

Timbaktu Collective / Dharani FaM Co-op Ltd

Opening New Paths for Farmers in Distress – a case study

March 2011

Introduction

The smallholder farmer of Anantapur district today is in an extreme distress situation. Over the last decade, 758 farmers' suicides have been reported from Anantapur district. This crisis has been brought about by extreme indebtedness of the farmer, from the use of toxic agro-chemicals and the practice of continuous mono cropping of groundnut as a cash crop. Use of chemicals has led to increase in input costs while yields have been stagnant. Depending on a single crop has increased production and market risks, with the farmer in many cases losing an entire crop to poor rainfall, a pest attack or market price fluctuations.

In this context, the Timbaktu Collective, a voluntary organisation has been trying to respond to the desperate situation and agrarian crisis in 140 villages of Chennekothapalli, Roddam and Ramagiri mandals of Anantapur district. Its experiments over a decade from the early nineties led it to believe that the way out of the agrarian crisis was to restore the farm diversity and organic practices for sustainable management of agriculture and intervene in the market for collective marketing of the produce. These strategies were brought to a head through a cooperative of smallholder organic farmers called *Dharani Farming and Marketing Mutually Aided Co-operative society Ltd* (henceforth referred to as the Dharani cooperative).

The primary objective of Dharani cooperative is to procure, process and market the produce of its farmer members, if possible at a premium price. It expects more smallholder farmers to join the co-operative, be encouraged to grow food in a sustainable and organic manner and get the kind of returns they should be getting. Although it is too early to assess the success of the venture, the case study examines the functioning of the cooperative and the extent to which it has been successful in motivating farmers to adopt organic farming as an economically viable proposition even in distress hotspots like Anantapur.

Genesis

The Collective began experimenting and researching productivity issues in dryland farming in 1995. From there it moved on to promoting organic farming among the local communities through various projects supported by donor agencies such as Asha for Education, Sir Dorabji Tata Trust, Evangelischer Entwicklungsdienst (EED) and European Union. By the end of March 2011, around 1,190 families had shifted to the cultivation of organic food in a sustainable way on 3,570 acres of land.

In 2005-06 “*Adisakthi Dharani*” was promoted as a collective enterprise for marketing of organic produce of the smallholder farmers participating in the project. The overall purpose was to enhance the income and food security of dry land

smallholder farmers of Anantapur district in the short term and improve livelihood security through sustainable agriculture in the long term. The enterprise was initiated by one of the women thrift cooperatives (*Adisakthi* MATCS) promoted by the Collective, which put in the initial capital for the venture.

In April 2008, the participating farmers themselves were organized into a producer owned cooperative which was registered under Andhra Pradesh Mutually Aided Co-operative Societies Act of 1995. *Adisakthi* MATCS, handed over the venture, including the assets and liabilities, to this newly formed cooperative. Thus the business venture called "*Adisakthi Dharani*" was renamed "*Dharani FaM Co-op Ltd*" with a new board of directors. All the 890 farmers who had adopted organic farming under the Collective's earlier projects by then, became shareholders of the cooperative. As of March 2011, 1190 farmers have joined as share holding members.

Strategies to remove distress

The Collective felt that a producer owned processing and marketing venture would be able to address the following major issues faced by the small and marginal farmers in Anantapur:

- a) Unavailability of credit
- b) Exploitative trading practices
- c) Increased market risks
- d) Lack of access to the growing organic food market

The *Dharani* cooperative adopted the following strategies to achieve this purpose:

- ⇒ Promote diversification of the groundnut mono-cropping pattern through millets and pulses.
- ⇒ Promote eco-friendly organic farming methods that build on the traditional knowledge base of the farmers and utilise locally available resources such as biomass, livestock and labour.
- ⇒ Provide cultivation loans through the cooperative to reduce the debt burden of farmers
- ⇒ Organise marketing support for the farmer's organic produce in both rural and urban markets.

The management of the enterprise is organized into two teams:

- a) *Farming team* that ensures the production of certified organic millets, pulses and oilseeds at better yields and lower costs to the farmer and
- b) *Marketing team* that ensures a minimum support price for the organic millets grown and a premium price for the organic oilseeds and pulses grown.

Implementation Processes

While the Timbaktu Collective looks after the *developmental functions*, the elected directors of the *Dharani* cooperative take care of the *commercial functions* with professional management support from the Collective.

Developmental Functions

i) Formation of organic farmer groups in villages: A group (*sangha*) of 15-30 interested farming families is formed at village level. Each *sangha* constitutes both men and women members of the family. Each *sangha* chooses two group leaders (one man and one woman) who are jointly responsible for the overall work of the *sangha*. Each *sangha* is sub-divided further into groups of 4-6 farmers, called *brindams*. The sub-divisions are based on the location of the land of the farmers, so members having contiguous patches of land close to each other are grouped together. The *brindams* are an important aspect of the organic certification system undertaken by the cooperative, as neighbouring farmers would be most aware about the use of chemicals in the farms around theirs. Each farmer must allocate at least 3 acres of his/her land under this program, of which at least 1 acre should be under a crop different from groundnut. Some of the alternate crop options are the various millets, castor, sunflower, redgram, cowpea and horsegram.

ii) Set-up of village-level offices and identification of volunteers: Each *sangha* has an office in the village, which is used for organising meetings, storing records, assets and organic materials stock of the *sangha*, display of the basic information of the *sangha* and activities taken up by them, and also show details of organic farming methods with photographs.

Each *sangha* chooses one volunteer, who is based in the village, having farming background and is literate. The volunteer is part of the block-level production teams. The volunteer conducts the *sangha* meetings and provides information support to *sangha* members regarding program activities especially organic practices for soil fertility improvement and pest and disease management. The village volunteer, also monitors use, if any, of toxic chemicals that would bar the member from the *sangha*. Basic records relating to the work of each *sangha* are maintained by the volunteer such as a cash/bank book and a ledger, meeting minutes book, stock ledger, farmer diaries etc.

iii) Collection of basic baseline data: Basic information about the farming families and their previous years' crop including economics of cultivation is collected, to compare the impact of the programme. This is also very important for the organic certification programme.

iv) Capacity building of farmers: Organic farming practices in soil fertility improvement and pest and disease management, land development, biomass development, seed selection and post harvest management of crops are some of the main areas in which capacity building of farmers takes place. Capacity building is organised through trainings at both the programme and village levels, through exposure visits and through meetings with experienced organic farmers. Village demonstrations are organised in the plots of interested farmers, in which organic practices including crop rotation with crops other than groundnut is carried out as a

means of demonstrating model practices. Farmers undergo training to prepare various organic inputs for improving soil fertility and managing pests/diseases. Some of these include preparation of *Neem* seed kernel extract, *Jeevanmrutham*, *Panchagavya*, hand picking and burning of larvae etc.

Capacity building of the Board of Directors of *Dharani* cooperative, in all aspects of the program from production to marketing is organised through trainings, exposure visits and direct participation in program activities.



v) *Organising seeds, organic inputs and credit support*: Prior to the beginning of the season supply of, seeds especially of crops other than groundnut, is organised for the *sanghas*. The *sangha* members return the seed in double the quantity after the crop harvest and the seed is retained at the village office, serving as a seed bank.

Financial support for organic inputs is provided to farmers with a limit of Rs. 2,000/acre over the three-year project period. Primary activities for urine collection, compost preparation and soil development are undertaken. Arrangements are made at the *sangha* level for sharing of cattle urine amongst farmers who do not own livestock. Credit upto Rs. 3,000/acre is provided at the time of sowing and at the time of harvest. These loans that were earlier routed through the *Mahasakthi* MACTS Federation network¹ (as every member in the *sangha* is also a member of the *Mahasakthi* network) is now directly handled by the *Dharani* cooperative.

vi) *Land and biomass development*: At least a 1-2 months before the cultivation season begins soil and moisture conservation works are undertaken in the farmers' fields through the watershed development program or through the NREGA in the village. Trees suited for composting and organic preparations such as *Gliricidia*, *Pongam*, *Neem*, *Sitaphal* etc are planted at a density of about 100 plants per acre on the field bunds. These will also act as windbreakers. Measures have to be taken to prevent browsing by goat/sheep and for survival during moisture stress periods.

¹ The *Mahasakthi* mutually aided thrift cooperative societies network, composed of the *Adisakthi*, *Ananthasakthi* and *Mahilasakthi* cooperative societies which together have a membership of over 13,000 women, spread over 134 villages.

vii) *Monitoring cultivation of crops and crop harvest:* Regular *brindam*-wise visits are organised by the volunteer to monitor crop status in the farmers' fields. The yield of the crop both the main and intercrops is estimated just before the harvest. Yield estimation is a mandatory step in the certification process, as it helps to cross check at the time of procurement, that the quantity of a particular crop sold by the farmer is not more than the estimated yield.

Estimation of total organic crop output achieved is recorded just after harvest of crop, in order to be able to measure improvement in yield. Various post-harvest management measures are followed for pest control and for preventing spread of aflatoxin in groundnut and other crops.

viii) *Organic certification:* Organic certification of the *sangha* members' farms and crops is organised through the Participatory Guarantee System (PGS)² promoted by the PGS Organic India Council, Organic Farming Association of India (OFAI) - Goa and the Food and Agriculture Organisation United Nations, New Delhi (FAO-UN).

This certification system involves the following steps:

- ⇒ Forming a small group of farmers and organising their sub-groups on the basis of the location of their lands.
- ⇒ Signing of an agreement with each farmer about the commitments to be fulfilled by the organisation and the farmer regarding the program activities
- ⇒ Signing of a pledge by the farmer, that she/he will follow farming practices in line with the PGS National Organic Standards
- ⇒ Organising two meetings in a month throughout the whole season, in which the use of chemicals by any farmer is discussed and verified by the village volunteer and respective *brindam* members and recorded in the *sangha* minutes. At the time of purchase of produce, the Society checks the farmer's record of using chemicals.
- ⇒ A diary is maintained for every farmer by the village volunteer, which records all details of the work done by the farmer on his/her farm, including use of chemicals if any. This record is checked in every *sangha* meeting.

ix) *Research study on impact of organic farming and millets cultivation:* The farming component of the program has two main thrusts shifting to organic and diversification of the groundnut mono-cropping pattern with millet cultivation. Using the information in the farmer's diary and the baseline surveys, for year 0 (baseline),

² Details regarding the PGS system are available on www.pgsorganic.in and on the OFAI website at www.ofai.org.

1, 2 and 3, the impact of this program will be measured in terms of increased income through improved yield and reduced costs.

x) Programme Monitoring: The *Dharani* Cooperative's Board of Directors reviews the work of the marketing sub-team. The work of each sub-team is reviewed by the production and marketing team coordinator through individual team meetings respectively. At the *sangha* level, the work is reviewed and planned through two meetings every month. A season-end review is also conducted with each *sangha*, which is followed by a workshop to prepare a yearly production plan for the next season. A marketing workshop is also conducted just prior to the procurement season, to look back and plan for the year to come.

Commercial Functions

i) Obtaining legal clearances: Clearance from the local gram panchayat, registration from the district industries centre, factories department license registration, CST/VAT registration, license from civil supplies department for trading pulses, weights and measures department stamping of weighing machines were obtained. Trademark registration will be done in year 2011.

ii) Purchase of organic produce: Produce certified as organic, is procured by the Cooperative, in collaboration with the *sangha* members at mutually agreed dates. A procurement plan is made every year based on the extent of organic farming area and crops sown, while the crops are still standing. Decision on the purchase price is made based on the prevailing prices in the markets nearest to the village. Purchase price varies based on the quality of the produce measured by the outturn percentage of the sample of the produce. Purchase of produce is organised from the doorstep of the *sangha* members.

iii) Processing and storage: Procurement, storage and processing are the major operations before final sale of the produce. For this purpose, a storage and processing



unit, of the capacity to store about 100 tons of produce at any point of time was constructed. This includes space for sun-drying, space of grading and other labour-based operations and machine-processing units for turning oilseeds into cake and oil form, millets

into rice, semolina and flour form and pulses to its split form. A process journal and ledger is maintained to track the inflow and outflow of each commodity. The processing unit engages between 10-40 women every day to facilitate the processing work.

iv) Building market linkages in rural and urban areas: The basic business model of the program is to improve income of the farmers and to organise primary processing of the produce into basic commodities such as rice, semolina, flour, oil, nuts and dal, and market the produce in branded retail packets to individual and small rural and urban customer groups such as retail stores, consumer networks, organic food processors, restaurants, trade fairs/exhibitions, rural self-help groups etc. This would generate an additional price premium of atleast 10% for the farmers for their pulses and oilseeds and a minimum support price for their millets.

v) Millet food promotion: Diversification of the groundnut mono-cropping pattern with millets is a major focus of the program. A series of millet food workshops that involve preparation and serving of a number of a traditional and modern millet recipes are organized through the season with the village level farmer groups. A small restaurant was also promoted in the central marketplace of CK Palli to serve millet food to the local populace on a regular basis. With market development support, millet baked items can be introduced through the retail outlets of the bakers

vi) Raising funds towards working capital and fixed investment: Funds required for working capital (purchase, processing, storage and sale of produce) and fixed investment of Rs. 28 lakhs, towards storage and processing unit, was raised from a group called Friends-of-Timbaktu as interest bearing loans. Most of the loans were repaid by April 2010. However, the Cooperative again raised loans and at the end of financial year 2010-11 it has a liability of Rs. 16.4 lakhs as interest free loans.

The Board meeting of the Cooperative is usually held on the 6th of every month. Every year the Board makes a financial projection to understand the working capital requirement based on the consolidated acreage and yield estimation of the standing crop.

Key Achievements

i) Processing Unit: Construction of the Dharani processing unit was completed in June 2007. The building has a total area of 7,200 sq ft. An additional 3,600 sq ft of semi-outdoor area has been provided for transit of material and for processing work. An equal amount of space is also provided for sundrying of processed finished goods sensitive to dust. By mid 2008, there were 15 agro-commodities being handled at the processing unit. With increased diversity of commodities, storage had become more complex. As a consequence a separate building with 1,650 sq ft was erected in 2008-09.

ii) *Organic Certification*: All Dharani farmers are certified in Participatory Guarantee method. As on 2011, 850 farmers had been certified organic.

iii) *Marketing and Brand Building*: Pamphlets, labels and e-communications were used to sensitise the consumers about the PGS certification methodologies and the credibility of this certification system. A professional designer was engaged to develop a logo for the brand and multi-colour pamphlets. It was decided that “*Timbaktu Organic – Food for the soul*” would be the brand name and slogan. Multi coloured labels for the different organic products, were designed and printed. Multi-coloured flex banners were designed and printed for use in the exhibition stalls. Pamphlets were sent to all the customers and distributed in the gatherings like India Organic Fair, Dastkar, Nature Bazaar, etc.

iv) *Financial Achievements*: During 2008-09, the Dharani cooperative recorded a net loss of Rs. 0.55 lakhs at 4.16% on total sales of Rs. 12.91 lakhs. The business costing done by it enabled the Dharani team to establish correct pricing system and they found the path to overcome the loss incurred in the business.

During 2009-10, the cooperative recorded a sale of Rs. 31 lakhs with a net loss of Rs 1700/-.

The unaudited statements show that during 2010-11, the recorded sale is Rs. 38.5 lakhs with net profit of approximately Rs 1 lakh.

Future Prospects

The collaborative intends to raise financial resources in the form of equity for the cooperative on lines similar to that adopted by NDDDB for Amul pattern of milk cooperatives. The success of this venture will ensure better income for the marginalized dry land smallholder farmers of Anantapur district and in the long term will improve their livelihood security through sustainable agriculture methods. Investment in *Dharani FaM Co-op Ltd* is justified not only because it is a sound producer owned business enterprise and will give financial benefit to the shareholders but also because it is:

- a) *Ecologically sustainable* - It is contributing to improving the health of the people, the animals, the land and the environment;
- b) *Socially conscious* - It is increasing income of the marginalised smallholder farmer community by getting them better prices for their produce, lower input costs, access to much needed credit, improved productivity of their lands and animals while supplying much needed healthy foods to the consumers;
- c) *Financially viable* – It is designed to become financially self-supporting in the long run through implementation of economically viable activities.