

The Planting and Advisory Division of the Coconut Research Institute of Ceylon

Review of operations since its formation

BY

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PLANTING SECTION

THE need for Re-planting of Coconuts in Ceylon cannot be disputed. The total extent under coconuts is roughly 1,050,000 acres and an appreciable proportion of the palms therein have reached or are reaching the stage of senility and non-production. It has been estimated that if the economic life of a coconut palm is calculated to be 70 years, the area which would become due for re-planting each year would be 1/70 of the total extent or about 15,000 acres.

In order to carry out a scheme for the replanting of coconuts in this country the Coconut Research Institute formed a special Division to undertake the work of establishing nurseries and providing planting material for this purpose. Thus the "Replanting" Division came into being in October, 1948, when a Clerk was appointed. In January, 1949, Mr. O. B. M. Cheyne was appointed to the post of "Replanting Officer" and in April of the same year Mr. P. D. Laurence Fernando was appointed Assistant Replanting Officer.

It will be noted that when it was first formed, this Division was called the "Replanting" Division but it was felt that this was a misnomer as its work was not confined solely to re-planting but also to the planting up of *new* areas, the name was therefore changed and when advisory work was also included in its activities it received its present designation of "Planting and Advisory Division". It is financed by a special vote from the Department of Agriculture (and administered by the Coconut Research Board).

The Annual Votes from the Department of Agriculture are given below :—

			<i>Rs.</i>
1948/49 (January/ September)	..	..	137,468
1949/50 (October/September)	..	..	179,300
1950/51 (October/September)	..	..	410,000
1951/52 (October/September)	..	..	520,500

Since its formation in 1948 this Division has greatly expanded and the present staff (exclusive of office personnel) consists of —

- 1 Planting Officer,
- 1 Assistant Planting Officer,
- 8 Field Assistants,
- 12 Nursery Attendants,

besides the 7 Advisory Field Officers.

The work of the Planting Section of this Division is chiefly concerned with the supply of planting material—i.e., coconut seedlings and seed-nuts to coconut growers all over the Island and the establishment of nurseries for this purpose in the principal coconut growing districts. A good deal of advisory work is also carried out by correspondence and by visits. This advisory work covers a very wide scope and embraces many aspects of coconut growing, including methods of cultivation, fertilizers, application of manure and pests and diseases. Any problems which require technical advice are referred to the scientific staff of the Coconut Research Institute.

The supply of first class planting material is of paramount importance and the first step to be taken towards this end by the Field Assistants is the selection of seed-nuts from carefully chosen high yielding estates.

The best quality nuts come from "Mother Palms" which should have a consistent yield record of 80 nuts per palm per annum. Such palms are however few and far between and would only supply a very small fraction of the quantity required. For this reason the practice of using "Block-nuts" has been followed; these are the very best nuts derived from fields or blocks on estates showing sustained records of a high annual yield of nuts per palm and a good copra outturn over a period of 5 years or more.

It is difficult to find many estates that come up to this standard.

Planting material, chiefly seedlings, is supplied to private individuals, estates, and colonization schemes (the last through Government Agents, Assistant Government Agents, Divisional Revenue Officers, Rural Development Officers and Agricultural Officers).

Seed-nuts are also supplied to Agricultural Officers for nurseries laid down by them in their areas. In 1949 seed-nuts to the number of 140,000 were supplied for a nursery on the Government Farm at Bibile, while 50,000 were supplied in 1950 for the nursery at Paragahakelle for planting up 400 acres of coconuts at Wawinna in the Gal Oya Valley.

Many thousands of seedlings have been supplied to rubber estates where old rubber is being cut out and replaced with coconuts.

Nurseries

Since its inception the Planting Section of this Division has laid down up to date 14 nurseries in many parts of the Island. Difficulty was experienced at first in getting suitable land for this purpose but, thanks to

some estate owners, the Department of Agriculture and to Government Agents, land was made available on estates, Government farms, and Crown lands, and fine nurseries are now established in the following places :—

Coconut Research Institute Nurseries

	<i>Nursery</i>	<i>Situation</i>	<i>Capacity</i>	
1948/49	Ratmalagara	.. Madampe	.. 22,975	47,975 nuts
	Carmel	.. Kurunegala	.. 25,000	
1949/50	Ratmalagara	.. Madampe	.. 77,204	204,054 nuts
	Carmel ..	.. Kurunegala	.. 32,200
	St. Anne's	.. Puttalam	.. 40,000	
	Labuduwa	.. Galle ..	.. 35,000
	Walpita ..	.. Kotadeniyawa	.. 41,900
	Hettipola	.. Hettipola	.. 13,750	
1950/51	Ratmalagara	.. Madampe	.. 109,356	380,646 nuts
	Carmel ..	.. Kurunegala	.. 31,704
	St. Anne's	.. Puttalam	.. 67,298	
	Labuduwa	.. Galle ..	.. 30,251
	Walpita ..	.. Kotadeniyawa	.. 47,837
	Hettipola	.. Hettipola	.. 32,800	
	Palugaswewa	.. Rajakadaluwa	.. 30,000	
	Pappamodai	.. Mannar ..	.. 10,000
	Tharakundu	.. Mannar ..	.. 15,000
	Bandirippuwa	.. Lunuwila	.. 6,400	
1951/52	Bandirippuwa	.. Lunuwila	.. 6,400	616,400 nuts
	Ratmalagara	.. Madampe	.. 130,000	
	Carmel old	.. Kurunegala	.. 30,000	
	Carmel new	.. Kurunegala	.. 30,000	
	St. Anne's	.. Puttalam	.. 75,000	
	Labuduwa	.. Galle ..	.. 35,000
	Walpita ..	.. Kotadeniyawa	.. 40,000
	Hettipola	.. Hettipola	.. 45,000	
	Palugaswewa	.. Rajakadaluwa	.. 40,000	
	Pappamodai	.. Mannar ..	.. 10,000
	Tharakundu	.. Mannar ..	.. 15,000
	Kalawewa	.. Kalawewa	.. 75,000	
	Bedigama	.. Tangalla	.. 75,000	
	Killinochchi	.. Killinochchi	.. 10,000	

Two more nurseries are shortly to be established, one very large one at Wilpotha (Crown land near Battuluoya) to accommodate 100,000 seed-nuts and another at Arampola Government Estate, to accommodate 30,000 seed-nuts.

ADVISORY SECTION

The work of the Advisory Officers is mainly concerned with giving advice to coconut growers, more particularly to members of Coconut Producers' Co-operative Societies, on modern scientific methods of agriculture based on the latest results of experiments and investigations of the Coconut

Research Institute. They are responsible for the establishment of nurseries for such societies and for the selection and distribution of seedlings therefrom. It is also part of their duties to see that the seedlings issued to members are correctly planted and that the young plants receive proper attention.

Each Advisory Field Officer is given a "range" of operations, selected by the Administration. At present these have been allocated as follows :—

- (1) Kurunegala District with headquarters at Kurunegala.
- (2) Chilaw/Puttalam with headquarters at Madampe.
- (3) Negombo/Gampaha with headquarters at Walpita Farm, Kotadeniyawa.
- (4) Southern Province with headquarters at Matara.
- (5) Northern Province* with headquarters at Pallai (Jaffna area).
- (6) Batticaloa District* with headquarters still to be determined.

Advisory visits are at present confined to coconut properties of not more than 50 acres in extent and a report on each property visited has to be submitted to headquarters by the visiting officer.

They draw up and submit lists of Coconut Producers' Co-operative Societies, Rural Development Societies, Village Committees and other bodies connected with the coconut industry in each of their ranges, and in order to meet members and obtain a better working knowledge of them and their needs, they visit all such societies and periodically pay advisory visits to their holdings. They are also expected to attend meetings of Co-operative and Rural Development Societies as often as possible.

One of the most important of their duties is what is known as a "Follow-up" service, i.e., they visit and report on the condition of plants supplied to smallholdings. In many cases it has been found that, after the seedlings have been paid for by members and planted little or no attention has been paid to the after-care of the plants, a high percentage of which have died through neglect or have been destroyed by cattle due to inadequate protective measures in the shape of fencing. It is in such cases that the Advisory Officers point out mistakes and how to remedy them and give due warning of the consequences of apathy and negligence.

They have also to do a good deal of propaganda work among smallholders and to see that Coconut Research Institute literature in the shape of free leaflets on all aspects of coconut planting, pests and diseases and cultivation are distributed throughout villages in coconut growing areas. In this they seek the assistance and co-operation of village headmen, Rural Development Officers and Divisional Revenue Officers. They are expected too to organise visits by smallholders in their ranges to demonstration plots and

* At present there is no officer stationed in either the Jaffna or Batticaloa ranges but these posts will be filled very shortly. Two Officers will also be stationed at the Coconut Research Institute Headquarters as Relieving Officers.

experiment stations of the Institute and also to take a prominent part in any rural agricultural exhibitions, where they are often asked to give talks on matters in connection with coconut planting methods, upkeep, cultivation and manuring as well as to make known the functions of the Coconut Research Institute and of the Planting and Advisory Division in particular.

In addition to the ordinary work of this Division a Land Utilization Survey is now being carried out in the Kalpitiya area by a team consisting of 2 Advisory Field Officers and 4 Field Attendants. Up-to-date, reports on 226 separate holdings have been sent in to Headquarters by these two Advisory Field Officers.

Assistance to Coconut Producers' Co-operative Societies

As stated earlier in this review, the establishment of nurseries for Coconut Producers' Co-operative Societies is undertaken by the Planting and Advisory Division of this Institute which supplies these societies with selected seed-nuts (free of cost), barbed wire and fence posts. These fencing materials remain the property of the Coconut Research Institute. Construction of the beds, laying down of seed-nuts and erection of wire fencing is also done at the expense of the Institute, thereafter the up-keep of the nursery is the responsibility of the Society concerned. When the seedlings are ready for distribution our Advisory Field Officers see to the selection of good and rejection of bad plants and the good ones are then handed over to the society which pays for them at the rate of 25 cents each (*Present* price). The rejections are destroyed. So far this scheme for assistance has been working satisfactorily, but there have been one or two cases where societies have been unable to dispose of quite an appreciable number of their seedlings. This is due chiefly to the society's failure to obtain more accurate information as to their requirements before placing their orders for seed-nuts.

Originally expenditure in connection with the establishment of nurseries for Co-operative Societies was met by the provision of a special vote from the Commissioner of Commodity Purchase but during the latter part of 1949 this vote was exhausted and not renewed; since then expenditure on this account has been met by the Planting and Advisory Division from the funds allocated to it by the Department of Agriculture and administered by the Coconut Research Institute.

There is no doubt that the Coconut Rehabilitation Project, especially where smallholdings are concerned, can be appreciably assisted and accelerated through the medium of Coconut Producers' Co-operative Societies whose members (most of whom are small-holders) can obtain their planting requirements from the nurseries of the societies to which they belong. The demand for seedlings from members of Co-operative Societies is increasing and while some existing nurseries may have to be enlarged new ones will have to be established for other Coconut Producers' Co-operative Societies.

From a total of 5 nurseries accommodating 61,000 seed-nuts in 1948-49 the number of nurseries established by this Institute for Co-operative Societies has increased to 13 with a capacity of 217,000 seed-nuts. The following statement showing the nurseries established by us for such societies since October 1, 1948* with the number of seed-nuts laid down will prove of interest :—

1948/49		1949/50		1950/51		1951/52	
Bolgoda	1,000	Bolgoda	1,000	Bolgoda	2,000	Bolgoda	2,000
Sandalankawa	20,000	Batticaloa	24,000	Batticaloa	15,000	Batticaloa	15,000
Dunagaha	10,000	Gokarella	5,000	Gokarella	5,000	Gokarella	5,000
Mutugala	20,000	Madampella	25,000	Madampella	25,000	Madampella	25,000
Veyangoda	10,000	Kurunegala	17,000	Madampe	15,000	Madampe	20,000
		Sandalankawa	20,000	Mundel	15,000	Mundel	20,000
		Mutugala	20,000	Nattandiya	20,000	Nattandiya	20,000
		Veyangoda	10,000	Puttalam	20,000	Puttalam	20,000
		Dunagaha	10,000	Kurunegala	16,196	Kurunegala	15,000
				Veyangoda	7,000	Veyangoda	10,000
				Dunagaha	25,000	Dunagaha	25,000
				Mutugala	20,000	Mutugala	20,000
				Sandalankawa	18,000	Sandalankawa	20,000
Total							
Nurseries 5	—61,000	9	127,000	13	203,196	13	217,000

The average quantity of good selected seedlings obtained from seed-nuts laid down is about 60 per cent.

It is not possible to state with any exactitude the acreage that has been re-planted and newly planted since the Planting and Advisory Division started active operations in March, 1949, as much of the planting material supplied has been used for the filling of vacancies (supplying); all that can be said is that seed-nuts and seedlings have been distributed to various sources sufficient to plant up approximately 20,000 acres.

* Financial year—October 1 to September 30.