For these women, money does grow on (neem) trees

Once, the women of Muddana Guddi, a village in Raichur district, in the southern Indian state of Karnataka, suffered from drought and poverty. With no alternatives except cursing their own troubles, they used to migrate to neighbouring states for work. Now, they are earning their own livelihoods by running a business worth hundreds of thousands of rupees. The women collect readily available neem tree seeds, to produce and sell neem cake. They have been so successful that they received a UNDP national award.

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uring summer, when there is little paid agricultural work available, women and children of Muddana Guddi, a village in Raichur district, Karnataka, collect neem seeds and sell them to a mediator who comes to their village. In a week, a woman can collect around 100 kg of seeds and earn 300 to 400 rupees (around US\$ 6 to US\$ 8). It is well known that many tonnes of neem seeds are exported from Karnataka to big industries in the north of India. They are processed into neem oil, which is sold at a high price. While seed collectors get minimal amounts, the mediators earn thousands of rupees. After extracting the oil, the leftover cake is also sold, although it does not have the qualities needed for use as a fertilizer or bio-pesticide.

Identifying promising local initiatives

Farmers use neem cake like any other compost. Although it is called cake, it is actually a powder (see Box), so it can be added to and mixed with soil at any time, including when ploughing. When the crop is suffering a nutrition deficiency, the farmer will add neem cake to the soil. Observing this, and knowing that local farmers were losing out to the mediators and big business, Neju George, a social worker, thought that if neem cake could be produced and sold locally, poor women may be able to earn some money. To achieve this aim, he and some like-minded friends started an organisation named *Jagruta Mahila Sanghatane* (JMS), which means "women's organisation with awareness". Under this JMS umbrella, many women's self help groups were formed. Each worked on a specific income generating idea, such as making terracotta jewellery or herbal medicines. JMS operates like a federation, providing trainings, publicity, workshops and



Separating the waste, like all the other steps in the process, is a collective effort.

market facilities for the women. "First we tried to unite the women so that they could organise self help groups. Then we searched for income generating activities. Our main intention was to make the best use of locally available natural resources. At last we found neem," remembers Neju George.

In this way, the self help group *Jhansi Rani Mahila Sangha* was formed, of fourteen women from Muddana Guddi. They decided to produce neem cake. But no-one knew how. Neju contacted the Indian Institute of Science in Bangalore to ask whether a small machine was available to crush the neem seeds. The answer was: "Yes. But the machine costs 500 000 rupees". But how could the women, who earn only 10 or 20 rupees per day, afford the equivalent of nearly US\$ 10 000? Then they had the idea of crushing the neem seeds with the help of a tractor. This process started seven years ago and till today it is working.

Marketing the neem cake locally

All the fourteen members of the women's self help group are involved in gathering the neem. Seven teams of two members each go to the surrounding villages. A temple compound or a school will be chosen as a meeting place. Women and children of each village will come to the meeting place to sell their seeds, but this was not always straightforward: "When we went

Making and using neem cake

After collection, the neem seeds are poured on dry ground. After the seeds have dried, any filth and other waste is removed. A tractor will then drive over the clean seeds until they are crushed. The women then take this material and filter it. For this they use a locally made wire screen like the one shown in the photo above. Around 75 percent of the filtered material will be fine enough for use. The remaining seeds and product will be crushed again until it is all fine enough. The powder that results from this crushing and filtering is called neem cake. Since the women do not extract oil from seeds, the oil content will remain in the cake. This is important in terms of quality, as the active ingredients are found in the oil. If products containing neem oil are used in farming, they can act as an insecticide or a pest repellent, and also provide nutrients. When seeds are crushed in the industrial process, the neem oil is extracted first, but is still sold as neem cake. Farmers say this is no use, and that the industrial product is not of good quality.

to collect seeds, some mediators turned angry. Some of them assaulted us. They offered other villagers half a rupee extra per kilo of seeds. But the villagers are our friends and relatives; they didn't fall into the trap. Considering this situation, we increased the purchase price of seeds. The mediators totally disappeared from this trade", recollects Chinnamma, a group member. After gathering all the seeds together, they take them to Pothnal, a village where another group has provided storage space.

With many struggles along the way, the group members succeeded in producing seven tonnes of neem cake in 1999, the first year of production. But, where were the buyers? With the brand name of "Chiguru", Neju planned to advertise the neem cake in a simple style: a three-wheeler with a banner went around the villages. But there also was some aggression from chemical fertilizer companies, because the banner read "Don't use chemical fertilizers. They will devastate your land. To increase fertility, use Chiguru neem cake". Some days passed without any sales. They decided to look for ways of convincing farmers to use the neem cake. They gave about 50 kilos of cake to more than 100 farmers and asked them to pay for it after harvest. However, the farmers did not really understand this method of raising awareness. They just used the neem cake, and it was disappointing to see that none of them refunded the cost.

During this period, there was a lot of publicity about organic farming, and the then agriculture minister, H.K. Patil, met with some farmers, and realised the importance of these ideas. This led the Karnataka government to implement an organic farming policy to encourage farmers to adopt sustainable agriculture. This boosted the scope for marketing organic fertilizer and biopesticides. Sahaja Samrudha, Karnataka's leading organic farmers' group, was searching for huge quantities of bio-pesticides and vermicompost. Neju George contacted them and assured them that he could provide whatever quantity of neem cake was needed. So the cake was brought to Bangalore, and then it was distributed to farmers. "It was very useful for me. My crop was neither attacked by pest nor disease" says Shivanapur Ramesh, farmer of Devanahalli, Bangalore, who grows mulberry and grapes. From this time onwards, there were no more worries about the market. Now the cake is being exported to other places such as Hubli, Belgaum, Goa, and Maharashtra. Year by year the business is growing. Last year the Jhansi women's group had a turnover of 400 000 rupees. This year they reached 500 000 rupees by producing 100 tonnes of cake.

Impacts and sustainability

Though it started on a small scale, the impact of this project can be clearly seen. Women who once used to migrate, now remain in the village. From seed collection to export, they perform many tasks. Mariyamma, a group member with little formal education, maintains all documents of expenditures and income. After all the cake is sold, she distributes the profit to all the members. "We used to have to go to big cities in search of food. Now our problems have disappeared. We earn money here and are also saving some for the future," says Sushilamma, a group member, with pride.

In the initial stages, some of the villagers ridiculed the women's new profession. "My husband objected, asking why we are doing this work. But when the burden on him of providing money was decreased, then he admired me. Now he encourages me to go ahead," says Huligemma, another proud group member.

The United Nation's Development Programme (UNDP) has been encouraging rural women's entrepreneurship. Every year it recognises small entrepreneurs and gives a national award, known as "Partners in Change". In 2006, Chinnamma, the *Jhansi* team leader, was proposed for the award, and beat

690 other entrepreneurs to win it. She received the award, worth 200 000 rupees, from Mr Kamalnath, Commerce Minister of the government of India.

In this area it is quite natural that every farmer grows many neem trees around his field, especially on bunds. Therefore there is scope for the initiative to grow. Neem is a drought tolerant tree, which does not suffer from pests and diseases, so no inputs like water, pest control or fertilizer are needed. Any farmer with neem trees can earn an income even in years of drought. Previously, farmers did not know about the importance of neem seeds, so they did not earn anything from them. But the situation here has changed. Farmers sell their seeds to the womens' groups rather than the industrial company or their mediators. The farmers wish to help the women of their village, while also earning an income!

Building on successes

Some factors can be identified which contributed to the women's success. They were keen to earn their own living, they were hard-working and innovative. They have also formed a strong and united group, and had support of local organisations and



The keys to success are clear to see: women are enthusiastic, hard-working and innovative.

people. They did not let low education levels hold them back, but were keen to learn. The decision of the Karnataka government to support organic farming also came at the right time for them, when their product was ready but there was little demand.

The *Jhansi* group, still composed of the original fourteen women, now has plans to grow. Getting an adequate place to collect and store the seed, and producing the neem cake are their main priorities. To crush neem seeds they require a machine. "Setting up a unit for extracting and packing neem oil is part of our future plans," explains Neju.

Neem trees planted by villagers decades ago are now giving financial stability to women. A family's livelihood often depends on these women! Behind this achievement is the humble neem tree, a natural resource which has given life to several villages.

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