

# Coconut Risk Management and Mitigation Manual for the Pacific Region



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# 20. MANPOWER IN COCONUT AGRICULTURE AND FACTORIES

By J. Poihega and R. Bourdeix

## Description

A scarcity of labour power may drive some farmers to neglect their coconut plantation: insufficient weeding resulting in turn of plantation to bush; heavy competition between plants reducing yields; difficulty in harvesting and loss of a significant part of the coconut hidden by weeds; irregular and late harvests leading to a deterioration in coconut quality. Lack of manpower may also jeopardize the economic viability of processing factories.

In agricultural planning, competition between crops is sometimes combined with extensive management of areas, without a decisive improvement in labour productivity.

# Occurrence and severity

The conjunction of three phenomena may cause causes a scarcity of labour power: extension of surfaces, low productivity evolution, lack of adjustment of crop calendars.

In the Savai'i Island (Samoa) according to the Ministry of Agriculture and Fisheries, 20 to 30% of the coconut are not harvested; according to other stakeholders (Savai'i coconut growers association), it could be as high as 40%. Reasons are as follows: 1) Price offered is too low for the work as small growers obtain only 0.25 Tala (0.1 USD) per coconut. 2) Lack of labourers: young generation move to Apia or overseas and do not stay in the farms. Only old people often remain in the farms.

The hard work is probably a third reason. The fields are typically grass covered and the coconuts are transported on the backs of people. At certain times of the year, the situation may be worsened by labour supply bottlenecks, which are unsatisfactorily resolved by neglecting certain operations, including weeding.

In June 2017, the 'Pacific Agreement on Closer Economic Relations Plus '(PACER) was signed and included a side-arrangement on labour mobility. The Pacific wanted an agreement that went beyond the Australian SWP and the New Zealand Recognized Seasonal Employer (RSE) scheme. Although low-skilled labour mobility is facilitated under these labour mobility programs, the Pacific wanted more binding commitments in the PACER Plus Agreement that would ensure that the region's gains from labour mobility are safeguarded. While this agreement has several cultural and economical advantages, it can also strongly affect labour supply.

### Mitigation and adaptation

- Although the complete mechanization of coconut cultivation appears complex and not necessarily desirable, simple and affordable machines could be introduced into coconut cultivation and processing that reduce the labour demand. Such machines are well developed and affordable in India and Sri Lanka.
- Use cover crop to reduce weeding work.
- Use more modern means of harvesting and transporting nuts than carrying on a person's shoulders. See for instance the CIDP movie: coconuts are harvested with horses and collected in huge plastic bags that are mechanically dumped into trucks, minimizing the

manual labour of transportation.

- Pay the workers better, so more stay in the country instead of going abroad for work.
- Allow temporary or permanent immigration of workers from poorer countries (as presently done by Australia, New Zealand and Cook Islands in the Pacific region).

#### **Actions to undertake**

Labour cost is usually a major component of the capital outlay and operating cost of smallholder tree crop projects. It is therefore important to have reasonably reliable estimates of the time taken (per tree or per unit of products) for silvicultural activities (e.g., planting, weed control, thinning and pruning), harvesting and postharvest processing.

Find ways to convince the youth to stay working in agriculture.

In coconut factories too much menial and repetitive physical production line work is undertaken. While it is not good to systematically replace the work of humans with that of machines, solutions must be found. Agricultural work, even if it is repetitive, does not look like production line work. It is outside and not in a confined space; the actions are less strictly repetitive. The term production line is defined by an organization in which:

- the complex work is broken down into elementary and hierarchical tasks that execute successively and repetitively;
- each jobholder is assigned a physically fixed position (or with very few movements);
- the objects to be produced or transformed are made mobile by a suitable conveying process: They are brought and removed from each station without the operators having to worry about their handling.

Despite its obvious success in the field of production, and the wage increases obtained, many workers have denounced the inhumanity of such production line work.

Research should find ways to reduce the painstaking work in coconut plantations. In fact, many technical solutions are already available, the question is to convince farmers to use them.

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