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Women Leaders
Case Studies from India

ICRISAT Women Farmers Day
12 September, Hyderabad, India
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Deep-seated social inequalities continue to go against women today, denying them an effective voice in decision-making and management both at the household and community level. In agriculture too, gender is an important determinant of agricultural outcomes in terms of resource management and productivity. The gender gap encompasses differences among men and women in a range of areas: (a) ownership and use rights over resources and assets including land, water, livestock; (b) capacity to capture beneficial environmental services, financial capital, labor use and the returns to labor, political and social capital (empowerment); and (c) access to technology, training, information and agricultural advisory services in general.

Our challenge is to reduce gender disparities and positively affect the potential of agriculture to lift households out of poverty.

ICRISAT made 2014 its Year of Gender to give extra attention both internally and externally on how we can better provide opportunities for women to succeed. Agricultural research for development at ICRISAT widely recognizes that the social relations which influence the positions, attitudes and opportunities of people actually shape agricultural practices and knowledge, their outcomes, and ultimately their impacts. Hence, ICRISAT research specifically puts social relations at the heart of gender dynamics in agriculture.

In its ‘Strategic Plan to 2020’, there are eight ‘Critical Focus Areas’ that cut across all of ICRISAT’s research programs namely: Monitoring, evaluation and impact assessment; Gender and equity analysis; Geo-spatial science methods; Modeling and scenario analysis; Modern breeding platforms integrating genetic, genomic and phenotypic information; Information and communication technology; Knowledge sharing and innovation; and Fostering agro-enterprises. Gender is an essential element of ICRISAT’s overall agenda. We attach great importance to the gender implications of our research and training activities. There is an emphasis on incorporating the gender implications in all project proposals and reporting to enhance sensitivity and knowledge on women’s work and economic contributions.

On the occasion of the ICRISAT Women Farmers Day, I join in celebrating the achievements of Indian women farmers, and I extend my best wishes to our women farmer leaders and all women farmers across the country with the assurance that ICRISAT will be their staunch partner to make agriculture more women-oriented and women-friendly not just for one day but every day and in every way.

William D Dar
Director General
We believe it is important to recognize the role of women in agriculture so that it can be an important engine of growth and poverty reduction. ICRISAT regularly conducts Farmers Days to share new technologies, best practices and information about improved varieties to benefit the farmers. Since 2014 is designated as the ‘Year of Family Farming’ as well as ICRISAT’s Year of Gender, we are celebrating this Farmers Day as ‘ICRISAT Women Farmers Day’.

On this day, ICRISAT will recognize the achievements of Women Leaders specially chosen for their leadership qualities they have displayed in their communities and their achievements despite personal and social difficulties. We are sure that this token recognition for their exemplary work will encourage them to help more women farmers in their regions and motivate others to come forward and take leadership roles. To commemorate this occasion, we have put together this book featuring the profiles of these chosen women leaders.

We wish our women leaders and ambassadors all success in their endeavors to better their lives and the lives of those around them.

Dr Suhas Wani
Director IDC

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1 The Role of Women in Agriculture, ESA Working Paper no. 11-02, FAO, Rome, 2009
Women Leaders
Case Studies from India
Organic farming and thrift schemes, key to success

Ms Vaddemani Malleeswari
Residing at: Musalireddygaripalli in YSR Kadapa district
Project: Bhuchetana

Organic farmer Vaddemani Malleeswari from Musalireddygaripalli village is a trailblazer. The 110 families in her village, comprising mostly of small and marginal farmers, look up to her. Not only does she teach them improved methods of farming but also shows them how to address their financial problems and save themselves from the clutches of moneylenders and dubious microfinance institutions. Currently, she heads a 60-member thrift group. Each member saves ₹300 per month and the total savings of the group is above ₹250,000.

From organic seeds to pesticide and fertilizer

Malleeswari started off by growing organic vegetables and distributing seeds every year to 60-70 women in her village for their vegetable gardens. She markets organic produce, cold-pressed oil and honey to Punnami Sendriya Rythula Sangham, Vempalli. She is a founder and board member of the cooperative.

Malleeswari also prepares and supplies botanical pesticide and organic fertilizer *Jeevamrutham* made from cow urine and dung, jaggery, powdered black-eyed peas or cow peas and top soil.

The thrift revolution

Apart from taking the initiative to popularize organic farming, Malleeswari had to literally fight her way to establish self-help groups (SHGs). She fought for a separate Village Organization (VO) in Musalireddygaripalli and started 12 SHGs. This is no mean task, given that she started off with a 10-member women’s group. Impressed by the group’s activities that included saving at the rate of ₹300 per month per member and credit facilities to the needy members at 1 per cent interest, 21 more women joined the group. As of July 2014, 30 more women joined, bringing the total to 61 members.

An agent of social change

Malleeswari trains other farmers to grow organic produce. The members in her SHG learned new skills for income generation such as making food items with millets, pickles, organic fertilizers, etc. With the help of the women’s group she has been able to deal with her son-in-law who had been harassing her daughter. She and her group members are trying to register their group under APMACS Act 1995 as Sree Gayathri Women Paraspara Sahaya Sahakara Parimitha Sangham. She advocates women to be financially independent and ensure that their families are provided with healthy and nutritious food.
Technology-led agriculture makes her a winner

Ms V Subbamma
Residing at: Krishnampalli in YSR Kadapa district
Project: Bhuchetana

V Subbamma from Krishnampalli village has shown that adoption of technology-led agricultural practices can increase crop yield. She has studied up to fifth grade and is married to Srinivasulu, who is also a farmer. She has two children studying first grade and third grade. She has 2 acres of land and cultivates groundnut. She has one borewell on her farm which is used for irrigation.

Increased yield

During *rabi* (postrainy) season 2013-14, she followed improved technologies in one acre of her land and continued with traditional practice in another one acre. With improved technologies, she realized 960 kg per acre pod yield and 760 kg per acre pod yield under farmers’ practice. The quality under improved practice was also good in terms of pod size, kernel quality and appearance and realized a farm gate price of ₹37 per kg, while that produced under farmers practice realized ₹34 per kg. Due to cost saving in primary fertilizers and labor costs in weeding, the overall cost of production was still on the lower side or at par in the improved management plot as compared to farmers’ practice plot.

Thus with the adoption of science-led technologies, she realized an additional benefit of ₹9,680 from her one acre land. Subbamma joined the Bhuchetana initiative during *rabi* 2013-14. Under the initiative, farmers get technical guidance from DoA and ICRISAT experts and get 50% incentive on secondary and micro nutrients inputs. Other DoA schemes are also converged along with Bhuchetana to ensure a holistic solution at farm level.

During *rabi* 2013-14, Bhuchetana program was implemented in 30 mandals in the district. In each mandal 100 hectares area was covered with improved management.

Reduced application of fertilizer; new techniques for disease and weed control

Subbamma shared that Bhuchetana has helped her change her agricultural practices. This program helped her to know and implement science-led technologies. Under Bhuchetana, she came to know about soil test-based fertilizer application and reduced the application of urea, DAP and MOP to 27 kg, 43 kg and 83 kg per hectare. Before Bhuchetana, she was not aware of emerging deficiencies of secondary and micronutrients like Sulphur, Boron and Zinc. After understanding the role of essential nutrients, she applied 250 kg gypsum, 25 kg zinc sulphate and 2.5 kg borax per hectare. By using these nutrients in adequate and balanced amounts, she not only realized higher yields, but the pod, kernel quality and oil content also improved. Tikka leaf spot and collar rot diseases used to affect her crop earlier. However under this initiative she learned about seed treatment with *Trichoderma viridae* and dithane M 45. She also learnt about weed control with pendimethlene and as a result labor cost on weed control reduced a lot. She also adopted border crops because of which sucking pest incidents were less in the early stages. Now most people in the village follow her advice to use soil test-based fertilization. She urges others to use science-led technologies like soil test-based fertilization, use of vermicompost to enhance productivity.
Science-led technologies result in better yield

Ms V Lalitha
Residing at: Krishnampalli in YSR Kadapa district
Project: Bhuchetana

V Lalitha from Krishnampalli village, Duvur mandal, Kadapa district has studied up to 9th Grade and is married to Narayana, who is also a farmer. She has three children, one son and two daughters, who are in pre-primary school. She has 2 acres of land and cultivates groundnut. She has a borewell in her farm that is used for irrigation.

During rabi (postrainy season) 2013-14, she adopted improved technologies on one acre of land and continued with traditional practice in another one acre. She realized 880 kg per acre pod yield under improved practice and 720 kg per acre pod yield under farmers’ practice. The quality under improved practice was also good in terms of pod size, kernel quality and appearance and realized a farm gate price of ₹ 34 per kg, while that produced under farmers practice realized ₹ 31 per kg. Due to cost saving in primary fertilizers and labor costs in weeding, the overall cost of production was still on the lower side or at par in improved management plot as compared to farmers’ practice plot.

Thus with adoption of science-led technologies, she realized an additional benefit of ₹ 7,600 from her one acre land. Her keen interest to adopt new technologies and technical guidelines by Department of Agriculture (DoA) and ICRISAT experts has shown that yields on farmers’ fields can be significantly increased to improve livelihoods of farmers.

Lack of awareness was a big stumbling block to get higher yields and incomes. Earlier, in a bid to get more yield, she used to apply more of urea, DAP and MOP and lost lots of money on it without getting corresponding results.

Reduced application of fertilizer; new techniques for disease and weed control

V Lalitha shared that Bhuchetana has changed her approach to agriculture. This program helped her to know and implement science-led technologies. Under Bhuchetana, she came to know about soil test-based fertilizer application and reduced the application of chemical fertilizer. She was not aware of emerging deficiencies of secondary and micronutrients like Sulphur, Boron and Zinc. By using these nutrients in adequate and balanced amounts, she not only realized higher yields, but the pod, kernel quality and oil content also improved. She also learned about pest and weed control and adopted border crops because of which sucking pest incidents were also less in early stages.

She is always eager to learn innovative ways of doing things. She actively participates in agriculture related meetings, and interacts to clarify her doubts. People in the village seek her advice on soil test-based fertilization and use of vermicompost.
An award-winning organic farmer

Ms Annapreddy Seeta Naga Malleswari
Residing at: Nuthakki in Guntur district
Project: Bhuchetana

Annapreddy Seeta Naga Malleswari from Nuthakki village is married to a farmer. She has two children. On 26 September 2013, she was presented the Dr IV Subba Rao ‘Rythu Nestham’ memorial award by minister DK Aruna for adopting organic farming. When Seeta took up organic farming many people discouraged her saying that she would not get a good yield unless she used chemical fertilizers and other pesticides.

A bumper yield of organic rice and bananas

Seeta, however, was not discouraged and went ahead with her decision to go totally organic. She used only neem cake, poultry manure, cow dung, vermicompost, jeevamrutam (organic manure), cow urine (using a drip) and crop residue as mulch. She got a good yield when compared to those who used chemical fertilizers and pesticides. Paddy (BPT 5204), which she planted in 1.4 acres, yielded 49 bags (each 72 kg). The banana (chakkara keli) crop too had a better yield. Each bunch with approximately five to six hands, fetched her ₹220 when compared to the regular banana bunches that were sold for ₹150 in the market.

Besides procuring good yields and good profit, Seeta is proud that through water conservation and organic methods of farm management she is able to produce food that is good for health and good for the earth too.
Ms Bheemireddy Koteswari
Residing at: Kaza in Guntur district
Project: Bhuchetana

Bheemireddy Koteswari of Kaza village in Guntur district is a Raithu Mithra Convenor and participates actively in Polam Badi programs teaching good agricultural practices to people in her village. Her husband B Satyama Reddy, is a farmer and they have two children.

Koteswari owns 2 acres of wet land and 1 acre of dry land on which she raises paddy and cotton. Earlier she used chemical fertilizers like DAP, urea, SSP and different types of pesticides for getting a better yield and protecting her crops from various pests. However, after some years, the crop yield started decreasing.

**Maintaining soil health as well as increasing the yield**

She got soil testing done on her farm and based on the analysis she started applying the recommended micro-macro nutrients and pesticides. After that she started getting good yields when compared to that of the previous years.

Koteswari maintains good rapport with other farmers and leads the Raithu Mithra group in her village comprising 15 farmers. She teaches farmers the importance of using soil-test based fertilizer and use of micro and macro nutrients to increase yields and maintain soil health.
Cultivating crops with care

Ms Kasturi
Residing at: Pulimgunta in Chittoor district
Project: Bhuchetana

Kasturi has studied up to seventh grade and is married to a hardworking yet illiterate farmer. She is the mother of two children and the owner of 0.4 hectare (1 acre) of land. She and her husband have been trying for years to extract higher yields from this plot, with repeated disappointments.

Applying knowledge of crop care

During the rabi season of 2013-14, Kasturi attended a Bhuchetana village level training program conducted by the Department of Agriculture and ICRISAT experts. This motivated her to test the new technologies being promoted under the Bhuchetana program, and evaluate (a) the performance of a new groundnut variety and (b) science-led ways of cultivation (including soil test-based balanced fertilization), with very favorable results. Not only was the yield higher, but the farm gate price she got for her produce was also higher (giving ₹ 7,000 extra income) than from sales of traditionally grown crops.

With her newfound knowledge, Kasturi was able to reduce her primary macronutrient doses and save her crop from damaging diseases. Also, the application of weed repellents saved her from the expense of weeding.

Kasturi understands the importance of education and knowledge, and is thus very enthusiastic about learning and practicing any new developments in crop cultivation. She eagerly participates in technology dissemination meetings in her village and interacts with experts to clarify all her doubts. She is very hard working and is determined to help change the fortunes of others as well.

Leading by example

Kasturi’s leadership qualities and ability to quickly grasp new knowledge encourage other farmers to seek her advice. Following her example, most of the farmers in the village are now implementing soil testing followed by balanced fertilization of the soil.

After her success, Kasturi confidently conveys the message that balanced fertilization is important, and that use of improved varieties and good agricultural practices result in substantial yield increases. On a personal level, Kasturi and her husband are now grateful that they can comfortably save for their children’s education.
Manga makes a turnaround

Ms RB Manga
Residing at: SSB Peta in Chittoor district
Project: Bhuchetana

Manga, educated up to high school, and her husband Muniyelu, a farmer with no formal education, have two sons. They are a farming family, and she and her husband have been cultivating paddy on the 0.8 hectare land that she owns, but in the past 10 years they noticed that the yields were decreasing year after year. They were confused and depressed as the future looked bleak.

Knowledge is power

After attending a village level training program, Manga learned about science-led technologies for cultivating paddy. She then volunteered for participatory trial evaluations, and under the Bhuchetana program got seed, secondary and micro-nutrients at a discount, and advice on optimum quantities of nutrients for her field.

Success is a great motivator

During the **rabi** of 2013-14, Manga cultivated an improved variety of paddy with better land management practices, harvested 20% higher yields, and also got better farm gate prices for the produce. After deducting expenses, she was happy to see a profit of ₹ 7,000 from only half of her land.

Manga understands the importance of knowledge and is very enthusiastic to learn and practice any new technology. She eagerly participates in technology dissemination meetings in her village and interacts with experts to clarify all her doubts. She is very hard working and is determined to help change fortunes for the better.

Because Manga is quick to grasp new technologies, and drawn by her leadership qualities, farmers from her cluster (and others too) seek her advice. Most of the farmers in the village are now wisely practicing balanced fertilization of their plots.

After her success, Manga confidently praises the importance of balanced fertilization, use of improved varieties and good agricultural practices that have resulted in substantial increase in yields, and subsequently increased incomes.
The power of an idea

Ms Vakicharla Kamala
Residing at: JC Agraharam in Prakasham district
Project: Village Dynamics in South Asia, Andhra Pradesh

Vakicharla Kamala from JC Agraharam is a school chairman and self-help group (SHG) leader. She studied up to 12th Grade. Her husband Hari Prasad is a veterinary worker and she has two children.

Sowing the seed of social change

Kamala is a Brahmin and initially her mother-in-law would not allow her to venture outside the house as she was mingling with low caste people and cautioning them against following superstitions and age-old customs and traditions that had no relevance in modern society. Because of her ‘progressive’ thinking many parents were reluctant to send their children to her for education as they thought that she was wasting their children’s time and brainwashing them to give up their age-old superstitions in which they had immense belief. Even the village panchayat, elders and village members were against her. It took her a long time to convince the villagers on the importance of educating girls as most of the villagers believed that educating a girl was a ‘waste of money’.

However, her husband and her father-in-law, who is a school headmaster, encouraged her and helped her. She started off by building a rapport with the youth and was able to persuade them to adopt a modern and progressive outlook to better their lives and develop the village. Through the youngsters she was able to reach out to the elders. Kamala, today, is respected in the village and the elders themselves send their children to her house to take her advice.

Her rapport with the women in the village increased when a bore well was dug in her house. Most of the women came to her house to fetch water and though she is an upper caste woman, she mingled with everyone and developed good relations with all the villagers. Now they affectionately call her amma (mother), pinni (maternal aunt) or atttha (paternal aunt).

Empowering women

Kamala takes an active interest in agricultural and social activities. She informs farmers about reforms and changes in agriculture from articles published in newspapers and books or news items aired on television. For the past 12 years she has been working towards her dream of modernizing her village by adopting modern tools and technology. Her goal is to educate and empower women. She spreads the importance and uses of SHG to all women. She also empowers women to make decisions in agricultural activities and educates them about the various government programs and schemes that are beneficial to them. She motivates parents to educate their girl children.

Because of Kamala’s efforts there is a change in agricultural methods and crops, the wages of agricultural labor have increased, water tank has been sanctioned, a new school building has been sanctioned, transport facilities have been developed, 99% girls are attending primary school, 50% of girls are going in for higher education to nearby towns and cleanliness and sanitation have improved among families in the village.
**Breaking caste barriers**

Forty-nine-year-old Jagarlamudi Sadguna of Pamidipadu village has two sons working as software engineers - one in Bangalore and the other in New Zealand. Her husband Veeraiah is an electrician.

Sadguna cultivates chickpea, black gram and subabul (*L. leucocephala*) on her 10-acre farm. She takes decisions related to cropping pattern, type and quantity of input use, timely operations and selling output in the market. She took the initiative in starting self-help groups (SHGs) in 1995 and four groups were formed under her guidance. She played an important role in educating the women on how to form groups and the advantages of being a member of SHGs. She took a lead role in forming SHGs and in securing loans for the members of these groups. Later the number of SHGs increased to 130. Presently, she is working as head of the Village Organization (VO) to guide and supervise the functioning of SHGs. Under her supervision 70 SHGs are functioning. Each group consists of 12-15 women members. They used the loan amount for purchasing livestock, education of children, purchase of inputs for crop production and starting small businesses.

**SHGs break caste barriers**

The caste restrictions in her village are not too rigid. Though Sadguna belongs to the upper caste, she gives equal importance to all the villagers in providing information, assistance and help in the formation of SHGs. Some of the SHGs are managed by women from the Scheduled Caste (Madiga and Mala). She supervises the functioning of anganwadi centers (Integrated Child Development Service run by the Government of India) run by women from all castes. She took the initiative in getting loans for Scheduled Caste (SC) and Scheduled Tribe (ST) households for the improvement of uncultivated lands to be brought back to cultivation.

Sadguna encourages the women in her village to become SHG members. Sadguna was also a member of the village dairy milk society. She encouraged women to rear livestock and earn income by selling milk. She created awareness among the farmers particularly SCs and STs to adopt organic manure and encouraged the usage of bio-pesticide. She organized classes for villagers on yoga and meditation.

Sadguna is known in the village for her helpful nature. She creates awareness among people, especially among the lower castes, by providing information about new agricultural technologies, health related issues and ongoing welfare and development programs. She is able to understand and solve the problems of villagers by working with members of other SHGs and meeting officials like the MRO, the MDO, school teachers and bank officials.

**The importance of education**

Sadguna advises the women to encourage their children to go in for higher education. She herself took a bank loan to finance the post graduation (MCA) studies of her two sons. Sadguna teaches other women the importance of sanitation - to keep their houses clean and avoid open defecation. She also advocates women to improve the health of their family members by providing nutritious food and clean drinking water. Sadguna does not endorse the caste system. She encouraged the inter caste marriage of her son despite opposition from some of her family members.
An early adopter of change

Boya Bharathi has been instrumental in her community for exemplifying how to produce good quality groundnuts, which can fetch a higher market price. Along with her husband, she cultivates groundnut and tomatoes under rainfed conditions on the 3 acres of land she owns.

Bharathi is only 25 years old but she was the first in her village to quickly adopt ICRISAT’s good agricultural practices to mitigate aflatoxin contamination in groundnut. The package of practices included applying farmyard manure, gypsum and other practices. She obtained a good crop of quality groundnuts with a higher yield, which fetched her a good price in the market.

The crops do the talking

She tried hard to convince other farmers to adopt the recommended set of good practices. Initially the community was sceptical, but when they saw her bountiful crop, they were convinced. She was, thus, instrumental in creating a mind-set shift in her community to adopt the good practices that can help mitigate aflatoxin contamination resulting in better crop produce and higher returns.

In addition to her leadership role in leading others towards superior farming, she also maintains the accounts of the seed cooperative society in her village. Further, she also teaches in the school sponsored by a local non-government organisation – Rural Development Trust.

Today, she is a respected and inspirational figure in her village. She has one message for her fellow farmers – “Adopt the technologies suggested by ICRISAT”.

Ms Boya Bharathi

Residing at: Palabhavi in Anantapur district
Project: Integrated pre and post-harvest management strategies to mitigate aflatoxin contamination
Breaking through the clouds

Ms Hanumakka
Residing at: Pampanur in Ananthpur district
Project: Harnessing the true potential of legumes: Economic and knowledge empowerment of poor rainfed farmers in Asia

Farmer livelihood in the drought-prone region of Ananthpur in Andhra Pradesh suffers intensely during the drought years, which occur quite often. Their local varieties of crops are not drought tolerant and hence take a hit during droughts.

Breaking through this bleak scenario, 38-year-old Hanumakka, a resident of Pampanur village, Atmakur mandal, Ananthpur, took the lead in adopting the high yielding and drought tolerant variety ICGV 91114 developed by ICRISAT. This variety can withstand prolonged drought up to 40 days and the pod yield and haulm yield is more than the local variety. She was the first farmer in her village to adopt this new variety and proved to other farmers that they can get a dual advantage — earn more from higher yields and escape the predictable devastation of drought years.

Hanumakka farms her 2 acres of land under rainfed conditions and cultivates groundnut, tomato and okra. She lives with her farmer husband, two sons and two daughters.

Recognising her leadership skills, she has been nominated as convener of the Sasya Mitra Group in her village, which has 100 women farmers as members.

She is tirelessly disseminating information to other farmers to reap the benefits of drought resistant varieties such as ICGV 91114 developed by ICRISAT and defeat adverse conditions.
Bagging the right way

Ms Sujatha
Residing at: Ayyavaripalli in Anantapur district
Project: Integrated pre and post-harvest management strategies to mitigate aflatoxin contamination

Sujatha has seen the insides of a school only up to eighth grade. However, this did not deter her from being a pioneer in adopting innovative post-harvest storage technologies.

She has about 10 acres of farmland and cultivates groundnut and vegetables under rainfed conditions. Her husband is also a farmer and they live in a joint family. She has a daughter and a son.

Minimizing post-harvest loss

Groundnut can be damaged by bruchids or suffer from aflatoxin contamination during storage. Sujatha was looking for a way to protect her crops when she was introduced to ICRISAT’s post-harvest storage technique for groundnut using triple layer PICS bags. These bags help protect the produce during storage and thus reduce losses suffered by the farmer.

Not only has she adopted innovative technologies but is also instrumental in convincing other farmers to adopt the same. She has emerged as a leader in technology adoption in her community. She is now educating the farmers of her village and nearby villages about the importance of minimizing post-harvest losses in groundnut and the advantages of using PICS bags.

NOTE: PICS (Purdue Improved Cowpea Storage) bags are used to store seeds. The three-layer bag consists of two polyethylene plastic bags 80 microns thick and an outer bag made of woven polypropylene. PICS bags are proven effective in reducing damage caused by storage pests.
Turning gypsum to gold

Application of gypsum to groundnut during flowering is one of the agricultural best practices, which improves the pod quality and pod shell strength and increases yields. It also enhances the oil content of the nut and hence the crop fetches a higher price in the market. However, the residents of Palabhavi village in Anantapur district were not aware of this simple yet effective practice that has multi-faceted benefits.

B Tirupalamma, a 40 years old self-motivated farmer, pioneered this practice in her community. Gypsum was not available in the pesticide and fertilizer shops in the vicinity of her village. That was never a roadblock. The pioneer in her drove her to source it from afar and she tried it out in her fields. Once she achieved good results, she had to face the challenge of convincing other farmers that investing in gypsum application gave multiple benefits and manifold higher returns.

Tirupalamma, lives with her farmer husband, two sons and two daughters in a joint family. She has 12 acres of rainfed land and cultivates groundnut, tomato and okra.

The villagers of Palabhavi consider her as a leader and innovative farmer. She is the director of a seed cooperative society in her village with a membership of 113 farmers.

Her message to all farmers is to follow the suggestions of ICRISAT scientists to enhance crop yields, minimize pesticide use and reduce aflatoxin contamination.
The risk taker and the change maker

Ms Peddakka

Residing at: Ippaeru in Anantapur district
Project: Integrated pre and post-harvest management strategies to mitigate aflatoxin contamination

Peddakka of Ippaeru village of Anantapur district is a champion farmer in promoting good practices to reduce post-harvest losses in groundnut. She has 4 acres of land under rainfed conditions and cultivates groundnut. She has three daughters and her husband is a farmer.

Post-harvest losses proved a heavy burden for Mrs Peddakka. The existing practice of drying groundnut on farm fields for two to three days contributes to high pod moisture and aflatoxin contamination. Farmers of the village were not even aware of post-harvest losses in groundnut, and particularly the associated health hazards due to aflatoxigenic molds. Moreover, farmers were reluctant to adopt new technologies.

Adopting new technology

Peddakka decided to take charge of changing the status quo. She took a keen interest in learning from ICRISAT the correct storage techniques for groundnuts under ideal moisture conditions. Using ICRISAT provided PICS bags, she could now store groundnut after proper field drying at optimum storage conditions and thus reduced losses due to pests and aflatoxigenic molds.

She was instrumental in transferring the technology to other community members, educating them about the role of high levels of moisture (>10%) in contributing to mold growth and the advantages of PICS bags in proper storage.

Due to her leadership capabilities and her innovative and risk-taking nature, she is now the president of the self-help group in her village. She maintains good rapport with government officials and bank officials to get loans for her self-help group.

She is interested in canvassing on a large scale the benefits of ideal pod storage methods in reducing aflatoxin contamination and its associated health hazards to humans.

NOTE: PICS (Purdue Improved Cowpea Storage) bags are used to store seeds. The three-layer bag consists of two polyethylene plastic bags 80 microns thick and an outer bag made of woven polypropylene. PICS bags are proven effective in reducing damage caused by storage pests.
Reaping the learning curve

Ms Lavanya
Residing at: Muddulapuram in Ananthpur district
Project: Harnessing the true potential of legumes: Economic and knowledge empowerment of poor rainfed farmers in Asia

Lavanya, 40 years, is a woman farmer in the village of Muddulapuram, Kudaeru, Anantapur. She owns 5 acres of land under rainfed and cultivates groundnut during rainy season. Her family comprises a visually challenged husband, two daughters and a son.

A good communicator, she was always enthusiastic to learn and adopt new agricultural technologies, including improved varieties. She was convinced that there are improved varieties that can withstand the debilitating effects of drought, which Anantapur is prone to. She approached ICRISAT for a good variety and procured ICGV 91114. She initially grew it on 2 acres of her land. Witnessing the good performance of this variety under drought condition and the yields in return, she was enthused to expand the area under this hybrid.

However, farmers of her village were reluctant to use new varieties due to various reasons and preferred to stick to the traditional and local varieties. Discouragement from local farmers and traders about new variety was another difficulty she had to surmount.

She persisted in her efforts and has been able to convince her community to switch over to the new hybrids created by ICRISAT. Today, she is convener of the Sasya Mitra Group (SMG) in her village comprising 100 women farmers.
Married with one son, Garimella Mythili Venkataramana owns 0.8 ha (2 acres) of land and runs a small dairy farm of 5 cows. She has received several awards as Best Woman Farmer. She is best known for her training of many farmers and other interested persons on the production of bio-gas, which she generates from cow dung and cow urine. In fact, she is credited with training all individuals who run the several bio-gas plants installed in her village.

Besides her skill at generating bio-gas, she also maintains a vermicompost unit using dairy farm manure, and every year trains farmers in the art of vermicomposting.

Garimella Mythili grows various kinds of fodder grasses and Azolla to feed her dairy animals on the land she owns. She also cultivates seasonal vegetables with organic fertilizer. She uses ONLY organic fertilizer for her vegetables, and prohibits the use of inorganic fertilizer in her fields.

Dirtying hands for a cleaner environment

Garimella Mythili comes from an orthodox Brahmin family. As anyone who is familiar with orthodox Brahmins knows, farming and dairy farm maintenance, especially dabbling in unclean things such as cow-dung and cow urine, is taboo for her, and therefore poses a big challenge. Nevertheless, she has the support of her husband in overcoming such social obstacles. She even cooks her food with the bio-gas generated from her bio-gas plant at home.

Her message to other women, especially to other women farmers, is clear and noble – Protect our environment, perform only organic cultivation.
**A tribal widow turned trainer**

Ms Gudem Laxmi
Residing at: Jaddangi in East Godavari district
Project: Bhuchetana

Gudem Laxmi is a widow with two sons. She used to be married to a farmer who died, and is now left with no option but to earn an income to maintain her family.

**A widow with few options**

Gudem Laxmi belongs to a tribal community, where women, especially widows, are not encouraged to participate in social events, much less get an education. But Gudem Laxmi saw no alternative if she was to provide her family with a decent standard of living. She actively participated in the vermicompost trainings and other technological training related to agriculture and offered by the government.

**Vermicomposting expert**

While searching for suitable employment for a single person such as herself within the village (to be close to her young family), she realized that running a vermicomposting unit was the answer.

Gudem Laxmi now maintains her own vermicomposting unit, and also trains other farmers (both men and women) in the benefits of vermicompost for crop quality. She emphasizes the ease with which one can use available farm manure and other low cost inputs to produce vermicompost at home. Gudem Laxmi now prepares and sells the best vermicompost fertilizer in the area.

Prior to the vermicompost boom, Gudem Laxmi used to apply low and inadequate fertilizer to her fields due to their high cost, so yields from her farm were also low and of poor quality. She is now keenly aware of the benefits of vermicompost, and declares that every farmer should use only organic manure, preferably made from farm yard manure, to rejuvenate the soil and obtain the best crop yields.
Ms Naliboila Paandu Rangamma
Residing at: Korukallu in Krishna district
Project: Bhuchetana

Paandu Rangamma is well-known in her village for her commitment and passion for agriculture and dairy farming. She received the Best Woman Farmer award in her mandal from Krishna district collector and bagged the Best Mahila Raithu award in market yard (Kaikalur and Kalidhindi mandals).

Her husband expired 25 years ago and she has raised her two daughters single handedly. She bought three buffaloes and income from dairying was the source of livelihood for family. She has 2 hectares of land in the mandal in which she has adopted ‘direct sowing of paddy’.

Rangamma takes an active interest in the village development activities. She was a member of the Mandal Parishad Territorial Constituency and was elected twice as Primary Agricultural Cooperative Societies (PACS) co-director.

She was involved in Gram Panchayat activities as MPTC member and has earned a good reputation for herself in the village. She has demonstrated to fellow farmers how to adopt ‘direct seeding of paddy’ (DSR) to reduce cost of cultivation and grow rice with minimum quantity of water and yet obtain a good yield.

She is a ‘people person’ and is able to communicate well, she takes active part in community meetings and is a role model to the women in the village.
This tribal woman does not shy away from technology

Ms K Venkata Lakshmi
Residing at: Yarlagadda in East Godavari district
Project: Bhuchetana

K Venkata Lakshmi is a tribal who puts to good use new agricultural technologies. Her husband, who is a farmer, supports her interests in farming. They have two school-going children. She is an expert in System of Rice Intensification (SRI) cultivation in paddy and also zero-tillage maize cultivation since many years. She has been recognized by government officials for her work.

She actively participates and practices new technologies related to agriculture to support her family. She helps other farmers in her village to practice these methods and her agriculture fields are a living example of how farmers can achieve better yield by using improved practices when compared to normal practices.

She believes women farmers should be independent and make use of the latest agricultural technologies introduced by the government to increase their yield and income.

A ward member and DWCRA leader

Ms Sannaboina Anantha Laxmi
Residing at: Venkatapuram in Krishna district
Project: Bhuchetana

Sannaboina Anantha Laxmi of Venkatapuram village owns 3 hectares of land and has good knowledge of agriculture. Her husband Peddi Raju died five years ago. She has two daughters and a son. To support her family, she bought two buffaloes in addition to managing her farm. She was ward member from 2004 to 2009 and was also a Development of Women and Children in Rural Areas (DWCRA) leader.
Thirty-nine-year-old Gowni Jayamma from Aurepalle village is an elected member of Mandal Parishad Territorial Constituency (MPTC). During her tenure as village president from 2001-06 she visited government offices and managed to get around ₹10 million as funds for taking up welfare and development programs. Some of her achievements were construction of drainage channels, office building for DWCRA (Development of Women and Children in Rural Areas), toilets for children in two primary schools, Gram Panchayat office, three check dams in watershed areas, helping villagers to get ration cards and pensions, etc. She created awareness among the villagers particularly women about the ongoing welfare and development programs.

**Overcoming discrimination**

She belongs to Gowda (toddy tapper) caste which is categorized as a backward community. Some of the upper caste villagers did not cooperate and recognize her as head of the village because of her caste and also because of her gender (female). A woman was elected as the village head for the first time in the history of the village where usually people belonging to the upper caste (Reddy community) were elected as village heads in the Gram Panchayat elections.

**Communication is the key**

Gowni improved her speaking skills and awareness by visiting government offices and was successful in getting funds for village development. She interacted with the villagers and personally visited the houses of opposition party leaders and upper caste people to seek their guidance, cooperation and suggestions to get more funds for village development. She also developed a good rapport with all the villagers including the Harijan community.

**Leadership role in SHG**

She is a woman who fights for the rights of the villagers. She always encourages women to become members of self-help groups (SHG) by explaining to them the importance of savings and other benefits which help them to stand on their own feet. She was a member of Varalakshmi SHG since 2000 and became the president in 2012. She is playing a lead role in getting loans for her group members from banks to start self-employment activities to improve their livelihoods.

**Recognized as a progressive farmer**

Her status has undergone a change for the better after serving as head of the village. She is encouraging women to become members of the SHG. She advises the village women about crop choices, input use and farm operations. She also cultivates cotton, pigeonpea and paddy crops on her 10-acre farm. Villagers have recognized her as one of the progressive farmers. She participates in farm operations and supervises farm work. She also manages domestic activities and business (selling toddy to villagers).

She believes every woman must take responsibility and get involved in decision making with regard to crop production, children’s education (particularly female children), understand the importance of drinking water, sanitation and consuming healthy and nutritious food.
Making a neat income from spent malt

Ms A Yadamma
Residing at: Fasalvadi in Medak district
Project: ICRISAT-SABMiller India

A Yadamma is a group leader of Priyadarshini women self-help group (SHG), Fasalvadi village. Her husband, A Mallesham is a farmer and they have three children.

She has undertaken a sustainable business model of transportation and distribution of spent malt with the aim of strengthening livelihood opportunities and financial security of the women SHG as well as increasing milk yield, fat content and livelihoods of the beneficiary farmers in the village under collaborative ICRISAT-SABMiller India project.

Spent malt is one of the byproducts generated by the brewing industry. It consists of the residue of malt and grain which contains carbohydrates, proteins and lignin, water-soluble vitamins. It is palatable and is readily consumed by animals. This activity is benefitting 58 farmers who are utilizing the spent malt (1,437 kg/day) and feeding 377 milch animals. Total milk production in the village is about 1,510 liters/day. With the use of spent malt as animal feed, farmers have observed increased milk production of 1 liter/animal per day with improved fat content. Increased gross income on milk production is about ₹12,340/day with a net income of ₹8,750/day in the village. In total, the village is getting increased net income of ₹262,350 per month with an average net income of ₹4,520 per family. Spent malt is provided by the Charminar brewery at the rate of ₹1.75 per kg and the SHG is selling it to beneficiary farmers at ₹2.5 per kg. Till June 2014, 1,172,423 kg of spent malt was sold by the SHG making a net profit of ₹44,540 during the 31-month period after meeting the expenses of transportation, handling, rent for storage and labor charges for distribution.

Transportation, handling and distribution of spent malt can be a difficult task, as it is perishable and has to be utilized within 1-2 days. Meeting the requirements and expectations of beneficiary farmers is also very difficult. However, Yadamma has achieved her target by putting concerted efforts, hard work and by creating awareness among users.

The persuasive power of informal meetings

Yadamma belongs to a backward community but is a good leader and mingle with people easily. She is patient and persistent and overcomes her problems through informal meetings and trainings.

She is respected in the village. Her financial status has improved and she is able to provide good quality life and education to her children.
Generating income by raising a nursery

Ms R Shivalaxmi
Residing at: Venkatakishtapur in Medak district
Project: ICRISAT-SABMiller India

Shivalaxmi is a group leader of Manjeera women self-help group (SHG), Venkatakishtapur village. Her husband R Laxman is a farmer and they have two school-going children.

Raising a nursery during the off-season

ICRISAT in collaboration with SABMiller India and consortium partners had promoted nursery raising by women SHG with the aim of strengthening livelihood opportunities and financial security of the women as well as increasing greenery, carbon sequestration and addressing ecosystem services in the watersheds. Shivalaxmi voluntarily came forward and took up the difficult task of raising a nursery during off-season. She has grown about 12,000 saplings of teak, Pongamia, rain trees and Gliricidia to plant them in the project villages. Her group supplied 10,056 saplings at the rate of ₹ 6 per sapling and earned ₹ 60,336 as additional income in addition to attending to their regular jobs.

There was severe scarcity of water during the off-season and a suitable site for raising a nursery was not available in the village. Mobilizing group members for taking up this activity was also a difficult task. She had selected a suitable site for the nursery even though it was far away from the village where some water was available. She persuaded and motivated the group to take up this activity by sparing more time and labor.

Overcoming backwardness

Shivalaxmi belongs to a backward community. Because of her leadership qualities she was elected as leader of the Village Organization (VO) which is a group that monitors women SHGs in the village. She works as a resource person to train the members of SHGs at mandal level. She motivates and organizes new self-help groups and establishes bank linkages to SHG members. She regularly monitors and motivates SHG members with regard to repayment of loans. She also motivates SHG members to have insurance coverage. At present she is working as Non Pest Management (NPM) & Marketing Committee member at the mandal level.

She is respected in the village because of her leadership qualities and her association with community development. Her financial security has improved because of various livelihood options and she is able to provide good quality life and education to her children.
Based on the success of sustainable business model of spent malt as cattle feed in Fasalvadi village, Sangareddy mandal in Medak district, similar activity was promoted in Adarsha watershed, Kothapally village on 17 June 2013 with the aim of strengthening livelihood opportunities and financial security of the women self-help group (SHG) as well as increasing fat content and milk yield; and livelihoods of the beneficiary farmers in the village under collaborative ICRISAT-SABMiller India project.

V Anusuja came forward to undertake the responsibility of transportation and distribution of spent malt in the village even though it is more than 50 km away from the Charminar brewery. Anusuja is married to V Anjaiah, a farmer. They have two children.

Spent malt is provided by the brewery at the cost of ₹1.75 per kg and SHG is selling it to beneficiary farmers at ₹3.0 per kg. The SHG provided 397,882 kg of spent malt till June 2014 and earned a net profit of ₹22,020 during a 12-month period. A total of 54 beneficiary farmers (40 beneficiaries in Kothapally, 7 in Gollapally, 5 in Urella and 2 in Enkepally villages) are utilizing the spent malt (1,080 kg per day) and feeding 268 milch animals. Total milk production in the village is about 1,254 liters a day. With the use of spent malt as animal feed, farmers have observed increased milk production of 1.5 liter per animal per day with improved fat content. Increased gross income on milk production is about ₹12,950 per day with a net income of ₹9,710 per day in the village. In total, the village is getting an increased net income of ₹291,420 per month with an average net income of ₹5,400 per family.

Creating awareness

Spent malt is a perishable product and transportation from more than 50 km distance, handling and distribution can be a difficult task. During the initial week, farmers did not come forward to buy the spent malt and it was infested by worms. A lot of material had gone waste.

Anusuja made the effort to create awareness amongst users and conducted result demonstrations. Initially she offered spent malt to beneficiary farmers free of cost to show them the benefit of feed material for increasing milk yield and fat content. After seeing the benefits, farmers started buying the material and the requirement increased gradually and spread to three neighboring villages as well.

Leading by example

Anusuja has very good social contacts with the village community. She is dedicated and hard working. She is respected in the village. She owns a vehicle for transportation of spent malt from brewery. Her financial status has improved due to spent malt activity and she is able to provide a good life and education to her children. She believes innovative thinking, dedication, hard work and active participation in science led integrated watershed management projects can bring prosperity to rural India.
Ms B Lakshmi
Residing at: Kothapally in Ranga Reddy district
Project: ICRISAT-SABMiller India

B Lakshmi is the group leader of Lakshmi Narasimha women self-help group (SHG), Kothapally village, Shankarpally mandal, Ranga Reddy district. She received an award from Dr MS Swaminathan Research Foundation for her outstanding contribution to the welfare of women. Her husband B Sailoo works as a mason cum farmer. They have four married children and live with their son’s family in Kothapally village.

Under the dynamic leadership of Lakshmi, Lakshmi Narasimha SHG has grown Gliricidia and Jatropha nursery during 2003-2005 to plant them in the village as well as supplied to ICRISAT to plant them in other villages and earned income of more than ₹20,000 per year during off season.

She was proactive and instrumental in taking up income generating activity of vermicomposting by utilizing farm residues and weeds like Parthenium to improve sanitation and health in the village. The group has used vermicompost in their fields as well as sold it to other farmers at ₹5 per kg and earned income of about ₹2000 per month per member.

Watershed systems helped Lakshmi to adopt integrated nutrient management along with diversified crops including maize, sorghum, chickpea, pigeonpea and vegetables such as carrot and tomatoes which helped her to get enhanced yields with improved quality and incomes.

With the improved incomes from the above activities she became the proud owner of a small grocery store and a woman with decent net savings of about ₹1,500/month.

Before ICRISAT started its watershed project in the village, she used to carry on the family profession of making baskets using palm leaves and sold them in nearby villages for grain or cash. Her financial condition was so bad that she could not send her children to good schools and she put them in social welfare hostels. Her family meals used to be chapattis with a little chutney. “We could afford dal or lentils only once a week. Now we have rice, dal, potatoes, and curries with vegetables such as okra, brinjal and tomatoes,” says the 52-year-old tribal lady of Kothapally. With her leadership qualities and capabilities she was able to rise above her circumstances and became a role model for others.

Because of her leadership qualities she was elected as president of Village Organization (VO). She was elected as leader at mandal level and participated in district level meetings and trainings. She motivates and organizes women to form new self-help groups and establishes bank linkages to SHG members. She regularly monitors and motivates SHG members to repay their loans.

Lakshmi is respected in her village because of her leadership qualities and for being associated with community development activities. She is invited to all village meetings and interacts with officials to know the technicalities. She briefs national and international visitors from ICRISAT and other organizations about the progress of income generating and livelihood activities undertaken during watershed project. Her social status, livelihood and financial security has improved because of various livelihood options. She is able to provide good quality life to her family.

Her wish is to become an entrepreneur to provide employment and livelihood options to the poor and marginal people in the village by establishing cottage industries with the technical and financial assistance from government and other sectors.
Ms Vakiti Padmamma
Residing at: Dokur in Mahabubnagar district
Project: Village Dynamics in South Asia

Vakiti Padmamma was illiterate but through the Government program ‘Rathri Badi’ she learned to read and write. In her village, the higher castes play a dominant role and she was able to overcome it by communicating with village level officers and village elders. As a village leader she has been able to get funds from the government for various village activities.

This year she was elected as a member of the Mandal Parishad Territorial Constituency (MPTC). She was earlier a ward member from 2000 to 2007 and was again elected in 2013. She is Gram Sangham leader for 33 groups and was the self-help group (SHG) leader for five years.

Padmamma runs a dairy farm business and is also into agriculture. Earlier she used to work as a daily-wage construction laborer earning `20 per day. For her children’s education she had taken a loan from Karur Vysya Bank at 2% interest. Her son also worked as a farm laborer to meet the family’s financial needs.

Now she is financially stable and she readily shares her knowledge on raising livestock and farming with other women farmers.

An active social worker

Mid-day Meal Scheme: Padmamma takes a keen interest in the developmental activities in her village. With regard to the Mid-day Meal Scheme in village schools she has met the principal and faculty of the village school and discussed about the quality of food being supplied and talked to them on the need to improve the quality of food being served to children.

Construction of toilets, laying pipelines and roads: Padmamma was able to persuade the local MLA and secured permission to construct toilets in the village school. She also participated in Rajiv Arogya Pathakam for constructing toilets in houses. She also plays an active role in getting pipelines and roads laid.

SHG and other women oriented activities: Padmamma encourages the women in the village to participate in the programs conducted by the private sector and government. She ensures that the SHG groups run properly. She advises those who have received loans to pay back according to the bank norms.

Some of her achievements include getting the MRO office to pass the Mahila Bill for farm women, meeting officers of the Velugu scheme run by the Government to solve the problems faced by SHG groups and securing a loan from Kaukuntla Grameen Vikas Bank and distributing equally to SHG groups.

Social issues: In most villages, child marriage of girls is still practiced and Padmamma spares no effort in educating women on the issue. She advises the women in the village to get their daughters married only after the completion of their education.
Rajitha readily accepts innovation

Ms Magidi Rajitha
Residing at: Pochampally in Nizamabad district
Project: Bhuchetana

Twenty-seven year old Magidi Rajitha, although from a backward caste, is an active and enthusiastic member of her family and of the entire village. She and her husband Rajeshwar live with their two sons and Rajitha’s old father. They own a small dairy with 12 buffalos and 3 cows, and a farm of 2.6 ha (6.5 acres). Her family earns a living from sale of farmyard manure (FYM) and compost.

Rajitha has been contributing towards the earnings of the family by working in the dairy at home, and also by making “bidis” (leaf cigarettes) from leaves of the tendu tree, and environment-friendly food plates, made of leaves stitched together with twigs. The latter two were under the Development of Women and Children in Rural Areas (DWCRA) program of the government. Her cheerful and assertive nature has made her the leader of a 5-member women’s group organized under the Mahila (women) Society to make bidis.

Embracing innovation

Her familiarity with compost-making drew her to the Bhuchetana program that promotes science-led technologies. Encouraged and advised by the program, she was the first in the village to take the initiative to compost animal and plant wastes using microbial culture, through which she obtained good compost in 35 days. She applied this new method to the vermicomposting her family had been undertaking for the past 2 years, and found that is faster and less laborious than the older method. They are now shifting to the new process.

Earlier, Rajitha was the typical Indian housewife, subservient to her husband and father, without a say in decision-making. However, her recent successes have given her a good standing in the village, and she has been able to attain the full support of her husband and family in contributing to the decisions at home and also in their farming activities.

Her formal education (Standard 9) and her informal education have given Rajitha the capability to appreciate and accept new ideas, enabling her to improve the welfare of her family and others. She is the president of the Shivaparvathi DWCRA Mahila Society and is also a member of the Small Industries Development Initiative of the Government at the Mandal level. She has also worked as a teacher in an Anganwadi Center for infants.

Besides Rajitha’s earnings from the bidi and leaf-plate making, her family also earns income from sale of FYM and compost, and her new venture into the aerobic microbial process of composting has added to her family income and stature in the village. The state government recently awarded her as the best woman farmer of the Mandal.
Narendla Vijaya is a young mother of 36, with two grown children. She had studied up to seventh grade before her marriage, and is now keen to see her children go through college. Together with her husband, her family of four lives together and own 2 ha (5 acres) of farm land.

**Promoting good agricultural practice**

Vijaya is a keen farmer and plays a decisive role in improving their farm practices by adopting improved agricultural technologies. She has installed drip irrigation on half of her land, and grows vegetables and turmeric for cash incomes. She also grows paddy in some portion of her farm. Vijaya’s family is known for getting higher crop yields than most other families in the village. They get more turmeric and paddy than the village average, as also high yields of brinjal and lady’s finger (okra).

When Vijaya learned about the Bhuchetana program and the aerobic microbial process they use for composting waste material, she was quick to adopt the technique to compost the waste plant material after harvesting turmeric. She also practices the integrated crop management concept of Bhuchetana, including balanced use of nutrients for crop cultivation.

**Social Motivator**

Vijaya is an active motivator in the village, and convinces others to adopt good farm practices when she learns about them. Working hard, shoulder-to shoulder with her husband, Vijaya enthusiastically evaluates all new ideas and techniques, logically looking at the pros and cons before applying it in her farm. It was interesting to hear that when she first tried to compost her plant waste using microbial culture, which needs a 20% portion of cow dung, she went to the extent of “borrowing” cow dung from a neighbor as her own cow dung stock from just two animals was not adequate. The lesson she learned from this, and which she repeats to all concerned, is that we need to properly recycle the animal and plant waste from our farms, and use less chemical fertilizer in our agriculture.

Vijaya served as president of the Development of Women and Children in Rural Areas (DWCRA) Mahila Society in the village and continues to be a strong member of the society working as a social motivator for the general welfare of the women. She insisted on getting higher education for her daughter despite early resistance from elders in the family. Today, it not just her family, but the whole village that looks up to her for advice and guidance.
A clear vision reaps double the yield

Ms Theneti Thirupathamma
Residing at: Palem in Nalgonda district
Project: Tropical Legumes II

She had attended school only up to eighth grade. That did not deter Mrs Theneti Thirupathamma from being a pioneer in adapting technology innovations to improve her farming practices and enhance her livelihood. In her thirst for learning about new agricultural technologies, she also influenced and encouraged other men and women farmers in her village to take up new technologies and improved farming practices.

Her vision is clear - “The goal is so much more important than the problems that may come up in the course. I believe there are a thousand ways to get there, and success has a different meaning for each person.”

Double the yield

In the past, Theneti had been cultivating the local varieties of redgram using the conventional cultivation practices of redgram. She got a yield of 10 quintals per ha with the gross income of ₹ 35,000 to 40,000 per ha, and her net returns after deducting the cost of cultivation was ₹ 15,000 per ha. After coming in contact with scientists from Krishi Vigyan Kendra, Palem, she started cultivation of ICRISAT developed RGT-1 variety of redgram. She also adopted improved crop management practices based on scientific advice provided by the scientists. Her yields doubled- 25 quintal per ha with a gross income of ₹ 90,000 per ha and net returns of ₹ 70,000 per ha. Thus, her net income increased more than four times by adopting improved varieties.

In her village, tradition dictates that a woman can step outside the threshold of their homes only when accompanied by a male family member. To overcome these social barriers and help other women farmers learn and benefit, she developed a demonstration farm in her land itself and displayed the technology to others. Today both male and female farmers approach her for advice.

Her message for other women is – “It wasn’t about the money, it was about a goal. I wanted to be the best in farming.” She adds, “Each one of us is unique and there is nothing one cannot achieve if you set your heart to it.”
Ms G Vijaya Nirmala
Residing at: Tandur in Rangareddy district
Project: Tropical Legumes II

Vijaya Nirmala has many firsts to her credit. She is the first woman farmer in the entire Telengana state to demonstrate the productivity potential of ICPH 2740, the first pigeonpea hybrid from ICRISAT under real farm conditions. She obtained a yield of 2,220 kg from 0.6 ha of land (3,700 kg/ha).

She is also the first farmer to demonstrate the productivity potential of transplanting technique in pigeonpea under rainfed conditions, which gave a yield of 1,280 kg of seed.

Nirmala has successfully introduced vegetable crops like okra, brinjal and tomato as an intercrop in transplanted pigeonpea under drip irrigation. She also has the expertise in growing short duration pulses like greengram and blackgram as summer crop under limited water availability conditions.

Before marriage, she came from a conservative family where women were not involved in decision making with respect to either household issues or livelihood matters. However, after marriage, with her husband’s support, she has become a progressive farmer and is actively involved in decision making related to choice of crops to be grown, selection of varieties, implantation of innovative methods, etc, for enhancing farm returns. Today she is an innovative farmer having greater role in decision making with respect to crop production for her family’s livelihood. Not only her husband, but also the entire village respects her innovative ideas in agriculture.

With the additional income she is able to provide good education to her two sons. Her elder son is currently pursuing a B.Tech in Agricultural Engineering.
Organic cultivation gives her a bumper yield

Ms Savita Jeevan Yelne
Residing at: Khanapur in Adilabad district
Project: SWISSAID’s Climate Change project

Savita Jeevan Yelne, a 38-year-old woman from Khanapur village, owns 2.4 hectares of land. She also owns four cows which provide valuable manure for her farm. She used to cultivate hybrid cotton (Bt) and soybean. Like most other farmers, she previously cultivated her fields using plenty of fertilizers and pesticides. As a result, the soil on her fields was drained of nutrients and the rising cultivation costs started eating into her household budget for four adults and two children.

Mounting loans
“The cost of fertilizer rose every year yet the harvest kept declining. I was left with no choice – if I didn’t use more chemicals, I risked losing my entire harvest,” says Savita, who started taking loan after loan, till she found herself in serious debt. “It’s a vicious circle. The first loan can only be paid back if the harvest and product sales are successful. Meanwhile, cultivation costs are so high that there is nothing left after they are deducted. So another loan is needed for the next sowing season.”

Stopping the downward spiral
Savita’s participation in SWISSAID’s “Climate change project” and the renowned Centre for Sustainable Agriculture (CSA) heralded the change she longed for. “Thanks to organic farming methods, my cultivation costs were reduced, the soil’s fertility on my farm has improved and my income has increased,” she says. It also helped that her husband supported her. Savita began to attend advanced training courses at the CSA. She grasped the finer points of producing organic fertilizer. In 2011, her practical test followed. She began to cultivate organic wheat on 0.1 hectares. Mixing her own fertilizer and organic pest control products using ingredients which she could buy at the local market, vastly reduced her purchasing costs. It soon became obvious to Savita’s family that she intended to cultivate the rest of her land organically.

860 papaya trees loaded with fruit
Savita decided to cultivate papaya on 0.4 hectares of her land. Last year, she planted 860 saplings. Because she used organic fertilizer and pesticides she spent 35 per cent less than before when using the chemical products. At harvest time, the trees were heavily laden - about 70 fruits weighing almost one kilogram each - were hanging from every tree. “I am very happy that my papaya trees are producing fruit. The papayas also taste really good. People from other villages are coming to see my farm. And it’s all because I converted to organic cultivation methods.” As her field is near the main road, Savita first sold her fruit to passersby. “I purchased the plants for ₹10 each. Now, each tree is yielding fruit worth ₹1,500,” she says. She has earned ₹2 lakh income by marketing organic papaya.

Sharing her good fortune
Savita now cultivates vegetables and soya using organic methods. She feels it is important to share her good fortune with others. She transfers her expertise by organizing training courses and conferences for other farmers. They trust Savita. After all, she has risen from within their ranks. Ten farmers from the village are following her example and cultivate organic vegetables. This is enough to cover their families’ vegetable consumption for eight months and to improve their nutritional health. The plants are thriving. And hope is also growing that more farmers will join this group and an increasing number of farmers will be able to escape the debt trap.
Leading by example

Ms Chandramma
Residing at: Tunkimetla in Rangareddy district
Project: Increasing Food Legumes Production by Small Farmers for Strengthening Food and Nutritional Security through Adoption of Improved Technologies and Governance within South-South Cooperation.

For the past 25 years Chandramma, a 50-year-old farmer from Tunkimetla village had been cultivating pigeonpea. The whole village had been struggling with low pigeonpea yields, particularly due to wilt and sterility mosaic diseases.

With the advice and guidance of agricultural officers, Chandramma took up hybrid pigeonpea under assured irrigation. It was only last year that she realized excellent yields by growing ICPH 2740 (11 qtls per acre – 2.8 tons per ha) compared to the traditional local variety (300 kg per ha) that she was used to.

She followed all the agronomic practices such as spacing, irrigation, dibbling and timely plant protection. She also overcame the hazards of wilt and sterility mosaic disease by trying ICPH 2740.

A sincere and industrious woman, she not only promptly followed the instructions given by agriculture officers, but also served as an influencer in her community by playing a leadership role, particularly motivating women farmers to adopt effective farming strategies to promote higher productivity by growing adaptable varieties.

Adopting effective farm strategies

Ms Soni Bhai
Residing at: Chinnamylaram in Mahbubnagar district
Project: Increasing Food Legumes Production by Small Farmers for Strengthening Food and Nutritional Security through Adoption of Improved Technologies and Governance within South-South Cooperation.

For the past 15 years Soni Bhai, a 45-year-old farmer from Chinnamylaram village had been cultivating pigeonpea. The whole village had been struggling with low pigeonpea yields, particularly due to wilt and sterility mosaic diseases.

With the advice and guidance of agricultural officers, Soni took up hybrid pigeonpea under assured irrigation. It was only last year that she realized excellent yields by growing ICPH 2740 (11 qtls per acre – 2.8 tons per ha) compared to the traditional local variety (300 kg per ha) that she was used to.

She followed all the agronomic practices such as spacing, irrigation, dibbling and timely plant protection. She also overcame the hazards of wilt and sterility mosaic disease by trying ICPH 2740.

A sincere and industrious woman, she not only promptly followed the instructions given by agriculture officers, but also served as an influencer in her community by playing a leadership role, particularly motivating women farmers to adopt effective farming strategies to promote higher productivity by growing adaptable varieties.
Karnataka Case Studies
An agriculture graduate shows that farming can be highly profitable

Ms Vijaya BM
Residing at: Timmanna in Udupi district
Project : Bhoochetana-II

After completing BSc from University of Agricultural Sciences Bengaluru in 1991, Vijaya BM worked for three years in an NGO at Ananthpuram, Andhra Pradesh. In 1994, she married Thimmanna Hegde, who is also a BSc Agriculture graduate. After her marriage she left the job and started farming. She has a 19-year-old son and 13-year-old daughter.

Integrated farming system and dairy farming

Both husband and wife decided to take up farming to prove that farming can be a remunerative profession and to be a role model to educated youth. They purchased 4.43 acres of land in Yalajith village of Kundapura taluk in Udipi. Initially they did not have enough financial resources, so they planted crops that were covered under insurance. They grew coconut on 1.5 acres, areca nut on 1.5 acres and cultivated paddy and maize on the remaining land. They adopted integrated farming system with multi and intercropping system with banana, pepper, spices, medicinal plants, etc. They also bought 10 hybrid cows. They could sell an average of 60 liters of milk per day. They also prepared a milk product called *khova* (evaporated milk that’s used for preparing Indian sweets) and sold it in the local market.

Organic manure

Vijaya also prepares organic manure (*savayava paddathi*) utilizing ongoing government schemes. She has procured a bio-digester to produce manure from cow dung and a vermicompost unit. She also prepares organic fertilizer *jeevamrutham* made from cow urine and dung, jaggery, powdered black-eyed peas or cow peas and top soil.

Mechanization

To overcome the problem of hiring farm labor, Vijaya took to mechanization. She bought a paddy transplanters, power tiller, power weeder, milking machine, chop cutter, flouring machine, etc.

Results and awards

As a result of Vijaya and her husband’s hard work the value of their land had increased more than a hundredfold. They had bought the plot of uncultivated land for ₹ 50,000 and currently the land’s value is ₹ 10,000,000.

Considering her efforts and achievement in agriculture, UAS Bengaluru has honored her with Best Woman Farmer award for Udupi district in 2013 and Dr Dwarakinath Award 2012 for Best Farmer.

Vijaya has also set up an agri clinic center at her farm and motivates local youth to take up farming. She is involved in farm advisory and helps farmers utilize government schemes.

Vijaya is now financially well-off. She believes that hard work pays. Despite the popular notion that farming involves a lot of risk and results in losses, Vijaya is glad that she was able to prove that farming can be a remunerative profession.
Ms Gangamma
Residing at: Gandragolipura in Bengaluru Rural district
Project: Bhoochetana II

Thirty-year old Gangamma belongs to an agricultural family. Her husband works as a milk union dairy secretary, and their two daughters are in primary school. Agriculture is the main source of their income, but they have not had the means to purchase land for themselves, so they take on lease the land they need to cultivate every year.

Gangamma has been working in the flagship Bhoochetana scheme as a Farm Facilitator in the Karepura cluster in Doddabelavangala Raitha Samparka Kendra for the last 3 years. Karepura cluster comprises six villages, and Gangamma is responsible for dissemination of technologies in these villages.

Introducing improved varieties
The crop year 2013-14 has been an extremely busy time for Gangamma. She conducted large-scale participatory demonstrations in her cluster with a new maize variety, getting a 20% higher yield over the traditional variety, and organized a field day to show the benefits to the 34 men and 13 women farmers who participated. She also conducted trials with three new varieties of *ragi* (finger millet) and two varieties of pigeonpea (red gram) demonstrating their superiority over older favorites.

Managing land and water
Through the Bhoochetana program, Gangamma got trained in soil testing and management of nutrients, pests and disease. She keeps her agricultural knowledge updated through TV and newspapers, and shares this with her fellow farmers. She advocates soil test-based balanced fertilization, and increasing soil organic matter with green manure crops, sunhemp, *Glyricidia* and cowpea. She also trained farmers in vermicomposting, and the use of equipment for vegetable cultivation. In addition, she popularized line sowing using seed drills and tillage across the slope in her cluster. Her cluster is now informed about seed treatment and soil sampling to improve their crops.

Superwoman style
Gangamma overcame challenges in a male dominated society, and was able to convince women farmers to participate more actively to improve their standards. Not complacent, she is now pursuing a Bachelor’s Degree through distance education, determined to help her fellow farmers to make agriculture a sustainable and rewarding life occupation – all this while attending to her primary responsibility, her family.
Ms Mamatha
Residing at: Gundooru in Bengaluru Urban district
Project: Bhoochetana II

Twenty-one years ago, farmer Muniyappa and his wife did not expect that their newborn baby girl, named Mamatha (which means mother’s love), would be leading and managing other farmers at a very early age.

Mamatha belongs to an agricultural family who grow ragi (finger millet) and red gram on their 0.4 ha (1 acre) plot of land. She has been working in the flagship Bhoochetana scheme as a Farm Facilitator in Gundooru cluster in Bidarahalli Raitha Samparka Kendra for the last 1 year, and is responsible for disseminating technologies in all the nine villages of this cluster.

Putting her knowledge to use
After undergoing training in soil testing, land and nutrient management, Mamatha bravely began teaching farmers innovative methods of improving their crops and their livelihoods. During the 2013-14 crop season, Mamatha conducted trials with castor, three new varieties of ragi and two new varieties of red gram, to demonstrate the benefits of improved varieties. She conducted participatory trials on bunds of four farmer’s fields to demonstrate soil and moisture conservation, and encouraged farmers to use green manure (Glyricidia, sunhemp and cowpea) to improve the soil. She conducted two campaigns in her cluster, involving 21 men and 15 women farmers, to inform on seed treatment and soil sampling, and conducted training on vermicomposting and use of farm equipment to benefit the community. Mamatha also mobilized around 5 tons of recommended inputs for her cluster, and popularized line sowing using seed drills and tillage.

Breaking away from tradition
Being a young lady participating in a traditionally male dominated business was not easy, but Mamata was able to use her managerial skills, and agricultural expertise to convince farmers to adopt new strategies and mechanization to improve agricultural production. She maintains a helpful relationship with all, uses the media to keep up-to-date, and takes videos of good technologies on her mobile phone, which she then shares with other farmers. Mamatha has earned the respect of her society. Besides being proficient in Kannada, Telugu and the English language, Mamatha is also pursuing a Bachelor of Commerce degree. Of course, she still has to meet her parent’s expectations and return home at a respectable time each day.
A prize-winning farmer and a leader

Ms Kamalamma HN
Residing at: Valnur in Kodagu district
Project: Bhoochetana II

Kamalamma from Valnur village, Somavarapete taluk, Kodagu district is an award-winning woman farmer who has been cultivating 14 acres of land for the past 30 years. She is a widow and her two daughters and two sons are married. She is currently living with her sons.

Taluk and district awards for paddy crops
Her 14-acre land has both dry land and irrigated land. The soil is predominantly red sandy soil. In 2010-11 she was awarded the first prize by the agriculture department in the taluk for paddy (Tunga) yield of 83.43 quintals per hectare in 2.5 acres of land. In 2011-12 she bettered the yield and won the first prize at the district level for paddy (Tunga) yield of 119.20 quintal per hectare in 2.5 acres of land.

From coffee, spices and bananas to animal husbandry, fish farming and poultry
Besides paddy, Kamalamma also grows coffee and pepper in eight acres, ginger, orange, spices and banana in the rest of the area. She is also into animal husbandry, fish and poultry farming, making manure and runs a nursery for plants.

An active community leader
Kamalamma was twice elected as a member of the Grama Panchayat. She also served as vice president. She has also formed a self-help group Gajalakshmmi SHG-Valnur in 1997. For the purpose she was able to get 30 cent land free from VSSN Society.

She takes great interest in all the village activities such as improved roads, water tanks, agroforestry, fish farming and social awareness programs.

She believes that educating every woman farmer is very important as it prepares them to take better care of their children and also take up innovations and challenges in the field of agriculture.
Ms Sarswati Suryakant Shetyalkar
Residing at: Sambrani in Uttara Kannada district
Project: Bhoochetana II

Sarswati Suryakant Shetyalkar lives in a joint family with her husband, his parents and brothers and sisters-in-law. She was born in an agricultural family, and although she had studied up to the pre-university (PUC) level, her family duties, chiefly taking care of her two daughters and a son, occupied most of her time. Her husband works in the forest department on a daily-wage basis. But he was the only earning member of the large and growing family. Saraswathi decided that she needed to find work and help with the family finances.

Discovering Bhoochetana

While searching for a job she learned about the ICRISAT-led, Government of Karnataka Bhoochetana program, and was drawn to it as she liked its theme of helping farmers. She joined the Bhoochetana program as a Farm Facilitator. Being a farmer herself, she is aware of the problems faced by farmers - the high cost of cultivation, poor crop yield, and fast deteriorating soil fertility. As a first step she learned the strategy behind the program and how to overcome the problems of subsistence farming. The village where she lives is populated with backward class and uneducated women. She went about motivating these women to save money and spend it judiciously. She helped them adopt the Bhoochetana program, which involves low cost input with high returns.

The power of persuasion

At the start she found it difficult to motivate the villagers who were mired in a subsistence mindset, so she started visiting individual houses and told them about the project and its benefits. She is a member of Sri Kshetra Dharmastala Rural Development Project and the Stri Shakti Sangh Sambrani self-help groups (SHGs). She used the SHG group as a platform and started motivating fellow farmers to save money through the SHGs and then adopt Bhoochetana interventions in their field. Most of the villagers are now Bhoochetana farmers.

People in her village and also neighboring villages consider her as a leader; they seek her advice not just for agriculture, but also to resolve their day to day problems. If there is one message Saraswati would like to give women, it is to understand the power of women and use it for the betterment of themselves, their village, state, and thereby the nation.
Jayanti Ashok Akkasali, was born in a poor agricultural family 34 years ago. She, her husband and three children belong to a backward community. They own a small 0.8 ha (2 acre) farm plot on which they usually grow paddy for their livelihood.

**Taking advantage of opportunities**

Jayanti became involved with the Bhoochetana project and being an enthusiastic person, underwent training and attended capacity building programs that taught her about improvements in agriculture and how to manage and improve her income. Jayanti is also an active member in her village self-help group (SHG), and equipped with her title as Farm Facilitator in the Bhoochetana program, began motivating her fellow backward class farmers (especially the women) to employ improved crop management practices.

It was not easy for Jayanti at first. The farmers had for centuries lived in the shadow of being “backward”, and were not confident enough to take risks and try new technologies. But Jayanti persisted and convinced them that unless they helped themselves when help was available, there was no hope for improvement. She taught them about soil fertility and how improvements to the soil would result in improvements in their crops.

**Helping women realize their potential**

Jayanti also paid special attention to the uneducated women farmers and advised them to save their money through SHGs and use it wisely. She encouraged them to link to Raitha Samparka Kendras and invest small amounts so that they could reclaim fertility for their soil. Although it was a struggle for Jayanti at first, the villagers now admire Jayanti and talk about her hard work and how she generously shared her knowledge with them to bring about a positive change in their lives, changes they experienced in the very first season after trying agricultural improvements. Today, most of the villagers are an integral part of the Bhoochetana project.

Jayanti had been part of the Mahalaxmi Mahila Swa Sahaya Sangh, an (SHG) monitored by Bharatiya Agro Industries Foundation, through which she helped other women to save money and gain benefits from their savings. In the year 2005 she also formed another SHG called Hongiran with the help of Deshpande Rural Development and Self Employment Training Institute to involve the members in various income generating occupations such as tailoring and dairy farming. Jayanti maintains that women are not destined for the kitchen alone. If they have the will they can make a change in their lives and break out of poverty at the same time.
Salvager of barren land

Ms Sheela Sikandur
Residing at: RH Camp-3 in Raichur district
Project: Bhoochetana Plus

Sheela Sikandur is 42 years old and is married to Sudhannya Sikandur who, like her, was a social mobilizer when he worked with a Non-Government Organization (NGO). They have two daughters.

Start with the soil

Sheela owns a 1.3 ha plot of land, but it was barren. She knew she had to rejuvenate the land before it could become productive, so she adopted an integrated farming approach, starting with soil improvement. She installed drip irrigation to save water and also constructed water storage structures. There were issues regarding soil and water drawbacks; she had to start from scratch to convert her barren field into a profitable business model.

Sheela started to gather agricultural knowledge from fellow lead farmers and experiment with that on her farm. She constructed one vermicomposting unit and used the compost as a source of fertilizer. Learning from the Bhoochetana program, she started using balanced nutrient management practices, focusing more on the use of organics, along with replacing deficient secondary and micro-nutrients. She planted Glyricidia on the bunds, allowing its root system to nourish the soil, and using the leaves for compost making. She thus turned her barren land into rich agricultural land, and started growing horticultural and plantation crops along with agricultural crops such as cotton and paddy. Today, her net income from the land is ₹ 120,000 per year.

Reaping the benefits and sharing the knowledge

After her convincing success, Sheela now trains other farmer on different aspects of soil health, organic farming, vermicomposting, and balanced nutrient management. She joined a self-help group in her village and is an active member. She also gives year round employment to three women in her farm.

Sheela herself follows a diversified multiple cropping system, and can now supply vegetables for sale in the village to earn a daily income. In addition, she runs a dairy farm, a fishery and a flour mill. She supports her husband in social mobilization of agricultural technology in her village through savayava bhagya (organic farming). Sheela is popular in her village as a lead farmer who is respected, and who can be looked up to for advice.

Deservedly, she received the Progressive Farmer award from University of Agricultural Sciences Dharwad during 2012-13.
Agricultural motivator

Ms Devika
Residing at: Muddinakoppa in Shimoga district
Project: Bhoochetana II

Devika, aged 35, is married to Rajappa, a farmer, and the two of them live in an independent home with their son and daughter.

A farmer first

Devika is recognized as a woman knowledgeable about agricultural practices, not only in her village, but in surrounding villages as well. This is no wonder, as Devika has been involved with agriculture since her childhood, and she is very familiar with the normal agricultural production techniques.

She served as a Gram Panchayat (local village administration) member from 2005 to 2010, as a member of the Jala Samrudhana Yojane for four years, as a member of the Raita Shakti Group (supported by the state department of agriculture), and as the president of the Stree Shakti Group in her village.

Devika found out about the innovative technologies being promoted by the Bhoochetana program, and has adopted them for her fields since 2011. She grows maize and red gram (pigeonpea) as an intercrop, grows green manure crops, uses watershed techniques of sowing across the slope of the land, uses soil and water conservation techniques, and deep summer ploughing, and pays heed to the importance of micronutrients needed for the soil.

Devika is a resource person for many of the training programs that are organized by the agriculture related government departments, and has successfully initiated several difficult programs for the benefit of her village.

Mother and farmer

At home, Devika maintains a small dairy unit of two cows, has a gobar-gas (using cow-dung) unit, and practices vermicomposting to obtain organic fertilizer for her fields.

Devika is able to balance her maternal duties with the large number of initiatives she promotes for the farmers of her village. At one time her children’s grades were falling below average, but she worked hard to help them, and due to her constant training and the homework she encouraged them to do, they are now faring very well in school.
Bhagya Jagadish is a popular figure in Chinmane village. She is married to Jagadish, a smallholder farmer, and has two teenage sons who are students.

**Committed to facilitating**

Bhagya Jagadish is the samyojaka for a Swa Sahaya Sangha in her village. She is also the Vice-president of the Dharmasthala Swa Sahaya Sangha for Mandaghatta Valaya. Despite these public offices, she is also self-employed, runs a flour mill at her house, and together with her husband they grow paddy and maize. She also grows Azolla in her house and uses it to feed the cattle, and as manure for her kitchen garden.

Bhagya has been a Bhoochetana facilitator for the past four years. She is very committed to the farmers, and to ensure that they have the necessary inputs for their fields, she travels from farm to farm in a bullock cart with her husband, distributing micronutrients and other inputs directly to the farmers. She never fails to remind them to pay attention to the health of their soil and to use organic manure, which they can make in their own farms. She has thus successfully run Farmers Field Schools in the villages of Kunsi Hobli.

**Overcoming opposition**

Although Bhagya is well known and respected in the villages, it was not all smooth sailing for her, as her father and mother-in-law were not in favour of their daughter-in-law working outside the home. “It will only bring shame upon us,” they said. Bhagya did not lose courage; she got her husband to explain the pros and cons of her work, taking pride in her earning capability, and they were slowly convinced.

Her honest and straightforward approach as a facilitator strengthens her position, and farmers from her village and the surrounding ones approach her for guidance on fertilizer use and plant protection management. She is so popular that political party leaders are now vying for her attention, hoping she will join them and work for their parties.

Yet Bhagya does not lose sight of her priorities. “Care for your children” she says, “and give them an education. And don’t forget that rural women have many opportunities to increase their family incomes.”
Ms Rajeshwari V Patil
Residing at: Handiganur in Haveri district
Project: Bhoochetana-II

Rajeshwari V Patil is popularly known as Krishi Mahile in her village. Her husband is proprietor of Kalmeshwar Stone Crushing Industries & Bricks Manufacturers at Dharwad and Gadag. Her family comprises of four adults and two children. The family has a land holding of 113 acres, both irrigated and rainfed (Maize 50 acres, sugarcane 15 acres, paddy 15 acres, groundnut 10 acres, and 20 acres of chilli, millets and cucumber.

Awards galore

Rajeshwari is a model progressive woman farmer and has more than 15 agriculture related awards to her credit. She received the Sreshta Krishi Mahile Award (2012-13) from the University of Agricultural Sciences Dharwad, Karnataka. She also received the Basava Krishi and Chalukya Awards. Her achievements in the field of agriculture have been featured in many Kannada newspapers and leading English dailies.

Rajeshwari comes from an educated and affluent family and is respected in her village. She is a member of the district Krushika Samaj run by the Karnataka State Government and is president of Agriculture Cooperative Society Ltd, Handiganur village.

Adoption of new technologies

Her family, society and the agriculture department have supported her in achieving her dream of bringing awareness and educating farmers and farm laborers. She tells them how to avail government schemes and educates them on organic farming, advanced agro technologies and adoption of new technologies in dryland agriculture - Integrated Nutrient Management (INM), Integrated Pest Management (IPM), mixed cropping pattern and adoption of different irrigation methods.

She has studied Law but has taken up agriculture as her vocation. She leads women farmers not only at the village level but also in all the districts of north Karnataka. She provides information on agriculture aspects like income generation activities, vermicomposting, bio fertilizers and green manure production. She also educates them on improving soil health through agronomic practices for increasing productivity in dryland agriculture. She lays emphasis on soil-test based fertilizers and micronutrients recommendations.

Social issues

Rajeshwari regularly conducts social awareness programs. She educates women to fight against child marriage and child labor. She has brought awareness among rural women on cleanliness and hygiene.
A progressive farmer in a backward village

Ms Nanda
Residing at: Sugatur Hubli in Kolar district
Project: Bhoochetana-II

Nanda is a women farmer. Her family owns 15 acres of land. She is married and has two children. She is progressive in her thinking and has adopted integrated farming systems with drip irrigation. She is also into animal husbandry, goat rearing and beekeeping.

Nanda lives in joint family and she has to do the household chores. While her priority is the maintenance of her home, she voluntarily takes part in farming activities in order to put to use the various agricultural innovations. Her husband supports her and she is able to balance her home and farm activities.

When other women farmers evince interest in learning new techniques of agriculture she readily shares with them whatever she has learnt and implemented on her farm. In a backward place like Kolar where farmers are reluctant to adopt anything new, Nanda’s farm stands out.

She is an inspiration to the women folk in her village as she has shown that women can step out of the confines of their homes and achieve their dreams.

A champion of organic agriculture

Ms Mamata
Residing at: Bale in Chikmagalur district
Project: Bhoochetana Plus

Mamata, a Farm Facilitator lives with her farmer husband, two children and her mother-in-law at NR Pura. She studied Pre-University Course (PUC) and has worked as an assistant field officer as part of the Savayava Gram Scheme at NR Pura for three years. She has trained the farmers on the use of vermicompost, bio-digesters, biogas and other organic methods of agriculture.

With her guidance, 60 farmers have started traditional vermicompost units, 20 farmers have formed Japanese model vermicompost units, 15 farmers have installed bio-digesters and eight farmers have installed biogas units on their farms.

She belongs to the hilly zone (Malenadu) where the farms are scattered and isolated. Reaching the farms in remote places is a challenge. She has achieved distinction in her work with the support of the Department of Agriculture officials and her family.

Through the efforts of Mamata, the village has witnessed a revolution in organic agriculture.
Empowering other women

Ms Chandramati
Residing at: Ganadalu in Chikmagalur district
Project: Bhoochetana Plus

Chandramati and her husband Bommegouda of Ganadalu village own 8 acres of land. They raise agri-horti crops and are also into dairy farming. They have two children, a son and a daughter.

Being a lead woman farmer in the village, Chandramati has formed a women self-help group (SHG) in the village. She guides the women in the group on how to avail various government facilities available and thus helps in upgrading the life of the villagers.

Department of Agriculture comes to her rescue

She has created awareness among fellow women on the importance of micronutrients and has succeeded too. Being a graduate she evinced keen interest in the various agricultural innovations that could be implemented in her area. Since she resides in a backward village she was finding it difficult to get the needed information.

However, she was able to update her knowledge of agriculture and horticulture by contacting the Department of Agriculture and Horticulture. Being literate, she created awareness among the women in the village and empowered them to make use of the new innovations in the field of agriculture. Her dedication to the cause of women upliftment makes her special. She is a source of encouragement to the SHG members. She has influenced the women and brought about change in their lives.

Taking on new challenges

Ms Shekammavani
Residing at: Tavaragera in Koppal district
Project: Bhoochetana II

Shekammavani is an award-winning woman farmer from Tavaragera village. She received Progressive Women Farmer Award (2003-04) from University of Agricultural Sciences, Dharwad, Karnataka. She also was awarded Progressive Farmer award in the organic farming category by the Horticultural Department.

She lives in a joint family that has 13 members. Agriculture is the family occupation. The family has a 16-acre land holding -- 9 acre irrigated, 5 acre dryland and 2 acre mango plantation. Shekammavani undertakes Bhoochetana activities every year. She likes to take on new challenges and is well known in the village. She advocates dairy farming and vermicompost production. She is a SHG representative member. Her family condition has improved from what it was earlier.
For her agriculture and social welfare go hand in hand

Ms Sujathamma
Residing at: Muduvatti in Kolar district
Project: Bhoochetana II

Sujathamma is a resident of Muduvatti village which is one of the nine villages selected for Integrated Watershed Management Program implemented by ICRISAT. Sujathamma is a member of the executive watershed committee. She is married and has two children. Her family has 3.5 acres of farm land, on which she cultivates finger millet. Part of her farm land is used for mango plantation. Apart from agriculture, she maintains livestock for additional income.

Since her husband is physically challenged, Sujathamma takes care of the entire farming activity. She also participates in community welfare activities and is an accredited social health activist (ASHA health worker). She is also a member of SHG groups.

The villagers respect her for her leadership in the agricultural community.

She starts a ‘white revolution’

Ms Hemavati
Residing at: Ganadalu in Chikmagalur district
Project: Bhoochetana Plus

Hemavati, her horticulturist husband, her two sons and her in-laws live in Ganadalu village. She is a trendsetter in her village. She formed a women self-help group (SHG) for the purpose of raising money to run a dairy farm. The women in the group collect milk from the villagers and thus encourage the farm women to take up dairying.

In this region there are no milk unions and hence the farmers hesitate to take up rearing of dairy animals. To overcome the problem, Hemavati came up with an initiative to market the milk produced by the villagers. With the encouragement she received from her husband, she has been able to implement her plans.

She has studied up to 10th Grade. She says her education has helped her in creating a marketing channel for the milk produced in the village.
Creating a market for dairy products

Ms Girija
Residing at: Sadarhalli in Chikmagalur district
Project: Bhoochetana Plus

Girija and her farmer husband Mallegowda have 15 acres of land. The cultivate agri-horti crops and raise dairy animals. Her husband is lead farmer and Gram Panchayat member. She lives in a joint family comprising of six members. She has studied till 10th Grade.

As a lead woman farmer in her village she has formed a women self-help group (SHG). The group collects milk from the villagers thus encouraging the farm women to take up dairying. The SHG provides microfinance helping the women to better their economic status.

Girija had to create a marketing channel to sell the milk produced in the village as there are no milk unions in the village. With her husband Mallegowda being the member of Gram Panchayat she was able to reach the maximum possible farmers in the region through his contacts.

A model floriculturist

Ms Pushpa
Residing at: Lakya in Chikmagalur district
Project: Bhoochetana Plus

Pushpa, her agriculturist husband Nanjundappa and their son live in Lakya village. Pushpa is into floriculture and has been cultivating rose and jasmine flowers. The flowers are exported to the domestic markets depending on the demand. She has adopted floriculture in an area that has moderate rainfall. Traditionally vegetables are grown in this part of Chikmagalur district and hence there is no organized market for flowers. However, Pushpa took the risk and with the support of the Department of Agriculture, she was able to get excellent results.

Pushpa is a model farmer in the region and encourages other farmers to go in for floriculture.
Veritable vermicomposter

Kavitha Umashankar Sharma is married to Umashankar Sharma who works in the Veterinary Department as a Health Inspector. They have two daughters and a son. They live in Raichur, but only since they migrated from Rajasthan in 1980.

Introduced to vermicomposting

Kavita Sharma enjoys being a farmer. She adopted an integrated farming system in her 2.4 ha (6 acre) farm, and besides agricultural crops, she grows horticultural plants, and all types of forest species on the bunds. She also runs a dairy and poultry farm, exports pomegranate to other countries, and sells pomegranate seedlings to local farmers. Three years ago, Kavita attended a training program on producing organic manure. Being an educated and progressive farmer, she gathered more information and started a vermicomposting unit in her farm.

Kavita has now completely shifted to organic farming, using the vermiwash as a micronutrient, which she delivers through the drip irrigation system. This helped her to save about ₹ 10,000, which she earlier used to spend on chemical fertilizers and pesticides. She recently prepared 20 cemented structures for vermicomposting, and designed a very efficient system for collecting the vermiwash from them through a network of pipes.

Role model with a model farm

Kavita encourages other farmers (particularly the women) to form an organic farming group and produce organic fertilizers through vermicomposting. She is also an active Bhoochetana lead farmer and follows the balanced nutrient management practices on her farm, which is a Model Farm to the neighboring farmers and to trainees from the Agricultural Department and University, who are advised to visit the farm and adopt the same system. She was awarded with Krishi Pandit award during 2010-11 from the University of Agricultural Sciences, Raichur.

Kavita is a dynamic lady. She accepted the challenge of low crop productivity and fast deteriorating soil fertility, attended trainings and discussed with other lead farmers about ways to overcome the challenges, and has now become financially sound. She is well respected by the villagers, who recognize that her success comes from her hard work and willingness to apply new technologies to her farm.
She is known in her village as a farm facilitator

Ms Vijayashree  
Residing at: Hullikeri in Bellary district  
Project: Bhoochetana II

Vijayashree is a woman farmer with a 4 acre dryland holding, who is known for her dynamism. She provides training in organic farming to women farmers in Hullikeri village. She is a resource person for the Trainers Training Programme at Karnataka Watershed Development Project (KAWADS), Khana Hosahalli. She has attended farm facilitator’s trainings at District Agricultural Training Centre (DATC), Kampli and also attended capacity building training program at Rural Development and Self Employment Training Institute (RUDSET) institute. She is an SHG representative member. Vijayashree’s husband is physically challenged. She works hard to support the four members in her family and actively participates in various social activities in the village.

All for organic farming

Ms Siddabasamma  
Residing at: Sridergaddi in Bellary district  
Project: Bhoochetana II

Siddabasamma is a well-known woman farmer in Sridergaddi village. She received the Progressive Women Farmer award from Raichur University during 2011-2012 and was felicitated by the Syndicate bank at Bellary for her achievements in agriculture.

She lives in a joint family comprising of seven members. Her family has a 9.5 acre land holding and agriculture is their main occupation.

Every year she participates in Bhoochetana activities. She has adopted Integrated Pest Management (IPM) technology in Bt. Cotton crop and is also into vermicompost production. She motivates women farmers to take up organic farming and has demonstrated the benefits of the practice on her own vegetable farm. Her farm has even attracted officials from the Central Soil and Water Conservation Institute.
An expert in tissue culture

Ms Prasanna Prasad Bhat
Residing at: Petri Cherkadi in Udupi district
Project: Bhoochetana II

Prasanna Prasad Bhat of Cherkadi village is a married woman with two sons who lives with her in-laws. Her husband is an agriculturist with a nursery and a tissue culture lab.

Prasanna has passed PUC (Pre-University Course) and is an expert in tissue culture. Being a woman from a conservative Brahmin family she had to face a lot of problems as women from their community do not mingle with men.

She worked with her husband when he set up a nursery and through him she gained knowledge of the market. She then started tissue culture of different banana varieties.

She is source of encouragement to many women in her village. About 30 women are working in her nursery and tissue culture project. She believes in women empowerment and while employing she gives special preference to widows and the differently abled.

A villager, yet modern in her thinking

Ms Ekantha
Residing at: Kappa in Dharwad district
Project: Bhoochetana II

Ekantha from Kappa is a married woman with two children. She prepares large quantities of vermicompost and has adopted integrated farming systems. She has successfully grown different crops and got better yield.

Though she is not educated and comes from a rural background she has taken up innovative farming activities. Initially, she faced a number of problems but was able to overcome it by maintaining regular contact with agricultural communities and attending a number of short and long term trainings.
A model farmer

Ms Komala
Residing at: Matturu in Shimoga district
Project: Bhoochetana II

Komala from Matturu village is a successful woman farmer. She is married and has three children. Besides farming she also produces vermicompost and has adopted integrated farming system to grow vegetables. She has participated in many departmental training programs. Coming from a rural background she had to face many problems but she was able to overcome them through the support of her husband. Now she is member and office bearer of many organizations.

She has adopted many technologies and is a model farmer in the village. She is respected in the village and other farm women turn to her for advice.

An active FFS worker

Ms Rajeswari Madannavar
Residing at: Petri Amargol in Dharwad district
Project: Bhoochetana

Rajeswari Madannavar is actively involved in agricultural activities and participated in Bhoochetana program as a farm facilitator. She plays an active role in conducting Farmer Field Schools (FFS) managed by the women in the village.

She has faced no difficulties as she enjoys the full support of her family, ICRISAT and the Department of Agriculture.

She formed women groups in order to regularly conduct Farmer Field Schools. She has a good rapport with fellow farmers in the village. She has created awareness on the Bhoochetana scheme. Earlier, the men and women were not interested in attending the trainings and meeting but she convinced them that they all had to work together for the development of their village.
Tamil Nadu Case Studies
Muruheshwari and her husband Kamaraj are both farmers, and not unlike others in their village, they were poor, usually in debt, borrowed frequently from moneylenders and relatives, and kept a low profile.

The turning point

One day Muruheshwari attended a training program conducted by the ICRISAT Watershed Committee, and discovered a way to pull herself and her family out of their poverty stricken lives. She was convinced about the necessity to fertilize the soil, use seed from improved varieties, and practice soil and water conservation. She told her self-help group (SHG) about the watershed concept, and soon saw that other members were taking her advice and reaping the benefits. Muruheshwari also introduced kitchen gardens for 20 families. These families are now able to include the nutritious vegetables in their meals, which they had earlier avoided because of costs.

A model farmer

Muruheshwari has attained a level of sustainable development through her initiatives. She created awareness about health and hygiene in the village, and is now a model farmer in the woman’s SHG. Through the SHG she got herself trained in tailoring, and started a tailoring unit that provides employment to 10 women in the village. On weekends she helps trainee students in tailoring and toy and handicraft making. To date she has trained about 60 students, and is also conducting Train the Trainer courses for school teachers. She also cultivates red roses for sale in flower shops.

In a male dominated society, the men are the decision makers. Made courageous by her success, Muruheshwari bravely intervened for women to be given a role in choosing which crops to cultivate and in choosing a source of funding. Men had been borrowing from a commission agent who would then force them to sell him their produce at a low rate. The women were now knowledgeable about savings and thrift and linking with banks, which was a way of eliminating the middle-men and getting better prices from the markets. They were also familiar with government and NGO welfare schemes. Water scarcity had been a major challenge for these farmers, but the watershed concept provided a solution, and the land management technologies had improved the quality and yield of their crops. The once meek and unnoticed Muruheshwari is now looked up to with respect and gratitude.
Odisha Case Studies
Women Leaders
Case Studies from India

Ms Chitralekha Mohanty
Residing at: Nenti, Konark district

Chitralekha Mohanty, married with two daughters, and who lives in a joint family, has this to say for herself, “I am very loyal towards agriculture and am always headstrong to do something different in agriculture, and work hard for my village.”

Independent and determined

The two words above describe Chitralekha, who owns 2 ha (5 acres) of farm land, and proclaims with pride that she supervises work on her farm by herself, without even asking her husband for help. In the state of Odisha where she lives, rural ladies are not generally employed in income generating activities, and no support is forthcoming to empower them. Chitralekha does work with a group of ladies though, those with no family infrastructure, and who work hand-to-mouth for a living. Chitralekha is covertly happy that her outward show of managing her own farm is actually allowing her to provide employment to these women.

Empowering women farmers

Chitralekha’s land lies near Konark, which is either affected by floods or by drought, not suitable for rice. For this reason Chitralekha wisely chose to cultivate vegetables and fruit -- brinjal, pumpkin, okra, green chilli, banana and papaya. She took an initial loan from a bank, and once stable, she started a self-help group for women farmers. She also arranged for them to receive a primary education to teach them reading and writing – a fact that spurred quarrels with their families, who were not used to the idea of educated women.

Chitralekha is also a member of Bharat Krushak Samaj (BKS), an NGO that provides her with financial help and field workers when she needs them. She says she is indebted to BKS for her ongoing success.

Chitralekha’s parents died when she was very young. She had to fend for herself, so joined a social organization to earn a living and support the education of her brothers, her sister, and another poor family. She then opened an agricultural school, Manno Gyan for a group of poor lady farmers. Today, her dream is to start a lady’s wing for agricultural advice, and she invites agricultural advisors to visit her village with a view to helping these women.
No task impossible

Ms Jayanti Majhi
Residing at: Mandiarucha in Nuapada district
Project: Introduction and Expansion of Improved Pigeonpea (Arhar) Production Technology in Rainfed Upland Ecosystems of Odisha is funded by the Government of Odisha under the Rashtriya Krishi Vikas Yojana (RKVY)

In rural Odisha, migration of male members of the family increases the burden on the women of the household. Jayanti Majhi, resident of Mandiarucha village, Sinapali block, and Nuapada district of Odisha was no exception. Her husband would often migrate to neighboring states for wage labor. Hence, the entire burden of looking after the family, including her in-laws and her small child, cultivating the fields and all other tasks fell on her.

Seed production program

Though she has studied only up to seventh grade, she actively participated in the ICRISAT project for pigeonpea cultivation when it was introduced in Odisha. She cultivated the Maruti variety of pigeonpea under the certified seed production program. She accurately followed the entire package of practices recommended by ICRISAT. This gave her good yields and consequently good returns.

She received ₹30,640 for her sale of certified Maruti seeds, which she sold to ICRISAT. Of this amount, she put aside ₹7,500 as savings and used the remaining amount for the construction of her house. Her family was delighted at her success and how it translated into their prosperity.

She displayed good leadership qualities throughout and led the village self-help group, taking part in trainings and becoming a source of inspiration for other women in her village. She is the secretary of the self-help group, maintains all records and manages the group. In her words, “If a woman is confident, there is no task she cannot do equal to a man.”

Her next steps are to encourage her community members to stop migrating out and make them realize the opportunities available in the village itself.
Women Leaders
Case Studies from India
Maharashtra Case Studies
Mandabai Bhikaji Kale is a 45-year-old framer from Bazar Wahegaon village. She has studied till eighth grade and is a HOPE Project beneficiary from the year 2009.

**Sorghum seed bank**

In Marathwada region, Jalna district has been facing severe drought from the last three years. *Rabi* (postrainy) sorghum crop grown during these years with local varieties and farmer practices were damaged at the seedling stage resulting in severe shortage of seed for the subsequent season. On the other hand, crop grown with improved varieties and recommended production technology under HOPE project gave satisfactory grain and fodder yield under famine conditions. Farmers, both men and women, were trained in scientific method of production technology and seed produce, sowing seed of improved varieties for use in subsequent seasons. These trainings, particularly with respect to the self-help group members of Mandabai Kale, have given valuable dividends in the form of women saving the seed as a regular practice.

Mandabai Kale prefers *rabi* sorghum varieties based on grain and fodder quality rather than yield for saving the seed. She gifts *rabi* sorghum seed to relatives and friends on different occasions and also earns two to three times more profit through sale of saved seed. This activity helped in seed multiplication and increased the socio-economic status of women farmers. Mandabai has been featured in local newspapers and has been recognized by the government of Maharashtra for her work.

**Memberships, initiatives and training programs**

Mandabai has a list of achievements to her name. She is member of Kamdhenu Surabhi Mahila Bachat Gat (SHG) for the last four years. She is a member of Vanrai (NGO) which works on soil and water conservation, tree plantation, rain water harvesting, sanitation and no smoke *chulha* (earthen stove). She participated in construction of Vanrai Bandhara (nala bunds) with Vanrai members. She promotes biogas plant and sanitation (construction of toilets with the help of CTR). She has set up a biogas plant in her house utilizing sewage water and farm yard manure. She also popularized the use of chaff cutter for fodder processing. Mandabai organizes training programs for women farmers through the SHG. She also organized a tailoring training program with the help of the District Business Center and organized training on soybean and *aonla* (Indian gooseberry) processing through Krishi Vigyan Kendra (KVK), Jalna.
Out of purdah and into social work

Ms Rekha Jainarayan Jaiswal
Residing at: Kinkhed in Akola district
Project : Village Dynamics in South Asia, Maharashtra

Rekha Jainarayan Jaiswal, from Akola district of Maharashtra, has studied up to 12th Grade. Her husband, Jainarayana Jaiswal’s main occupation is farming although he is the Police Patil of Kinkhed village. She has a married daughter and a school-going son.

Rekha is from Kalal caste which practices the purdah system. It was only after 15 years since her marriage that she was able to come out of it. When her first child was enrolled in school, she encouraged her child to participate in each and every activity and this brought her into close contact with the school teacher. With the help of the school teacher and support from other women she became a member of the Indira Mahila Mandal in 1991. From then on her social work started.

She worked as president of Indira Mahila Mandal in 1991 and joined an SHG in 1999. Now she is the president of the SHG and also a member of the dispute resolution committee of the village. She is also a member of the farmer school run by the block agricultural department and a member of the community knowledge center.

Rekha tries to solve the problems of women from Kinkhed village through the Mahila Mandal, SHG and other activities. She has brought in awareness among women on the importance of saving and education.

Rekha is a fine example of a woman who has been able to rise over gender restrictions. Her husband supports her in every activity she undertakes.
Rising above social taboos and gender issues

Ms Sunita Suryakant Nanaware
Residing at: Shirapur in Solapur district
Project: Village Dynamics in South Asia, Maharashtra

Sunita Suryakant Nanaware from Shirapur village is a widow from a minority caste. She has a daughter and a son. Her son completed his PhD from Solapur University and both son and daughter-in-law are working as teachers. She has purchased 10 acres of land in the village and now engages in farming and social work. She has devoted 8 acres for sugarcane cultivation and grows limes on the rest of the land. She also has three crossbreed cows. All the 10 acres are on drip irrigation.

Gender bender

Way back in 1995, Sunita was the first lady sarpanch of Shirapur village. Earlier there were women who were elected as members of Gram Panchayat but they never came to the office and never participated in the decision making process. In 1997, a hail storm resulted in the death of two people and widespread damage of crops. During that period she was the Sarpanch. She met the Chief Minister of the state who sanctioned a special package from the state government for the village.

While working as Sarpanch, Sunita used to actively participate in meetings and used to give suggestions in meetings and also takes decisions. This was not liked by some people in the village given that she is a woman and a widow at that. In some villages, widows are considered ‘inauspicious’ and are accorded a low social status, Sunita was able to bring about a change in the village people’s mindsets.

An active leader

Currently, Sunita is a member of different committees at the district level. She is chairman of the village Mahila Mandal, secretary of one SHG, member of District Cooperative Dairy, member of District Judicial Committee and member of Block Market Committee.

Sunita has studied up to 12th grade and she always speaks on women’s problems in the Gram Panchayat. She promotes the Mahila Mandal in the village and for this she conducts various training programs for women and encourages them to start small businesses.

Sunita, who is from a minority caste and a widow, has proved that though gender issues can be a hurdle, it is possible for women to overcome them and emerge as community leaders.
Breaking the shackles of gender-based traditions

Ms Kamal Manohar Kadu
Residing at: Kanzara in Akola district
Project: Village Dynamics in South Asia, Maharashtra

Kamal Manohar Kadu from Kanzara, Maharashtra, has studied up to 11th Grade. Her husband Manohar Natthuji Kadu is a farmer. They have two children. Earlier, she was living in a joint family and agriculture was their mainstay. In 1996, Kamal, her husband and two sons had to move out due to family disputes. It was a difficult year for her as her two sons were studying 12th Grade and 10th Grade and her husband had been hospitalized for four months following an accident. She survived by borrowing money from relatives. Meanwhile her children completed their schooling and the following year Kamal and her husband started working in the fields again with renewed energy. It was an unforgettable year according to her as it taught her many things in life. From the next year onward they were able to get their highest produce from agriculture. Her husband received the Progressive Farmer award and was even interviewed on national TV.

Kamal comes from a society where women cannot step out of their house without the permission of family members. It took her five years to convince her husband and family that they had to change with the changing times.

Farmer Field Schools

Four years ago. Kamal started the Farmer Field Schools (FFS). She conducts classes once a week for the village farmers. She imparts education on various subject matters like seed information, pest control, water management, spraying appliances, intercropping techniques and soil fertility management.

She has completed a 15-day certificate course in Water and Land Management Institute (WALMI), Aurangabad (MH).

The SHG connection

Kamal has opened four self-help groups (SHGs) in Kanzara. Since 2004, she has been the president of Jageshwar Maharaj Women SHG. Since 2009 she has been the secretary of Punjaji Maharaj women SHG. Since 2011 she has been the president of Radha Krishna Farmers SHG and is currently the president of Kulswamini Women SHG. She tries to inculcate the habit of saving among the women in the village.

Social campaigns

Kamal takes an active part in all village activities. She attends village assembly meetings. Last year she started an ‘Alcohol Free Village’ movement with a group of 100 women. She also undertook village sanitation – spraying of disinfectant, water tank sanitation, chlorination of water, etc – by taking up the initiative in the village assembly. She advises labourers and farmers on how to improve their economic conditions. She is also the president of two bhajan (religious) groups in her village. She lays emphasis on the education of children to make them physically and technically sound so that they can stand on their own feet.
A Scheduled Caste woman’s fight against poverty in her community

Usha Vilas Sarvagoud is a Scheduled Caste (SC) woman from Shirapur village. She studied up to fourth grade. Her husband works as a mason and she helps him in his work. She has three daughters and a son. All the daughters have completed their 10th Grade and are married. Her son completed his 12th Grade and is now doing a technical course in ITI Mohol. She owns 1.5 acres of land that was given to her by the government, which currently is lying fallow. She is a member of the drinking water supply committee of the village.

First SHG in the village for Scheduled Caste women

She started a self-help group (SHG) in 2003. She is the first SC woman in the village to start an SHG for SC women in the village. She attends many training programs organized by the government.

In 2003 the Government took the initiative for opening an SHG in the village. Usha started the first SC SHG with 11 women. Before that no woman from the SC caste had started a savings account in the bank. They were totally dependent on moneylenders and landlords.

She personally met some bank officers and got subsidized loans sanctioned to her SHG for purchasing buffaloes and goats. All 11 members purchased buffaloes and goats but most of the members were landless. So because of the problem of finding grazing land, some members sold their goats and buffaloes.

Most of the SC people are landless. They work as agricultural labor or non-farm workers. When they need money nobody is ready to give them loans. So, through the SHG the SCs have begun to save money and are also utilizing the credit schemes.

Campaign for ban on liquor

Usha is a member of the village campaign fighting for a ban on liquor. In her village, the men from SC community are addicted to liquor and often beat their wives. Even young boys have started drinking despite the fact that they have not attained the legal drinking age. Usha’s husband too was a drunkard. So she first got her husband to stop consuming alcohol and started spreading awareness among the women and men in the village on the evil effects of alcoholism. She encourages women to fight for a ban on alcohol in the village. Her goal is to increase the decision making power of women at home, in the community and society.

The importance of education

Usha had studied only up to fourth grade because of poverty, however she ensured that her daughters completed their 10th Grade and took up tailoring classes. Her son is now going in for technical education. She believes education of children and small savings can help the people of her community to come out of poverty.
Ms Latabai Balasaheb Kakad
Residing at: Dolasane in Ahmednagar district
Project: Sustaining Agricultural Productivity and Improved Livelihoods - Ahmednagar watershed, Maharashtra

Latabai Balasahed Kakad lives alone in rural Maharashtra, but not from choice. Her husband died 24 years ago, her daughter is married and lives elsewhere, and her two sons have jobs in the city. Latabai has 0.8 ha (2 acres) of agricultural land, which she manages on her own.

Water, water everywhere
Latabai is a member of the Kalbherav watershed development committee. She took the initiative and played an active part in watershed interventions such as selecting sites for check dams. Due to her efforts, check dams have been built, and women use the water for drinking, domestic purposes, and washing cattle. The presence of check dams have caused water tables to rise in bore wells and dug wells. She is the first farmer of the watershed project to construct a farm pond in her field, and she motivates other farmers to do the same. She grows onion, tomato, groundnut, wheat, chickpea and pearl millet.

Latabai is an active watershed committee member, and is always encouraging her fellow farmers to participate in watershed projects to improve their livelihoods and be financially independent. She regularly attends meetings of her self-help group and the village development committee. She does not hesitate to raise issues of general concern, asks for interventions at the right time, and is always willing to adopt new technologies.

Multitasking keeps her going
Latabai is literate, bold, a good communicator and time manager. Little wonder she brought up her children almost single-handedly and gave them a good start in life. Not one to wallow in self-pity and loneliness, she took a loan from the self-help group called Dhan Laxmi Bachat Gat, and invested it in a grocery shop, which she runs. She borrowed money and bought a cow and a goat, and earns a lot from sale of the calves and milk. She also takes on sewing jobs, and interestingly, took the initiative to improve a cemetery in the village.

Latabai is looked up to as a leader among the women of the village. They consult her for advice to solve their problems, and are willing to take part in the meetings she organizes to manage major issues such as livelihood improvement, sanitation, and water. Her favourite subject is the management of water and maintenance of the wells they so painstakingly built for their village.
Harkubai Karbhari Pardhi lives with her husband, son, daughter-in-law and three grandchildren. She is illiterate. The family owns a 2 ha (5 acre) plot of agricultural land. They live in a Scheduled Tribe settlement in a remote area of Dolasane village.

**Learning from the watershed project**

Harkubai and the adults in her family work in their own farm and also work as agricultural laborers in their village and in nearby areas. She was also part of a workforce that constructed a check dam. They also constructed a check dam near her farm, so now she has water in the nearby well, enough for her farm.

There are other wells near the settlement, and the tribe now has sufficient water for the next eight months. Under one of the watershed projects, Harkubai planted 350 pomegranate trees a year ago. Seeing the result, she motivates other tribal farmers to grow dryland horticultural crops. With support from a self-help group, Harkubai has started a poultry farm in the backyard of their home. She also grows pearl millet, green gram, sesame, chickpea, wheat, tomato and onions.

**Tribal tenacity**

Harkubai is a tribal woman around 60 years old, and lives in this remote tribal settlement without transportation facilities. She is poor, illiterate and socially backward, so getting used to a village level institution was initially a major challenge. But Harkubai has will power; she regularly attends the watershed and village development committee meetings, raises appropriate issues and takes the initiative to motivate others. She takes the responsibility to carry information from the project field staff to the members of her settlement. She is an organized woman, and takes follow-up action when necessary.

Harkubai is hard working, has good communication skills and a sense of humor. She has become an enthusiastic leader of her settlement, giving guidance and suggestions to other women for development of the village. She motivated the people of her tribe to participate in watershed work under the project. What brings the biggest smile to her face is that she has encouraged her son to construct a house with a well, and, an innovation for tribals, a toilet!
Sharda Bai is from the Gond tribe. She and her husband Bhagchand own 2 hectares of land in Siyalwada village. She has three children. Before the Model Watershed Development project was introduced in her village, her land was under single cropping area and the productivity was very low. She and her husband would tend to a single crop and in the off season they would work as unskilled laborers. With their meager earnings it was difficult to make both ends meet.

**Enhancing productivity using ICRISAT’s BBF system & Nutrient Management**

In 2011, Bhopal Yuwa Paryavaran Shikshan Samajik Sansthan (BYPASS) with the aid of ICRISAT discussed Productivity Enhancement trials with the farmers of the village. At that time, Sharda Bai took keen interest and learned about micronutrients. She was ready to try out the fallow management trial on her land.

Sharda used ICRISAT’s Broad Bed Furrow (BBF) system for soybean and chickpea cultivation. This year she practised double cropping and as a result of nutrient application and water conservation she got 25% more yield.

From 2013 she started paddy cultivation in the lower part of the land with the help of Nutrient Management. The multi-cropping enhanced her earnings because of which she was able to purchase a flour mill which brings in additional revenue.

**SHG loan for vegetable cultivation**

Sharda Bai is also a member of Pooja self-help group (SHG). She took a loan from the SHG for vegetable cultivation in 2012 and took land on rent for raising vegetables. After meeting the food requirements of the family, she would sell the rest of the vegetables at the weekly **haat** (market).

Despite coming from a backward tribal community, Sharda has overcome illiteracy and her shyness and is now a leader in her community. She is a quick learner and is teaching what she has learned to other small holder farmers in her community. Trying to emulate her success, other women in her community have started vegetable cultivation using the methods she had taught them.
Kaliya Bai is a self-help group leader in Nayakheda village. She is from the Gond tribe and lives with her son. She owns 0.8 hectares of unirrigated land. Since her patch of land is very small she works as an agricultural laborer in the same village.

In 2010, she came to know about self-help groups (SHGs) through Bhopal Yuwa Paryavaran Shikshan Samajik Sansthan (BYPASS) -ICRISAT initiatives. She started Pooja SHG and is currently the treasurer. There are 16 members in the SHG and all are from the tribal community. They have collected ₹15,360 till now.

**From SHG treasurer to entrepreneur**

Earlier, agricultural labor was her only source of income and it was very difficult for her to save money. With the help of the SHG, she took a loan and purchased material for a kirana (grocery) shop. She runs her shop in the mornings and evenings and works on the farm during the day.

Soon after she finished the nutrition training conducted by BYPASS, she started preparing mixed grains flour (Wheat-Gram flour, Wheat-Gram-Soybean flour). She prepares packets of Desi Gram, Asha Tuar and black gram and sells the items at the Science Fair in Bhopal and Sagar. Through her efforts she is not only earning money but is also spreading awareness on nutrition in her community.

With the increase in her income, Kaliya, who was abandoned by her husband, is confident about providing a good education to her only son. This is a great achievement for a poor tribal woman, who earlier never dared to move out her village alone and never participated in community level programs.

Kaliya now manages her SHG and motivates the women in her village to save money regularly. She works hard, managing her kirana shop and taking up labor work under watershed activities. She travels to Bhopal and Sagar four times in a year to sell nutritious food items at the Science Fair. State minister of S&T, Govt of MP visited her stall in 2012. Her community is proud of her.

Kaliya says that illiteracy has been the biggest hurdle in her life and therefore it is her goal to provide good education to her son.
Ms Geeta Bai
Residing at: Siyalwada in Raisen district
Project: Nine Model Watersheds, MoA

Geeta Bai is from the Gond tribe of Siyalwada village, Raisen district, Madhya Pradesh. She is an elected ward member of the Gram Panchayat and works as an agricultural laborer. She is also member of Model Watershed Committee Siyalwada and member of a self-help group (SHG). Her husband Omkar Singh is also a farmer and agricultural laborer. They have three children and own 2 hectares of land.

Model Watershed Project changed her attitude

When the Model Watershed Project started in the village in the year 2010, Geeta Bai joined the women SHG. As SHG representative, the community elected her as member of Model Watershed Committee, Siyalwada. Since then her life has changed. As a committee member she regularly participated in all meetings and Farmers Days that were organized. She actively participated in labor work as well as productivity enhancement trials. She learned how to produce vermi compost and sells it at the Science Fair in Bhopal for ₹10 per kg. She raised a nursery of 1,500 *Gliricidia* saplings and distributed plants to farmers.

Geeta voices her community concerns

Earlier Geeta Bai never participated in meetings but soon after becoming a member of the Watershed Committee, she started participating in Gram Panchayat and Gram Sabha meetings to raise the proposals of tribal families under Mahatma Gandhi National Rural Employment Guarantee Act for Kapil Dhara Wells. She raised four proposals for water storage structures in her village and took responsibility for the completion of all structures under Watershed Development Project. Through her leadership role all SHG women are involved in day-to-day watershed development activities in the area. It is a great achievement for a tribal woman from a poor socio economic status to stand as a representative in a multi-village forum as she had to overcome issues of male dominance and caste dynamics. Earlier even the Gram Panchayat post holders used to avoid her. She had no awareness about development schemes for tribals and hence could not fight for their rights and entitlements.

An effective leader

By taking part in the SHG and Watershed Development Project meetings, she was able to update her knowledge. Her confidence increased because of the support she got from the SHG members. Seeing her actively participating in the various meetings, the tribal families in the village approached her to raise their proposals at these forums. When her proposals got passed in Watershed Committee and Gram Panchayat, she gained confidence as a community representative.
Kamla Bai is from the Gond tribe and is the leader of the self-help group (SHG) Aarti. She is married and has three children. The family owns 5 acres (2 hectares) of land. Agriculture in the region is totally rainfed and it is difficult to go in for double cropping. However because of the watershed interventions, 50% of the land is now under double cropping.

ICRISAT’s watershed projects ushers change

As the family had a small parcel of agriculture land and were into single cropping, both husband and wife worked as farm laborers in the same village and even in nearby areas. With the introduction of ICRISAT’s model watershed project, their life has changed.

Earlier, maize, soybean or chickpea were the staple crops. Also agricultural productivity was very low and they used cow dung and agri-waste as fertilizer. They had never used improved variety seeds.

After the Model Watershed project they came to know about
- Improved variety of seed and how to use them
- Nutrient management for maintaining good soil health (Specially macro & micro nutrients)
- Broad Bed Furrow (BBF) system of water management for improved moisture conservation and drainage

Kamla Bai participated in all trainings and farmer days with her husband. They participated in 2011-2012 for Technology IV and Integrated Nutrient Management. Now they are convinced that with improved technologies they can get better yield in both seasons. Now Kamla Bai’s family follows improved practices and they are growing chickpea, soybean and paddy crops. Due to runoff harvesting and water conservation their bore well water level increased and they are now growing wheat too.

Increase in income

Both husband and wife work in the model watershed project and they are getting good wages.

In 2010 Kamla came to know about the concept of SHG from BYPASS-ICRISAT initiatives. She is currently secretary of Aarti SHG.

There are 15 members in the SHG and all are from the tribal community. They have collected ₹14,800 till now. Kamla is trained and is good at keeping the minutes of the meetings and other SHG records.

She took a loan from the SHG and purchased a sewing machine. Through her tailoring work she earns an additional income of about ₹600 to 800 per month. Earlier Kamla had to mortgage her jewellery to get a loan at a very high interest rate, now through the SHG things have changed. Now, she is able to think of her children’s education, cleanliness and providing healthy and nutritious meals to her family.

Through her hard work and honesty, she has won the appreciation of the villagers. She teaches other SHG women how to keep records. Even illiterate men in the village come to her for getting applications written. She now participates in all meetings and events in the village with confidence; earlier she and the SHG members would never sit together with men in the meetings.
Gindo doubles her income using better agricultural practices

Fifty-year-old Gindo from Alwar district in Rajasthan lives with her husband, two sons and a daughter-in-law. Her husband and elder son work as construction laborers, while her daughter-in-law and she take care of their farm and home.

Adoption of modern agricultural practices

Under Sehgal Foundation’s Krishi Chetna project, the woman farmers from the village were educated on modern agricultural practices. “A year-and-a-half ago, people from the foundation came to our village and educated us on soil fertility, use of fertilizers and seed quality. They also gave us fertilizers for a 1-acre land sample to demonstrate the effect,” Gindo says, observing her ripe millet crops.

Yield increase attracts more farmers

She is also in touch with Krishi Sakhi of her village for updates on the beneficial practices in agriculture and government schemes for farmers. The knowledge of better farming practices, under Krishi Chetna project, helped her improve crop yields by around 50% that translated into better household income for Gindo. “With added income, we don’t have to struggle for the basic necessities,” she says.

Today, Gindo uses modern practices in a major portion of her farm. She says that because of the results, women who were earlier reluctant to adopt new practices are coming forward and taking part in the Krishi Chetna project. The project data reveals that 40-50% increase in the millet yield and 30-40% increase in mustard crop was witnessed across the region, increasing the income of many households.

Self-help groups to the rescue

Her transformation from a voiceless rural woman to an aware woman farmer of Mauya village was not an easy one. She had to fight the cultural conservatism, besides the family’s reluctance to rise beyond the social limitations set for women in Mauya. By persuading her family and with the help of Ibtada, she formed self-help groups (SHGs), to cope with additional expenses in the family. Whether it was a marriage in the family or sudden illness, most often the family had to beg the zamindars for either an advance or a timely disbursal, which often would fall on deaf ears.

Taking the SHG route, Gindo formed a group named Chandni that has 15 members. Initially, it was difficult for her to gather women to form the SHG and asking them to contribute a small amount on a weekly basis was another uphill task. But with a determined will, she soon crossed the hurdles in her path. Looking at the advantages of SHGs, Gindo later formed three more SHGs namely, Sita, Lakshmi and Mira. “The groups not only help women take care of the family’s expenses but also boost their confidence. They no longer consider themselves a burden on the family’s male members,” Gindo said.

Despite being born and brought up in a traditional Indian village, she has learnt to fight and demand her due. Today, she has a voice, is aware of the modern agricultural practices and applies them on her 3-acre farm to get good crop yields.
Farm laborer transforms into self-sufficient farmer

Ms Anandi
Residing at: Moreda in Alwar district
Project: Sehgal Foundation Unnat Krishi Project

Fifty-year-old Anandi from Moreda village in Alwar district of Rajasthan, once used to work as a farm laborer. Low wages and irregular payment often forced her to beg the landlord for money. Most often her pleas would go unheard. There were days when the members of her family, her husband and nine children, had to go without a meal because they did not have the money to buy food.

Thanks to NGO Ibtada that educated her about the self-help groups (SHGs) and Sehgal Foundation that taught her better farming practices, Anandi, today, is a happy woman. She grows millets, mustard and wheat on the farm. Wherever she goes, people greet her with warmth.

Double the yield

A major stepping stone for women in the village was Unnat Krishi project of the Sehgal Foundation. The project provided SHG women with free of cost fertilizers, as per the requirement of crop (millet / mustard / wheat) and soil. The aim of the project is to educate the women farmers in better agricultural practices. “When I adopted the measures my yield of millet and mustard doubled,” informed Anandi. Earlier she could produce 8-10 quintal of millets but after adopting the new practices the yield had increased to 15-20 quintal. She also persuaded other women in her SHG and village to adopt modern agricultural practices and has been able to replicate the results in 4-5 acres of land. Today, she is a role model to other women farmers.

Formation of SHGs

Recounting her early struggle to persuade the women in the village to form SHGs, Anandi says that nearly all of them had expressed fears of the little money that they had getting robbed. Her plan was to collect ₹ 10 from every house on a weekly basis. This collection was meant to be used, in times of need, by the members. Anandi floated the idea and with repeated persuasion from Ibtada staff members, the women formed a SHG - Savera Mahila Munch, Umrain, in 2000. The group was later registered in 2006.

Her will and determination to give a comfortable life to her children is exceptional. At 5 am, irrespective of the weather, she starts the day by cleaning the house, fetching water for drinking, making food for family, helping children go to school and feeding poultry and dairy animals. She finishes her daily chores before moving to the field to raise crops to feed the family and earn money. With children, ranging from 8 years of age to 28 years, she effortlessly shuffles into various roles of a mother, as per the needs of children.

On the field, she does seeding, ploughing, fertilizing, harvesting, and post-harvesting jobs. With 6 acres of land at her disposal, she produces enough to meet the everyday needs of the family of 11. “We have been into farming for ages but nobody ever told us about the various requirements of soil and benefits of using different fertilizers. When Unnat Krishi people came to our village and asked us to adopt their practices, initially we were reluctant. But gradually, looking at the benefits, we adopted the measures”, she said. The added income helps her to live a dignified life besides educating her children.
Manibai is somewhat of a legend in her village. In the first place she has a large family -- four sons and four daughters, two daughters-in-law and two granddaughters. Her husband is an invalid and unable to work. They own two huts, one house and a store. They also own four cows, 10 goats, eight sheep and one camel, and 5 ha rainfed land, where they cultivate cereals and pulses. Together with the livestock, the land provides a source of food and income – though with such a large family, they still remain poor.

**Empowering women**

Manibai is an honest, brave and confident woman, who has been working hard to improve the lot of women in her village. She played a significant role in popularizing a health, vaccination and family planning program, and encouraged education of girls. She is a member of village development committee (VDC), and worked for cattle vaccination, provision of drinking water, deepening of wells, connection of electricity in the village, a rainwater harvesting structure (tanka) for women and horticulture. She also helped to start an Aanganbadi (nursery school) in the village and worked for the eradication of child marriage and the purdah system. She also helped village women to open bank accounts.

Manibai’s good work was not without problems. When she involved women in a self-help group (SHG) she was harassed by her father-in-law, elder brother-in–law and her neighbors. People taunted her when she was popularizing family planning, and on one occasion she was even dragged out from a car in protest. Despite all these problems she continued her work with moral support from her brother and two brothers-in-law.

**A lady netaji**

Manibai also takes a take keen interest in farming, and has helped in three agri-horti units, 10 nutri-gardens and 30 demonstrations of integrated crop management. She is currently the vice-president of the VDC, and is well known as “netaji” (leader). The villagers want her to contest as Sarpanch (village head) in the next election.

Manibai wants the women to become economically independent and wants them to work on farming, cattle rearing and water harvesting. She asks women to come forward and support the rights of their girls and other women, get educated, participate in village meetings, farmers’ trainings, exposure visits and developmental activities. People now see her as a development activist.
She marches forward

Ms Geeta Devi
Residing at: Govindpura in Jodhpur district
Project: CGIAR Research Program Dryland Systems

Like a soldier with a mission, 31-year old Geeta Devi is focused on improving agriculture with modern innovations and involvement of women, despite age-old restrictions that try to hamper her progress.

Women can play a role in several agricultural activities

Married, with two children, and a husband who works in agriculture, Geeta is determined to bring about better opportunities for women. She arranged meetings of village women, highlighting problems that prevent them from self-dependency. She helped in execution of government schemes for women, and participates in the development of silvi pastures (grass sowing and plantation), solar energy, Farmer Club training meeting, exposure visits to Central Arid Zone Research Institute, Arid Forest Research Institute and Krishi Vigyan Kendras, and has been playing a leading role in forming self-help groups (SHGs). At present she is the Assistant Coordinator of the Govindpura Farmers Club and also a member of the village development committee (VDC) formed by ICRISAT. She is fully involved in implementation and monitoring of the CGIAR Research Program on Dryland Systems (CRP1.1) and motivates other women to participate. These women actively participate and take ownership of the activities such as 30 kharif crop demonstration, creation of three agri-horticultural units, four horticulture units, two masonry check dams, one earthen embankment, construction of two rainwater storage tanks (khadin) and three rainwater storage cisterns (tanka).

Braving opposition

Geeta Devi faced opposition from the old men of the village community who criticized her for not maintaining “purdah” (covering head and face with a veil) and for “brazenly talking to men”. Fortunately her husband and father-in-law supported her actions. She also met with opposition from her maternal side, but after a while they began to appreciate the good she was doing.

She organized a meeting in 2009 to introduce women to NABARD, the national agricultural bank. Gradually people began to have faith in what she was doing, shed their fear of working outside the confines of their homes, left the purdah system, and began to cooperate and appreciate that they could not only contribute, but could also benefit from engaging themselves in the various programs. Although Geeta Devi had a little daughter and was pregnant at the time, the rural women noticed that she still coordinated the work by phone and paper. They have nothing but praise and respect for her today.
Ms Munni Devi
Residing at: Padasoli in Jaipur district

In Padasoli village near Jaipur, traditionally farmers grew pearl millet, sorghum or mung bean. However, the returns from these traditional crops is not very high. When pigeonpea was introduced into the villages by ICRISAT, Munni Devi was the first farmer to take up pigeonpea cultivation.

Munni Devi is a widow who stays with her extended family. In the male dominated society of the region, it is extremely difficult for a woman to take up any kind of initiative outside of household work. Munni Devi broke from the shackles with the hope of leading an independent life – one where she is not economically dependent on others. An extremely hardworking woman, today she fetches the highest yield per unit area in her district, which is strictly a rainfed area.

**Her experiment**

Munni Devi first experimented with growing pigeonpea on a small piece of land. The returns she got from pigeonpea as compared to sorghum (which she was growing traditionally), encouraged her to grow pigeonpea on 5 acres of leased land. She reported a net profit of ₹70,000 per ha from pigeonpea as against ₹10,000 per ha from sorghum and mungbean. She has also introduced in her household kitchen innovative dishes like pakoda (fritters) from pigeonpea flour. Munni Devi’s initiative encouraged more women farmers to get actively involved in pigeonpea cultivation. She has set an example for other farmers not only in her village but also in the neighboring villages to grow pigeonpea on their farms. She also plays a leadership role amongst the women farmers’ group in Padasoli village.

**Healthy mid-day meals in schools**

She also works for a government school, where she prepares the mid-day meal. She makes sure to feed the children with good quality and protein rich pigeonpea dal. She loves the school children as her own and the children affectionately call her *Buwaji* (aunt).

Pigeonpea cultivation has eliminated the drudgery of collecting fuel wood from the nearby forest since dried pigeonpea stalks can be used as fuel wood. Pigeonpea also provides the best fodder for cattle and the dry stem can be used to make the outer and inner wall of their dwellings. Considering the multiple uses of pigeonpea, she considers it a “wonder crop”.

**Additional income**

With the installation of a dal mill in their village, the women are very happy as it means an additional source of income. Munni Devi has also taken the lead to train women farmers from her village in *dal* making, packing and marketing in her area. Her leadership qualities, soft spoken and pleasing nature makes her a natural leader. She is a role model for other women in the village- a widow who manages her own livelihood and that of others. Before ICRISAT’s intervention, farmers had to sell their produce at rates dictated by intermediaries. Today, Munni Devi is very happy, as their produce is being marketed through the Padasoli Krishak Kalyan Samiti, which provides them a fair return.
Gujarat Case Studies
Ms Chandrikaben Mukeshbhai Luhar
Residing at: Gajanvav in Gujarat district

For Chandrikaben Mukeshbhai Luhar of Gajanvav village in Gujarat, India, every little penny counts. Almost 13 years ago, she started small, saving ₹ 10 in the ‘Bachat Mandal’ (savings group) every month. The savings plus the income from farming are helping her put her daughter through college.

Luhar joined the Self Employed Women’s Association (SEWA) and attended ‘Jeevan Shala’ – the association’s school where she picked up reading and writing skills. The life lessons helped, and soon enough, the 38-year-old was able to form her own ‘Bachat Mandal’ encouraging several other women to start saving.

“Initially, my family was less supportive. But I had the will to stride ahead. All the skills acquired at the Jeevan Shala helped me prosper and now I am supporting my family financially too,” Luhar says.

A tough beginning

Coming from the luhar (carpenter) community she had little knowledge of farming. Her family, economically deprived, experimented with various small-time professions. SEWA improved her knowledge on farming, encouraged her and now she is a master trainer in agriculture.

“I attended a series of training sessions on inter-crop management, seed multiplication, and marketing. I did not own any land so I leased it and cultivated sesame and grain. Excess rains destroyed our sesame but the grain survived. We got a good yield of grain that year. Thereafter, my husband encouraged me to take to farming. I opted for a mini MBA, and training on marketing and costing and acquired computer skills,” she adds.

A new vision

Luhar took part in several meetings of SEWA which she says redefined her perception and personality. Support and guidance from the Association helped her open up. “I was passionate about academics, but circumstances forced me to give them up. I am fulfilling my dreams helping my daughter with her education. My son, after receiving quality education managed to secure his livelihood. To me, SEWA is the platform which gave me new vision,” she says.

Lending a helping hand

As a master trainer, she is now providing seasonal and pre-seasonal training to villagers helping them with future and spot price of various crops in 30 villages. More than 3000 farmers on four crops, gum, guvar beans, castor, two types of cotton benefited from the session.

Luhar has been training local women in computer skills helping them fetch data entry jobs. She started her own computer training institute in her village. “I use internet to improve my knowledge and understanding on various issues. I also managed to earn ₹ 3000 every month from the school,” She says.

Luhar now owns a piece of land and agriculture has become her profession. For her courage, she earned respect, and her confidence gave others hope. She took part in several of SEWA’s activities in Nepal and Assam, New Delhi and Kashmir in India.

“Nothing is impossible,” she says adding “Savings are essential, even if they are small. Someday they will help fulfill your dreams.”
Kokilaben Amratbhai Makwana spent much of her childhood as a farm laborer. Abject poverty forced her to quit school and work as a daily wager to feed her parents and four siblings. The quandaries continued even after wedding for Makwana, a resident of Pisawada village, Gujarat.

“My husband too dropped out of school and the living conditions at my in-laws place were not any good. My husband’s wages did not suffice the family needs. So, we rested our hopes on agriculture,” she says.

Support for her came in the form of SEWA’s activities. The Association established a Kishori Mandal (Adolescent Girls group) in her village. Members from SEWA organized several meetings and one such session in 2003, helped her understand the importance of savings. She took more interest in the Association’s activities and experienced change.

Sharing her success

Makwana has so far organized 450 self-help groups for ‘ATMA’ program run by the government, from her village and the nearby 20 villages. These groups help the farmers gain collective strength and bargaining power. They also help the farmers avail government subsidies to receive seeds, fertilizers, training and even loans. The groups provide a platform to farmers to come together and discuss good practices, market information, challenges and solutions in farming.

Makwana also formed Khedu Mandal (farmers’ group) in her village by the name Pisawada Khedu Mandal. The group makes collective purchases of inputs like seeds, fertilizers to availing technical trainings and post harvesting processing. She also helped farmers avail loans from nationalized banks. There are currently 11 members in the Khedu Mandal of which six are women. The group is also involved in spreading the message of not selling farm land to outsiders and for non-farm purposes.

“In 2010 I underwent training from Anand Agriculture University as a Master trainer and now I am running my own Agriculture Field School in my village. I have trained more than 4,300 farmers on integrated crop management, seed multiplication and greenhouse technologies,” she said.

“I also coordinate with government offices to learn about welfare schemes,” she adds.

Makwana inspired several farmers to take up agriculture. When the women were reluctant to take up work in villages, she was called in to motivate them.

For the past five years, she has been cultivating improved and certified Gurjari variety paddy and GJ496 variety in wheat. The net benefits for her work stand at ₹ 80,000 this year.

Recognizing her efforts and hard work, the district level committee of ‘ATMA’ program named her the ‘Best Farmer’ in the district. She was the only woman farmer amongst 87 winners!

“People know me as agriculture master trainer and because of my work a different identity of mine has been created. Seeing the value of knowledge now I want my daughter to pursue quality education,” she says.
The desire to do something for the betterment of the community drove Lilaben Kanuji Thakor to break the shackles in the very conservative Thakor community in Gujarat. The 52-year-old from Adraj Moti has been a member of SEWA for the last 15 years.

“After my wedding, I moved to my in-laws place and had to take care of my husband’s three younger sisters. We inherited 3 bigha land in which we started cultivation but had very little income come out of it,” she says.

“For everything, we had to take the approval of the men in the house. I always wanted to help in my own ways. Despite some opposition at home, I began attended training sessions on agriculture and certified seed, planning, budgeting and marketing. Now I can see the transformation as it is happening,” she adds.

**Working towards betterment**

Though only educated till Grade VII, she is now training the community women farmers of 10 villages.

“Stop wishing, start working -- is what I learned. Only that can make a difference,” the 52-year-old says.

Thakor created an identity for herself. Owing to her Gandhian philosophy, she cut down on expenditure and unnecessary assets. She saved more to increase the 3 bigha land to 20 bigha. She is now into contract farming helping small farmers make a living.

“I wish to see more women in agriculture. There is a good amount of support available and the scope of prosperity in the profession is high. Every women needs to garner enough courage and show more commitment towards work,” she says.
Securing livelihoods using agriculture

Ms Nanduben Govindbhai Baria
Residing at: Kukna in Gujarat district

I may not change the direction of the wind, but I can adjust my sails to always reach my destination – says Nanduben Govindbhai Baria from Kukna in Gujarat. From humble beginnings as a daily-wage farm laborer, she rose from a life of poverty to one of wealth. Now she is growing vegetables on her patch of land and is able to provide others with employment opportunities.

“The day I met a member of Sukhi Mahila Sewa Mandal (District Association) everything changed for me. She shared details of the activities carried out through the Association and also spoke well of Bachat Mandal (savings group). I was inspired to join the Bachat Mandal and formed a savings group of my own. Growing banana, cotton, groundnut and paddy crops helped me repay my loans. The trust I placed in agriculture yielded good results,” she said.

Understanding integrated farm management practices

Her association with SEWA, secured her knowledge on various government schemes. She also attained information on drip-irrigation and sprinklers in fields and understood integrated farm management practices. She is now a master trainer in agriculture. In 2009, as a reward for her efforts she received the City Microfinance Award.

Currently, her group is in the process of setting up two new Community Learning and Business Resource Centers (CLBRC) and will be responsible for training and membership.

“To taste success in your life you must possess passion. Proper planning too is needed,” she shares with other women of the group.
Ms Shardaben Kesrisingh Makwana
Residing at: Manpura in Gujarat district

Shardaben Kesrisingh Makwana of Manpura village, Gujarat, has been with SEWA since 2001. She underwent various trainings on savings and marketing of SEWA products through Village Resource Centres which helped her in increasing production, reducing cost of inputs, and improving quality of production.

She has also helped the poor in her community to become members of savings groups and avail credit facilities. She encourages them to use SEWA products and urges them to get insurance coverage. She also tells them the importance of taking up managerial and technical trainings.

Currently, she owns 1.5 bigha of land and cultivates brinjal, cluster bean, bitter gourd, tobacco and millet. She earns approximately ₹ 48,000 every year.
Jharkhand
Case Studies
Sabita Nayak of Kharsawan is a mother of two daughters. Her husband is jobless. The main source of income for her four-member family is agriculture.

**Off season crops bring in the income**

She cultivates maize twice a year and does not let her land lie fallow at any time. She is the only woman in the village who undertakes cropping throughout the year. Being a self-help group (SHG) member she also imparts training to other women in the village.

Since she grows crops even during the off season she is able to procure a better price. She has been able to increase her income through dryland crops.

**Role model for other women in the village**

Sabita’s daughters go to school and she has built a *pakka* house for her family. She has even bought a computer for her children. Being an SHG member, she took a loan and purchased a pump for irrigation purpose. She also fenced her field to prevent animals from grazing in her fields.

Sabita is a hardworking woman. She convinced her mother-in-law to allow her to go and work in the field daily and in order to go to the field she cooks food early every morning for all her family members. She also imparts training to other SHG members on agriculture and helps them physically and financially when they undertake agriculture work. People seek her help on agriculture-related issues. Farmers borrow agriculture equipment from her. She is respected in her village.

**Just do it!**

Her message to other women is to step out of the confines of their houses and do something on their own. This not only helps them increase their income but also helps them in gaining respect in society.
Women Leaders
Case Studies from India
The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that conducts agricultural research for development in Asia and sub-Saharan Africa with a wide array of partners throughout the world. Covering 6.5 million square kilometers of land in 55 countries, the semi-arid tropics have over 2 billion people, of whom 644 million are the poorest of the poor. ICRISAT innovations help the dryland poor move from poverty to prosperity by harnessing markets while managing risks – a strategy called Inclusive Market-Oriented Development (IMOD).

ICRISAT is headquartered in Patancheru near Hyderabad, Telangana, India, with two regional hubs and six country offices in sub-Saharan Africa. It is a member of the CGIAR Consortium. CGIAR is a global research partnership for a food secure future.

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