

RE-CONDITIONING A VERY NEGLECTED ESTATE

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Madulakelle

AFTER I had been planting tea and rubber for 22 years, I decided that it would be prudent for me to own a coconut estate—as a form of Old age Pension (See “Coconuts—Consols of the East” by Hamel Smith and Pape—1912).

The first problem was to decide where. The answer was to compromise between the dry north with its single monsoon and less than 50 inches of rain and the wet south, with its long periods of cloud and about 100 inches of rain; so to-day I am the owner of St. Andrews Estate and part owner of Nellella Estate, both in the Kurunegala district, where the annual rainfall is between 75 and 85 inches, which is ideal for coconuts.

In December, 1919, when I bought St. Andrews Coconut Estate, it was completely neglected; on 48 acres the coconuts were competing with high jungle and the remainder was overgrown with scrub vegetation riddled with termite mounds. Needless to say the stand of coconuts consisted of good, bad and indifferent palms with many vacancies calling for selective thinning and extensive replanting.

In my view, there were two main reasons for the weak palms :—

- (1) The planting of “Kalaty” (immature) seed-nuts.
- (2) Planting the seed-nuts in small holes which later become enclosed and root-bound within huge termite mounds.

Cruciform Replanting

These weak palms had all to be removed and replaced with carefully selected seed-nuts obtained from my best heavy-bearing, “mother” palms.

The replanting in the hard upland portions which had to be dynamited was in cruciform holes with husks arranged in layers, inner side upwards, each successive layer being dusted with a mixed fertiliser and covered with top-soil. Each *cruciform* hole was so filled that the cross was 2 inches above ground level in order to allow for settlement. A freshly germinated nut with undamaged roots was planted in the centre of each cross (Today, selected seedlings are to be preferred.—*Ed.*).

In some areas, I noticed that the overshadowed young palms were distorted by phototropism (*i.e.* became leggy and remained vegetative) and I took care to remove the weak and senile palms in such a way that the young palms received the morning and evening sun.

Re-conditioning

The first thing that had to be done was to break up and destroy the termite mounds and then gradually to transform the stiff termite-ridden clay into loose well-aerated loam. To achieve this no husks were ever sold; instead all were incorporated into the soil on the *Radial Trench System*.

Every year, two 6-foot long trenches were dug on opposite sides of each palm and these were filled with husks, mixed fertiliser and top-soil in superimposed layers as previously described. The following year two other radial trenches were dug but in fresh soil so that the fresh young roots, previously established, were not cut and so serious root damage was avoided. In due course a complete system of radiating arms of husk was established round each palm.

Thereafter the application of fertilisers was in showery weather by sprinkling in wide circles coinciding with the spread of the crown and then covering the fertilised soil with fallen fronds and cut vegetation so as to keep the soil moist and cool, even in hot dry weather.

This *Wide-Circle Manuring*, without any of the root-mutilating operations such as ploughing, harrowing or hoeing, ensures a quick response owing to the undamaged condition of the feeder roots. The heaviest-bearing palms I have ever seen are those which have never known any root-smashing system of manuring.



St. Andrews Estate

As purchased, overgrown with jungle vegetation—palms
mostly unproductive

As to whether it pays or not to apply fertilisers, I have never been in any doubt. It was worth it when nuts were only worth 2 to 3 cents each; it is even more worthwhile with nuts at 14 cents. It is true that the price of fertilisers has risen, but not by seven times.

What is necessary also to realise is that the applied plant foods or fertilisers make several journeys up into the palm if all the husks, the fallen leaves and any surface vegetation is repeatedly returned to the soil. That is why I never sell any husks and I never allow any burning of cut

weeds or fallen leaves. Consequently the soil is now rich in humus and is freely aerated by earth-worms. It is what is best described as a "living" soil which is constantly being regenerated by the break-down of the mineral constituents in the sub-soil by the humus produced from the decaying organic matter.

Estate Maintenance

Originally there was a tendency towards stem-bleeding but the patches were promptly treated in the approved manner, any water-logged low-lying areas were drained, and with the improved condition of the soil, the disease no longer occurs.

The estate is properly enclosed in order to prevent damage from straying cattle but in order to save recurring expenditure on fence posts, I planted *Gliricidia* cuttings inside and outside the boundary wire at close intervals.

Conclusion

Has all this been worthwhile? The results speak for themselves. I now obtain 5,000 nuts per acre from 108 acres on St. Andrews Estate and 4,100 nuts per acre from 146 acres on Nellella. My best area today was once poor, overgrazed, and eroded chena land which was planted 27 ft. x 27 ft. ; out of 1,262 palms only two are duds and the yield is now approaching 6,000 nuts per acre.

Whereas formerly St. Andrews Estate was an unproductive liability, it is now an appreciating asset of considerable value. Others can do what I have done providing they do not completely exhaust their financial resources by the purchase of more land than they can manage. A neglected property may be acquired very cheaply but an equal share will be required to recondition it to bring it again into profitable production and so increase its capital value.



Husk Bund
Husk Bund
Under Construction