PLANTING SYSTEMS—PART II

LESS PALMS—MORE NUTS !

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It is very noticeable that over 90 per cent. of the plantations in the South of the Island have been established in a most haphazard manner which indicates a complete lack of foresight on the part of our forefathers. As a result of haphazard close-planting, productivity of the palms has been reduced to such a degree as to occasion severe financial loss to the present owners.

It would appear to be more profitable to devote an area exclusively to coconuts planted not less than 24 feet apart—or where the soil is poor, even 22 feet apart. We find too, that in the majority of cases, other deep-rooted trees such as jak, breadfruit, cashewnuts, etc., are interplanted with the coconuts, and this obviously interferes with and seriously retards the growth of the coconut palms. Heavily underplanted catch crops such as plantains, manioc, yams and pineapple which may bring in some income also compete for air, moisture and the available plant food, and seldom give good crops.

Economy is the first consideration in successful agriculture, and at the present time when labour conditions and other factors adversely affect our undertakings, it is of special importance to see that our system of planting is conducive to the maximum yields of food crops. Two factors essential to the proper development, productivity and health of plants are sunlight and the availability of moisture and food material from the soil. These are denied to the coconut palms when a piece of land is too closely planted with coconut and other fruit crops and as a result of competition for light and food the individual palms suffer and the land becomes unprofitable. This is particularly the case along the coastal areas of the Southern Province where the palms have been planted even less than six feet apart. The yield of palms in many crowd-planted estates, smallholdings and home gardens is surprisingly poor and does not exceed two or three nuts per tree, per annum, whereas on correctly planted areas, with the required distance from tree to tree, the annual yield per palm is 70 or more nuts provided there is proper cultivation.

Further disadvantages of close planting are that it is impossible to carry out cultural operations such as manuring, ploughing and harrowing, while the cost of picking nuts, particularly by climbing the trees, is exorbitant and in most cases proves unprofitable.

TRIANGULAR PLANTING

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THERE are several methods of planting coconut palms—square ,oblong, triangular and quincunx. Square planting, although standard practice in Ceylon, does not give the best coverage to the soil as there are big light patches at the centre of each square. More plants can be put

down to the acre and the fullest use can be made of the land by using the system of triangular planting which is perhaps a little more difficult to lay down.

In the system of equilateral triangular planting the first and essential step is to establish a base line, though it does not matter whether this runs through the middle of the land or along one of the boundaries provided it is dead straight. When the base line is laid the planting distance, say 26 feet, is marked along it by means of a succession of pegs, each about 18 inches in height. Equilateral triangles are then constructed with the distance between two consecutive pegs forming the base of each successive triangle. This is easily done with a knotted rope which should be twice the length of the distance between the pegs, viz., 52 feet. The ends of the rope should be held at the two pegs and the rope stretched out from its middle so that a triangle of three equal sides is thus formed. A peg is then fixed at the apex of the triangle. After two or three lines of such triangles are established it only remains to join up the lines and peg out the planting distances along each of them in the ordinary way. It is essential to ensure that the pegs are correctly laid so that the lines will be dead straight.

In this way, 72 seedlings instead of 64 can be planted per acre with a proportional increase in yield because better use is made of the land without the root systems or the fronds of the palms interfering with one another. Furthermore, weed growth is checked because the ground is more effectively shaded.

(*Readers are referred to the previous article on this subject in No. 2 of 1950, page 29*).