

AN EXPERIMENT ON CATTLE MANURING AND IRRIGATION OF COCONUT PALMS

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I am pleased to report the results of an interesting experiment on intensive cattle manuring combined with irrigation on coconuts at Eddunkelle Estate, Ahangama.

The common practice on coconut estates is to tether a pair of cattle to the palms at night for a week or ten days and cover up the manure with a dose of supplementary artificial fertiliser.

In the method adopted at Eddunkelle Estate, 25 heads of ordinary Sinhala cattle graze outside the block to be manured during the day time. By about 4 p.m. the animals are brought to the shed and tied in the cadjan roofed shed for the night. By about 7 a.m. the following morning, the animals are taken out once again.

Two women come later and make an emulsion of the dung and urine in water and direct the mixture to the base of the palms along a small channel. The animals feed on grass only.

The cattle shed is at the higher point of the block and is supplied with a copious supply of water from a storage tank which in turn is supplied from a well on the lower slopes of the estate. (Vide Plate No. 1).

Artificial manures used:

The trees were also manured with 8 lbs. of C.R.I. General Mixture. The soil consists of hard laterite and the lay of the land is undulating.

Results

Date of Commencement of the Experiment: 1st January 1959.

Number of Palms in this Block : 280.

Crop Figures:

February 1959	..	..	109 nuts
May	..	..	182 "
July	..	..	216 "
September	..	..	133 "
November	..	..	481 "



Plate I
Water tank with pipe line

January	1960	..	..	409 nuts
March	..	..	..	682 ..
May	..	..	..	1,639 ..
July	..	..	..	4,115 ..
September	..	..	..	2,986 ..
November	..	..	..	2,240 ..

The response to this system of manuring is spectacular. 78 palms which did not have a single nut in January 1959 on counting in November 1959 had numbers varying between 19 and 68 nuts. Before manuring was commenced these palms were yellowish in colour, but now the foliage is dark green.

The photographs of some of the palms before and after manuring show striking differences.

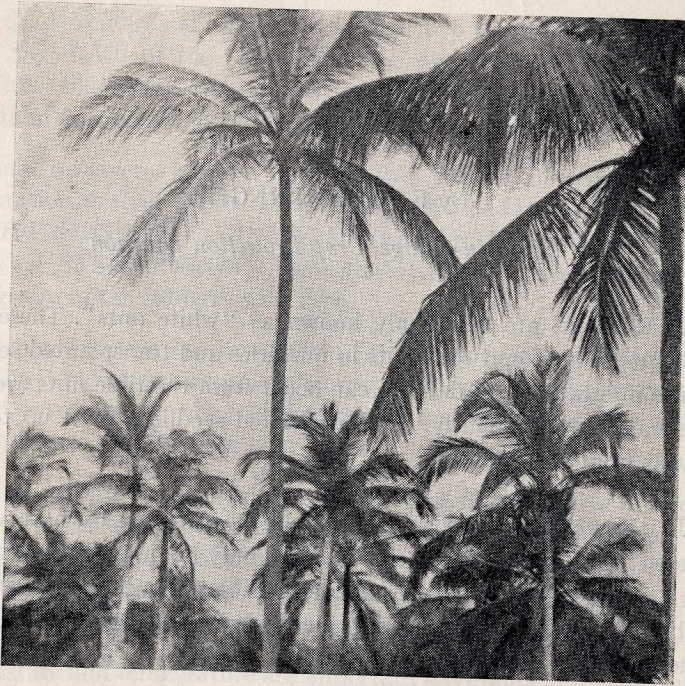


Plate II—A sample of palms before manuring

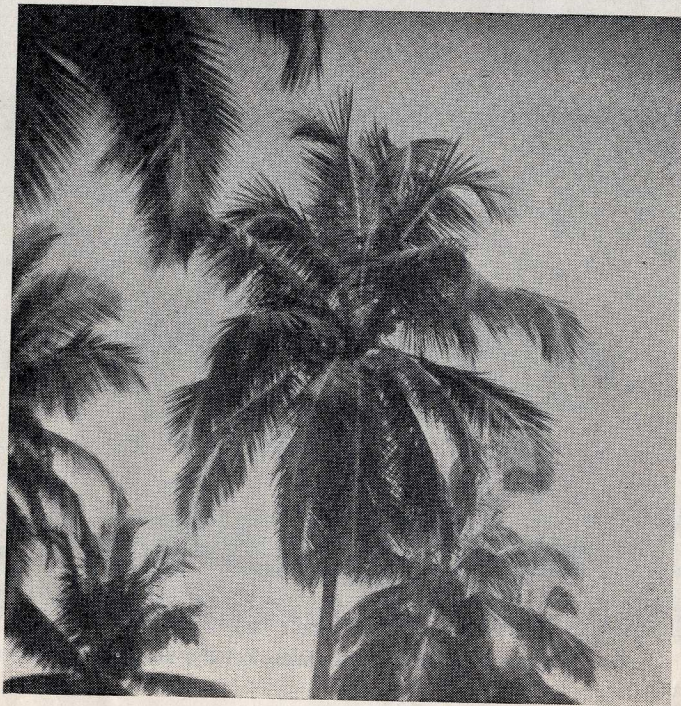


Plate III—Palms showing typical improvement after manuring