THE FUTURE OF THE INSTITUTE

By

MR. F. C. COOKE,

Director.

MR. F. C. COOKE said that the past history of the Coconut Research Institute has been very adequately dealt with by the Minister of Agriculture and by our Chairman. I do not now propose therefore to speak about the past work of the Institute which has already been fully reported in the Press and in our own *Coconut Quarterly.* Man does not progress by dwelling too much on the " glorious past " or on past achievement. To do so is like trying to progress while looking back. Sooner or later you put your foot in a hole or trip over a log and come a cropper.

So I propose to deal now only with our Present and the Future. The Institute today, and by today I mean the five years since the first increase in Cess in October, 1950, is reorganising itself and making up for 21 years of financial malnutrition and neglect. New officers have now to be recruited, officers have to be carefully selected for specialist training overseas, and the buildings and organisation of the Institute have to be expanded so as to provide a more complete service to the Coconut Industry.

As regards research our most urgent need is for more specialist officers and for far greater concentration on individual problems of research. In India, the Coconut Research Stations have no less than 19 graduates, each of whom is himself expected to investigate individual problems of research and the results are published either under their own names or as first authors, even though they may not be the most senior in the team. This could in some cases have unfortunate results in irresponsible publications but on balance more is achieved because more brains and fresh young brains are actively and keenly engaged in research. Otherwise the subordinate research officers lose interest and vegetate until their turn for promotion comes.

Almost since its inception the work of our Institute has depended on the imagination, drive and work of only a few senior officers and in my opinion the most urgent need of the Institute is to decentralise its activities. A scientist who busies himself with a whole multitude of problems rarely completes a large piece of research thoroughly and satisfactorily. This is an age of specialisation and the Institute urgently needs more specialists. Nor is scientific research a matter which

one can wholly delegate to junior officers. Each research officer himself must be closely, practically and intimately concerned with his specialist problem, and it is only by actual work, persistence, singleness of purpose and a determination to overcome difficulties that he can ever hope to reach sound conclusions.

That is why it is so important when we are considering officers for overseas training to send only the right kind of men from Ceylon. The advent of speedy air travel and the craze for international conferences has resulted in a frame of mind which is not healthy. Some people are beginning to think they have a right to be sent overseas. In my view this right should be earned by sound work. This is the American way—In the Hawaiian Pineapple Research Institute only when a research officer has concluded a complete and major piece of research is he recommended for long leave and overseas travel and then the Institute is keen for him to go to extend his knowledge, and the same man may be sent overseas again and again on various missions, if his output of research is high.

When considering officers for overseas training or study it is necessary to consider what are the ingredients of success. They are Character, Energy, Brains, Knowledge and a Sense of Humour. It is sheer waste to send men who have only two of these characteristics and this is the reason why officers so often fail on their return to deliver the goods and give a proper return in the development of Ceylon's economy.

In this respect we have been very fortunate; the Board has sent four officers overseas and all have returned keen, inspired and full of useful knowledge acquired the hard way and the expense will, I am sure, be more than justified by the benefits that they will bring to the coconut industry, as their work develops.

So we can now begin to look to the future. Our most immediate problem is the rehabilitation of the coconut industry. This is proceeding on sound lines through the good work of the Planting and Advisory Division supported by the work of the Research Divisions. The Soil Chemist has been studying the manurial problems of young coconuts; the Botanist has already laid down the principles of selection and the correct management of nurseries, based on the results of his investigations, and now we come to the work of the Chemist.

It is the duty of a research officer to look ahead and to anticipate trouble in order to have the answer ready when the emergency arises. I am anticipating that we can expect trouble in replanting certain areas due to soil exhaustion through seventy years of mono-cultivation. There are indeed rich soils with ample reserves of all necessary plant nutrients which with ordinary attention will continue to give 6,000 nuts per acre; there are poor soils which give only 2,000 nuts or less. It is possible that these poorer soils may have become exhausted of certain essential and important plant nutrients, other than NPK, and it is for this reason that we have started a sub-division of plant chemistry in order that we shall soon be in a position to diagnose any such deficiencies by the method of foliar diagnosis and plant analysis, if and when the need arises and I am certain it will.

Another field of possible trouble is pests and diseases. Young plants are particularly vulnerable because their crowns are so near to the ground and at any time there may occur a major outbreak of a hitherto minor or unrecorded pest or disease. In India they have no less than 13 officers working on these problems. It is too late to try to do something when a serious outbreak occurs and besides there are a host of problems which have never been properly tackled. It would, for instance, be most useful to determine what is the natural biological control which is here preventing

the coconut beetle from getting out of hand. Today the problem is really no worse that it was 30 years ago. Nevertheless on one young plantation I visited no less than 99 out of every 100 palms were seriously affected. If we knew what is controlling the pest elsewhere we could use the parasite on this estate.

By far the most important work we now have well in hand is the problem of producing two nuts where only one nut is obtained today. Besides halving the cost of production, it is essential to produce more coconuts in order to maintain the standard of living. It is anticipated that the population of Ceylon will reach 16,000,000 in the next 30 years and it is necessary for us to concentrate on the vital problem of doubling our productivity of raw materials and finished goods not only in the coconut industry but also in subsidiary fields of production. If this is not done the people must inevitably suffer because the standard of living is fundamentally determined by the output of work per head.

In this connection, I am forcing the pace in order to ensure the early establishment of our Isolated Seed Garden in order to supply high-grade seed coconuts to the whole of Ceylon. I have received the most enthusiastic co-operation from the Forest Department in securing a suitable piece of jungle and from the Soil Chemist and Botanist in selecting and developing the actual site.

And now I will conclude leaving you with two thoughts regarding the aims and objects of research. To the true research worker, his purpose is to strive, to seek, to find and not to yield, and to this end he must work with all his heart, with all his soul and with all his mind. If he does this he will be a lucky man for he will indeed find the secret of true happiness. If, like us, he is under a Board of Management which is so just and considerate he is indeed fortunate.