

# COCONUT CULTIVATION IN LAKSHADWEEP—ITS PROSPECTS AND PROBLEMS

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Lakshadweep situated in the tropical zone of 12°N latitude and 70° and 74°E longitude in Arabian sea is accessible only by ships that reply from the mainland. The nearest island is 150 miles away from Calicut. The Lakshadweep Administration has two chartered ships, M.V. Amindivi and M.V. Laccadives for the purpose of port of cargo and passengers from the mainland islands.

## Service and facilities

any time during fair weather one ship will run standard voyage fixed by the Administration while other will run according to the necessity of transport cargo to the islands. All the commodities as well as materials for the construction work have to be sent from the mainland. 'M.V. Amindivi' is one of the most modern ships of the Shipping Corporation of India built in Yugoslavia, having all amenities that are available in a bigger vessel. It is a passenger-cum-cargo vessel and has a capacity of 164 passengers and 1000 tonnes of cargo with 24 crew. The ship runs at 12 nautical miles. There are three classes of accommodation—cabin, bunk and deck. The cabin is the best class comparable to the first class in the train. There is a dining hall for the cabin passengers and a mess for the crew, which is bar-attached. Western style food is served in the mess. The food is a little costly. The cabin is above water-level while bunk and deck are below the water-level. There is a common mess for the bunk and deck passengers. The ship costs the Administration a sizable amount for its running expenses. 'M.V. Laccadives' is a smaller vessel which offers only two classes of accommodation, the cabin and deck. There is very little convenience in this. 'M.V. Amindivi' is an all-weather ship while 'M.V. Laccadives' is suited only for fair weather.

## Voyage

In order to board the ship a valid pass is to be obtained from the Lakshadweep Administration. The office of the Secretary to the Administrator located at 11, Road, Calicut will issue the pass on submission

of an application in the prescribed form. Authorised Officer in the island will issue the passes while returning from the island. The application form is to be submitted sufficiently in advance. Boarding the ship either from Calicut or from Cochin is by country craft or by motor boat. The ship will be normally anchored at Calicut about 4 to 5 miles away from the shore, while at Cochin it is anchored in Mattancherry lake. In the rough sea it is an unnerving experience to get into the ship, as well as to disembark at the island. Small country boats or 'Pablo' boats carry you across the still blue water of the coral lagoon in the island.

## Area, topography and general living conditions in the Island

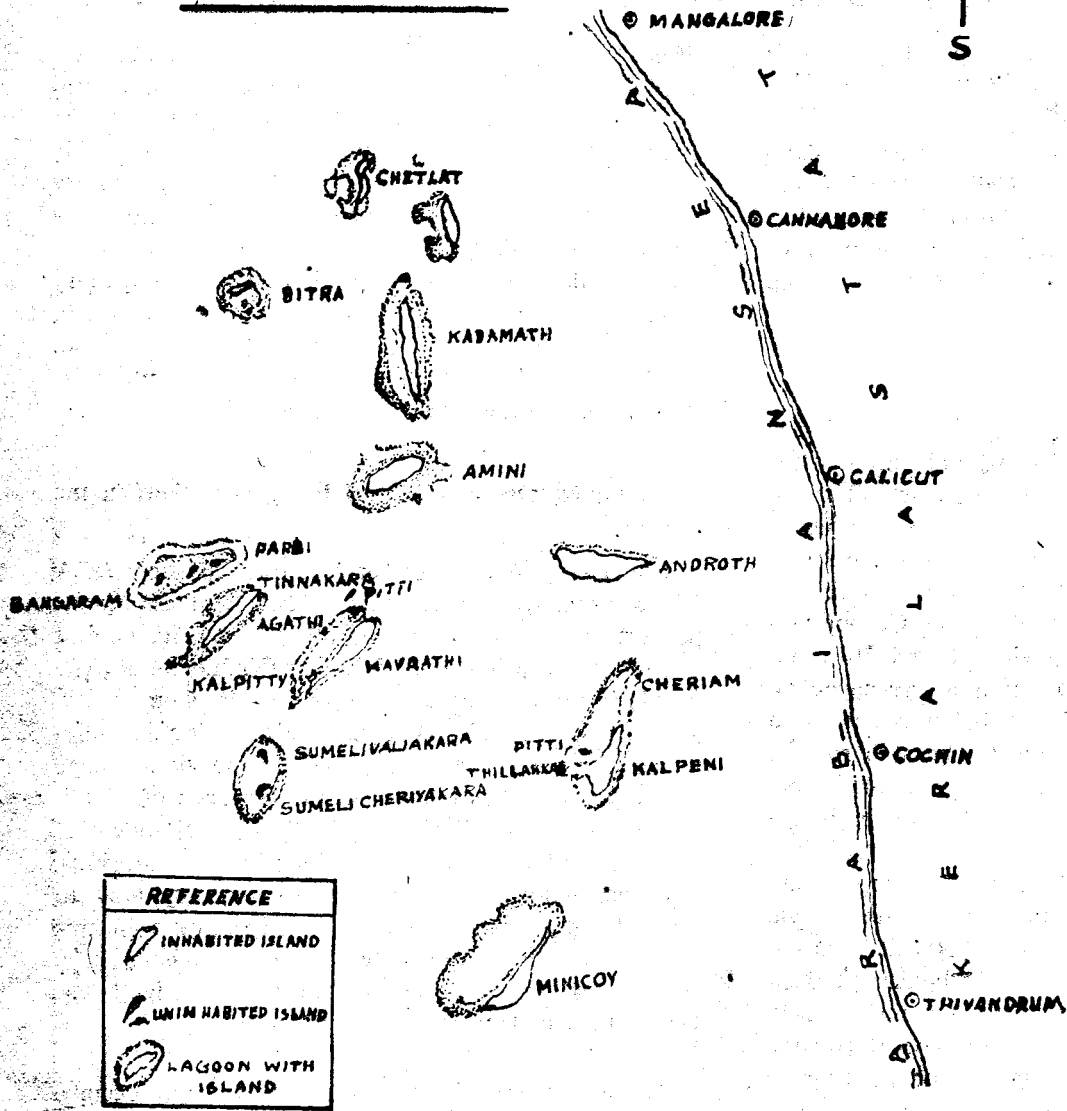
The Lakshadweep formerly known as LM & A Islands are a group of twenty islands. All these islands lie north to south except Androth Island (Fig. 1). Out of them ten are inhabited from time immemorial. The people in the Island belong to the Muslim Community. The local language is Malayalam with colloquial differences to some extent. In Minicoy Island the language is Mahal which has relation to the language of Maldives as well as similarity to Hindi. The Islanders of Minicoy are famous seamen working in merchant ships. The international sea route is passing very near to this Island. There is a very old lighthouse in this island. In other islands new lighthouses have been constructed or being constructed by the Lighthouse Department of Government of India.

Agriculture and fishing are the two major occupations of the Islanders. The author had the opportunity of visiting the important islands on two occasions and study the agricultural aspects, the general standard of living etc. in the Island. The islands visited by him include Kavarathi, Androth, Minicoy, Kalpeni, Amini, Chetlat, Kadamat and Kiltan, and Bitra. Bitra is the only island which is having slight brackish water during certain season of the year. In all the other islands good drinking water is available. It is reported that urinary diseases are quite common in Bitra because of the use of saltish water.

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FIG I

MAP OF  
THE LACCADIVE, MINICOY & AMINDIVI ISLANDS  
NOT TO SCALE



(COURTESY, ADMINISTRATION, LACCADIVE ISLANDS)

Commissioner, Director of Health Services, Director of Fisheries, Director of Agriculture and other officials of the various departments. Power produced by diesel generators is available in seven of the inhabited lands at specified time. Usually it is available from 6 a.m. to 12 p.m. except in Minicoy, Kavarathi and Androth lands where it is available throughout the day. These three islands are equipped with automatic telephone system which is working. Radio telephone is available at island headquarters situated at Kavarathi where telephone connections are available to mainland through Calicut on a priority basis.

**Educational and other facilities in the islands**

In all the major islands there is one Higher Secondary school and a few Upper primary Schools are functioning. A few feeder Schools are also functioning in the islands. A junior college has been started at Kavarathi a few years back. All schools are affiliated to Kerala Educational Department. Post Offices and medical facilities are available in all the islands. Patients suffering from major diseases are always taken to mainland and at times the ships are diverted

The progress achieved by the islands since independence is fantastic. During pre-Independence days the islanders used to contact the mainland only during fair weather by country crafts and small motor launches. The islands are centrally administered. The Administrator whose Secretariat is located at Kavarathi is assisted in the administration by Collector-cum-Development

take the patient to the mainland depending upon the seriousness of the disease cancelling its scheduled voyage.

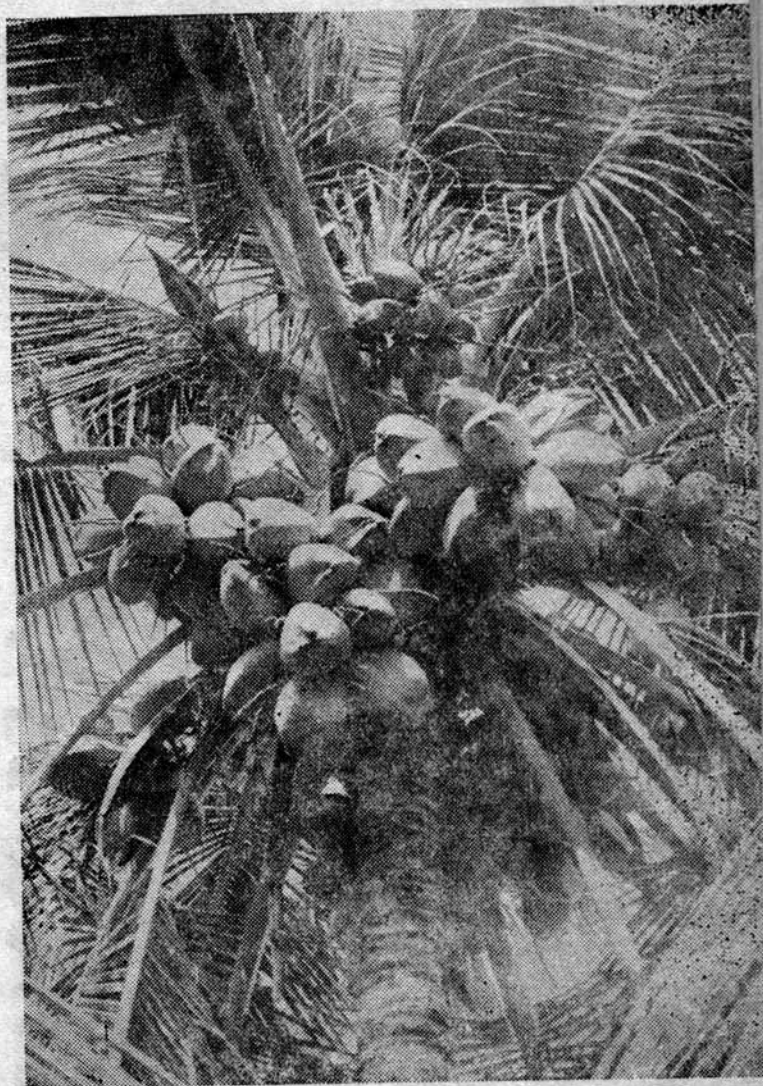
There is a dak bungalow in every major island. Recently it has been decided by the Tourism Department to make Lakshadweep a place of tourist attraction.

## Fisheries and other cottage industries

Around all the islands except very few there is very rich fishing ground called 'lagoon'. The lagoon is mostly towards western side of the island. Water in the lagoon is very shallow and calm. Coral growth is luxuriant in this lagoon. There are very strong coral reef on the eastern side of the islands. The lagoon on the western side and the reef on the eastern side protect the island from the ferocious waves that lash during the rainy season. The fishing area consists of 6,500 square miles around the islands. Many species of fishes are found in this area. Flying fish, shark, sardine etc. are very common. 'Ship jacket Tuna' is the most famous fish of Lakshadweep. In the Minicoy island a factory for processing this fish has been established. The factory produces two types of tinned tuna, one packed in oil and the other in brine. The tuna fish industry has great export potential. Under cottage industries fibre extraction and rope making is in existence in all the islands from time immemorial. Usually women engage themselves in fibre extraction and rope making while men are engaged in fishing. A mechanised fibre extraction unit is functioning successfully at Androth Island for the last seven years. This factory extracts bristle and mattress fibre from dry coconut husk. There is a regular market for the fibre and rope made in the Island at Calicut and Mangalore. Of late mechanised fishing from the deep sea has also been initiated in some of the islands.

## PRESENT COCONUT SITUATION

Lakshadweep is reputed for its coconut since a few centuries. The islands are coral formations. The soil is calcareous and very light which is high in phosphorus content. The islands have a combined area of about 2855 hectares (28 sq. km) with a population of 32,000 people which works out to a density of 994 people per square mile. The area under coconut is 2760 hectares. Altogether there are 6.53 lakhs of coconut trees in the bearing stage. The total production of coconuts in the island is estimated to be over 2 crores annually. The man-tree ratio in the island is 1:20. The current figures work out to a per capita availability of 640 nuts as against the figures of 220 and 230 for Philippines and Sri Lanka respectively. Even in Kerala, the major coconut producing State in India, the per capita availability is less than 200 nuts. The productivity of the palms in the island is also very high when compared to that in other countries. This fact assumes considerable importance because no managerial practices are adopted in the islands and the high productivity may be due to the favourable agro-climatic conditions as well as the genetical superiority of the cultivars. The average per hectare production is over 7420

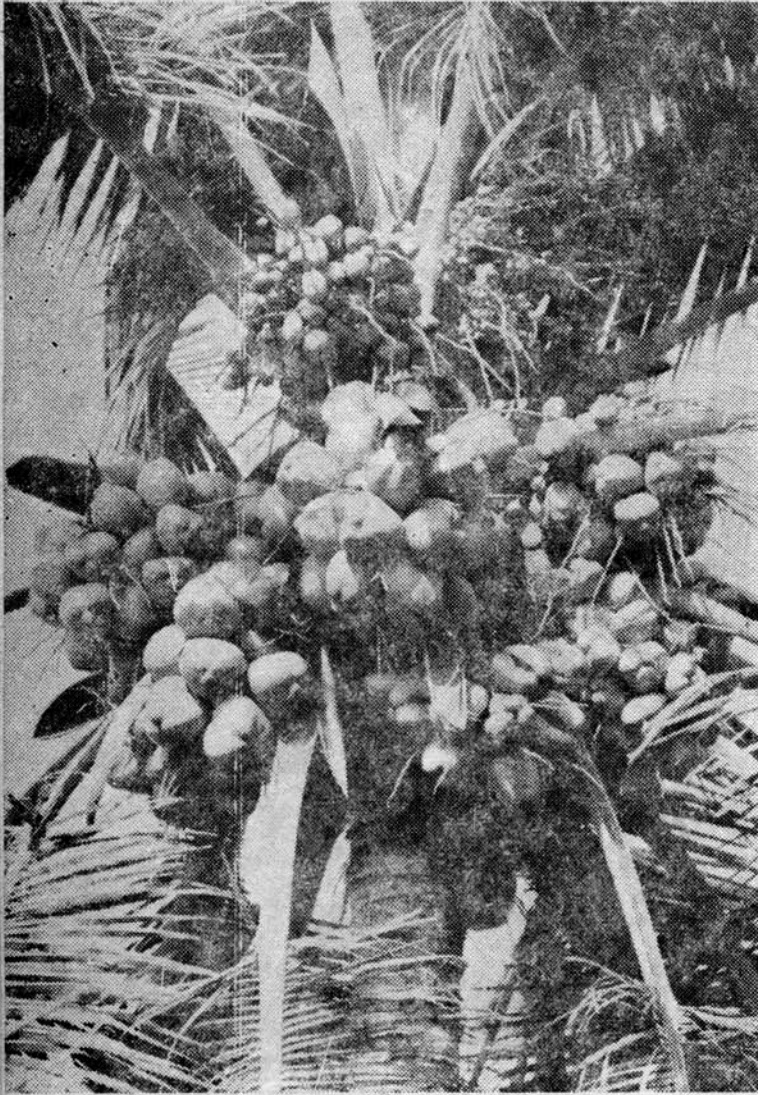


*Laccadive Ordinary*

nuts with an average palm yield of over 50 nuts which is definitely more than the average production figures of the major coconut producing countries. However in terms of copra output the position is not so encouraging as it is only 0.75 tonne of copra per hectare which is comparable to that in other countries. This point is significant because copra is the product of commercial importance and mere increase in number of nuts may not have much practical significance in Lakshadweep where farm level transactions are mainly in the form of copra.

### Coconut cultivars under cultivation

The important coconut cultivars found in the islands are Laccadive Ordinary, Laccadive Micro, Laccadive Dwarf Orange and Laccadive Dwarf Green. The dwarfs are seen on a very limited scale in Androth and Kavarathi Islands especially in homesteads while the other two types are prevalent throughout.



*Laccadive Micro*

#### **Laccadive Ordinary**

This is a tall cultivar growing in all islands. This cultivar is comparable to the west coast tall variety found in the mainland except that it is having 72 per cent oil as against 70 per cent in the case of West Coast Tall. In the island Laccadive Ordinary gives only 120-140 gm. of copra per nut which is slightly less than the West Coast Tall on the mainland (Fig. 2).

#### **Laccadive Micro**

This is a prolific bearer with an average per palm yield of over 200 nuts per year with a copra content of 85 to 95 gm. per nut. Palms of this type are found growing scattered in the plantation. Consequent upon the significant contribution of the microtype to the total marketable surplus in the islands a total of over

10,000 nuts are required to process a tonne of copra as against 6900 nuts in other parts of India and 4000 nuts in Malaysia, Sri Lanka and Philippines (Fig. 3)

Studies on the performance of these cultivars on the mainland have shown that both Laccadive Ordinary and Laccadive Micro are superior to the West Coast Tall with regard to its yield as well as copra content thereby yielding larger outturn of copra per tree per year.

The Laccadive Ordinary when used as female parent in the cross with Gangabondam has given the promising hybrid LO × G (Fig. 4).

In view of the fact that the Laccadive cultivars are in general superior to the West Coast Tall, these cultivars are now being used for large scale planting in the mainland. In the elite seed gardens at Kidu, Subramania, South Kanara, Karnataka (a campus of CPCRI, Kasaragod) and Central State Farm, Aralam, Cannanore large scale planting of Laccadive Ordinary have been taken up for crossing with Gangabondam as well as a direct seed source.

#### **Laccadive Dwarfs**

Both orange and green dwarfs are found in the Island especially in certain islands. These trees are grown mainly for the tender nut purpose and it is very rare that a mature nut is harvested from these trees. These dwarfs resemble in every respect the Chowghat Dwarf orange and green and hence it is suspected that these types originally came from the mainland.

#### **Density of palm population**

In all the islands coconut is grown without giving any consideration for space. Since the wealth of the islander is estimated on the number of palms he possesses, indiscriminate planting to increase the number has resulted in the over-crowding of palms in the island. In spite of this over-crowding, the trees are highly productive because of the soil and climatic factors which are most congenial for coconut culture.

Fortunately no major diseases are found in the islands. One of the serious problems of the island is rat damage to the tender nuts. It is estimated that over 40 per cent of the total production of nuts are damaged by rats and probably this is the highest record in the whole world. Rhinoceros beetle and Bombay locust are the other pests of coconut, but to only a very limited scale.