HOW TO INCREASE YIELD OF COCONUTS IN LAKSHADWEEP

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Laccadive, Minicoy and Amindivi islands are collectively known as Lakshadweep island. They are coral islands lying scattered between north latitude of 8 degrees and 12 degrees and east longitude of 71 degrees and 74 degrees in the Arabian Sea off the coast of Kerala State at a distance of 200-300 km. from the mainland. They are 27 in number - 10 inhabited, 12 uninhabited islands and 5 attached islets.

Coconut is the most important crop grown in the Lakshadweep islands, almost in the entire area of 2233 hectares. The total production of nuts for 1977-78 was about 220 lakhs. Per capita availability of nuts is 614 as against 200 in Kerala. The popular varieties of coconuts grown here are the Laccadive Ordinary, Laccadive Micro and Laccadive Small. Though the performance of these varieties is comparatively good in these islands, their maximum potentiality is not utilised by the islanders owing to the unscientific cultural practices followed by them. The average yield per palm per year is 55 nuts, which could be increased by following the improved package of practices.

[1] The farmers do not raise the plantation by giving proper spacing. The trees are planted haphazardly. This leads to competition for space, nutrients, sunlight etc. among trees. Therefore, the seedlings are to be transplanted in triangular method, adopting a spacing of 7.5 to 8 metres between plant and plant

[2] The farmers do not apply manures or fertilizers. Application of correct doses of manures and fertilizers as per the recommendation has to be followed, in order to obtain the optimum yield Regular manuring right from the first year of planting is very essential to ensure proper growth of the seedlings. The fertilizers are to be applied in two doses, first in May and next in September. Circular basins of 1.8 metre radius and 25 cm. depth may be dug around the trees. Compost or green leaves may be applied along with the fertilizer and covered with soil. The fertilizer recommendations are given below.

	May-June			September–October		
	N	P_2O_5	K_2O	N	P_2O_5	K_2O
	[in gram per tree]			[in gram/tree]		
I year	Planting in May-June					
II year	50	40	135	50	40	135
III year	110	80	270	110	80	270
IV year	170	120	400	220	160	540
				330	200	800

fertilizers like urea, ultraphos, phosphate, muriate of potash, phala, factamfos and comm-ly available fertilizers may be ed.

3] The farmers pay no att-ion to the control of the pests and diseases. The serious pests of coconut found in La-kshadweep are the rhinoceros beetles and rats. For the control of the rhinoceros beetle, the field must be kept clean. The manure pits etc., where the larvae of the beetle are found should be sprayed with 0.01% BHC. The beetles must be hooked out from the palm and killed. The axils of the inner-most 3 or 4 leaves of the palms ust be filled with a mixture of % BHC and sand in equal ua..tities. Rats cause severe damage to tender nuts and hence severe loss in almost all the islands. The tender nuts with fairly big sized holes may be found on the ground at the base of the attacked trees. Rats may be controlled by using poison baits with zinc phosphide r rodofarin, mechanical barriers nd rat traps.

With regard to the diseases, leaf blight [*Pestalotia palmarum*], stem bleeding and bud rot [*Phytophthora palmivora*] are found to be prevailing. Although the incidence of leaf blight and stem bleeding was found in all the islands, bud rot was noticed only in certain palms in Amini island. The intensity of leaf blight infection was relatively more in Agatti island. Stem bleeding was more prevalent in Kiltan than in other islands [R. A. Singh-*CPCRI Annual Report* 1977, PP. 145-147]. To check the spread of the leaf blight disease, removal and burning of the affected leaves and spraying the foliage with 1% Bordeaux mixture will be useful. The damage due to stem bleeding could be checked to a certain extent by completely removing the affected tissues by means of a chisel and dressing the wound with hot coal tar or Bordeaux paste.

Against bud rot in the early stage, 1% Bordeaux paste could be applied on the crown of the palm, after removing the infected tissues and a thorough cleaning. Badly affected trees must be removed and burnt. As a prophylactic measure, all the healthy palms in the vicinity of the affected one should be sprayed with 1% Bordeaux mixture.

[4] More attention should be bestowed to cultural practices. In fact, the interspaces in coconut gardens are never cleaned or weeded. Shrubs and unwanted vegetation are common sight in coconut gardens. The vegetation not only competes with coconut for the essential nutrients, water etc., but also acts as a breeding ground for the rats and other pests. Therefore regular cleaning of the bushes and periodical ploughing of the interspaces is a must. The field must be kept always clean. At present, no particular attention is paid to intercropping. Crops like banana, chillies, tomato, brinjal, cowpea etc can be raised in coconut gardens after the palms attain a height of 5 to 6 metres. However they are also to be adequately and separately manured.

[5] Mixed farming may be practised in coconut gardens. The pressure on land in Lakshadweep is very high [per capita availability is only 0.08 ha.]. Therefore, all efforts have to be made for the maximum utilisation of the available land. Some farmers do maintain farm animals. In order to develop a balanced human, animal and plant ecosystem, maintaining farm animals poultry and growing maize, bajra jowar and other forage crops has to be followed.

[6] Regular harvesting once in 40 to 45 days has to be practised in order to obtain the maximum yield.

Thus by adopting improved cultural manurial and other practices, the total yield of coconuts in these islands can be substantially increased.

TO CONTRIBUTORS

Articles to 'Indian Coconut Journal' must be sent in triplicate, typed in double space on only one side of the paper. Photographs should be in glossy paper in size not less than a post-card. Always use metric system for weights and measures.

— Editor