



June 2009 Volume 11 No. 1

Magazine on Low External Input Sustainable Agriculture



LEIS INDIA

**Farmers as
Entrepreneurs**

Adding value to life

Indigenous communities in the Nilgiri Biosphere Reserve area have improved their livelihoods by appropriate farm practices and value addition. The community is enjoying the benefits of getting together by enhancing their capacities in adding value to lives and livelihoods.

Robert Leo and Mathew John

The Nilgiris is a mountain area which is part of the Western Ghats of South India, a home range for six primitive tribal groups. Most of them are either pastoral or have been hunter gatherers. The region is dominated by plantations of tea/coffee and commercial vegetable cultivation. Approximately 55% of the land is under the Forest Department. The average rainfall varies between 2000 mm in the west to less than 500 mm in the eastern and northern sides. Land use change has taken place in the Nilgiris over the past 200 years, with a constant move towards commercial species, both in the forest and in agricultural lands.

The Arakode region of Kotagiri taluk is a rain shadow area and the Irula community is predominant in the region. This valley was a gateway to the Nilgiris range by the British and the traders during the 18th century. There are over 350 families in the valley and hold approximately 550 acres of traditional land. The Irulas cultivate minor millet, vegetable and fruit trees in their community land holdings. The millets are always grown in a mixed cropping system - a combination of different cereal, pulse, tubers, vegetable crops and numerous uncultivated foods crops, as food and nutritional security. Millet cultivation is taken up as a community activity - labour for clearing land, crop guarding against wild animals and post harvest processing is shared. This provides a strong bond, socially and culturally. Rainfall and crop raiding by wild animals is a huge determinant in their food security. Many times, these threats have forced the community to discontinue farming practices leading to large tracts of land becoming fallow and semi-wild.

Interestingly, the overall land use change which has taken place across the rest of the mountains has not affected this region to a large extent, except that the community transformed their land, partly, into coffee cultivation. Coffee is grown largely with a number of fruit trees, shade trees, pepper vines, silk cotton trees and wild trees - a rich diverse system. The few non tribal farmers who live in the region have also practiced a similar crop pattern. In addition, collection of non-timber forest produce (NTFPs) is an important traditional activity to meet their livelihood requirements. Earlier, the entire family used to go into the forest for collecting gooseberry, soap-nut, gallnut, barks, roots and phoenix leaves, seasonally, which would be sold to small traders.

A few of the villagers have developed excellent skills in making fruit baskets, winnowing baskets, granary and mats from locally collected bamboo. Goat rearing is widely practiced, usually, among elderly people. Children are very much associated with this practice - this is also a reason for poor literacy amongst Irulas. Small traders

visit the village to buy farm produce, goats and forest collections and sell cloth, small groceries as well finance their emergencies and festivals. Usually, the interest rates are extremely high while the purchase rates offered for buying produce are extremely low.

Arakode Women and Land Development Group, Banglapadigai

Keystone Foundation, an NGO, has been working in the Nilgiri Biosphere region since 1995 with indigenous communities on eco-development initiatives. In developing enterprises, Keystone has been focusing on promoting local marketing, facilitating organic certification and enabling value addition.

In the year 1998-99, a group of farmers and NTFP collectors requested Keystone Foundation to assist them in a legal battle with a nearby private estate to secure their traditional land holding (80 acres). Legal consultation support was provided and this became instrumental for the revival of traditional mixed farming, starting up a farmer's revolving fund and community level value additional centre.

Major crops grown are pepper, coffee, silk cotton, fruits, vegetables, millets, pulses and soap nuts. The farmers were encouraged to grow crops organically with training on compost, vermi-compost and preparation of bio-pest and disease control inputs. Soil and moisture conservation techniques were incorporated to ensure soil health. Micro irrigation through HDP hose pipes and sprinklers were introduced for efficient water utilization and sharing amongst users. So far, the Foundation has trained 113 farmers in coffee cultivation.

In the year 2004, a revolving fund account was started in a bank, through which savings, lending loans, purchase of seeds and bio-inputs are facilitated. Interest free loans are provided to the group members. These funds are used to procure the primary produce and engage in the process of value addition.

Production levels reached upto 2.5 tons of coffee, 5.5 tons silk cotton, 0.5 tons of pepper, 1 ton millets and 2.5 tons of vegetables and fruits. The farmers were encouraged to supply coffee, silk cotton, pepper, fruits to the value addition centre at fair prices. The harvests from the farms like vegetable, greens, tubers and fruits were procured under an Organic Bazaar-marketing venture for farm fresh produce.

Value addition

A level of value addition used to happen at the village but it was always at an individual level e.g., ginning of silk cotton would take place in home using vessels - it meant that the skill level was there but an addition of technology as well as scaling it up, was required. The emphasis has been on parameters like sanitation, quality, appropriate tools, packaging which has allowed them to bring their products into the open market.

Initially, the value addition activity was done from a rented house and gradually grew to have its own building in 2005. There are 11 women (directly) and three men (partly) involved in processing and packing of silk cotton mattresses, pillows, coffee powder, pepper & gooseberry products, making pickles, spice packing, millet processing and broom making by using phoenix leaves.

Certification and marketing

The farmers of the village have registered themselves under **PGS certification** (Participatory Guarantee System) ensuring sustainable farming conditions. The value addition groups have **shared a ratio of profit** with all farmers and collectors who have supplied the raw materials for value addition. Through value addition, the value of the product increased 5-7 times within the village premises, itself.

Keystone is a member of the PGS Organic India Council and has thirteen groups registered under it. Produce from these groups (mainly coffee, pepper & silk cotton) can use the PGSOIC logo on their products. Right now, coffee packing has the logo printed on the packing.

These products are directly sold to the Enterprise section of Keystone which provides access to regular employment and enables direct payments to the group. It helps in linking the clientele through the Green Shops and facilitates the centers for local marketing through organizing outlets.

Keystone has its own chain of four shops which are called 'The Green Shops' – based in Kotagiri, Coonoor, Ooty & Mysore (recently opened in Sept 09). These shops are primarily targeted at the middle class segment of consumers. The production groups have also begun selling through their own outlets which go under the name 'The Honey Huts' – these are in Masinagudi, Mettupalayam, Barliyar, Bannari and Hasanur. Apart from these, Keystone has tied up with retail shops in different places – the main ones are in Salem, Auroville & Pondicherry with limited supplies to some others.

Impacts

There has been a price advantage due to value addition reflecting on the income earned by the farmers. By adding value, the price of one unit of silk cotton of 1000 silk pods increased from Rs 140/- to Rs.265/- Further value addition by producing pillow or mattress will further fetch a three fold increased price. Similarly, with roasting and grinding Coffee fetched a price of Rs 75/- per kg as against Rs. 50-60/-. Pepper, which earlier fetched Rs. 85/-per kilogram is now being sold at Rs 130/-, with value addition. The

value of other products like honey and gooseberry has doubled and in some cases has increased three times.

The human resource skills and attitudes have enhanced not only the production processes but overall family and village development. Technological intervention have increased efficiency in ginning cotton, solar driers and dehumidifiers for fruit processing, husking machine for millet processing, mixers and grinders for pickle and spice packaging. This women's group has now started a small grocery in the premises to cater to the village's needs with some principles, like not selling tobacco.

The value addition group members often visit all the farms for interaction and procurement. Besides farming, 36 farmers have also undertaken beekeeping to increase income opportunities. This has also enhanced crop productivity through crop pollination. Though diseases like the Thai Sac Brood Virus remain a constant threat, the potential continues to encourage the beekeepers. These initiatives have reduced the traders' influence.

The value addition centre acts as a central pivot around which social, cultural and economic linkages are bound. This production and direct participation is a critical backward link to the Organic/Green Enterprise which Keystone hopes will bring the customer & the market, closer.

However, this extremely strong effort at the village has not come without its share of difficulties. Such a holistic approach is constantly challenged by a few farmers' practices. Hard market realities force them to grow short term mono crops like cultivation of beans to deal with cash requirements.

There is still a long way to go but they are slowly picking up. What is crucial is building their stake into the centers.

Robert Leo and Mathew John

Keystone Foundation
Groves Hill Road, PB 35,
Kotagiri-643217, Nilgiris,
Tamil Nadu,
e-mail: kf@keystone-foundation.org
www.keystone-foundation.org

Value addition of products

Produce procured from farmers	Process involved in value addition	Finished produce for market
Coffee parchment	Graded, sundried, peeled & polished, roasted, grinding into powder and packed	Marketed as powder Marketed as roasted beans
Silk cotton pods	Removal of pods, dried, Ginned, filling in stitched bags	Marketed as Mattress, pillows, cushions and as ginned cotton
Lime fruits	Cleaned, removal of seeds, pickled, or added with sweeteners	Marketed as pickle / Marmalade
Pepper	Cleaned, graded, pickled, dried and powdered, dried and packed as whole	Marketed as Green pepper preserve, powder and whole
Ragi	Cleaned, powdered	Marketed as powder, cereal mix, biscuits
Bees wax	Melted, filtered, value added as Balms (nine different types), hand rolled candles. Soaps,	Marketed as Balms, candle and soaps
Honey	Filtered, graded, batched, value added with spices, added with fruits, nuts	Marketed as honey, flavored honey