. Only after the beginning of the last war, when rice was not available in the exporting countries, attention was focussed on producing enough food within the country itself. Even after the war, world-food-shortage continued and internal supplies became more and more inadequate in India due to the continued increase in population, loss of agricultural land as a result of the partition of the country and the failure of monsoon during successive years. Even now, one cannot say that agriculture is given the place it deserves in our national life. However, it is gratifying to note that more and more people have come to realise the importance of agriculture to national well-being.

Much is being talked about the reorganisation of agriculture to enable the production of the entire food supplies needed in the country, within the country itself. The illiteracy and the ignorance of the ryots are the chief bottlenecks in increased agricultural production. The improved methods of production developed in our Research Institutions and taught in our agricultural colleges do not reach the actual tillers of the land who alone can put them into practice and effect any improvement in production. With this end in view various proposals are being made at different levels. Extension programmes, and community development programmes are being inaugurated in different centres of the country to improve the condition of the agriculturist. The improvement must be made at the lowest possible level—and this is possible only by reorganising agricultural education and popularising it in such a way that improved methods of agricultural practices will reach the doors of every farmer in India. With this object in view suggestions are made in this paper to reorganise the agricultural education to fit in with the needs of the country at the present moment.

Agriculture and animal husbandry are very much dependent on each other in India, so much so, one cannot be separated from the other. But this is not at all recognised by many people. Consequently agricultural colleges specialise in agriculture almost completely ignoring animal husbandry. The veterinary colleges which exist today impart instruction in the curative and preventive aspects of animal husbandry. The animal population of India is mainly composed of cows and buffaloes and hence dairy husbandry must be the centre theme of any training in animal husbandry. It is well known how much the welfare of our cows and buffaloes are dependent on agriculture and vice-versa. Therefore it is clear that land, agriculture, animal husbandry and dairy science cannot be separated from each other—one is complimentary to the other. Hence the need for any agricultural education to be well balanced in agriculture, animal husbandry and dairying. Any specialisation in one particular branch should be done after the degree stage only.

Just now, we have but few Agricultural Colleges giving instruction up to the degree standard. The minimum standard of admission is inter-science and the period of training is, three or four years, so much so, it takes nearly six years after matriculation for the training in agriculture. This is beyond the reach of the average agriculturist and hence the course has to be simplified if it is to become popular among the agricultural population. Institution of a diploma course of two years duration in agriculture and animal husbandry and dairying will be the only solution to meet the situation. These agricultural schools will be situated not in towns but in the rural areas. To start with, one school may be opened in each district. Lower secondary (either pass or failed) will be the minimum qualification for admission and the training will be in the local vernacular and concentrate equally on the practical aspects of agriculture, animal husbandry and dairying. Only children of agriculturists will be admitted to this course, so much so, they will be almost familiar with the current agricultural practices in the area. So, the training will concentrate on the improved methods of production in the three fields. No fees will be levied, but at the same time, production from the farms attached to each school will meet a portion of the cost of the training. After the two years of training, the diplomas will be awarded based more on the progress-report of each student than on any formal examination. These diploma holders will then mostly return to their farms in the villages. Some of them will be available for teaching agricultural subjects in all primary schools as per the basic education system or for extension work on the country side envisaged in the community projects. Even some of the lower jobs of the agricultural and animal husbandry departments will be open to them. In any case, these diploma holders are to form the back bone of all agricultural extension work in the country and without such an army of

trained workers in the agricultural and animal husbandry fields, it is not possible to improve the standard of agricultural production in the country.

A second stage in the reorganised scheme of agricultural education will be a degree course in agriculture laying equal emphasis on the theory and practice of agriculture, animal husbandry and dairying. Here, the minimum educational qualification for admission will be a pass in intermediate with Chemistry, Botany and Zoology. This course will extend to four years, and the degree will be awarded after a course of approved practical training. These colleges will also be situated in rural areas to give an actual agricultural bias to the training and also extensive farms will be available for practical training. Even here, the admission will be open to students with some aptitude for agriculture. These agricultural graduates will be required to fill the supervisory and lower gazetted posts of the agricultural departments.

A third stage in agricultural education will be the specialisation in any of the branches of agriculture, namely agricultural production, animal husbandry and dairying, after a four year degree course. Only one such post-graduate college will be needed in each province, where regular instruction will be given in the three different branches for two years. Simultaneously, each student will have to work on a problem and submit a thesis as part of his examination. On passing the examination, these post-graduate workers will be awarded M. Sc. (Agri.) degrees. These M. Sc., graduates will be experts in their own branches of specialisation and will be required to fill the superior posts of Agriculture department particularly research and teaching posts.

To put through this scheme of Agricultural education, it will be necessary to reorganise the agricultural department itself. Both the agricultural and animal husbandry departments will be combined under one Director of Agriculture with three joint Directors, each in charge of Agriculture Ani. Husbandry and Dairying. The reorganisation scheme of Agricultural education also will be placed in charge of the Director of Agriculture, so that all facilities for practical training will be available to the students. Of course the examinations at the 2nd and 3rd stages will be conducted under the supervision of the Universities.

The reorganisation of Agricultural education on the above lines will provide the necessary facilities for an agricultural extension service. In the reorganisation scheme to begin with, each district is to have an agricultural school with a farm attached. The farm will have all the three sections, agricultural production, animal husbandry and dairying. Side by side with the diploma course, short extension courses of 3 months' duration comprising all the three sections, or one month course in any section will be arranged for the benefit of the village farmers. During

the annual holidays of the school, refresher courses could be conducted for the benefit of agricultural extension workers, with a view to give them opportunities to be in touch with the latest developments. Even other arts and science college staff-members and students can undergo this summer extension course. Besides all these activities in the school itself, there should be a regular set up of people attached to the school, and equipped with all the necessary propaganda material to go into the villages and explain the latest advancements in a popular language.

LIBRARY
TNAU, Coimbatore - 3



000053738

Recent Advances in Agriculture — their Importance to Coconut Industry

by

S. G. AIYADURAL,
Assistant Oilseeds Specialist

Introduction: Considerable research work is being pursued on the theoretical and practical aspects of agriculture in the different countries of the world and results of practical importance are getting accumulated from year to year. Only careful study of individual problems can however reveal to what extent the results would be of practical applicability for the improvement of the crop concerned.

Systematic long-range applied research on coconut is of recent origin. Copeland has, in his well-known book, described the work done in the Philippines on the physiology of coconut in the earlier years. The four coconut Research Stations in the Madras State have contributed much valuable information on the development of the crop. A research Scheme on coconut was initiated in Ceylon in 1933. In 1929 the Department of Agriculture, Straits settlements and Federated Malaya States started research on Coconut products. Entomological work in Fiji has provided good examples of biological control. Research Stations in Indonesia carried out much work on coconut palms.

There is shortage of oils and fats in our country due to industrial advancement. It has been accepted that the main source of expansion in world fat supplies lies in extended development of the scientific cultivation of appropriate oilbearing plants. Coconut is one of the major oilseed crops of India. Hence the extension of research and the wide application of present knowledge to existing coconut lands would result in increased production of coconuts.