

Women Transforming Indian Agriculture



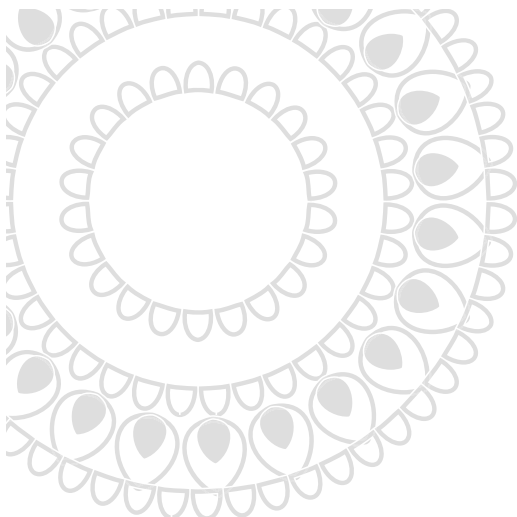
A Collection of Case Studies from
Indira Kranthi Patham of Andhra Pradesh and
Kudumbashree Mission of Kerala



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April 2013



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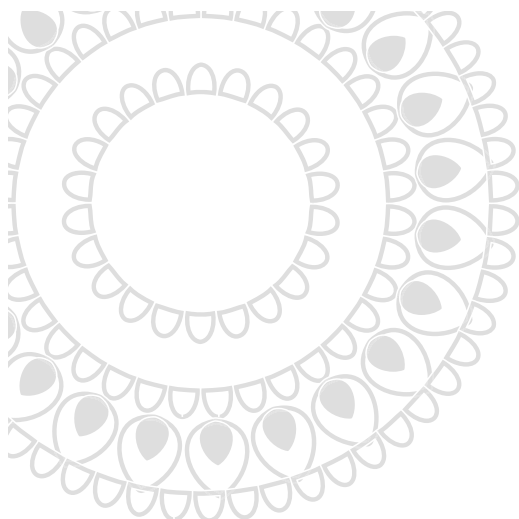
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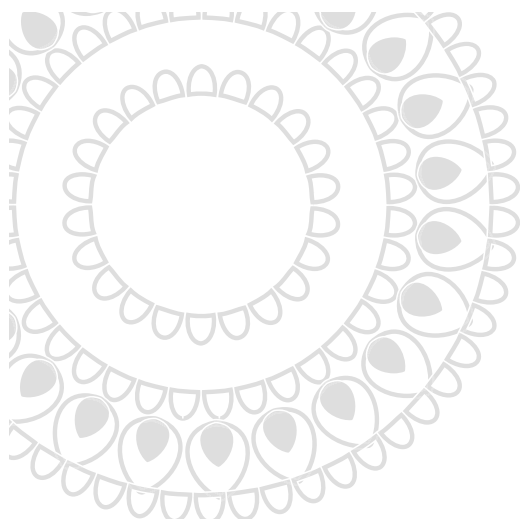
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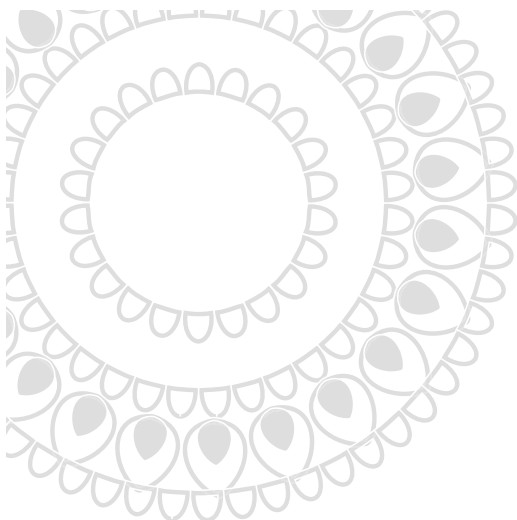
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Acronyms



ADS	Area Development Society	MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
BPL	Below Poverty Line	NABARD	National Bank for Agriculture and Rural Development
CA	Cluster Activist	MS	Mandal Samakhya
CDS	Community Development Society	NHG	Neighbourhood Group
CMSA	Community Managed Sustainable Agriculture	NPM	Nutrient and Pest Management
CRP	Community Resource Person	POP	Poorest of the Poor
DRDA	District Rural Development Agency	SERP	Society for Elimination of Rural Poverty
FFS	Farmers' Field School	SHG	Self Help Group
ICRISAT	International Crop Research Institute for Semi Arid Tropic	SMS	Sashya Mitra Sangha
IKP	Indira Kranthi Patham	SRI	System of Rice Intensification
IPM	Integrated Pest Management	VA	Village Activist
KDS	Kudumbashree	VFPCK	Vegetable Fruit Promotion Council of Kerala
KVK	Krishi Vigyan Kendra	VO	Village Organization
JLG	Joint Liability Group	ZS	Zilla Samakhya
LSG	Local Self Government		
MKSP	Mahila Kisan Sashaktikaran Pariyojona		



0.0 Executive Summary



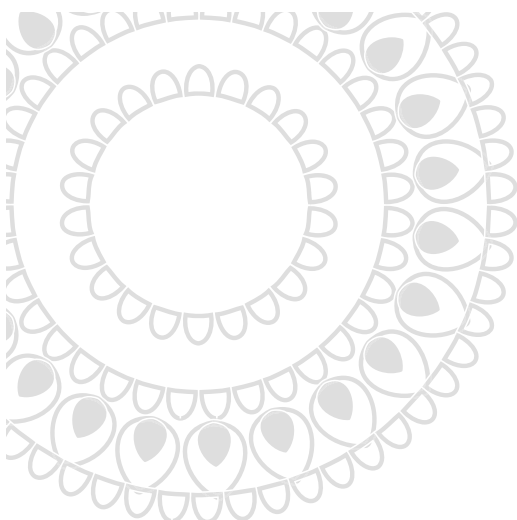
An accepted approach of women's empowerment and building livelihoods of the rural poor is to combine both aims in building strong women's collectives from below, and organising livelihoods activities in which the women are central in ownership, management and operations. Kerala's Kudumbashree (KDS) and Andhra Pradesh's Indira Kranthi Patham (IKP) are two programmes that are often cited as having achieved both women's empowerment and rural livelihoods successfully on scale. Both have built multi-tier women's collectives from village level upwards that serve as the institutional backbone of every intervention that are implemented to improve the lives of the rural poor. Of particular interest are two sub programmes called Community Managed Sustainable Agriculture (CMSA) within IKP and Collective Leasing within KDS where women's economic empowerment is designed and executed in the context of women in agriculture. Both these 'women in agriculture' programmes have brought in lakhs of women as main actors in changing existing patterns in Indian agriculture and have informed the formulation of a national women farmer's empowerment programme called *Mahila Kisan Sashaktikaran Pariyojona* currently being implemented in 12 states reaching at least 2 million women.

This document captures five good practices each that emerged within CMSA and collective leasing. These good practices refer to a variety of interventions leading women to take the lead in cultivation, technology transfer and adoption, resource pooling, bringing back large tracts of fallow land into cultivation and marketing, and in the process transforming them from a housewife cum wage labourer to change agents in agriculture. Both programmes are successful in achieving multiple convergences with state, civil society and market actors in marketing, training, new initiatives, and the like. This document especially anchors the centrality of the women's collectives that have played pivotal role in all these endeavours.

A number of positive learning and a few concerns have been pointed out in the document:-

1. The multi-tier institutional backbone of women's collectives is the key to all successes that have been achieved in these two programmes of CMSA and collective leasing.
2. Women are playing multi-dimensional micro and macro roles and responsibilities in both CMSA and collective leasing as planners, technology carriers, mobilisers, managers, entrepreneurs, negotiators and even innovators.

3. Both the programmes have transformed the women as the primary actors in crop management thus reducing the traditional role of men in the act.
4. According to women, their mobility has vastly enhanced, their personal savings have improved, and their respect in the family has improved. In most cases, the women are now an earning member within the family.
5. Both programs engage women as the peer educator, demonstration farmer, and master trainer. The women have broken the myth that agricultural pedagogy and extension services are a male domain.
6. Convergence has been a key to the successes achieved. The examples are many — MGNREGA, Agriculture Department, Gram Panchayats, Digital Green, mobile technologies, marketing cooperatives, etc. which have been vital for the successes that have been achieved so far.
7. Creating capacity within the community has been the primary capacity building strategy followed in both the programmes. From the experience so far, this has worked out well.
8. One major concern is about the legality of collective leasing. While collective leasing is certainly working on the ground, illegality of leasing in law is a constraint that needs to be addressed. These two programmes provide ample evidence to make a robust case of liberalizing the laws of leasing in favour of the poor.
9. Although the women have certainly progressed a lot in their engagement in agriculture, time has come now to look at more structural issues of women in agriculture, from a truly gender perspective. It would be useful to apply any of the available gender frameworks in agriculture to assess how the two programmes fare. This is more relevant in the context of MKSP that now works in 12 states aiming to reach 2 million women
10. Both the IKP and KDS Missions have structured gender programmes that mostly work on domestic violence and related issues. There is enormous scope for the gender programmes to get involved with gender issues in women in agriculture that are so foundational that such associations can go a long way to engender Indian agriculture to the extent that agricultural assets become more engendered, the women are recognized as farmers, credit, insurance, and other supports flow to the women.
11. While the convergence efforts are exciting, for long term sustainability some of these convergence efforts need to be institutionalized. Kerala's strong Gram Panchayats provide one such pathway for institutionalization, but may not be the only pathway when it comes to other states.



0.1 Introduction



Ever since the self-help group (SHG) mechanism became established as one replicable pathway of the women's social and economic empowerment in India, several state and non-state programmes based on women's self-help group mechanism have been and continue to be implemented with significant successes. Kudumbashree (KDS) programme of Kerala and Indira Kranthi Patham (IKP) programme of Andhra Pradesh are the two best known programmes. These two programmes have been able to mobilize very large numbers of rural women into multi-tiered collectives that have provided the backbone for implementing several thematic initiatives spanning from agricultural development, micro enterprise, product marketing, health & education, gender equality, and others.

1.1 Purpose of the document

This document captures several good practices from these two state initiatives in the domain of women in agriculture. The purpose of this document is three fold: a) To learn from the good practices of women in agriculture from KDS and IKP, b) To disseminate the practices and learning to a wider audience and, in particular, to the implementers of similar projects of women in agriculture, and c) To identify the issues that need to be weaved into such good practices to make them even more effective and relevant to rural women and their lives.

1.2 Context of the document

The specific context of this document emerges from two mutually connected realities of rural India. These are:-

- 1) Indian agriculture is increasingly 'feminized' in terms of labour; most of the work in agriculture and allied activities are done by women, as the men are increasingly moving out to the cities and towns for work. This is in contrast to the identity of a farmer still being a man owning land, as recognized in the agricultural policy of the country. The women are providing more than unskilled labour work, and yet they are not recognized as farmers.
- 2) To change this reality, the Ministry of Rural Development, Government of India has taken up a large national programme called *Mahila Kisan Sashaktikaran Pariyojona* (MKSP) (women farmers' empowerment programme) under the National Rural Livelihoods Mission, in which about 2 million rural women engaged in agriculture are being empowered through multiple interventions

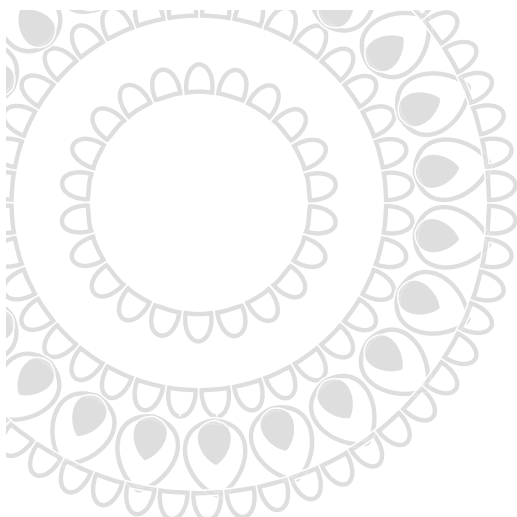
by state and non-state actors in 12 Indian states. The overall goal of this national programme is as follows:

- Build strong community institutions of women farmers;
- Popularise Community Managed Sustainable Agriculture- low cost sustainable practices such as NPM/IPM/integrated nutrient management;
- Promote and enhance food and nutritional security at household and community level;
- Reduce drudgery for women farmers;
- Focus on landless, small and marginal farmers as project participants;
- Value addition and marketing and
- Build resilience to climate change

This document captures the case studies from KDS and IKP to inform the MKSP programme and its approaches. Specifically, it deals with cases where women have moved ahead and are making significant intellectual and economic contribution to Indian agriculture. The document shows the women featured here are no longer the labour, in a given mode of production strictly owned, controlled and managed by men, but are emerging as the change makers themselves. This context of the document also raises the question if more needs to be done to realize the goal of empowering rural women and thus the document identifies the need to adapt these experiences with the wider emerging realities of women farmers in India.

1.3 Content of the document

The document has four parts: the next section i.e. section 2 discusses the two state programmes of KDS and IKP and situates the women in agriculture programme within the two programmes' objectives. The overall framework of the collection of case studies is discussed next in the section to provide the basis of the next two sections i.e. sections 3 & 4 capture the 10 case studies, five each from IKP and KDS. The section 5 discusses the positive lessons, points out a few concerns and the way forward.



2.0 Women Empowerment Approaches in KDS and IKP



Both approaches have strikingly common features and have equally striking differences. The first common feature is that both the state missions were set up as a government controlled Society registered under the Societies' Act of the respective states. The Society structure has given the programmes several distinct advantages: the freedom of mission driven hiring, innovative programme planning, less control by government's treasury rules, multi-scheme convergence, fund raising, human resource deployment and development, and others. The second common feature is the commonality of multi-tiered rural women collectives as the institutional backbone of all programmatic interventions. While AP has a four tier women's collective structure, Kerala has a three tier structure of the women's collectives. The third commonality is the constant endeavour to build women's ownership of all programme interventions through bottom up planning under overall programmatic thrusts determined at the state level. And the fourth common feature is that women are taking the lead in local level executions of all types of programmes.

The most striking difference between the two approaches is how they engage with the Panchayati Raj Institutions. In AP the women's collectives at Village-Mandal-Zilla levels are

directly engaged with the government's departments through the Society, almost bypassing the democratically elected Panchayati Raj Institutions; in Kerala, these women collectives have become partners to the strong Panchayati Raj Institutions thus deepening local democracy and decentralization. Another striking difference is that while KDS has its mission structure at the state and district levels, IKP mission structure is situated only at the state level.

With these opening remarks, we will, in the following few paragraphs, describe the main features of the two approaches as it emerged through more than a decade of works.

2.1 Brief Description of the two approaches

Indira Kranthi Patham

Andhra Pradesh Government established The Society for Elimination of Rural Poverty (SERP) in 1998 with a mission to reduce and eventually eliminate rural poverty in the state. With World Bank support, it initiated a pilot programme called Velugu that eventually grew into a pan-state programme called Indira Kranthi Patham (IKP) covering all the 1098 Mandals in 22 districts. IKP is a large multidimensional programme that aims at empowering rural

women and their families through building women owned collectives of SHGs-Village Organisations-Mandal Samakhya-Zilla Samakhya based on women representatives elected at every tier, and bound by micro-finance practices of thrift and credit. These collectives are the building blocks that carry various livelihoods programmes by the women and for the women through training, technology, and finance and other inputs as well as taking up delivery of various state benefits and entitlements to the rural poor.

The IKP programme now has resulted in the formation of 10.54 lakh SHGs with 11.6 million members. The SHGs are federated into 39,584 Village Organisations, 1098 Mandal Samakhyas and 22 Zilla Samakhyas. All these SHGs, VOs, Mandal Samakhyas, and Zilla Samakhyas are linked with nationalized banks, who have lent nearly Rs.14570 million to these collectives. Moreover, 16 fisherwomen Mandal Samakhyas, 125 disabled Mandal Samakhyas, and 17 Cenchu Tribe Mandal Samakhya have been formed out of representatives of these special category women's SHGs.

Several programmes have been implemented riding on the backbone of these collectives that include banking credit for the SHGs, micro finance, micro insurance, gender equality, health and nutrition, land dispute resolution and others. All of these programmes had and continue to have clear focus on improving livelihoods in its multiple facets. The most distinguishing characteristic of these interventions is how each of them have successfully been carried by these collectives of the women taking the lead in almost all the possible roles and responsibilities relevant to the success of the programmes.

Community Managed Sustainable Agriculture (CMSA) is one such livelihoods focused programme within IKP that specifically deals with issues of increasing agricultural income,

popularizing sustainable agriculture techniques, improving household nutritional security, and enhancing diversified agricultural production. The most distinctive feature of the programme that makes it relevant to this document is its focus on women farmers. It aims at creating a pool of women demonstration farmers, women technology trainers, women extension workers, women agri-entrepreneurs, and provision of technology and knowledge inputs focused on women. Although the programme's overt aim is to shift the focus of agriculture to more sustainable methods and techniques, from the existing capital intensive, energy intensive, soil destructing crops and their management, the programme has cleverly weaved the intervention with women as the agency for introducing and carrying this shift. Our present documentation of case studies will draw good practices from CMSA so that some of the practices can be replicated elsewhere.

Kudumbashree Mission

Kudumbashree meaning prosperity (shree) of the family (kudumbam), is the name of the state poverty eradication mission of government of Kerala for which a Society was formed in 1998 under the relevant Societies Act. Kudumbashree Mission came into being as a culmination of a process of community mobilization taken up initially within the community led poverty identification in Alappuzha Municipality in the early nineties, followed by the district level community based nutrition programme effort in Malappuram District in 1994. The political decentralization process initiated in 1996 gave a fillip to the process of strengthening women's participation in governance structures. The Women's Component Plan of the state allotted 10% of the plan budget to Local Self Governments (LSGs), making it essential to bring about meaningful participation of women in formulating and executing plans.

The Kudumbashree Mission was launched in May 1998, to create a state-wide base of community organizations of women that work in tandem with local self-governments for poverty eradication and women's empowerment in the context of ensuring food security. By 2004, the Kudumbashree Community Organization network had been established in all the 1072 Gram Panchayat areas of the state. Much like in IKP, KDS too built a three tier structure of women groups at the village level, Area Development Societies (ADS) at the ward level, and Community Development Societies (CDS) at the Gram Panchayat level, comprising of elected women representatives at each level. While the CDS is a registered society, the neighbourhood women groups (NHGs) as they are called and the ADS are informal organizations of women. Unlike IKP, it's only the NHGs that practice thrift and credit, the ADS and CDS are not micro finance entities in Kerala. Also unlike IKP, the Kudumbashree has its district Mission Units filled with professional staff, instead of elected women of Zilla Samakhyas that manages all the programmes. So far up to March 2012, the KDS mission covers 2.14 lakhs NHGs covering 38 lakh women, represented by ADSs in 19789 wards and CDSs in all 1072 Gram Panchayats of the state.

KDS also runs a number of programmes based on the three tier women's collectives, which include implementation of MGNREGA, micro-finance programme through bank linkages, micro-enterprise programme based on activity groups, value chain integration programme, as well as running other social development programmes like destitute rehabilitation, child development programmes, etc.



SRI paddy being grown with NPM techniques under CMSA , Vishakhapatnam

The programme of KDS that is of relevance to this document is the women's collective farming programme initiated in 2004. This programme focuses on women farmers who are encouraged to form special activity groups among the NHGs to pursue collective farming. These were initially called activity groups and were later renamed as Joint Liability Groups (JLGs) when NABARD brought in the concept of collateral free lending to JLGs of rural women. The programme's focus is to provide enabling support to JLGs for leasing in land from landowners on oral or plain paper agreements, and thereafter, providing finance, technology and material support to these groups for successful cultivation and sale of food and nutrition crops in addition to home consumption. Here too the programme aims to build women farmers' technical knowledge and practical experience of crop production and management, enhance their ability to deal with the market mechanism to their benefit, create a pool of women extension workers and technical resource persons and thus make them the change agents of reviving agriculture in Kerala that otherwise have been affected by upward mobility of men towards cities and towns in India and abroad. The

quantitative achievements are significant: more than 2.67 lakh women are involved in cultivation in 49 thousand plus hectare of land that otherwise was lying fallow in the state.

It's no coincidence therefore that both CMSA and women's collective farming programmes are a part of *Mahila Kisan Sashaktikran Pariyojana* (MKSP). They function as Project Implementing Agencies in Andhra Pradesh and Kerala respectively. Both bring in enormous value to MKSP by ways of prior experience of programming with women farmers, based on the institutional strength of multi-tiered grass root women's collectives, and strong linkages with either local self-governments as in Kerala or with the various state departments.

Since all the case studies of good practices in this document have been collected from the experience of CMSA and Women's Collective Farming under IKP and KDS, it is critical that these two programmes are discussed in some details so as to delineate the connection with the good practices that emerged and deserve documentation.

2.2 CMSA- an initiative of IKP

CMSA aims at changing crop management practices from an energy intensive, capital intensive, and chemical fertilizer & chemical pesticide driven production techniques to more ecologically and financially sustainable techniques. The currently practiced agriculture technology has already depleted soil nutrition and water table, reduced bio diversity on the one hand, and has also made agriculture unviable because of high inputs costs and inadequate return on investment. Moreover, the existing model of agricultural production suits only those who can afford to invest in scale, and therefore are unsuitable for many marginal and small farmers and agricultural labourers who do not have the needed financial resources.

However, CMSA has very cleverly weaved this intervention with women's economic empowerment by making the woman the primary vehicle and owner of this intervention. This serves the dual purpose of changing crop management technology and creating a new agricultural change maker, namely the women.

Currently CMSA is being implemented in 11,000 villages in 653 Mandals of 22 districts on 38.71 lakh acres with 19.67 lakh farmers. There are three major strands in CMSA intervention: a) The Poorest of Poor Strategy (POP), b) 36ft. x 36ft. models and c) SRI¹ paddy. The POP strategy aims to reach out to the poorest, often the landless agricultural labourers who lease in land for cultivation. It encourages and provides technological and financial support to these labourers to lease in land and deploy sustainable agri-techniques for production of food crops. The leasing in is typically done either individually or collectively by the selected families, sometimes with facilitation by the VO. However, the POP strategy is not limited only to the leased land, and even supports marginal farmers holding up to 1 acre plots. The SRI system of paddy is propagated among small and marginal farmers owning about 1 to 2.5 acres of land of which they are encouraged to cultivate SRI Paddy on 0.25 acres and use another 0.25 acres for a 36ft. x 36ft. seven tier model of mostly vegetable and fruit production in the remaining 0.25 acres to earn a net income of Rs. 50,000/- and to provide food and nutritional security at the household level.

While all the three interventions refer to crop management techniques, the relevance to this documentation lies in the way it is owned and managed by women's collectives at the village, Mandal and Zilla levels. The village organization (VO) has a key role in managing the CMSA programme on the ground. The VOs

¹System of Rice Intensification (SRI) is a methodology aimed at increasing the yield of rice produced. SRI is adapted to rain-fed (unirrigated) conditions with transplanting superseded by direct seeding sometimes.

choose women village activists (VAs) who are hired by Mandal Samakhya. The VAs identify the interested women farmers among the SHGs to become CMSA farmers, and then facilitate formation of farmers groups called *Sashya Mitra Sanghas* (SMSs) and help the VO manage various aspects of CMSA. A group of 20-25 such women farmers form a SMS. The farmer SHGs together with the VO develop a CMSA plan on capacity building, production, maintaining internal controls and marketing. The VO is entrusted with overall programme management at the village level and is the centre of all CMSA activities in the village.

One special feature of CMSA programme is that it accepts men farmers' SMSs as well. These men farmers have to be spouse of the respective women SHG members. In such cases, these men farmer SMSs have to undergo training conducted by the women CRPs and CAs.

The Mandal Samakhya monitors programme implementation of the VOs and coordinates with resource NGOs. The Mandal Samakhya also coordinates the delivery and training and extension services to the SMSs through Cluster Activists (CA) assigned for a group of five villages who organise training programmes, field visits and provide technical resources to the farmer SHGs. This may be called downward responsibilities of the Mandal Samakhya. However, the Mandal Samakhya also have upward responsibilities. They coordinate with the district level *Krishi Vigyan Kendras* (KVKs) and the resource NGOs of the district. The Mandal Samakhya has agreements with seven NGOs namely Sweep in Srikakulam District, Kovel in Vishakhapatnam District, Jattu Trust in Vizianagaram District, RIDS and FORD in Anantapur District and Voice in Nalgonda District. IKP at the state level has an agreement with Digital Green, a technology communication group for training on community video films. The NGOs mostly provide technical support in the form of training,

community mobilisation, FFS training, trouble shooting and marketing.

The Zilla Samakhya has a five member CMSA subcommittee formed out of successful women farmers. The sub-committee oversees implementation and forms tie-ups for marketing by negotiating with private sector. They also develop partnerships with NGOs who provide technical support and training. Zilla Samakhya also coordinate with District Rural Development Agency (DRDA) to link up with various government programmes. For example, CMSA activities have been synchronized with MGNREGA which funded preparation of compost pits and digging of village tanks as a part of the public works programme. The CMSA sub-committee regularly visits FFSs and farmer fields to monitor progress and potential bottlenecks, and monitor district-wide progress. The CMSA sub-committees at the mandal and district level visit the field for 10 days every month to observe field level progress. They also participate once a month to review performance at the mandal and district level.

As can be seen, the CMSA programme is entirely operated and managed by women collectives at the village, mandal and district levels. The CAs and VAs are all women and they are accountable to the collectives. The leaders of the collectives coordinate with the NGOs, KVKs, DRDAs, and monitor programme progress. The recipients of the programme interventions such as the POP farmers, the SMSs, and SRI cum 36/36 farmers are mostly women. The women collectives have a payment structure for the VAs who are paid Rs. 2000/- per month and in addition Rs. 1000/- per month as incentive. The CAs are paid remuneration of Rs. 6000/- per month and Rs. 2000/- per month as incentive. The members of Mandal Samakhya are paid Rs. 100/- per day when they attend meetings or travel to the field and actual travel expenses while members of Zilla Samakhya are paid Rs. 150/- per day and actual travel expenses.

Considering the gigantic work being operated and managed by women, we have considered five case studies to capture the thrusts of the programme.

2.3 Collective Leasing: An initiative of Kudumbashree

While farming has always been one of the livelihoods interventions of the KDS apart from micro enterprises, the collective farming practices emerged from the community groups as a response to the dual challenge of reviving agriculture as well as providing the women with enough livelihood opportunities. Agriculture in Kerala has seen slow exodus of people going out for other vocations resulting in vast tracts of land lying fallow and unproductive. The women groups on the other hand needed opportunities near home and most of such opportunities could come from agriculture. Therefore collective farming by women groups, where the women leased in such fallow or cultivable waste lands from mostly absentee landowners became a feasible solution. The reason why the collective farming is relevant to this documentation is because, like CMSA, this too is almost entirely operated and managed by the women of the three tier collectives.

In Kerala, the women at the village level are grouped into what are called neighbourhood groups (NHGs). Initially, these groups had more than 20 members each, but later they were regrouped to 20 members and less following NABARD's SHG principle. The name however remained. The NHGs at the villages select interested women among each NHG to form a collective farming group. These groups are specially registered by ADS and CDS. Collective farming women groups are one such activity group. These groups were encouraged to negotiate with landowners (who sometimes may be one among them) to lease in, her/his land, in which the ADS and CDS often play a facilitation role. A typical farming group consists of 4-10 members and the land they cultivate is

mostly leased in land. The majority of the landless women's groups have leased in land for cultivation through oral agreements with private land owners, though some of them have signed a lease/rental agreement with the land owner under the trust of the Gram Panchayat. The ADS-CDS and Gram Panchayats often assist these groups to find land for cultivation and also help in negotiating the lease rent with the land owner.

KDS permits only a narrow range of food crops to be done by collective farming. Plantation crops like rubber, coffee, and tea are forbidden. Experience has shown that the collective farming groups have been most successful in doing banana and paddy for which they receive incentives through the ADS and CDS.

The ADS has a very specific role in the collective farming programme. While they facilitate formation of such collective farming groups, their main contribution is to link these groups to MGNREGA works to develop the land and make it fit for cultivation. This is easily done by the ADS as in Kerala the ADS's operating area being co-terminus with Gram Sabha, it is recognized as an implementation agency of the MGNREGA. The collective farming groups discuss with the ADS leaders of their needs of MGNREGA works, and often supplementary schemes are prepared by the ADS and the MGNREGA support is operationalized.

The CDS represents all the women members of the NHGs of a Gram Panchayat. Gram Panchayats in Kerala typically represent 30,000 populations. The CDS too usually is a large body. The CDS's office is in the Gram Panchayat's premises that ensure strong linkages with Kerala's Panchayati Raj Institutions. For the collective farming groups, the CDS provides the financial assistance, liaison with the Banks for financial assistance, as well as with Gram Panchayat for technical and financial support. The *Krishi Bhavans* - the agricultural extension centers of the agriculture

department in Kerala are under the jurisdiction of the Gram Panchayats which is why their technical support depends on Gram Panchayat's instructions. The CDS is also responsible for monitoring the programme in their area.

As a whole this is a simpler model than CMSA, where technology inputs are less intensive, and are locally available. The *Krishi Bhavans* play a crucial role to train the farming groups in weeds management, micro-irrigation, inter-cropping, pest management, and other process and quality control measures. The farming groups receive short term loans from KDS through CDS, where they are entitled to an interest subsidy of 5%. An incentive mechanism is available to CDS based on two criteria: expansion of collective farming area and output from collective farming practice.

Like in IKP, the entire collective farming programme at the CDS-ADS and NHG levels is operated and managed by women. They negotiate lease rates, make training plans, MGNREGA plans, work with Gram Panchayats and *Krishi Bhavans* for technical support, deals with banks for financial support, and most importantly deals with KDS leadership at the district and state levels discussing, planning, negotiating, bargaining for effective implementation of the programme. The programme impact is impressive; 49000 Ha out of 75000 Ha of fallow and cultivable waste land has already been brought under collective farming by 2.65 lakh women.

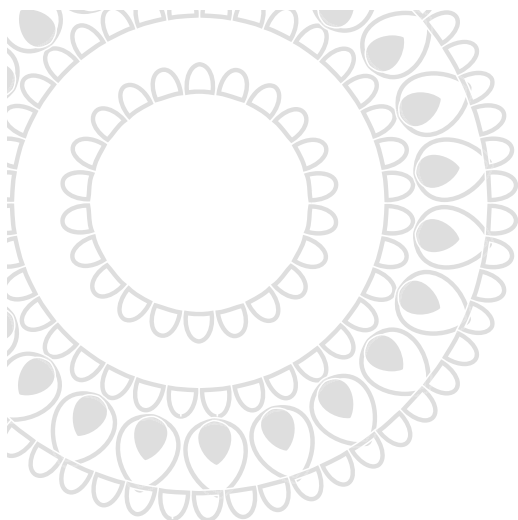
We have considered stories from various aspects of the women's endeavour connected to collective farming to reflect on their overall achievements through the programme.

2.4 Focus of the case studies

The selection of case studies from such large state wide programmes needs to follow certain foci. Keeping in mind that the overall purpose of this document is to learn from the good practices and also point out what can be done while adapting from these good practices, in choosing the case studies we have considered the following principles that capture:

1. Women's leadership in the process of intervention
2. The change in women's life as a result of the intervention
3. Women as main actors carrying the intervention as facilitators, CAs, VAs, and others.
4. The collectives' enabling ability of providing multiple upward and downward linkages for effective programme implementation.
5. Women as technology providers

These principles help document the achievements of individual women, the good practices carved in the processes, women's individual and collective agency and the transformation of their identity: from a housewife-cum-wage labour to that of a leader, manager, technology provider, and main actor in the agricultural change.



3.0 Case Studies from Andhra Pradesh



3.1 Case Study I

Land-Leasing: From Individual Subsistence to Collective Enterprise

Padmamma, Veeramani, Sujatha, Ratnamma and Bhagamma belong to landless agricultural worker families of Raipally Village in Zahirabad Mandal of Medak District, where 87% of rural population is considered BPL. These women belong to the Dalit Madiga community that falls at the lowest rung of the socio-economic hierarchy. Typically, their families are landless agricultural wage workers; the women seek work in agriculture, while the men look for work as coolies or cart pullers; work that is outside of agriculture. These women are members of different SHGs of the same village. The main thrusts of the SHG activities are thrift and credit, but they have not been able to graduate to livelihoods activities individually or collectively other than continuing with wage labour work. The POP intervention brought to them an opportunity for the first time. As mandated by IKP, the village activist working for the VO found these women and five others suitable for the POP intervention that focuses on land leasing and cultivation using CMSA technique.

Meenamma, the woman VA encouraged these women and facilitated their leasing in of 0.5 acre of land each for all 10 of them, totaling

five acres, in which they would grow paddy by using the inexpensive SRI method in 0.25 acre each and use the rest 0.25 acre each to cultivate vegetables under the 36 ft. x 36 ft. multi-tier mulching method. Leasing in requires them to pay lease rent that they cannot afford, plus they do not have resources for production. The POP strategy has developed a systemic answer to that. The women would get a loan of Rs. 10,000 to 15000 per acre each depending on their request, to pay the lease rent. Additionally, they would also get a working capital of Rs. 2000-3000 each at 3% interest, of which 2% is kept by the SHG. The SHG pays back the principal and 1% to the VO. The estimate is that they would be able to pay back the loan from the sale of the crops.

Once the VAs identified people like Padmamma through discussion among the SHGs in the village, the information flows to the VO's NPM-CMSA subcommittee who then asks for the above funds to the Mandal Samakhya. The Mandal Samakhya on the basis of this request releases POP fund as mentioned earlier, to the VO for onward release to the respective SHGs, these women belong to. The women get the fund from their respective SHGs.

Padmamma et al. were excited but they did not have any exposure or training in such techniques. However, they realized if they could

pool in their resources to jointly cultivate the leased land, they will reduce input and transaction costs. The CA and the VA both actually encouraged them for resource pooling. The CA helped them prepare their field for SRI paddy and seven layers mulching techniques and create water harvesting structure in the field, for which these women worked under MGNREGA. Moreover, the CA trained them on planned water use under SRI, exposed them to the nuances of pest management, but more importantly taught them how to pool in their resources like sharing of labour, costs, waters and aggregation of inputs and produce.

Padmamma and team jointly leased in five acres at the cost of Rs. 9000 per acre per annum, and arranged the paddy fields in a manner so that they could best use their labour, water, seeds, and other inputs. Additionally each of them did develop a 36ft. x 36 ft. multi-tier mulching garden for a variety of vegetables for all three seasons.

Pest management is a key technology intervention under POP programme. These women learnt the diagnostic skills to observe, document and understand the behaviour and life cycles of pests and the role of natural predators. Subsequently, they were also trained to use physical methods of pest management complemented by botanical formulations and bio-pesticides. They also learnt about the ways to maintain soil health such as mulching, use of green manure and vermin-composting; and appropriate cropping systems such as inter-cropping, multi-cropping and crop rotations. Almost all of these trainings were done by peer



Paddy fields under CMSA farming in Vishakhapatnam district

educators that are captured in another case study.

The cultivation of SRI paddy and vegetables through pooling of resources has been greatly beneficial to Padmamma and nine other women. They could use the production for self-consumption and actually sell a good part of the crop. Moreover, they could sell the vegetables to the nearby schools, for midday meals. As a result they could pay back the lease rent in full, renewed their lease for the 2nd and 3rd year and continued successfully. On an average, their net revenue is about Rs.30000-35000 per year each from this operation.

This case study highlights several findings. Padmammass have clearly gradually transformed from being wage labourers to owner-producer of food through land leasing, pooling of resources, and enhancement of knowledge of agri-techniques. Their social capital improved, individual income increased, their confidence in themselves took a new leap. At the same time, innovative programmatic linkages with MGNREGA, mid-day meal, and with the local market were significant

contributory factors to their successes. MGNREGA wages provided income as they prepared their fields, the midday meal program in the village provided an accessible outlet for their vegetables, and the local market could absorb their produce. Furthermore, the three tier structure of Mandal Samakhya, Village Organisations and SHGs provided the enabling environment to make it possible. The institutional synchronization proved vital for such successes. While the experience of the women is very positive, there is also an inherent risk: the leasing in of the land is oral and informal such that the women's income security is not on a solid ground.

(Source: Group discussion with Padmamma, Veeramani, Sujatha, Ratnamma, and Bhagamma in Raipalle village, Zahirabad Mandal, Medak district, Andhra Pradesh)

3.2 Case Study II

Decentralized Agricultural Extension: Women as providers of extension services

Meet Santosha, the NPM retailer, a CRP and a pioneer of sustainable agriculture in Nandigrama Village, of Ramayampet Mandal of Medak District in Andhra Pradesh. A widow, in her mid-thirties and illiterate, she is one of the most sought after persons as a technology provider, a demonstration farmer and an NPM expert plus retailer. Santosha's journey is no ordinary tale. She belongs to the Dalit community and like other Scheduled Caste households in the region, she only had a small piece of low quality land (0.25 Acre) that was quite inadequate for meeting her household requirements throughout the year.

Her journey to self-reliance started when she became a SHG member and started participating in the thrift and credit programme on a regular basis. It helped her family's cash

flow, but more importantly it provided her the opportunity to move up. Her active involvement in all SHG activities took her to become a member of the VO and eventually, her leadership qualities helped her to become an executive member of the Mandal Samakhya and finally the Zilla Samakhya. She became a member of the Livelihoods Sub-Committee of the Zilla Samakhya and was entrusted to oversee implementation of CMSA programme in the district.

Her strength lies in her leadership qualities, and also her ability to absorb the technological aspects of CMSA interventions and demonstrate them to others. She was chosen as a CRP, because she quickly learnt and demonstrated the technological responsibilities of a CRP.

A CRP is defined as a best practitioner of CMSA techniques. In the language of agricultural extension, a CRP is a demonstration farmer, who is supposed to provide demonstrable evidence that CMSA techniques are poor friendly, practical, cost saving, output maximizing and more sustainable techniques by being the change herself. They are trained on non-pesticide management, soil fertility management, 36ft. x 36ft. models, poly crop models, rain water harvesting, SRI cultivation, farmers' field schools and integrated farming systems. They are seen as role models by the community, and they are expected to provide hands on experience to the willing farmers. A CRP has to establish 36ft. x 36ft. models, crop models, compost pits, cattle shed lining, bund plantation, SRI in paddy, deep furrows, registration fee collection.²

Santosha received trainings in NPM techniques; ways to utilize locally available resources like seed, natural fertilizers, sunlight, water and

² Each farm family including farmers outside the SHG fold pay Rs. 30 per year as registration fee.

land; crop management— ways to maximize output from a unit of land through inter-cropping, multi-cropping and crop rotations; conservation of soil moisture, renewable natural resources and flora and fauna bio-diversity. Santosha showed exemplary accomplishments in all these. In fact she could do all that was expected from a demonstration farmer using her own and a leased in land, and that was indeed the key to her success. As a CRP she conducts what is called Farmers' Field School (FFSs) which means she has to take on site class for CMSA practitioners in the morning from 7 am to 10 am to show how these techniques work on the ground. The VAs would bring the CMSA practitioners to the CRPs who have to conduct these classes on a regular basis. These practitioners are women and men selected by the SHGs and VOs who intends to practice CMSA techniques on their own land to produce paddy, red gram, leafy vegetables, fruit plants, orchards, and 36ft. x 36ft. multi-tier mulching models for vegetables-fruits. These farmers are grouped into what is called Sashya Mitra Sangha (SMS). The CRPs train these SMS members at the FFSs by rotation on a regular basis under a VO and Mandal level CMSA plan. Each CRP has to adopt three villages and conduct such training and hands on demonstration. For her CRP work, Santosha receives Rs. 375/- per day including her honorarium, DA and travel expenses. Her work took her to other districts as well.

The CRPs in conjunction with VAs and CAs are clearly the programme vehicles of CMSA. Santosha is not alone nor an exception. Hundreds of such women CRPs are now carrying the CMSA programme in 21 districts. There are CRPs at the state level, district level and some are working at the Mandal level. Almost all these CRPs are women.

Santosh's story has not finished yet. As a CRP, she also produces botanical extracts, pheromone traps³, liquid manures, neem cakes, composts and other products for demonstration and actual use. Her entrepreneurial abilities found expression when she decided to start a shop to sell these products. These shops became a part of the CMSA programme, for which the state leadership decided to provide seed grant of Rs. 10,000/- to start the shop. Apart from these products, Santosha's shop also sells equipment like de-weeders and wet grinders.

Santosha is a live example of the women centric approach of CMSA. It's clear that CMSA followed the well-established dictum of agricultural extension: peer learning, demonstration, practice the change and on the job learning. The critical difference CMSA brought in was that it entrusted its institutional faith on the capability of women. On another plane, the CMSA also very correctly relied on a decentralized extension strategy to have CRPs at all levels that have come up from the SHGs themselves and are not imported from elite educational institutions. A third learning is that the CRPs are embedded with Zilla Samakhya and Mandal Samakhya that are the backbone of CMSA interventions. They are embedded in two ways: they are part and parcel of the Samakhyas, being a primary member and leader of the institution in their own might, and also they are managed by the Samakhyas and remain accountable to the same institutions, to which they belong.

Amidst all these commendable achievements, a caveat may be in order. While Santosha has her own land that she got under survivorship from her husband, not all CRPs may be as lucky as she is.

³ A pheromone trap is a type of insect trap that uses pheromones (hormones) to lure insects. Sex pheromones are the most common types used. A pheromone impregnated lure is encased in a conventional trap such as funnel trap.

While the CRPs' primary asset is intellectual, it's important to complement it by hard assets like land ownership and control of the income she earns. In the absence of that, the women CRPs may become only improved tools in a grand design and not being a designer herself.

(Source: Interview with Santosha, NPM shop owner in Nandigram Village, Ramayampet Mandal, Medak District, Andhra Pradesh)

3.3 Case Study III

Women as Technology Provider

CMSA aims to alter agriculture practices by introducing new cost effective, poor-friendly, local material based and environmentally sound techniques that are scientific, practical, and process driven. In brief, it's an alternative technology adoption programme in scale among the poorer section of the rural women and their families to increase income and improve household food security, and in the process empower the women with a new knowledge system that has a promising future. The question is how do these technology management and adoption take place, what are the communication strategies and how it can be sustained. To answer these questions this case study documents the process and strategies of CMSA.

Jyothi, of Marikel Village in the Timmajipet Mandal of Mahboobnagar District, is a CMSA farmer cum Cluster Activist. She is part of a district and state wide network of CRPs and CAs that transfer technology from the state through the district down to the mandal and villages. It's a cascading approach in which the state level CRPs train the district level ones and they in turn train the CAs working at the mandal and village levels. These CRPs and CAs are professionals from the community who rose to leadership at different levels by experience and commitment. Jyothi is one of them, who having studied up to class X and belonging to a high caste family, is

articulate and has already risen to leadership at the VO level and became its treasurer. In 2011, she resigned from the honorary treasurer post and became employed as a Cluster Activist (CA). As a CA, she receives an honorarium of Rs. 6000/- per month from the SHG federation at the Mandal level to whom she is accountable. The SHG federation receives the money from IKP programme fund. As a CA she has a mobilizational cum technology bearer role in the villages. Jyothi is trained not only in CMSA techniques of agri-horticulture; but she is also trained in mobile based MIS applications and digital video photography.

The CMSA programme has tried a unique experiment. It combined three roles in one person like Jyothi. She is a technology bearer, a MIS data collector through mobile, and also a technology communicator through video films. At the same time the mobilizational role remains and is intrinsically built in with these three roles. The data Jyothi sends through mobile messaging is a set of information that come from 40,000 such villages on nearly 1 million CMSA farmers to a central server in IKP's state office, and gets processed and then communicated downward to Zilla Samakhya as well as published in the public domain. Thus, data of each of such interventions like the 36ft. x 36ft. model, operational FFSs, SRI paddy coverage, operational NPM shops, compost pits, and others are sent by Jyothi and her peers and are gathered and analyzed by competent persons at the state level.

Technology transfer needs physical demonstrations and virtual methods can supplement that effort quite effectively. Not all the SMS members can attend FFS in the morning on a regular basis, nor can they remember all the technical aspects so easily. Attending morning FFSs is almost impossible for women farmers due to their household work. Digital communication helps clarify information, and reinforce memory. Jyothi received training

and hand holding by Digital Green, a technology communication group, and as a result she can shoot videos of CMSA crop management techniques, gets them edited by expert editors and thereafter shows these videos to the farmers using a battery operated Pico-projector.

Jyothi is in charge of five villages and has trained dozens of CMSA practitioners, gathered and sent hundreds of data over mobile on a regular basis, and has also shot and shown a number of video films on CMSA techniques to sensitize, orient, and to provide skills to those farmers. Jyothi is representative of a state wide mechanism which includes technology adoption, programme management and technology communication. Did Jyothi's life and voice change for the better as of result of all these engagement? She believes that her leadership, management and intellectual capacity are recognized by all stakeholders without fail. This, coupled with her reasonable earnings, has surely changed her position in the family. Her mobility is not questioned, her opinions are heard, her suggestions are often accepted. She cites one example: *she was instrumental in admitting her two school age daughters to a boarding school. Her decisions in the field are more independent though, she admits. She enjoys the respect she commands in the field. At home, her say on saving and expenditure decisions are taken seriously by her family members.*

There are a number of learnings from Jyothi's case study. First, the combination of technology demonstration, technology communication and MIS data collection roles seems to have been successfully weaved into one person. This approach of multi skill development of one person is an interesting strategy in terms of long term sustainability, as one of these many skills, she may use for many more years after the programme ends, while some other skill may not find takers after the end of this programme.

In case of Jyothi for example, her mobile based skill or CMSA technology transfer skills may be of use for many years, while video shooting and projection skills may not or vice-versa. The case study also hints at a broader question: while such facilitational and communication roles surely cause vast enhancement in women mobility, and that itself is a desirable outcome, as well as women's earning enhances her voice in the family, are these changes transformational in her life? The question is not to doubt the enormous feat achieved by Jyothi and her peers, but to pose it for further systematic research.

The second learning is about the decentralized management model which is built on the enormous trust CMSA programme has reposed on a local agent instead of relying on imported expertise based on highly specialized expert knowledge. The IKP believed in local knowledge creation, knowledge transfer by local means with use of carriers that are local and rooted to the institutional fabric of the community managed institutions. It also successfully incorporated modern methods of communication and analysis and broke the myth that sophisticated technology can only be adopted by elites of the society and the rest will always depends on crude, traditional local empirically generated technologies, that are often perceived more like an art than a science.

Finally, Jyothi's case also establishes that programme deliverers can also be very successful communicators at scale, and that delivery and communication indeed go hand in hand and need not be seen as a separate line of activity requiring exclusive personnel. In fact combining the MIS function with delivery and communication function is a triple feat. It would be good to do a more careful analysis about its quality and effectiveness when delivered at scale.

(Source: Interview with Jyothi, CA, Marikel Village, Timmajipet Mandal, Mahboob Nagar, Andhra Pradesh)



NPM shop under CMSA selling organic vegetables grown by SHG members

3.4 Case Study IV

Women as Leaders of Change: Many Hats to Wear

If the Zilla Samakhya, Mandal Samakhya, Village Organizations and SHGs are the institutional backbone of all IKP programmes including CMSA, it is obvious that the leadership of these women's institutions at all levels require multiple skills, knowledge and experience to conduct programme management, institutional networking with external stakeholders like Government Departments- Banks- Panchayats, technology dissemination, monitoring, communication and others. Venkateshwaramma's story reflects on how the different roles are played by the women leaders who are making it happen.

Venkateshwaramma of Marikel Village in Timmajipet Mandal, Mahboobnagar District in Andhra Pradesh has many hats to wear. She is a leader of an SHG, leader of the VO, member of a Mandal Samakhya's subcommittee and a NPM sub-committee member of the Zilla Samakhya. She is also an entrepreneur, running a NPM products outlet, involved in

management of her family's grocery shop, and an auto rickshaw business. The latter are part of an ongoing familial business.

Venkateshwaramma is from an upper caste Reddy family and educated up to class X, therefore, it was not difficult for her to climb up in the institutional hierarchy of the SHG-VO-MS-ZS. She was part of the process of formation of the VO, and thereafter in its registration as a Cooperative. All such VOs under IKP have been

registered as a cooperative under Mutually Aided Cooperative Societies Act, 1995, where the cooperative can run without any administrative control of the government. The Mandal Samakhya which are comprised of a number of VOs are also registered under the same Act, as a federation of cooperatives. The advantages are enormous—the cooperatives can access bank credit and provide loan to its members, they can run as a member driven business entity, and enter into business contracts with agencies, Panchayats and companies.

As one leader of the VO, Venkateshwaramma facilitated membership of more SHGs, and was conversant in issuing share certificates, and maintaining relevant registers that are needed for a registered cooperative. She was also instrumental in negotiating lines of credit to the VOs from commercial and regional rural banks for onward lending to the member SHGs. The VO was involved in the NREGA implementation, and she even worked on behalf of the VO to facilitate MGNREGA work for the women members of the SHGs. When she became a leader of the Mandal Samakhya, she was trained on federating the VOs and issuing them

share certificates, but she learned new skills as well. She became the training organizer for all VO's and all SHGs, and eventually, monitoring the performance of the SHGs became one of

her main duties. The other main responsibility was constant liaising with government departments for securing governmental support to Mandal Samakhya's programmes.

Venkateshwaramma's role in managing the VO's and Mandal Samakhya has been focused on what may be called programme management functions like training, monitoring, liaising, mobilizing, and conducting negotiations. Eventually, she was also trained on handling mobile based reporting, and data gathering, and mobile based text service for advance information of market prices for vegetables and transmitting those to CMSA farmers.

However, her success is not limited to management leadership. She learnt all the CMSA techniques and eventually became a successful CMSA farmer. Her husband was initially quite resistant to introduce these techniques on their family land and going against usual practices, but she claims she was forceful and could finally convince him to do it. After two seasons, he realized the power of these techniques in terms of cost savings, improving soil nutrition, production variety, and enhanced market value of these non-pesticide products. The result was that her husband finally turned into a full time farmer, and returned home from Nagpur, Maharashtra where he used to work in the construction industry. This change came when he saw that the land became extremely productive, and could earn a reasonable return.

IKP-CMSA has found leaders like Venkateshwaramma in many mandals and villages. While IKP staff were instrumental in transferring management skills and experience to the leaders of Zilla Samakhya's and Mandal Samakhya's, it is their institutional practice that was critical for its absorption and sustenance. The institution building wing of the IKP was instrumental in creating and establishing these capacities among these rural women who hitherto have never been exposed to such situations and the needs emerging out of those situations. As she moved upward from SHG to VO to MS and to ZS, Venkateshwaramma had to learn new skills, undergo new experiences and perform new roles and responsibilities. The idea at work clearly is not to create specialists but create broad capacities that can eventually be tweaked to specializations whenever necessary. Venkateshwaramma may be an exceptional woman that she could absorb all that she learnt and successfully used those for the institutions to deliver results. It may be conjectured that not all women would become Venkateshwaramma, but the intent and strategy of IKP and CMSA is quite clear; create and establish a broad range of local capacity, capacity that will stay and grow within the community and help sustain the institutions of the women.

Did Venkateshwaramma's situation in her family change significantly? There are indications that it did. Specifically, her mobility, her management and intellectual capacity, and her success to bring her husband back from migration- all indicate that she is more respected and loved in the family than before. There is no question that she brought honour to the family. It's perhaps difficult to make the case that gender relations have vastly improved in her family. That would need more systematic inquiry.

(Source: Interview with Venkateshwaramma, ZS NPM subcommittee member Marikel village, Timmajipet Mandal, Mahboob Nagar district, Andhra Pradesh)

3.5 Case Study V

CMSA Leading the Way to Household Food Security

According to Indian classification of farmers, Lakshmi would belong to the category of small farmers. Her family has one acre of crop land in Korada Village in Padmanabham Mandal in the Vishakhapatnam District of Andhra Pradesh. The land is rainfed, where crops like paddy, vegetables, legumes, millets and papaya are grown in two seasons, depending on the availability of water. Like many small farmer households of Andhra Pradesh, most of Lakshmi's family's agricultural income is spent towards purchasing food for consumption and paying the interest on the loans taken to purchase agricultural inputs like chemical pesticides and fertilizers. Despite an acre of land, her family is not income or food secure. By any standard, she is regarded as one of the very poor, if not the poorest.

Although Lakshmi's family has land, still she was included in the POP strategy that is meant for landless labourers. Using CMSA techniques of bio-fertilizers, bio pesticides, mulching and SRI methods, Lakshmi's family indeed improved their production and the variety of produce in a very significant way. Her household has begun harvesting multiple crops every year with the cost of cultivation reduced to nearly one fourth of what it was earlier. They could achieve better and improved yields, and they also got more variety. The amount of vegetables, legumes and grains they use to buy from the market has been significantly reduced. Due to the improvement in their economic situation, they have been able to take on an additional 0.5 acre land on lease and used it partly for SRI paddy cultivation and partly for doing a 36 ft. x 36 ft. seven tier model to grow vegetables, fruits and tubers. They have also invested in other livelihood assets such as setting up a local NPM shop to sell bio-pesticides and bio-fertilizers.

Lakshmi speaks more about her multi-tier vegetable garden, that gave them substantial quantity and variety of vegetables, grams, roots and fruits. Under the 36ft.x36ft. model, crops are arranged in seven tiers. The first tier includes plants which require minimal sunlight such as root or tuber crops like carrot, beetroot, and ginger. The second tier includes creepers that cover the soil such as bottle gourd and cucumber, and act as live mulch. The third tier includes leafy vegetables such as sorrel leaves, spinach, coriander and amaranthus. The fourth tier includes vegetables such as brinjal, tomato and chillies. The fifth tier includes perennial crops such as castor and red gram. Sixth tier has fruit trees such as papaya, drumstick, custard apple and guava. The seventh tier also has fruit crops such as mango; these are plants which require maximum sunlight. The harvesting of multiple crops round the year is provide food throughout the year, promotes nutritional security and ensures regular income to the family in the small plot of land. On a plot of 0.25 acre, this seven tier production system produces enough for a four member family of Lakshmi. In fact they now have marketable surplus.

Using SRI method in rice cultivation and applying bio-fertilizers and bio-pesticides, Lakshmi's fields could produce much more than before. And using rainwater effectively, Lakshmi could grow paddy and cereals in two seasons instead of one improving soil nutrition, outputs, and again, creating a marketable surplus.

Lakshmi's another effort is to create and manage a seed bank, preserving seeds of paddy, vegetables, and fruits in a group. Initially this was started as a CMSA farmers led effort, with the seeds obtained from the vegetables, tubers, fruits and creepers of the 36 ft. x 36 ft. model. Soon it grew into a fairly large programme within CMSA, in which, seed varieties developed by research institutes like ICRIASAT were added to the seed kitty of the

SHG. The variety in the seed bank grew from five to 18 different types of seeds. The members could borrow from the seed bank, with the condition that she will have to return to the bank the same amount plus an additional 50%, so that the kitty grows for others. Moreover, seed exchanges started happening across the VOs and Mandal Samakhyas, thus spreading across the district and beyond.

Running a seed bank requires technical knowledge of seed preservation, as well knowledge of accounting. Lakshmi took on the responsibility, learnt the techniques from the CAs, arranged the space at her home, and is managing the seed bank on her group's behalf.

What does all this mean for her life? She claims that her family's net income is now over 50,000/- in a year, a significant jump from before. Her family's food basket is now vastly improved, thanks to the variety of vegetables, fruits and tuber that get included in their daily diet. She also claims that their debt burden is now less than before. This success, she says, has made her more confident and has facilitated her inclusion in household decision making. Even though her decisions still need consent from the male members of her household, she is finding pockets of autonomy. While she had to work hard initially to convince her family to accept her CMSA experiments, she is now a better negotiator and exercises her choice on what crops and vegetables to grow on their land,

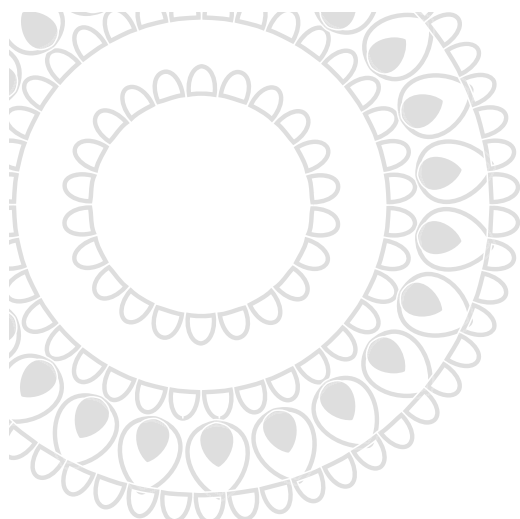
how much to sell and purchase, and also on spending decisions. She travels to the market in Vijaynagaram town to sell the produce and purchases materials to prepare natural pesticides.

Clearly, Lakshmi is the change agent for her family towards achieving household food security through adoption of sustainable agriculture techniques. Lakshmi's case establishes that rain fed areas and the families dependent on it can be made food secure if appropriate technologies are used. In Lakshmi's words, as long as they only knew of usual ways of cultivation they were certainly poorer, CMSA techniques have helped her family break the cycle of poverty.

Did it help her break the burden of patriarchy? Did her gender situation improved? As we can see her confidence level enhanced greatly, her management capacity has improved, her value in the family has increased. We might say that she has been able to stir a change in her situation in the family. We have to wait and see if that is transformational.

(Source: Interview with Lakshmi, a woman farmer practising CMSA methods in Korada village, Padmanabham Mandal, Vishakhapatnam, Andhra Pradesh)

4.0 Case Studies from Kerala



4.1 Case Study I

Collective Leasing: Transformation of Women as Cultivators

If you ask any NHG member “what would you like to do to improve your economic situation?” almost 98% will most likely say, “We want to do collective farming on leased land,” says a Kudumbashree official at Thiruvananthapuram. Compared to about 900 women groups that are engaged in micro enterprise, 2.15 lakh women’s groups are doing collective farming on leased-in land. While this depicts the enormous popularity of collective leasing among women members, the story below will indicate why this is so.

Ramani Sreenivasan, Sheeba Balakrishnan, Sreeja Daran and Bindu Sathyan are members of Gramashree Joint Liability Group in

Mullasherry Gram Panchayat of Thrissur District. The group has been formed out of a NHG to take up collective leasing way back in 2006 when KDS took up farming as an economic

activity. KDS named these groups as “activity groups” (AG) within an NHG. If an activity group took up farming, they were eligible for a few back-end subsidies. Ramani et al. were all landless agricultural labourers that worked on local land owner’s land for a living. Together they worked for three landowners, whose lands were all in one adjacent single stretch of 13.5



Members of Gramashree JLG

acre. When the landowners stopped their cultivation around 1998, for being unable to pay high wages (around Rs. 125/- a day in 1998), the land lay fallow for years.

Ramani and others recall that they came to know of collective leasing programme from the Gram Panchayat. They decided to give it a try and started farming as part of Kudumbashree from 1998. These women knew each other and worked for the same landowners before, so they thought they could take the land on lease from the landowners, and revive cultivation of rain fed paddy for four months, which they knew how to grow. With the help of the Panchayat's ward member, and one CDS member, they were able to successfully negotiate a lease agreement with the landowners. The landowners agreed on the conditions: for 5.5 acres, the lease rent was Rs. 12,000/- per acre per annum and for the rest 8 acres, the lease rent was 50% of the harvest.

It was a challenge to secure the lease rent in cash because that was payable in advance, whereas the other rent was payable only after the harvest. The women took personal loans from the relatives and also some NHG loans to make the start. The CDS also helped them by discussing with the Gram Panchayat and developed a supplementary scheme under MGNREGA for land preparation and reclamation. MGNREGA wage helped them with some cash which they added to their NHG savings, NHG's loan and personal loans to pay the rent.

Even though these women knew paddy production techniques, they were encouraged to undergo training by the CDS. When asked why, the women answered, the CDS were making sure that they knew scientific crop management so that they do not lose crop by some pest attack, and become indebted.

Collective leasing has two intrinsic risks. A) crop failure or less production can make a person perpetually indebted, and B) if the crops do well for a couple of years, the soil quality vastly improves, and that can be attractive for the landowner to change his mind and take back the land. Ramani has been lucky in both these respects. Their production was reliable year after year thanks to adequate rainfall, and more

importantly, their lease did not stop, and it was renewed every year from all the landowners.

Although the land was rain fed, the women obtained about 1200 kg per acre yield from their field. These women were able to generate a total production of 15500-16500 Kg from their field. At this level of production, their revenue varies from Rs. 225,000/- to 275,000/- as a group, and their net income is about Rs. 40,000/- per member.

Their journey took a new turn when the group was registered with NABARD as a Joint Liability Group (JLG) in 2009. The category change was done as per official policy of KDS so that these groups can access agricultural credit at a minimal rate of interest from commercial and cooperative banks. Another milestone in their journey was in 2011 when the CDS and the Gram Panchayat under an overall KDS mission dictate, connected them to Supply Co, a public sector marketing cooperative that procures paddy on behalf of the government at the minimum support price of Rs. 17/- kg. while the prevalent market price was then Rs. 13/- per kg.

Ramanis' story is simple. The institutional backbone of CDS and ADS created under KDS provided the enabling support to these women to start a collective endeavour, using the local land lying fallow and the landowners agreeing to a market friendly arrangement of rent. Instead of trying new items, the women did what they already knew — paddy, and thanks to the initial support of NREGA and NHG loan, they took a risk in which they succeeded. They showed that using mostly family labour, these fallow lands can be successfully brought back to cultivation, and in the process help increase family income significantly. The structural linkage with Supply Co helped sustain their effort from vagaries of the market by purchase and sale under a protective price mechanism.

There are important lessons from this experience. Their effort is successful because the women and their families enjoy the trust of the landowners, so *that they can continue leasing in year after year. Thousands of such oral or plain paper agreements continue to dominate the leasing environment, as leasing is completely banned in Kerala. Such arrangements favour the landowners; the lessees gain as long as the owner allows them to gain. On the other hand, it's clear that even after paying lease rent at the market rate, the women have made substantive gains with a simple cultivation like paddy. This is because they do not usually hire labour to do the production, and even when they do, that is for a very limited period. The engagement of CDS and ADS is limited to providing the enabling environment, and some monitoring so that they can provide the back end subsidy to the group, but the technology transfer component is quite minimal.*

What are the changes in the lives of these women? According to them, their own kitty has increased, they have been able to repay all the personal loans, as a group, their savings are now substantial to the extent that they have very recently bought a 0.5 acre land as a group. The women have also invested in jewelleries and household items. In brief, the women's own assets are on the rise, increasing slowly but steadily.

The largest chunk of collective leasing interventions by KDS mission is in such relatively simple cultivation of paddy and banana with some inter-cropping of vegetables, tubers and fruits. The success is in its simplicity, backed up by the strong institutional backbone of women's collective and Panchayati Raj.

(Source: Interviews with Gramashree JLG members in Mullasherry Panchayat, Thrissur District)

4.2 Case Study II

Institutional Convergence: A Key to Success for Women's Collective Leasing

Kerala's Gram Panchayats are notable for their authority, financial and administrative powers. Typically, a Gram Panchayat in Kerala has 25-27 staff, its campus has multiple offices like *Krishi Bhavan*—the agricultural extension center, an office of primary education, animal resources and often a branch of a bank. The CDS's office is also situated in the Gram Panchayat campus. These Gram Panchayats handle one third of the state's budget, plus the central sector schemes that mandate Panchayat's role in planning and implementation. Kerala has even recognized the ADS as an implementation agency for MGNREGA.

How do all these connect to KDS programming? Does the presence of these institutions help the women in their works to improve their livelihoods in agriculture under collective leasing programme of the KDS? The case study below provides an answer.

Ancy George, Luzy Joseph, Joymol Antony and Gracy Verghese are members of Rose Joint Liability Group in Pambadumpara Gram Panchayat, Nedumkandam Block, Idukki District. Unlike the Ramanis, these women could only manage to lease in a two acre plot from one land owner. The lease is renewable every three years at a rent of Rs. 10,000/-per acre per annum. This land too was lying fallow, as the landowner moved to the nearby town in government service and had no interest in cultivation.

Although the Rose JLG could get only 2 acre, they were fortunate in a different way. The CDS and Gram Panchayat together helped this group in a number of ways. The group approached the ADS to provide them with MGNREGA support to make the land suitable

for cultivation. The ADS in turn made a supplementary scheme of MGNREGA and got this done. The women group approached the *Krishi Bhavan* for supporting them with quality seeds. They were in turn told that the Bhavan would do a soil test of their land, and then advise them of the best combination of crops. Eventually the soil test was done, and based on the results they were advised to do seasonal vegetables in a planned manner and change crops every season. The list of what they could produce was big: bitter gourd, brinjal, ginger, tapioca, carrot, lobia bean, tubers and banana. This crop combination required space planning so the women went back to the *Krishi Bhavan* and sought their advice. Thanks to the presence of CDS in the Gram Panchayat campus and their follow up, the *Krishi Bhavan* quickly responded and worked with the women to plan the two acre space for every crop and every season.

As these developments were taking place at the local level, KDS Mission struck a deal with the *Krishi Vigyan Kendras* (KVKs), the district level agricultural resource center of the agriculture department, to provide technical know-how and training on organic methods of pest and fertilizer management. The district KDS Mission provided a list of women JLGs to the KVK that they would train on organic crop management. Rose JLG was on that list. As a result, the Rose JLG received training on making biological pesticides and fertilizers by using local materials such as a mixture of tobacco juice and washing soap, and fish and powdered jaggery. The CDS in this Gram Panchayat also successfully contacted and secured a collateral free agricultural loan for the Rose JLG from the bank branch situated at the Gram Panchayat campus. Each member received Rs. 50,000/- as an unsecured term loan from the bank, payable in three years.

Rose JLG utilized these supports to their fullest. As a result, the Rose JLG cultivated high value vegetables using organic methods, with institutional finance at a reasonable rate of 7% per annum, with enabling technical guidance from the *Krishi Bhavan*. The Rose JLG's economic returns became significant so that they have returned their individual bank loans in time, renewed their lease for five consecutive years, took a return loan from the bank for another three years, and are paying the installments on regular basis. With local materials to make pesticides and fertilizers they reduced the cultivation costs. The crop rotations over the three seasons improved soil nutrition and thereby productivity. The planned use of space helped in obtaining maximum yield, and *Krishi Bhavan's* guidance and technical monitoring ensured minimum crop loss.

The crops generated in the field are divided into two parts: one part is for their domestic consumption that is distributed among the members; the second part is for sale in the local market. The sale proceeds are used for repayment of bank and other loans, input costs of next round of production and group savings. Consensus is the principle that guides this division rather than any scientific formulae. The women feel that roughly 60% is for their domestic consumption, and 40% goes to the market. It is quite likely, that financial considerations of repayment of bank loan, input costs for next seasons, savings for future, and ongoing market price of the products also influence their formulae.

The continuity of the present lease for the last six years is an indication that their agricultural operation has stabilized. Their performance is acknowledged by the Gram Panchayat and *Krishi Bhavan*, with the latter remaining an enthusiastic supporter of their endeavour.

This case study is an example of how CDS's strong linkage with the Gram Panchayat has been instrumental in providing multiple support systems to nurture and benefit a new endeavour. More important is that except for the linkage with KVK, all other convergence linkages are achieved at the local level, without much programmatic intervention of the KDS Mission from the top. This was possible due to the presence of strong and inclusive Gram Panchayats in Kerala. One tends to believe that this is more sustainable than the more centrally planned models.

What happened to the women of the Rose JLG in particular? What changed in their life? In answering these two questions, the women asserted the following: their dependence on their respective husbands for any financial support has reduced significantly; in fact their income now contributes to household expenditures. Their membership of the NHG and later the Rose JLG has given them a strong collective identity and added weight to their status within the household. They buy jewelry, household furniture, spend more lavishly on their children's marriage from their savings, and also use their savings for the higher education of their children. It is clear from the conversation that their thinking and planning horizon is now much broader than earlier. They are now seriously thinking of buying a piece of land in the name of the JLG.

A long accepted argument in the women's empowerment literature is that women's economic empowerment starts with earning and saving from that income. In that sense, these women have done well. It remains to be seen how far these changes transform the gender relations in the family.

(Source: Interview with JLG Rose in Pambadumpara Gram Panchayat, Nedumkandam Block, Idukki District, Kerala)

4.3 Case Study III

Multiple Marketing Channels for Women Cultivators

When agricultural production is mostly for domestic consumption, it's defined as subsistence agriculture. Commercial agriculture pre-supposes that agricultural production is predominantly for the market, although domestic consumption may still be a part of it. One of the most critical question, commercial agriculture has to address is ensuring market and remunerative prices. The case study below captures what KDS did to address the issue.

Both Dhanasthree JLG comprising of five members of Onakurvillage of Pambakuda Gram Panchayat in Ernakulum district, and Sneha JLG comprising eight members from Nadathara village of Nadathara Gram Panchayat of Thrissur district are examples of successful market players. Both are vegetable producers. Dhanasthree JLG operates on 80 decimals of leased in land, while Sneha JLG operates on 15 acres of leased land. Both JLGs have been in operation for about five years. While Dhanasthree grows a variety of seasonal vegetables and tubers, like bitter gourd, cassava, snake gourd, beans, tapioca and others, Sneha JLG cultivates bitter gourd on a commercial scale on a larger piece of land.

The beginning of both groups was almost the same. They were aware of the opportunity of collective leasing and they approached their ADS and CDS to help them negotiate land for leasing in. Both groups eventually negotiated with the landowners to agree on a lease for two years each, at the fixed rent of Rs. 10,000/- per acre. The lease agreements were all oral. The next step was to access MGNREGA funds to prepare the fallow land for cultivation. At the wage rate of Rs. 172/- per day, both the JLGs could use their family job cards to work for the preparation of the soil. This was not only a women's job. The men in the family also participated in preparing the land.



Members of Sneha JLG, Thrissur district

JLGs choose what they will produce under KDS's mandate, with a few restrictions. The restrictions are: a) no cash crops like rubber, tea, or coffee, and b) no chemical fertilizer or pesticides. The commercial production of food crops is allowed. Dhanashree opted for seasonal vegetables while Sneha opted for large scale production of bitter gourd. The predominant crop pattern in the area often determines the choice of the crop. The area under Nadathara Gram Panchayat is well known for large scale production of bitter gourd and export to other districts. That most likely has influenced their decision. The area in Pambadumpara Gram Panchayat is not under any specialized commercial crop. Moreover, relatively smaller plots are always known to be more useful for diversified crops. It appears that in both cases, the groups received appropriate advice and made a rational choice.

Although the scale of operation between the two groups is vastly different, both operate on similar marketing linkages. One part of that linkage is with the local market, often a weekly haat or a standing daily market where, the producers go and sell their products either directly to the consumer or to the trader. The traders often come to villages and buy the

products from the production sites. Even though selling at production sites usually earns a lower price than what they would have received at the market, it is beneficial for the women, because it saves the hassle to transport it to the market.

The second linkage is with the larger market at the district level and beyond. Linkage with such a market fetches a better price, but requires conforming to its logic. One such linkage facilitated by KDS Mission is with Vegetable Fruit Promotion Council of Kerala (VFPCCK), a state government enterprise. VFPCCK have

collection centers, where their staff comes on fixed days in a week, and collect the produce directly from the producers. The district level KDS Mission negotiated a routine with the VFPCCK to go and collect produce at different collection centers and at the same time spread the information through the CDS-ADS channels to the JLGs to avail this marketing facility. The JLG has to take their products to the collection point, where they are weighed and packed by the collectors and the producers are paid in cheque. The prices are pre-determined and declared. There is no intermediary involved in this transaction. The JLGs are required to be members of farmers' federation to avail this marketing facility. The farmer's federation serves as an notional "intermediary" and they receive a "trader's discount" of Rs. 2/kg. Often the federation uses that money to provide cash loans to the members. The JLGs could avail that loan, too. The KDS Mission also facilitated the membership of the JLGs in the farmers' federation.

There is a third marketing avenue that works primarily for big producers like Sneha JLG. Inter-district vegetable trade is managed by a different set of players who network with local private collectors to collect the produce

primarily from production sites and then trade it on a larger scale. The local collectors often have a pick up van and cash money to pick up from a production site and settle the payment in cash.

Sometimes the producers like Sneha may have their own pick up van which they use to transfer the goods to the nearest large trader. Since vegetable storage requires temperature control, the element of sophistication in this trade is quite high. As a large producer, Sneha JLG had

to look for such outlets. Since the area is known for large scale production of bitter gourd, finding such collector-traders was not difficult. Initially, the collector took the produce at the production site and paid Sneha JLG in cash. Later, the women realized that if they can arrange a pick up van and reach the mandi they would earn more even after accounting for the cost of transport and labour. So, in their fourth year, the Sneha JLG bought a pick up van. With the pickup van, they are now delivering their produce to adjacent districts, too.

How much can a group and a member earn is determined by the land size. While Dhanshree JLG's earning is about Rs. 35000/- per member in a year, Sneha group is earning Rs. 200,000 per member. The calculation of member's earning depends on three factors: individual member's contribution to the lease rent, individual money contribution to meet the input costs and post-harvest expenses, and individual labour of each member on the field. This calculation algorithm operates across the JLGs of KDS. Each JLG is taught to maintain a

ചെലവ് (Expenses)	
വാഹനം (Vehicle)	10,000
വാഹനം (Vehicle)	8,500
വാഹനം (Vehicle)	4,500
വാഹനം (Vehicle)	2,500
വാഹനം (Vehicle)	2,000
വാഹനം (Vehicle)	2,150
വാഹനം (Vehicle)	2,000
വാഹനം (Vehicle)	1,200
വാഹനം (Vehicle)	4,000
മുഴുവൻ (Total)	147,500

ലാഭം (Profit)	
ലാഭം (Profit)	1,52,500
ലാഭം (Profit)	300,000
മുഴുവൻ (Total)	1,52,500

മുഴുവൻ (Total) 1,52,500

മുഴുവൻ (Total) 300,000

മുഴുവൻ (Total) 1,52,500

Accounts register of JLG

register to record and track this computation. The labour rate for individual labour contribution is decided by the JLGs by consensus.

It appears that the decisive factor in the continuity and success of collective lease farming under KDS is continuity of the lease arrangement, and equally importantly, on learning the rules of the market. The price information for different products, different marketing outlets, and timeliness of delivering the produce to the market, on spot computation of sale value, price negotiation with the purchaser- all of these are lessons that are best learnt on the job. The JLGs learnt it that way. After a year of their immersion in the trade, the members were once taught of the arithmetic of product costing and pricing; based on their practical experience, they had already gained an intuitive sense of the rules and it helped them a lot. In addition, the women had to do it all by themselves and it is understandable that they probably have been supported in making these decisions and choices by their family members.

KDS mission's success in this case and many other cases is their ability to make convergence happen with a number of state and non-state actors to leverage institutional linkages and resources for the JLGs. However, its efforts are quite strategic, reactive and evolving, and leave a lot to be decided on the basis of local dynamics and evolving demands from the ground. For example, the VFPCCK connection for the JLGs is not to pick up all the produce, but to instill a sense of competition in the local market so that the JLGs can benefit from better pricing. At the same time, the Sneha JLG was enthused and they went on to engage with the larger inter district trade and learn to navigate through that mechanism through practical experience. In that sense, KDS tried to strike a good balance between state and market interventions to facilitate improvements in livelihoods.

The women of these two JLGs do not know each other. However, their refrain was similar. Both have said that they have internalized the business principles mostly through immersion into practical experience, and now feel more confident about the risks and their mitigations. Both have their business expansion plans and are waiting for new opportunities that include the purchase of land, leasing in more land, and diversifying into more remunerative crops. On the personal front these women share the usual story: they have enhanced mobility, gained more respect in family, increased personal savings, bought more jewellery, and modern kitchen instruments. Whether the family is now more "gender just" is a question that probably needs more systematic inquiry.

4.4 Case Study IV

Women Master Trainers: Peer Educators for programme scale up

With more than two lakh rural women involved in collective leasing or Sangha Krishi as it's called in Kerala, there is a need for a large number of crop management trainers that can work at the ground level to work with the JLGs on soil preparation, crop choices, planting and transplanting techniques, pest management, water and fertilizer management, weed management and similar issues. The need for such trainers is in thousands. While these topics are very much part of the curriculum of agricultural colleges, the students and alumni of these colleges are not expected to do the work needed here. The alternative is to build capacity from below, by gradually creating a large cadre of grassroot level trainers from these groups, so that the trainers remain accessible, understand women's specific concerns, and the capacities are retained in the community.

Like any other large scale implementation, selecting the right candidate for the job is known as, 'half the battle won.' The KDS Mission developed an innovative approach. It instituted a "Best Women Farmer" award in each Gram Panchayat every year. A best farmer is a combination of leadership and technological expertise. The person is expected to show leadership abilities by having moved up from the NHGs, and has also managed a JLG farm successfully with multiple crops year after year. In addition, she has to have time to devote to training activities and learn the science of these topics from experts. The final key to becoming a master trainer is that the person must have a good plot of land which can be used for demonstration.

The district KDS Missions sensitized the CDS and ADS leadership to discover such potential master trainers in consultation with the Gram Panchayats. The CDSs formed a team for this

important task. They asked the ADS to look at JLGs that did well in cultivation, production and diversity, and among those leaders that have moved up, preferably to the CDS leadership as well. In fact, finding a person who had risen to CDS leadership was not difficult. After all, all CDS leaders are members of a NHG, and typically most CDS leaders have worked as ADS leaders in the past. Finding a CDS leader who had been involved in training, had been a part of JLG and led it, and had increased their cultivation portfolio to a level that can be demonstrated to others was the challenge. Finally, they could find a few hundred such master trainers across the districts.

Bindu Scaria, from Vathikkudy Gram Panchayat, Idukki Block in Idukki District is one such master trainer. She has been selected unanimously by the CDS and the Gram Panchayat for her leadership abilities, training experience and having an excellent leased in plot. Bindu started as a NHG member in 2003, moved up to ADS leadership and finally to CDS leadership, and she is currently the chairperson of the CDS at Vathikkudy Gram Panchayat. Being a leader of around 8000-9000 KDS women, she is as busy a person as much as the president of the Gram Panchayat. However, that did not deter her to lead the Shreya's JLG along with four other members in her village which she helped form in 2010. Shreya's JLG leased in a 1.4 acre plot from one landowner for two years, and with the help of Krishi Bhavan, the team grows a number of vegetables, tuber and fruits in two seasons that earns them nearly Rs. 1.5 lakh per year for the JLG. As a leader Bindu has been a great communicator and a mobiliser. She helped form



Bindu Scaria with other JLG members on their field

a number of JLGs, and worked with the bank to provide loans to some of those JLGs.

Another such master trainer is Eliyamma. A member of the Veena JLG from the Pambakuda Gram Panchayat in Onakur village of Ernakulum District, she has been awarded the best farmer by her Gram Panchayat, and has been selected as a master farmer. She has been the leader of Veena JLG which was formed in 2008 and has five members. The JLG has been doing collective leasing on nine acres of leased in land which they received from two landowners. Thanks to her foresight, Veena JLG has used the land very judiciously to produce vegetables, fruits such as banana, and various tubers; all of which are under a crop rotation plan for all three seasons. She is also a member of a micro-enterprise group—another sub-programme within KDS, that produces ghee, curd, and rice powder. Her multi-dimensional abilities made her a favorite choice for a master trainer. Needless to mention, Eliyamma is one of the leaders of the CDS of Pambakuda Gram Panchayat.

The CDS and Pullickal Gram Panchayat leadership selected Ramlath as a master farmer.



Eliyamma on her land in Ernakulam district

She is from Pullickal village in Kondoty block of Malappuram district. In her case she is a leader of an ADS and is a member of the Madina JLG, which was formed in 2009, and cultivates a variety of vegetables including banana, cluster bean (lobia), cucumber, snake gourd, bitter gourd etc on 3.75 acres of leased land. The annual income from the farming is Rs 1.5 lakh per member. Ramlath is known to be a courageous woman. She was separated from her husband 10 years ago, and since then has single handedly managed her family of two children. She was the initiator of Madina JLG, and meticulously worked on the field to ensure good crops with reasonable variety, and right market connections. Apart from her field, she is an outstanding example of a woman who is single handedly looking after her family, has also built herself a decent

house, supports the continuation of her children's education, and even employs her former husband as a labourer on the same field. As such she was unanimously selected as a master trainer from this panchayat.

Trainers like Ramlath, Eliyamma and Bindu are now engaged as master trainers for implementation of the MKSP programme. They are being further trained by agricultural experts from KDS units, agricultural and horticultural departments.

These trainings involve modules on motivation, logistics, agricultural techniques, and on the various initiatives of KDS that include supporting and monitoring JLGs and working on convergences with MGNREGA, banks, *Krishi Bhavan*, KVKs, and others. Each master trainer is responsible to work with 5-6 JLGs, some of which are new. The logistical arrangement is such that these master trainers may have to move within their own ward and another ward.



Banana trees grown by members of Madina JLG, Malappuram

The principle at work is simple. Create capacity within the community and use that capacity for further scale up. The pedagogic model of replication is learning from the peers, and educating the peers. These women carry the peer experience to tell the prospective women farmers about what works and what does not. Their cross learning from each other's experience is yet another great pedagogic resource for the programme.

What happens to these women? Talking to them reveals that they see a different journey coming their way. It is a journey in which they would be recognized as local farming experts and thus replace the stereotype that agricultural expertise is a male domain.

(Source: Interviews with Master farmers)

4.5 Case Study V

Labour Pooling: An innovation born out of necessity

Family labour of each member and that of the group combined is the key to a successful collective leasing arrangement, as well as other enabling conditions like the continuity of the lease agreement and the convergence support from different sources. However, there is a limit to the use of family labour. Most agricultural practices require labour in several specific time slots: during planting or transplanting, during de-weeding, and during harvests. The work has to be finished at a specific time during those slots. When the leased-in land is more than a certain size, family labour is not sufficient to cope up with the requirement of the work. At this time, hiring becomes necessary.

Labour hiring at the market rate has become prohibitive for remunerative cultivation. Kerala's agricultural labour rates are one of the highest in the country and the labourers have to be paid in cash on a daily or weekly basis. Both are constraints on profitability and cash flow. This determines the limit as to how much land can be optimally leased in by a group depending on the number of members and their families.

One strategy could be labour pooling, in which two or more JLGs decide to pool their labour to work in respective fields as required. The case study here captures this innovation within the KDS programme.

Mary Enashu, Janaki, Annis and Anila are women farmers from the Poyya Gram Panchayat, Mala block in Thrissur district of Kerala that came together as Bhagyashree JLG in 2009. They belong to very poor households that are termed as BPL families at the time of their forming the JLG. Initially they leased in nine acres of land from two landowners with the enabling support of the CDS Chairperson. The land had been lying fallow for a few years. With the support from ADS as an implementer of MGNREGA, the group worked on the leased-in field to prepare the soil for cultivation. They initially started by growing paddy. In 2010,



Members of Bhagyashree JLG

another opportunity came their way, and they leased in another 2.5 acre on an almost adjacent plot, and started growing bananas, vegetables and spinach on that plot. The lease rent was Rs. 11000/- per acre per year for three years.

Managing an 11.5 acre farm by four women and their families could be quite difficult if they were to follow systematic agricultural practices. The option was to hire labour at market rate or seek labour participation in a different way.

Another JLG by name Shreemurthy started in the same area in 2009 and had five members. These five members, too were BPL families. This JLG leased in a five acre plot from one landowner and started paddy cultivation. They were also facing the same difficulty with labour as two of their members were unable to devote adequate time to the work due to illnesses in the family.

Mary and Anila approached the members of Shreemurthy JLG to help them. After some discussion they agreed to pool their labour. This meant that three members of Shreemurthy JLG would provide a pre-determined quantum of labour on Bhagyashree JLG's plots reducing their labour shortages. In return, the members of Bhagyashree will provide their labour to Shreemurthy JLG's fields.

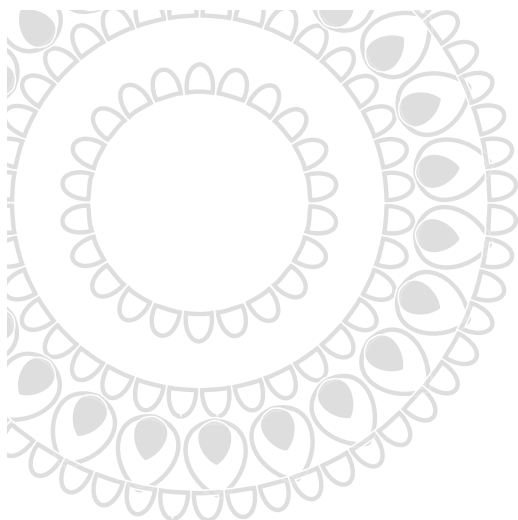
This apparently simple solution was not so simple to achieve and needed to overcome social dynamics. The women had to talk to their male counterparts so that they would agree to such an idea. Several discussions took place to determine how many labour days would be needed on both sides, how that will be recorded, and how the labour would be paid. For example a simple question is to understand if both paddies are of same variety, so that if labour is paid for by production share (which is the case here) it becomes an equitable distribution.

The tenacity of the women of both the groups finally made it happen. Somehow they could see the benefits of this collaboration more quickly than their male counterparts. Once they entered into this arrangement, the women became closer. They kept perfect records, exchanged their records as and when necessary. They understood each other's concerns, and settled all accounts in an absolutely transparent way. These women farmers have displayed significant economic foresight and agency in deciding to pool their labour to cut mutual costs. In 2011-2012, the Bhagyashree group got an annual net income of Rs. 22000/- per member per year and Shreemurthy group got Rs. 10,000/- per member per year. This is after accounting for domestic consumption of paddy, banana and vegetables of each group member.

Their collaboration is now in its third year. By this time, they are not only sharing labour, they are also sharing input costs. For all practical purposes these two JLGs are now working as one group having three plots of leased in land. They appear jointly in all the KDS related meetings, and also jointly engage with the Gram Panchayat. They appeared jointly for the interview as well.

This kind of labour pooling may not have been incorporated as a very general strategy within KDS, but could prove to be an effective one. It is generally known that the poorer a person is, she/he is more likely to live her/his life by the pooling of resources – natural, economic and social. The appropriate pooling of resources is possible as a strategy due to the presence of strong community institutions of the NHG-JLG-ADS-CDS and strong Gram Panchayat. These two JLGs can be regarded as a pioneer in this regard.

(Source: Interviews with Members of JLGs Bhagyashree and Shreemurthy)



5.0 Overall Lessons and Way Forward



Both KDS and IKP demonstrate an institutional model of how women collectives whose roots are from micro-finance practices can work for changing the women's role in Indian agriculture, and in the process alter the existing paradigms in force in agriculture towards more poor friendly, sustainable and forward looking practices. As stated in section 2.0, both KDS and IKP have striking similarities. This study identifies several of them including in the terms of institutional backbone of women's three and four tier collectives; utilizing women as change agents in agricultural practices, carrying all the innovations, transforming themselves from a labourer to a 'owner' producer, women as technology experts; and providing support for convergence. In this section we will draw a few over-arching lessons from the experiences:

5.1 Positive lessons

1. The multi-tier institutional backbone of women's collectives is the key to all successes that have been achieved in these two programmes of CMSA and collective leasing.
2. Women are playing multi-dimensional micro and macro roles and taking up responsibilities in both the enterprises of IKP and KDS. Several examples can be foregrounded- as planners, technology carriers, mobilisers, managers, entrepreneurs, negotiators and even innovators.
3. Both programmes of CMSA and collective leasing have transformed the women as the primary actors in crop management thus reducing the traditional role of men.
4. According to the women interviewed for this study, their mobility has enhanced vastly, their personal savings have improved, and their respect in the family has also improved. In most cases, the women are now an earning member within the family. In conclusion, these women have changed the family dynamics to some significant extent.
5. A woman as a peer educator is successful in both the programmes. The women have broken the myth that agricultural pedagogy and extension is a male domain. This, in addition to women as demonstration farmers, and learning on the job as the main pedagogy, has been very effective in both programmes.
6. Family income has certainly improved in both the CMSA and collective leasing interventions. The women's own estimates as shared for the case studies are surely a testimony that they are happy with the

progress they have made. It would be beneficial though to conduct further and more systematic income studies.

7. The convergence with government and non-government programmes and institutions has been a key to the successes achieved. There are many examples: MGNREGA, the Agriculture Department, Gram Panchayats, Digital Green, mobile technologies, marketing cooperatives, etc. which have been vital for the successes that have been achieved so far.
8. Creating resources within the community has been the primary capacity building strategy followed in both the programmes. From the experience so far, this has worked out well. Another significant lesson is that creating multiple types of capacity in the same person is often to the advantage of the person, as she can have many future uses of her acquired skills and experiences.

5.2 A few concerns

1. One major concern from the study is the legality of collective leasing. While collective leasing is certainly working on the ground, the illegality of leasing in law is a constraint that needs to be addressed. Andhra Pradesh has made a new beginning by legalizing leasing under certain conditions. These two programmes provide ample evidence to make a robust case of liberalizing the laws of leasing in favour of the poor.
2. Although the women have certainly progressed a lot in their engagement in agriculture, now the time has come to look at the more structural issues of women in agriculture, from a truly gender perspective. It would be useful to apply any of the available gender frameworks in agriculture to assess how the two programmes fare. This is more relevant in the context of MKSP that is now working in 12 states through its

state and non-state partners aiming to reach at least 2 million women.

3. Both the IKP and KDS Missions have structured gender programmes that work mostly on domestic violence and related issues. There is enormous scope for the gender programmes to get involved with gender issues in women and agriculture that are so foundational that such association could go a long way to engender Indian agriculture in a true sense and build on the positive experience of IKP and KDS.
4. While the convergence efforts are exciting, for long term sustainability some of these convergence efforts need to be institutionalized. Kerala's strong Gram Panchayats provide one such pathway for institutionalization, but may not be the only pathway when it comes to other states.

5.3 Way Forward

There are a number of practices and lessons that can be adopted in other similar programmes. At the same time, it may be remembered that local situations within such programmes and the enabling environment that creates it would vary and therefore the selection of appropriate aspects or programme interventions would have to be made carefully. It should also be recognized that both the programmes have some areas for improvements and consolidations to be made so as to make them more robust and exemplary.



Engagement of women's groups in farming has become an increasing trend in state's rural development programmes in several states. Kudumbashree in Kerala and Community Managed Sustainable Agriculture (CMSA) in Andhra Pradesh are two initiatives among them that have caught the attention of the policy makers and rural development programmers. These two initiatives are often cited as the desirable pathways of women empowerment in the context of increasing feminization of agriculture.

The collection of case studies presented here captures a nuanced understanding of the systems and processes that are empowering women in Kudumbashree in Kerala and CMSA in AP and in doing so identifies the gaps that need to be addressed to make the empowerment more enduring.

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