

Agricultural Survey— Coconut

Mr. C. A. Wickramasuriya, Chief Advisory Officer, Coconut Research Institute interviewed by Prof. P. P. G. L. Sirivardene over the National Service of Ceylon Broadcasting Corporation.

What conditions are necessary for growing coconuts successfully?

Coconuts grow well at altitudes below about 2000ft. and where the temperature is about 80°F. The coconut palm requires a well distributed annual rainfall of at least 50 inches. Provided the land is not water logging the palm grows satisfactorily on a variety of soil types, such as alluvial, loamy, gravelly, lateritic, sandy and even on clayey soils.

What acreage of land is presently under this crop in Ceylon?

In Ceylon a little more than one million acres of land is estimated to be under coconut. It is around 1.15 million to be more exact.

What are the varieties of coconut found in Ceylon?

The varieties of coconut found in Ceylon include the ordinary tall type which is called typica and then there is the dwarf variety called nana. The 3rd is the aurantiaca—the common thembili generally grown for drinking and medicinal purposes. Within each of these varieties there are a number of forms.

Which of these are cultivated on a large scale?

In Ceylon the ordinary Tall type called *Cocos nucifera* which is a variety of typica is grown on a commercial scale and this is what you commonly see.

Why is the dwarf variety not cultivated on a commercial scale?

The dwarf palm is not grown on a large scale because this variety suffers adversely from drought and because its nuts are small requiring about 2,250 to 3,000 nuts per candy of copra; furthermore its copra is leathery and of poor quality. Then further, flower production is seasonal and the palms are more susceptible to pests and diseases and this variety has a life span of about 40 years.

Is that why the tall variety is grown on a commercial scale?

Yes, the Talls are preferred because these palms are less susceptible than dwarfs to drought and the nuts are larger with a better out-turn of copra.

In the case of the Talls we require about 900 to 1300 nuts for a candy of copra, and this copra is also better than the copra obtained from dwarf nuts. Besides, flower production in the case of the Talls is continuous and the life span of the Tall is about 60 years or more.

What is the maximum yield that could be expected from an acre of coconuts?

The yield from a coconut plantation depends on a number of factors such as the effective rainfall, soil, quality of planting material used, manuring and on other management practices. Even where good planting material is used and correct planting and management is adopted, yields would differ depending on the rainfall and moisture holding capacity of the soil. In this respect different areas could show wide fluctuations of yield varying from 3000 nuts to even over 6000 nuts per acre per year.

How many palms are there roughly in an acre?

The number of palms in an acre in this country varies from about 55 to over 90. For good yields we recommend 64 palms to the acre.

How many nuts does a good tree yield and I believe they pick coconuts every 2 months. Is this correct?

A palm that gives about 70 or more nuts could be considered a good palm and yes you are correct coconuts are commonly picked once in two months.

What sort of work does the Coconut Research Institute carry out?

The Coconut Research Institute carries out Research to determine ways and means of obtaining increased yields. For this purpose there are the divisions of Botany, Soil Chemistry, Crop Protection then there are divisions of Agrostology, Chemistry and Biometry. The findings and recommendations of these divisions are published in the Institute's leaflets and publications which are available.

I believe the Coconut Research Institute has an Advisory Division?

Yes. The Advisory Division acts as liaison between research and the public and conveys the findings and recommendations of the Institute to coconut growers to encourage and induce them to adopt improved and scientific methods of coconut cultivation. Then there is also the Planting Division of the Institute which is responsible for raising and supplying quality seedlings to the public for planting during the Yala and Maha planting seasons at the Government Subsidised price of -/25 cts. each.

Do you think that the owners of coconut land in this country are getting the maximum production from their plantations ?

No, not in most cases. I would say that the condition of the majority of the coconut plantations in the country could without difficulty be improved to produce higher yields by the adoption of correct management practices and by judicious manuring. At the same time because about 20,000 acres of coconut go out of production annually owing to senility, it will also be necessary for owners of such lands to either replant or replace such old and uneconomical plantations without delay.

How does the Advisory Division of the Institute operate to persuade coconut growers to adopt improved methods of coconut cultivation ?

The Advisory Division of the Institute carries out its functions through a net work of 24 field men who are designated Advisory Field Officers and who are stationed in different parts of the country and assigned ranges varying from about 35,000 acres to 45,000 acres of coconut. They serve to enlighten owners of coconut lands by giving advice and "on land" demonstrations on proper methods of new planting and replanting, on aftercare of seedlings, on manuring, also on pests and diseases control. They also advice on soil and moisture conservation and other cultural and management practices that are necessary to be adopted to maintain their plantations in good condition and obtain increased crops.

This is very interesting and so useful. Under what type of service do you do these ?

Such guidance and assistance is made available under the Planting Service, Pests and Diseases Control Service, Crop Improvement Service and Service on Request.

I presume these services are offered free of cost ?

Oh! Yes, then also in addition the Field staff carries out inspections of coconut lands for the Commissioner of Coconut Rehabilitation, where fertilizer has been purchased by small holders through Co-operative Societies to manure their plantations.

That is interesting. Could you tell us a little more about the Planting Service you are providing to coconut land owners ?

The Planting Service is extended to those who intend to do new planting or replanting. Such intention is known when a person applies to purchase seedlings from the Coconut Research Institute. The Field Officer visits such lands by prior arrangement with the owner to demonstrate lining for planting and to advice on the preparation of planting holes and on the methods of planting. Thereafter the officer will inspect the young plantation and advise the owner on after-care, manuring and other cultural operations.

Then how about the Pests & Diseases Control Service ?

The Pests and Diseases Control Service consists of inspecting plantations to advise on preventive and control methods. This Service is partly shared by the Crop Protection Division which handles the pest control unit.

What about the Crop Improvement Service?

The Crop Improvement Service is rendered, to those who without a knowledge of correct management practices or who without recognising the problems allow their plantations to be in a poor state of management. Such lands are visited by the Advisory Field Officer on his own and the owner or the person in-charge is given necessary advice for the improvement of the plantation. In carrying out these services the Advisory Field Officer will persuade owners of land to use fertilizer regularly and outline to them how they could obtain their annual requirements of fertilizer, from the Fertilizer Corporation directly or through a Co-operative Society, at subsidised prices on permits issued by the Commissioner of Coconut Rehabilitation. He will distribute leaflets of the Coconut Research Institute and fertilizer application forms and wherever replanting is necessary, seedling application forms.

What about assistance to small holders?

The services I mentioned to you are meant mainly to help the small-holder, in helping him the officer even goes to the extent of tracing contour drains for soil and moisture conservation, pegging out drainage drains in low lying areas and lining lands for new planting and replanting with the object of training such persons on how such work should be done. He also helps them to fill up application forms for their requirements of fertilizer and seedlings.

While the form of approach no doubt is helpful in promoting the adoption of improved methods on individual lands, are there any other ways by which owners of coconut lands are made aware of improved techniques?

Through the services I have described the Advisory Field Officer is able by establishing individual contact to provide "On land" advice and demonstrations.

The other ways by which we persuade owners of coconut lands to adopt improved methods are through Demonstration Centres which are meant to serve as visual aids and which have been established and are being maintained by the Coconut Research Institute at Pallai, Mundel, Alampil and Mylambavelly. Such demonstrations showing the advantages of adopting correct methods of planting, replanting, management practices and fertilizer usage have been found to be an effective method of impressing on the coconut grower the need to adopt improved methods. Besides these, private lands within the ranges of the field officers have been selected to serve as Demonstration Units in these areas.

And does the Field Staff also deliver talks on proper management practices in coconut cultivation at Village Meetings within their ranges?

Yes, and at these meetings C.R.I. Leaflets and publications and also Fertilizer and Seedling application forms are distributed. Then also the Division participates in exhibition in various districts which are periodically held by Government Agents and District Agricultural Extension Officers.

Within the few minutes left, Mr. Wickramasuriya, can you give your views whereby a target of increased production could be achieved in coconut growing?

Owing to the scarcity of suitable new land for any appreciable expansion of the existing acreage, increased production can be brought about only by increasing the present yield per acre. A considerable increase in nut production could be effected within a short period of time by manuring the palms systematically. Besides, by replanting senile and uneconomic lands with high yielding material and by adopting scientific methods of planting and management practices, nut production can be increased.

And of course, as you mentioned earlier, Government already provides assistance to the industry by offering selected seedlings at the subsidised price of -/25 cts. each and I believe the Government also provides fertilizer at 1/3 or 1/2 the cost depending on whether the land is over or under 20 acres in extent?

But this alone is not sufficient to reach the goal of increased production. It is essential for an Extension Organization to intensify its efforts to persuade every coconut grower to regularly and judiciously fertilise his lands. Unfortunately the present Advisory Division of the Institute is not sufficiently equipped with adequate facilities to provide such an extended service to adopt individual, group, and mass contact methods which is absolutely necessary. Furthermore if such an Advisory and Extension Service works in close Co-operation with the Coconut Rehabilitation Department and the Fertilizer Corporation, I consider the desired results of increased production can, to a very great extent be achieved without difficulty.

I would imagine that these shortcomings would be rectified?

I hope so!

One last question, do you think that the small holder deserves further assistance?

I certainly think so, in the majority of cases as the financial resources of the small holder is limited, he is unable to purchase fertilizer even at subsidised prices. I think if they are given fertilizer on easy payment terms and monetary assistance to cut drains for soil and water conservation and to replant his senile and uneconomical plantations the coconut industry will benefit to a very great extent.

ASIAN COCONUT COMMUNITY

The Community will have to be judged, eventually, not merely on the splendid impulses that have led to its creation but upon the stronger realities of its ultimate commercial results. A promising start is always a useful first step. But the community will have a long distance to cover. The ceremonials of an elaborate inauguration must not be permitted to distract attention from the hard work ahead. Asian leishureliness and national rivalries will need to be disciplined to the urgencies of the wider task ahead.

CEYLON DAILY NEWS, 4.9.69