The Cooperativa Café Timor (CCT)

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Abstract

Many complex cultural and social, as well as economic, factors affect coffee cultivation in East Timor. Very little work is invested into the husbandry of coffee. Bushes are not pruned or mulched, replanting hardly takes place, fertiliser and pesticides are not used to enhance yields, and families are said to harvest coffee only for present cash needs rather than profit maximisation. In the past, the emphasis was placed on harvesting a large quantity, regardless of quality, as the organic coffee was sent to Indonesia for blending. Only in more recent years has the emerging cooperative organisation under the USAID-sponsored NCBA and CCT begun to pay a premium for better quality cherries and to improve the quality of local processing.

Better and proper application of technology in coffee production must be made available to improve the quality for exports. The international standard requirement by OCIA gives rise to continuous inspection of organic coffee to ensure high quality products. As a country that exports premium organic coffee, it is imperative that East Timor maintains its international competitiveness. As East Timor is registered as one of the international organic coffee members, efforts to maintain good quality are of importance to the farmers and the government.

Background

The Cooperativa Café Timor (CCT) is a 100% Timorese owned secondary cooperative involved in the processing and marketing of organic coffee on behalf of its producer members. The CCT was established in 2000 under the Timor Economic Rehabilitation and Development Project (TERADP), which is being implemented by the National Cooperative Business Association of the USA (NCBA) with a grant from USAID. Initially the program was developed by NCBA in cooperation with East Timor Center for Village Unit Cooperatives (PUSKUD) 1994 with the mission to develop organic coffee as an international market commodity for East Timor. Organic coffee became very popular around the world in the late 20th and early 21st centuries in response to consumer concerns about chemicals in food. Organisations in at least 68 countries have joined the International Federation for Organic Agricultural Movement (IFOAM) in developing and promoting organic farming. Also the demand for organic arabica coffee had shown an upward trend from 197 tonnes in 1992 to 445 tonnes in 1993, an increase of 126%.

In line with the stated mission and vision, an agreement was signed between PUSKUD and NCBA to develop organic coffee by setting up an autonomous organic coffee division as a unit under PUSKUD Timor-Timur in 1995. This positive cooperation was important and eventually became a competitor to other coffee traders such as PT Batara Indra and PT Denok. Following independence for East Timor after the ‘popular consultation’ on 30 August 1999, and by written agreement of the directors, PUSKUD changed its name and became the CCT. The goals of the project were, and still are, to improve the level of welfare of the coffee growers; introduce marketing chains to the population; and contribute to the planning and policy development for a commodity which supports the economy of the people of East Timor.

Production of CCT organic coffee has grown in line with the increasing demand for organic coffee in the USA, Europe and Australia. Production was 30 tonnes in 1995; 457 t in 1996; 775 t in 1997; 1363 t in 1998; 1476 t in 1999; 1255 t in 2000; and 1320 t in 2001. Reflecting demand, prices per pound on world markets are US$0.20–0.30 higher for
organic arabica coffee than for non-organic coffee. When world coffee prices fell to US$0.70 in 1998, the prices of washed organic coffee still remained substantially higher in the markets of Germany, Holland and Switzerland. The prices of organic coffee tend to be higher and more stable compared to non-organic produce because of the easy access of organic coffee to both the specialist organic and the conventional markets.

As mentioned above, PUSKUD was redefined as CCT in early 2000 based on the CCT-NCBA mission and vision, the Memorandum of Cooperation between CCT-NCBA, programs of the Department of Agriculture, RDTL, and the current five-year (2002–2005) programs of the USAID-NCBA grant.

The aim and scope of this paper is to outline the TERADP program, with its focus on the organic coffee industry and with the development of the cooperative movement. In the case of the TERADP program the objectives also encompass the provision of primary health care to the CCT member families, and the development of vanilla and cattle fattening industries as diversification for organic coffee on a national level. The program also includes a formal and non-formal educational program in the development of cooperatives and small businesses, as well as a cooperative trading in the essential household commodities for rural people at reasonable prices, in an effort to reduce the excessive general cost of living for the people of East Timor.

The organic coffee industry

Understanding organic coffee

Organic coffee is produced without the use of inorganic fertilisers or pesticides, with traditional low-input and manual approaches to the planting, management and harvesting operations. Organic coffee farming not only involves the absence of non-organic materials, but also takes into account other naturally sustainable methods such as erosion control on steep land, good pruning, maintenance of shade, weed control and the supply of organic inputs, e.g. composts and mulches.

In social and economic terms, organic coffee production is not only beneficial to coffee growers, but also to the processors, traders and consumers. Organic culture also has the aim of improving the biological cycle through the increase of microorganisms, flora, soil fauna, plants and animals, preserving soil fertility and curtailing pollution as well as balancing the social impacts on the wider ecological environment.

Culture of organic coffee

Based on organic coffee standards formulated by IFOAM in 1992 and the limits fixed by the EEC in 1991, organic farming techniques are not so different from conventional coffee culture in many respects, with attention being paid to the following:

1. The location of the coffee production area must be clearly delineated, inspected and certified annually, in the case of CCT, by the Organic Crop Improvement Association of the USA. The areas must be free from contamination or influence from synthetic chemicals or pesticides, with a buffer zone between the organic crop and other crops where inorganic fertilisers and pesticides are used or sprayed.

2. The varieties or clones to be grown should be adapted to the soil conditions and local climate as well as being resistant to pests and diseases. Farmers in East Timor plant arabica and robusta coffees, both of which are well suited to the natural conditions and climate of the country. Shade trees such as Casuarina junghuhniana and Paraserianthes falcataria (formerly Albizia falcataria) are used widely to provide the necessary protection from direct sunlight and wind.

3. The pattern of cropping is to plant shade trees 2–3.5 years in advance, after which the coffee is planted in a traditional, random arrangement. The coffee is not planted as seeds, but as self-sown seedlings, which are collected from existing production areas.

4. The soil fertility is increased and maintained by returning adequate organic matter to the soil from other organic gardens, compost, animal manure, plant wastes, green manure or other mulches. Crop and animal residues may need to be composted to make the nutrients available. The shade trees used in East Timor also fix atmospheric nitrogen and enrich the nitrogen status of the soil.

5. Pest and disease problems are considered in relation to the overall agricultural ecosystem management, which aims to limit use of even organic pesticides by focusing on integrated pest management (IPM) through resistant varieties, rotation of varieties, and mixtures to encourage natural predators, parasites and pathogens.

CCT’s implementation and extension activities

CCT provides extension and other advisory services to its cooperative members in the following five districts: Ermera (8828 families on 10,629 blocks), Liquica (2988 families on 3801 blocks), Aileu (1019 families on 1021 blocks), Ainaro (5361 families on 629 blocks).
8948 blocks), and Manufahi (1388 farm families on 1489 farm blocks). Since early 1994 CCT has conducted a number of activities including:

1. identifying and arranging for the organic certification of the 19,584 member farm families on 25,888 coffee production blocks, who are organised in 493 groups in 16 organic coffee cooperatives (CCOs).

2. setting up demonstrations of coffee rehabilitation based on pruning in Ermera (7 ha), Letefoho (1 ha), Liquica (3 ha), Aileu (1 ha) and Maubisse (1 ha), and undertaking pruning extension programs more widely across all locations every year.

3. setting up wet processing factories for coffee in four locations with capacities as follows: Liquica, 60 tonnes/day, Aifu 100 t/day, Estado 320 t/day and Maubisse 320 t/day. These facilities are to be expanded for the 2003 harvest season.

4. setting up a dry-processing factory for coffee in Dili, with a capacity of 200 t/day. There are also two sun-drying fields for the coffee in Tibar, Liquica District, along with warehouses to store the coffee parchment until the factory is ready to accept the batch for processing. The final export product is the coffee green beans in various quality grades established by professional tasters (cuppers).

5. collection of data on coffee blocks and levels of production.

In addition, two divisions of CCT are involved in improving and developing the industry through:

- improving quality of organic coffee
- improving the operation of cooperative coffee organisations
- planting of vanilla starts (currently 40,000) as an alternative crop
- a pilot project with selected farmers to fatten and market Bali breed cattle as an alternative income source
- improving the management of product marketing
- preparation and distribution of 200,000 shade trees to farmers
- training farmers to run their own business enterprise to increase their income levels.

In addition, there are ongoing efforts to improve the health and education of cooperative members and their families as follows:

- provision of primary health care services by Clinic Café Timor in all coffee-growing areas through professionally staffed clinics established in the districts of Ermera (three clinics), Aileu (one clinic), Ainaro (two clinics), Manufahi (one clinic), and Liquica (one clinic), along with a central clinic in the CCT headquarters in Dili. The rural clinics also service outreach centres with regular mobile clinic visits.

- provision of educational courses in such topics as information technology and English and Portuguese languages as well as basic accounting training conducted by the Klibur Mata Dalan no Fila Liman Ba Cooperativa (Cooperatives and Small Business Training Center) based in Dili.

- Establishment of a commodities cooperative trading in basic household commodities at reasonable fixed prices to assist in the control of the high cost of living in East Timor, especially Dili. This cooperative currently has 94 member small kiosks and stores in Manatutuo, Baucau, Viqueque, Aileu, Ermera, Liquica and Dili which are serviced by regular visits with supply trucks.

**Implementation of organic coffee technologies**

The CCT is promoting better practices in coffee production in many ways. This includes trimming of coffee trees before they reach 7–10 m high to provide greater sunlight, facilitate air circulation, reduce humidity, and remove old unproductive branches. The system has been demonstrated in 1997 involving 1000 farmers and up to 10 ha in the Ermera, Ainaro, Liquica, Aileu and Manufahi districts — responses have been impressive with production increasing from 500–1000 kg/ha to 2000–2500 kg/ha over three years. Other steps to maintain good quality coffee production have been demonstrated and promoted, including the planting of a shade tree nursery, manufacture of compost, replanting of coffee seedlings, field measurement and registration, assistance with regular coffee production block certification inspections by the Organic Coffee Improvement Association of USA (OCIA), and cooperative training management in the 16 CCOs.

**Organic coffee inspection**

OCIA is an internationally recognised organic crop certification authority based in Nebraska, USA which provides inspection, accreditation and certification services to growers who want to achieve organic production standards and use OCIA certification on their products. Certificates provided to member groups, i.e. the CCT and CCOs, upon attainment of necessary standards, provide assurance to customers that the produce is organically grown using:

- no synthetic pesticides or fertilisers in production or processing

- sustainable methods of production involving crop rotation, green manure, composting, and sound weed and pest management to obtain high yields and healthy soil
• no handling or runoff to soil and waterways of chemicals.

Producers must document at least three years of operation without synthetic chemicals, grow the crop according to OCIA standards, and pass annual certification based on inspections of fields, record keeping, and processing operations, before OCIA certification is approved. In the case of East Timor, all CCT/CCO member coffee blocks have been registered and certified as organic producers by OCIA, however this is only about 50% of the families who claimed to be coffee producers in the (most recent) 1997 census. The annual certification includes the inspection of 10% of the CCT member coffee blocks, the wet and dry processing locations, the drying fields and warehouses, as well as CCT’s administrative and transport systems that trace the coffee from farmer’s field to export containers full of green bean. It also involves the laboratory analysis of coffee characteristics and quality, which determines the proper labelling of the final product. This gives the country a competitive advantage in marketing its coffee as it has been widely recognised for decades to be a natural organic system, with minimal inputs.