Working together on the land. Photo: Rik Thijssen

Far from all oil palm turmoil

Gabriela Uran, Dina Hartono and Rik Thijssen

Oil palm has been one of the most vigorous agricultural sub-sectors of independent **Indonesia**. Since the 1970s, its acreage expanded from 100,000 ha to 3 million ha in 2000. This profuse growth has provided important economic benefits, but has also become a source of concern! Oil palm's high yields of edible oil correspond to application of high quantities of chemical fertiliser and pesticides. Much of the expansion of oil palm monoculture has been at the expense of Indonesia's tropical forest cover, and has displaced local communities without proper compensation (Hakim Bayar, 1999). It has also been held partly responsible for the forest and land fires during the 1997/98 El Niño phenomenon.

Unsustainable oil palm industry

During Indonesia's current period of economic crisis and political change the many weak points of this sub-sector were unveiled. In 1998, crude palm oil production declined for the first time since 1969. This decline was attributed to several factors, including increased production costs, difficulties to access credit, a 50% drop in the world market price of palm oil, as well as environmental effects, jointly exposing the rather unsustainable nature of the oil palm industry (Casson, 2000). Large financial losses were recorded and, technically, the main palm oil companies went bankrupt. Social unrest increased in and around oil palm estates.

Farming on Flores

Oil palm plantations in Indonesia are largely confined to the islands of Sumatra (78%) and Kalimantan (16%), where infrastructure exists for production and processing, or lowland is available in plenty. On Flores, the tenth largest island of the Indonesian archipelago, there are no oil palms. Largely 'forgotten' by the Central Administration, this island is frequently shaken up by earthquakes and volcanic eruptions. Flores is carved by deep ravines and rugged valleys; rainfall is unreliable and highly seasonal and can make water scarce. Understandably, it is not a first choice area for large-scale production of palm oil.

Instead, the dominant palm on Flores is the versatile coconut palm, found up to about 700 masl, on home compounds or in fields mixed with crops and sometimes livestock. It provides food, drink, oil, medicine, cash, fibre, timber, thatch, mats, fuel and domestic utensils. And it has proven to be one of the reliable cornerstones of the local way of life, even during periods of hardship.

When asked how the economic crisis or current political situation has affected their lives, local people often respond with a shy smile. Almost apologising for not being part of the real world, the world that has been so strongly affected by these major issues, Flores' people seem to have emerged largely unscathed. Of course, these events did not pass completely unnoticed. Many Florinese migrants returned home from Java and Malaysia because of loosing their jobs. Prices of daily necessities and services increased manifold. But so did the market price of agricultural produce. Cacao, vanilla, cloves and Robusta coffee suddenly made record gains. Besides this, rural inhabitants have, almost automatically, used their long-tested coping skills to provide enough food and other needs for all, including the returning labour migrants.

Still largely self-sufficient

Different cultures of Flores have their own systems of sharing food in times of shortages. Generally, borrowed food is paid back at a later stage in the form of food. Families never hide their food stock from others in the community. Maize is even stored in trees or open, simple bamboo structures in front of the house. Such security nets are especially appreciated by women who bear the responsibility for the family's food supply.

Women also expressed that they would feel very uncomfortable if the economic situation does not permit them in using certain 'luxury' goods such as sugar, soap and fuel for lighting. They would genuinely feel *malu* (embarrassed) when visitors arrive at their home, and they are not able to prepare coffee because sugar is not available or if friends stay away in the evening hours since there is no light in the house.

Florinese women, therefore, depend on alternatives. Buying sugar, soap and paraffin from a shop is, of course, preferred. But when cash is not available they resort to resources straight from

Farmers in the field: "there is great interest from the local communities for management of natural resources as well as for further diversification of plant species on their land". Photo: Rik Thijssen

nature. Good sugar can be obtained from the sap of the arenpalm (*Arenga pinnata*), and also from the coconut palm. An alternative for soap is to use black lava stones or the small brown fruits from the local tree *Mengkudu* (*Morinda citrifolia*) for washing clothes. The latter also provides body soap or shampoo. Improvisation for lighting the house comes from a combination of two other very common trees: kapok (*Ceiba pentandra*) and kemiri or candlenut (*Aleurites moluccana*). For this purpose, kemiri nuts are crushed until the oil starts seeping out. Kapok fibres are then mixed with the kemiri paste and twisted around a stick to produce a 'candle'. Not surprisingly, coconut oil - the common vegetable oil on this island - can also be used for this purpose.

There is always something to eat

Before the 1920s, when rice was introduced on this island, the Florinese were strictly hunters of small game and swidden farmers growing mostly bananas and cassava. Their main farming method, slash and burn, caused serious erosion problems.

Assisted initially by devoted catholic missionaries and more recently by several local and a few international NGOs, people have settled and become serious farmers. The traditional staple food was short of protein and had been the reason of many health problems. Adoption of the introduced species maize and rice, as well as increased attention to some indigenous species including cocoyam (*Colocasia esculenta*) and forest turnip (*Pachyrrhizus erosus*) have not only brought the much needed diversification, but also increased food security in times of hardship. Local people can assure you now that 'there is always something to eat'. If rains are not plentiful and rice and maize yields are not enough, stocks of the other less drought-sensitive plants are utilised. Apart from these starch providers, people now plant a variety of pulses and vegetables. Perennial cash crops have become common, while families tend to keep a few small livestock. And the sea yields fish that can be salted or dried in order to be stored for more difficult times.

Recent innovations

Community based agricultural development projects, such as the ones facilitated by FADO (*see Box*), are for instance involved in soil conservation and soil fertility work. Large areas on slopes have been terraced and leguminous shrubs such as *Gliricidia sepium* and *Calliandra calothyrsus* have been grown as terrace stabilisers and green manure or fodder crop. Building erosion control structures is exhausting work, yet working together in groups always provides a stimulus for completing the job.

Many farmers have started making use of liquid manure made by fermenting leaves of leguminous species, sometimes mixed with animal manure, in barrels filled with water. Some are so enthusiastic about the results achieved in rice and vegetable production that they have invested in building concrete containers, dug in the soil, for fermentation of the organic matter.

Other spear-points in these projects are integrated pest management and planting of various perennials, cash crops as well as different fruit and timber species. Attention is also given to forms of more intensive goat production.

No interest in increasing profit

Interesting to note here is that there is great interest among the local communities for management of natural resources, as well as for further diversification of plant species on their land. However, it seems that intensification of farm enterprises is not really what they are after. People are focused on satisfying their needs rather than making efforts to increase profit from one single enterprise. Coffee, for example, is making a good price these days. But farmers with coffee have not changed their routine. Pruning of coffee is not practised while shade is provided in plenty to the coffee trees using, for instance, *Erythrina variegata*. Such a system may provide lower yields, but under relatively low standards of cultivation it also gives more even annual cropping and extends the productive life of the coffee plant.

The few goats kept by most families are used in case of festivities and special ceremonies. Economic crisis or not, the Florinese love to sing and dance while traditional and catholic ceremonies are an important aspect of life and are still proudly performed. There are, however, no farmers venturing into commercial goat rearing, although quality tree fodder (*Gliricidia*, *Calliandra*) is plentiful nowadays.

What has been learned?

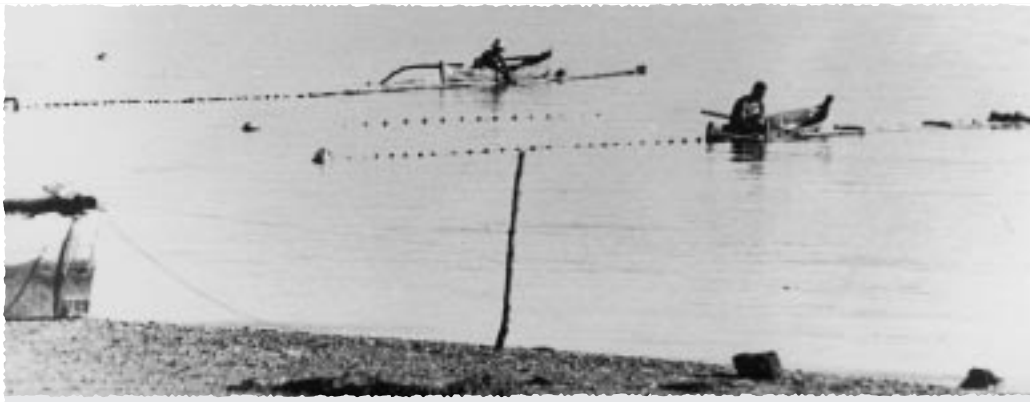
Given these project experiences, the worst must be expected from a newly launched government credit and extension programme, funded by IFAD, which aims at converting 20,000 ha of community land on Flores into monoculture cashew nut plantations. *Would it really be too far away from the oil palm schemes to have learned a lesson?*

■

Gabriela Uran (Programme Officer)**, Dina Hartono** (Advisor Gender) **Rik Thijssen** (Advisor LEISA/PTD), FADO-RI, Jalan Letda Kajeng 22, 80234 Denpasar, Indonesia. Fax: +62 361-239655, fadori@denpasar.wasantara.net.id

References

- Casson A. 2000. **The hesitant boom: Indonesia's oil palm sub-sector in an era of economic crisis and political change**. CIFOR, Occ. Paper no. 29
- Hakim Bayar A. 1999. **Perkebunan kelapa sawit - blunder ketiga sektor kehutanan**. E-law/CePAS, Indonesia



Fishermen collecting their catch near the shore. Photo: Rik Thijssen

FADO

FADO (Flemish Organisation for Assistance in Development) provides support to 34 Indonesian NGOs spread over 7 Provinces in Indonesia. On Flores, FADO is involved in agricultural projects with 10 local NGOs.

The focus of FADO's programmes in Indonesia is empowerment of farmers through developing sustainable agricultural practices with low external inputs, and building strong farmer organisations. In the programmes, FADO role is mostly in backstopping to increase organisational and technical capacity of local development actors. In early 2001, FADO merged with two other Belgian NGOs: Vredeseilanden and Coopibo.

FADO was co-responsible for the translation of ILEIA's publication **Farming for the future** into the Indonesian language. **Pertanian Masa Depan** 1999. Penerbit Kanisius, Yogyakarta.