

Leaves of Prosperity

G. XAVIER AND M. SUBRAMANIAN

Reaching out to the poor, landless and marginalized betel vine cultivators and supporting them to better their cultivation practices and to bypass sale of their produce to middlemen is steadily improving the lives of these farmers and holding up hope for them of a way out of abject poverty

The picturesque Anaimalai block of Coimbatore district offers ideal agro-climatic conditions for betel vine cultivation. Numerous landless Pandiya Vellalar communities have, for many generations, leased land from the owners of coconut plantations to cultivate betel vine, or *paan*.

The process of cultivation for this ancient crop (it has been in use globally for 2000 years) is highly labour intensive and, therefore, the communities involved invest most of their time and labour tending to it. Betel vine cultivation and its trade and commerce offer employment to about two million families in India and the livelihood of these people is solely dependent on the performance of this bread earning crop. The farmers have become members of the Thenchitur Vetrilai Urpathiyalargal Poocharam, or Common Livelihood Group (CLG), an intervention at the community based organization (CBO) level, to bring under one umbrella all those individuals involved in this business at the habitation level.

During cultivation, betel vine is very susceptible to diseases such as leaf-spot, leaf rot and a powdery mildew. This results in great losses. Against this background, it is important to mention the integrated support provided by the Pudhu Vaazhvu (New Life) Project (PVP). PVP began its operations in Tamil Nadu in 2005, covering 26 districts, 120 blocks, spread across 4,174 village *panchayats*. It had a project outlay of Rs 1,667 crores, funded by World Bank. The objective of PVP is to empower the poorest of the poor, the marginalized and the differently-abled, and to promote sustainable livelihoods for them. PVP follows the community driven development approach, and has absorbed the poor and the under-privileged into the mainstream development process. CLG members of Thenchitur derive enormous benefits from PVP, which has largely reflected the overall mandate of the Project—of poverty reduction and shared growth. These benefits have been taken to the ground through sustainable natural resource management, effective disease control, arrangement of micro-finance and business development.

Coimbatore is one of the most industrialized districts of Tamil Nadu. According to the 2011 Census, Coimbatore district has a population of 34,58,045 with a sex ratio of 1,000 women for 1000 men. Schedule Castes and the Scheduled Tribes account for 10.5 per cent and 0.82 per cent of the population, respectively. In 2011, the district had a total of 9,58,035 households (HHs). Coimbatore district is home to the Anaimalai Wildlife Sanctuary and National Park, both of which are under consideration by UNESCO as part of the Western Ghats World Heritage Site. There are over 2,000 species of plants, of which about 400 species are of prime medicinal value. Coimbatore district houses more than 25,000 small, medium and large industries, with the primary industries being engineering and textiles. Coimbatore District Society, or PVP, was formed in 2005.

PVP is being implemented in three blocks of Coimbatore district. Thenchitur village *panchayat*, where a betel vine CLG has been organized, is situated in Anaimalai block. Thenchitur *panchayat* has a target of 108 HHs, comprising 45 very poor, 66 poor, 40 differently-abled, and 21 vulnerable HHs. A *panchayat*-level Federation (PLF) has been functioning since November 2010 and has received Rs 10 lakhs as livelihood corpus fund, or Amutha Surabhi Fund (ASF). There are 25 SHGs, with 266 members, affiliated to the PLF. The betel vine CLG of this *panchayat* has 21 members engaged in cultivating approximately six acres of betel vine. A one-time development fund of Rs 77,800 was provided to the CLG for the purchase of essential infrastructure items useful in cultivation and for training to enhance the administrative and marketing skills of members. Besides, various loans through nationalized banks amounting to Rs 1.6 lakhs have been extended to members to facilitate timely farming operations.

Betel vine is a delicate and extremely fragile plant, which must be tended to carefully. Not only is it painstaking work but also the plants have to be kept disease-free. The fluctuations in prices, which are dependent on market conditions, have a great impact on the income of the farmers. Betel vine farming is labour intensive; the availability of labour for its cultivation during peak season is also a serious problem, preventing the timely execution of cultural practices. Currently, around 250 families of landless agricultural labourers of Anaimalai block are traditionally employed in betel vine farming. Each family usually takes on lease up to eight cents of fertile land that has coconut trees, which offer the much-needed shade to the betel vine. The owners of the leased land ensure continuous availability of water through lift irrigation. The land is usually leased for three years. Most often, organic farming practices are adopted, which involves growing the *sesbania grandiflora* (*agathi*) as a support crop, and bananas and chillies as inter-crops. The first picking of leaves usually commences after a gap of eight to nine months from the time of planting a robust seed crop.

The local name of the variety grown is *Sakari Kodi*. It has mild pungency and is light green in colour. In Anaimalai block, coconut trees are widely grown and because these provide additional shade, the vines are trailed on grown-up *sesbania* trees, the leaves of which are used both as manure and as a green vegetable, fetching additional income to the growers. The mature betel leaves are plucked by hand along with a portion of the petiole. The harvested betel leaves are washed, cleaned and made ready for marketing. An annual yield of a good betel leaf crop is about 65–75 leaves per plant, translating into a yield of 18 to 20 lakh leaves per acre.

The type of leaves produced by this CLG has found good market acceptance in the

neighbouring state of Kerala. Because the quantity available with individual growers is small (1 or 2 kg per picking), they usually hand over the daily collection of leaves to the brokers or middle-men, who then arrange to make a down payment at the rate of Rs 80 to 90 per kg of leaves. The village

middle-men, however, invariably exploit the growers and offer much lower prices than the prevailing market prices. These marketing bottlenecks have been successfully addressed by resorting to collective pooling of the produce and arranging to sell it directly to wholesalers at a higher price, thus bypassing middle-men.

As mentioned earlier, the betel vine CLG at Thenchitur was launched in 2011 as part of the PVP strategy for inclusive growth and development of poor, landless growers. The CLG primarily focussed on finding ways to stabilize production by making available critical infrastructure essential for crop management, coupled with the marketing of the produce collectively at a higher price to wholesalers, with an aim to enhance the individual members' profitability. On 7 March 2011, this CLG was formed with 20 members. Each member contributed Rs 100 as membership fee and the group elected a President, a Secretary and a Treasurer, to run the day-to-day operations of the CLG. Training was imparted on various aspects—administration, finance and crop management. Subsequent to the training, the group prepared a business plan, which was fine-tuned, with inputs from the PFT and District Project Management Unit (DPMU), Coimbatore.

On acceptance of the plan, the CLG received Rs 77,800 as development and infrastructure fund, which was utilized to purchase ladders,

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sprayers, vessels for lift irrigation, weighing balances and iron nails for plucking the leaves. Keeping in mind the constraints faced by the members due to shortage of funds for routine farming operations, CLG members were extended credit facilities through the Amutha Surabhi Fund and also through bank

linkages, to the tune of Rs 1.6 lakhs. These crop loans were both internal and external. The internal loan was provided through the Amutha Surabhi Fund initiated by the Project, aimed at giving timely business credit to CLG members. Besides crop loans, arrangements were also facilitated through nationalized banks to take care of the micro-financial needs of the members.

Apart from these initiatives, a major programme that was successfully implemented was collective direct marketing. The groups successfully bypassed the middle-men who had, so far, been buying the leaves at the rate of Rs 85-95 per kg, and had managed to sell their pooled produce directly to the wholesalers operating in the nearby town of Pollachi at the rate of Rs 120 to Rs 130 per kg, resulting in an additional profit of Rs 30 to Rs 40 per kg of leaves.

The success of this CLG has encouraged PVP, Coimbatore, to scale up the activities by organizing other betel vine growers of the *panchayat* into a new CLG. Plans are also underway to form a betel vine growers' Federation, with the following key objectives:

- A. The betel leaf is eaten raw; if the produce were to be cultivated through organic farming techniques, the product would acquire a unique selling point (USP), commanding a higher premium price in the market place. Therefore, it is planned that cultivators be brought under the

Participatory Guarantee System (PGS) Organic Certification Process. Most of the CLG members have undergone training in organic cultivation, and exposure visits have been arranged to familiarize them with the preparation of organic inputs and pesticides. Once the growers become eligible for an organic certificate, a suitable brand name may be assigned to the produce, capitalizing on the popularity of their geographical location. This will help them acquire premium pricing in a wider area and in diverse territories.

- B. The market price and yield make all the difference in improving agricultural profitability for small landless cultivators. Currently, all the growers face a 40–60 per cent loss in yield because of pest infestation and diseases. Despite repeated preventive measures using fungicides and pesticides, some of the sucking pests have not been eliminated; the diseases and the pests seem to have become resistant. It has, therefore, been decided to introduce improved cultivar varieties developed by the Tamil Nadu Agricultural University (TNAU) that have a high level of pest and disease tolerance. These will be tested for adaptability to the local agro-climatic conditions as well as market acceptance. Systematic testing and the gradual introduction and expansion of this new improved variety, coupled with the adoption of the Integrated Pest Management technologies, using bio-control methods such as *Trichoderma Viride* and *Pseudomonas* is expected to gradually eliminate pest and disease problems, thereby, resulting in a boost in the yield by up to 30 per cent.

These programmes of the PVP, Coimbatore, planned for the benefit of the CLG, aim at bringing in sustainable changes and

development in the lives of the under-privileged, landless betel vine growers of Anaimalai block of Coimbatore district.

NAGALAKSHMI'S STORY

Nagalakshmi of Thenchitur is no stranger to farming. As a child, she helped her parents with planting, weeding and plucking betel vine in the Thenchitur village of Anaimalai block, which lies in the picturesque foothills of the Western Ghats. This marginalized but bold and enthusiastic landless labourer has managed to sustain a family of four, raising her children and sending them to an engineering college to make their future secure.

The agricultural techniques adopted by her over the years were primitive but ensured that the eight cents of leased-in land where she and her husband cultivated betel vine was able to cater to the basic needs of the family. Productivity was below average. In addition, the prevalent nexus of local traders and middle-men led to a situation where she had absolutely no bargaining power and was constrained to sell her produce at the rate of Rs 80 to Rs 90 per kg of leaves, incurring huge losses.

In 2011, Nagalakshmi joined the 'Thenchitur Vettrialai Urpathiyalargal Poocharam (CLG), which was set up by the PVP society, Coimbatore, a poverty alleviation Project jointly financed by World Bank and the Tamil Nadu government. Like Nagalakshmi, a group of 20 marginalized landless labourers of Thenchitur, who had been, for generations, cultivating betel vine on leased land, were a part of this CLG. The members participated in all the meetings and attended training sessions held by PFT and DPMU.

Judiciously utilizing the infrastructure fund extended to them, Nagalakshmi purchased

implements such as sprayers, ladders and iron nails for her farm operations. Prior to the formation of the CLG, she would rent these implements at a considerable cost. Nagalakshmi also received a soft loan of Rs 35,000 through the Amutha Surabhi Fund (a corpus fund anchored by PVP) through the officers of the PLF of Thenchitur *panchayat*.

An entomologist and pathologist from the Department of Aromatic and Medicinal plants, TNAU also visited Nagalakshmi's pest-and disease-affected fields and recommended safe and effective pest control measures. Complying strictly with the procedures and diligently following the tips shared by PFT and DPMU, Nagalakshmi secured a bumper yield

of 750 kg of betel leaf per year from her eight cents of leased land.

She is able to sell her produce directly to the wholesalers at Pollachi, fetching an additional profit of Rs 25 per kg of leaves. Thus, with the incremental yield of 90 kg ($90 \text{ kg} \times \text{Rs } 120 = \text{Rs } 10,800$) and the additional price realization of Rs 14,400 ($750 \text{ kg} \times \text{Rs } 20$), Nagalakshmi earned an extra income of Rs 25,200, solely because of her valuable membership in the CLG.

Seeing the increased yield and the other financial and infrastructure benefits that Nagalakshmi received, other farmers are now motivated to become members of the existing CLG in Thenchitur.