

# Poverty reduction through sustainable agriculture



Photo: S U Saravanakumar, Evanesence Studios

*Farmers now have access to more than 100 indigenous rice varieties*

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The three tier institutional model of working with smallholders has delivered better services to the farmers in Tamil Nadu. The role clarity of organizations at each level and the organic linkage between them has helped in addressing both social and economic issues related to agriculture. Farmers with increased access to resources and services have been able to move towards prosperity.

**L**arge proportion of population in three districts of Tamil Nadu -Nagapattinam, Tiruvannamalai and Kancheepuram are dependent on agriculture and are largely poor. Agriculture is increasingly becoming non remunerative for them due to various reasons including low productivity, increased cost of cultivation, poor access to services and market fluctuations. A

baseline study findings revealed that the productivity of major crops like groundnut and black gram is low, cost of cultivation high, access to agricultural services and credit, poor.

Under such conditions, CIKS in collaboration with Vrutti Livelihoods Resource Centre, Bengaluru started working with the communities through a project, to enhance the incomes of smallholder agriculture households. The project is supported under the DFID Global Poverty Action Fund (GPAF) Impact Window and co-funded by HIVOS, Netherlands. The project approach is to build a farmer led social enterprise model with the potential to sustain itself and to upscale for larger impact. The project is currently working with 9218 farming households in the three districts spread in 79 Gram Panchayats (GPs).

## **The model**

The delivery model for carrying out various interventions has the farmers group at the village level and a farmers federation, called Agriculture Producer Company at the district level. Agriculture services will be provided by a group of progressive farmers called the Village Agricultural Business Development Service Providers

(VABDSP). Every Panchayat has one VABDSP, selected by farmers groups. They facilitate delivery of various services for the farmers, facilitate entitlements and schemes for farmer groups and serve as a link between the farmer and the project / producer company.

The village level farmers groups like women's self help group, men's self help groups, mixed groups, joint liability groups, farmers clubs etc., are the basic units. These groups called as Sustainable Agriculture Self Help Groups (SASHGs), have a membership of 20-25 men and women.

Panchayat Agriculture Development Committee (PADC) is the apex body of farmers groups which constitutes 12 - 20 representatives from various farmers groups belonging to the Panchayat. It is also represented by certain members at the panchayat level. The main role of PADC is to coordinate and monitor the activities of the farmers groups.

Cluster Agriculture Development Committees (CADC) is the apex body of PADCs and constitutes 20 - 30 representatives from PADC office bearers and operates at the block level. About 15 - 20 PADCs come under every CADC. The CADC coordinates and monitors activities of PADCs.

At the district level the Agriculture Producer Company (APC) is formed. The role of a producer company is to provide a variety of services for the farmers like insurance, organic certification, courses for farmers etc. besides providing good quality foundation seeds, inputs like neem seed powder, vermicompost, biofertilizers, biopesticides, gunny bags, cattle feed etc. to the members.

Presently there are 552 SASHGs, 71 PADCs, 5 CADCs and 2 Producer Companies in place. Presently, the membership of the two producer companies is around 4000. By the end of the project period, we hope to have all the 9000 beneficiaries of the project as shareholders in these producer companies.

## Key results

### Adoption of eco-friendly agriculture practices

There has been a significant progress in terms of farmers moving from inorganic farming practices to sustainable organic methods. Of the total farmer households, 15% have shifted from inorganic farming to Non Pesticide Management (NPM) farming practices and another 10% have shifted to complete organic farming practices. About 55% of farmer households have adopted at least one of the sustainable agriculture techniques/practices promoted by the project. There is an increase in productivity of all major crops and across varieties from the baseline.

### Reduced costs and increased incomes

A 7% reduction in cost of cultivation in comparison with the control group is observed. Nearly 4500 households reported an increased net income of at least 15%. Around 107 farmers practiced SRI method of cultivation in 143 acres. There was a reduction of Rs. 1250/- per acre in the cost of cultivation by following this method which amounts to a saving of Rs. 1,78,750/- in the entire district. In Nagapattinam district, 45 farmers adopted SRI method and



Photo: CIKS

An interaction in progress in Ilayamadukoodam village in Sirkazhi

Rs. 1,200/- per acre was reduced in the cost of cultivation. A total of Rs. 54,000/- was saved by adopting SRI in this district.

More than 2000 kitchen garden units have been set up and managed by women with the households getting an average income of Rs. 300/- per month. A total of 305 beneficiaries are involved in value addition in various commodities.

## Community Units

Community level initiatives are catching up in the project area. Thirteen community owned and operated vermicompost units, 7 community biopesticide units, 7 community value added production units are functioning in the three districts. A number of these units, especially, the vermicompost units and the value added products units, are owned by women. These enterprises provide good quality and timely inputs within the village for the farmers at a reasonable cost throughout the year. The women and others who work on these units get an additional income every month other than what they are getting from their regular farm work.

## Improved access to farm machinery

Agriculture Machineries Facilitation Centres (AMFCs) have been established in 14 panchayats to improve access to farm machineries. The types of machines available in AMFC are power tiller, mini tractors, oil engines, transplanters, power operated conoweeder and winnower. Most of these AMFCs are making profits and have become commercially viable as it's services are paid for by the farmer. For instance, in Peranamallur panchayat, 1800 bags (144 tonnes) of paddy grains were cleaned by using the winnower.

States need long-term policies to adopt agroecological practices. They should refer to agroecology and sustainable agriculture in national strategies to realise the right to food and in national plans to mitigate climate change.



Photo: CIKS

*Kancheepuram farmers visit a demonstration farm*

Cleaned grains fetch an additional income of Rs. 50 – 100 per bag, since the quality of the produce is better. AMFCs services are provided to the non project beneficiaries also.

## Conclusion

The model of working with smallholders through a village based service provider and facilitating demand based services, has delivered better services for the farmers. The three tier institutional model (Panchayat-Cluster-District) ensured timely aggregation of agricultural inputs and outputs at various levels, facilitated through APC. The role clarity of PADC, CADC (coordination, knowledge dissemination, monitoring the services of VABDSPs, resolving group conflicts etc.) and APC (business targets) and the organic linkage between these organizations has helped this institutional model to address both social and economic issues related to agriculture.

Local progressive farmers as village based service providers helped in efficient facilitation of various services to target communities. This was possible as they knew the local context, needs and priorities of fellow farmers in a better way. Farmers having realized the value of the services provided by the VABDSPs, have started paying for the services. Farmers are also willing to pay for specialized services like facilitation of Government entitlements, access to credit and insurance.

Representation in the governing board of APCs, enterprise promotion for women groups, selection of women as VABDSPs have significantly contributed to the empowerment of women by way of socio-economic development, participation in decision

making forums etc. There is an increased sense of social recognition and equality as expressed by these women VABDSPs. The inclusive approach in formation of groups (mixed group of landless and land owning farmers) and their apex bodies, focused economic upliftment activities for landless have also significantly contributed to equitable share of benefits.

Overall, the achievements of the project are significant. We have seen increased income levels for farmers across categories, increase in productivity, reduction in cost of production and increased net income for the producer company. There is a significant improvement in the capacities of leaders of the producer companies in identifying and systematically screening business opportunities. Transparency in discussions and ability to take informed decisions have considerably increased. We see a vast improvement with respect to regular functioning, record maintenance, leadership qualities and quality of interactions with the outside world. The focus of women SHGs has broadened from savings and credit to addressing issues relating to sustainable agriculture practices. On the whole, the project has helped family farmers break out of the poverty and move towards prosperity.

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