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Market Oriented Advisory Services through Women Advisory Service Providers in Punjab, India: The Case of value addition through food processing

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Introduction

India has made a quantum jump in production and productivity but lack of technology application in post-harvest handling and value addition of agricultural produce has eluded the farmers' of their due profit. About 10% of food grains and 25-40% of fruits and vegetables produce go waste, as the agricultural produces are not processed in the catchment areas. The value addition in the form of preservation and processing of agricultural produce has tremendous potential for providing employment and additional income to farm families in rural catchments and thus help in checking the migration of people to urban areas in search of livelihood (Patil and Singh, 2007). Agro and food processing industries in India have great importance in terms of employment, income generation, poverty alleviation, export promotion and foreign exchange earnings. In most of these developing countries, the majority of rural poor, primarily the farmers have small landholdings, limited resources and excess family labour. Creating multiple opportunities, especially for small and marginal farmers and farm women, through various agribusiness enterprises is a challenging task.

Inclusion of women in scientific and technological endeavors and realizing women's intellectual potential is a big challenge as they play a decisive role in many facets of agricultural sector in India. Self-help groups (SHGs) have emerged as an effective mechanism for empowerment through group action. Capacity building through training programmes has a positive impact for motivating the rural women to adopt the food preservation technologies which improved the knowledge level significantly (Meena *et al.* 2006). In pluralistic extension system in India public extension plays an important role. Central Institute of Post-Harvest Engineering & Technology (CIPHET-a unit of Indian Council of Agricultural Research, Ministry of Agriculture, New Delhi), made efforts to support the public extension system through commercialisation of processing technologies through social capital, capacity building and transfer of processing technologies among peer members and other rural women.

Remote areas in districts bordering Pakistan, lacked service providers, feeling this need CIPHET, Abohar campus took initiatives in far flung areas of Ferozepur district of Punjab state to build capacity of rural women in food processing technologies in a phased manner. In the first phase, during 2000-2003 about 350 rural women were trained by CIPHET, at Abohar campus free of cost. Out of these trained women, some innovative ones were selected for providing paid services in rural areas and were named as **Women Service Provider (WSP)**. This provided them with and opportunity to be self employed and earn some livelihood support for their families. On the other hand beneficiaries' i.e. rural women were trained in the real social settings/workplace. Consequently a number of SHGs were formed, trained, and linked to the market with an intention to empower the rural women socially and economically.

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Market Oriented Advisory Services (MOASs)

Demand for services

The target group was most vulnerable component of society i.e. poor rural women of high risk areas (as international border with Pakistan is nearby) where it was difficult to be more market-oriented activities. Convincing to pay for advisory services initially appeared quite difficult as people are accustomed of receiving plenty of free inputs from governmental programmes. Initially women were reluctant to come out of their homes for better livelihood options. To tackle this, the demand for advisory services was twisted through the organization of awareness camps, *Kisan Gosthi* (farmers meetings), field days etc. and on the demand of *Sarpanch* (Headman of village). Intensive interaction were arranged between scientists, SHG members (including villagers) and service providers, where, WSPs agreed to provide their services at village level for a small fee. This was fixed at Rs. 300/member/month, to meet out the expenditure of WSPs (like daily bus/auto fair, lodging and boarding charges etc. The raw material for food processing like fruits, vegetables, etc. was arranged/provided locally by villagers, only training cost was charged, while other services were provided free of cost.

Provision of services (reference to PPP)

The public sector and NGOs provided support at different levels, i.e. central, regional, district, and local. The services provided were:

- Organisation of need based and skill oriented trainings to the rural women
- Organization, stabilisation and management of SHGs
- Networking of SHGs
- Linking SHGs with financial institutions and research organisations for better services
- Backstopping support
- Promotion and funding from Indian Council of Agricultural Research (ICAR), Ministry of Agricultural (MoA), New Delhi
- Mentoring and coaching
- Promotion for extension role through SHGs
- Research methodology development
- Impact assessment and providing feed back to ICAR.

Kind of business services provided

- Provided packaging technology to the SHGs
- Due to distant market, motivated some unemployed school drop-outs as middle men for marketing of produce.
- Middle men used to purchase the produce from SHGs and sold with a margin of 40-50 % in the market. However, later on some SHGs started marketing themselves.
- Due to lack of transportation facility, middle men were transported the produce by the bicycle.
- Initially, middle men were facilitated to sell the produce among the staff of CIPHET, known persons and later on in the market.
- Developed networking of SHGs at cluster level, arranged group meetings to facilitate natural learning among peers.
- Arranged experts of bank officials for providing information on credit aspects at cluster level.
- Provided institutional back up support on technical, marketing, packaging, networking and safety standard for sustaining the SHGs.

- Monitoring and provided feedback information to SHGs for reconsideration in business activities.

Scope of services provided

Initial services included: organizing rural women; capacity building; promotion of value addition technologies; linking SHGs with markets; motivation for success case replication, input supply advice and supply the information on market price. However, there is further scope for more services on a wide range of activities to help rural women diversify their business activities. Activities which are dairy-based (whey, ghee, paneer, cheese, butter, cream, sweets making etc.), fisheries-based (fish hatchery, fish culture, fish pickles, rearing of brooding fish etc.), agri-based (mushroom production, preparation of vermi-compost, bee keeping, organic farming etc.) and allied activities (tailoring and embroidery, ink and shampoo making, preparation of matchbox, candle, soap, toys, rope making, cloth weaving, mat production, basket bags and carpet making, handloom weaving, garments, cattle feed etc.) could be taken up to enhance income. Services like information on production technologies; quality specifications; training in marketing; networking with other SHGs, and safety standards can expand the horizons of business.

Linkages and back-up support

Linkages were developed with various financial institutions for credit support; with development departments for supporting members through various schemes, and with other SHGs/associations for exchange the ideas and experiences of group members. For technical services and capacity building of SHGs, North Indian Technology Consultancy Agency (NITCON), Chandigarh, Indian Farmers and Fertilizers Co. Ltd. (IFFCO), and *Bharat Vidhya Parishad* (an NGO) played supportive role with CIPHET, Abohar. Being a part of public extension system, CIPHET provides agricultural advisory services free of cost to a variety of clients. WSPs were also trained and motivated by CIPHET, Abohar for advisory services and success case replications (SCR) in the food processing technologies, and closely monitored their activities.

Training support and networking

Imparting training to rural women is an integral component of MOAS, and considered as a part of strategy for empowerment of rural women. Through training process, women went through a sequence of experiences, and got opportunities to learn. In the first phase, CIPHET trained all rural men and women and in the second phase, WSPs provided the training to rural women at village level under CIPHET supervision. During the period (2001 to 2008) nearly 3000 women were trained on various value-addition and processing technologies through on-campus and off-campus trainings. The project was implemented in a network mode, by CIPHET provided technical help and played a lead role in creating awareness and helping choose various income generation activities from a basket of activities, like processing technologies; in addition of providing back up support to the SHGs. CIPHET also developed innovator WSPs who provided advisory services and SCR in processing technologies. CIPHET networked with IFFCO, for sponsoring trainings, hiring the WSPs for advisory services; Panchayati Raj Institutions arranged location for conducting trainings. NITCON, Chandigarh sponsored the skill oriented trainings for creating awareness about various governmental schemes for establishing the processing; PAU, Ludhiana provided technical help whenever needed by CIPHET and NGOs like *Bharat Vidhya Parishad*, Abohar and motivated rural women for training and provided its infrastructure for conducting trainings for rural women.

Cost recovery mechanism

As target group was poor rural women it was difficult to convince them to pay. To tackle this, intensive interactions were arranged between scientists, SHG members (including villagers) and service providers, where, they were told about the economic benefits that could accrue to them if they took proper training by WSPs. After discussions with all the parties it was WSPs agreed to provide their services at village level for Rs. 300/member/month, to meet out the expenditure like daily bus/auto fair, lodging and boarding charges etc. The raw material for food processing like fruits, vegetables, etc. was arranged/provided locally by villagers, only training cost was charged, while other services were provided free of cost.

Institutional Arrangements

At CIPHET, Abohar women were motivated and facilitated to form the SHGs and for SCR for harnessing the benefits of value-addition and processing technologies for employment and income generation. All the activities i.e. training need assessment through participatory rural appraisal techniques, capacity building of rural women, formation and stabilization of SHGs, linking with financing institutions and nearby markets, advisory services through WSPs for promotion of processing technologies, promotion for SCR, effective transfer of processing technologies through SHGs and monitoring and evaluation activities were carried out by CIPHET with the supportive role of other agencies. The project and activities of CIPHET was fully funded and supported by ICAR, MoA, New Delhi. Though private sector was not involved, but Civil Society Organizations (CSOs) like *Panchayati Raj* Institutions and NGOs did play an important role in this initiative. The agencies involved were:

- CIPHET, Campus Abohar, (Punjab)
- Krishi Vigyan Kendra, Abohar under the administrative control of CIPHET
- Zonal Coordinating Unit (under Extension Division of ICAR), Ludhiana, Punjab
- IFFCO- a multinational organization working on principals of Cooperative with Primary Agricultural Cooperative Societies (PACS) as members.
- Panchayati Raj Institutions, like Gram Panchayat (an elected body of villagers) under three tier Panchayati Raj System
- NITCON, Chandigarh (Punjab)
- Ministry of Small Scale Industry, Ludhiana chapter (a Government of India institution)
- Punjab Agricultural University (Division of Food Science), Ludhiana, Punjab
- NGOs like Bharat Vidhya Parishad, Aobhar.

Performance and Outcome

Clients served

The clients of this initiative were mostly poor farm women living in remote rural areas, who were trained to supplement their income through food-processing and value-addition of the locally available resources. Each WSP trained farm women in batches of 20-25 for 2-3 months, after receiving Rs. 300 (US\$-7) per woman per month for the advisory services offered by them. About 5000 women SHG member and non-members have been served so far. These advisory services were open for both the member and non-member of SHGs and services like organizing women in groups, information regarding raw materials etc., were provided free of cost.

Quality of services provided

Initially, literate farm women selected as WSPs by CIPHET for capacity building in post-harvest technologies were trained, facilitated, motivated under the supervision of scientists for providing training services in processing technologies at village level. Next, these WSPs transferred processing technologies through SHGs among rural women for a small fee. As WSPs were all

local farm women, they were knew well the socio-economic settings, prevailing customs and problems of the villages. They were further supported by villagers; CIPHET and SHG members, so they could serve the better even under harsh conditions. The efforts made by these WSPs can be considered 'good'.

Additional services needed

There was a strong desire among farm women to diversify their activities for improved livelihood. They desired additional services like diversification to more agri-based, horticultural-based, or animal-based enterprises /activities to reduce their risk and uncertainty. It was also felt that information on strong networking with other SHGs / farmers associations, knowledge of safety standards, food specifications etc. could help them commercialize their activities on a larger scale.

Training approach, coverage and cost recovery

SCR methodology, based on principles of 'horizontal' extension is facilitating the dissemination of new profitable micro-enterprises. It primarily addresses the low-income rural and urban households. 'Innovators' among the poor farm women are capable of identifying new income generating activities to successfully exploit market opportunities. There is ample of scope to promote and support the transfer and replication of these experiences by motivating these women innovators through capacity building for aspiring SHG members. SCR programme was systematically documented the positive attitude of SHG members and over 1000 women are indulging in SCR.

CIPHET a government institution provides the advisory services free of cost from production to the post-harvest management aspects. However, the WSPs are providing the paid advisory services to the willing women at village level. From 2001 to 2008 nearby 5,000 women were trained in their social settings on processing technologies. On request, WSPs are also providing similar paid services to NITCON, IFFCO, different NGOs and other agencies. The rural women are paying Rs. 300/month/member, which provides for the MOAS services like training on processing technologies, market price information, input supply advice, organizing rural women in groups, linking SHGs with markets and motivation for success case replication and transfer of agricultural technologies.

Benefits and impact

Though no comprehensive mmonitoring & evaluation system was set up, however, an evaluation was done to assess the impact of training and capacity building on the level of knowledge, changes in attitudes and behavior aspects.

Socio-economic attributes:

- All the members of SHGs were female and a majority of them (53.33%) were between 20-29 age groups. Only 33.33% of participants had primary and senior secondary level education.
- All the women had rural background whose technical skill were developed for food processing technologies like preparation of high quality jam, jelly, pickles, etc. at cottage level.
- Half of the respondents reported their income from SHG activities in the range of US\$42 to US\$68 per month. Thirty percent of them earned less than US\$ 68 per month. More than half of the respondents had 3-4 years of experience as members of SHGs, and only 26.66% had more than four years working experience.

- Most of the participants belonged to labour class family who adopted processing technologies as complementary occupation.
- The group stabilization rate was found to be 60%.
- Unemployed women and youth got employment as service providers and middle men.

Gain in knowledge level, change in behavior and attitude

Knowledge of SHG members increased significantly (knowledge gap 60%). It was observed that increase in experience and family size of group members were significantly correlated with the gain in knowledge level. Some indications of behavioral change were also observed, viz. risk taking behavior, application of marketing strategies, creativity, positive attitude, problem-solving ability, self-confidence, leadership qualities, group cohesiveness, information receiving pattern and knowledge regarding financial aspects. Results show a significant change in attitudinal areas in socio-economic upliftment; education and training; marketing and entrepreneurship qualities; technology adoption and participatory research; and banking/credit aspects.

Lessons Learnt and Policy Implications

The constraints hindering the market access and commercialisation of processing industries are:

- Lack of knowledge regarding marketing strategies
- Distant location from market/city and research institutes
- More area to cover by extension functionaries
- Negative attitude of banks for providing credit
- Lack of group stabilization
- Illiteracy and prevailing customs prevent the rural women to come out from home for SHG activities (training and marketing)
- Exploitation for loaning by local money lenders.

However the following lessons from ths experiences can be drawn which bear many policy implications for the planners and policy makers:

- ***Additional committed extension personnel required:*** Public extension personnel in India work in too many areas, as result their efforts are diluted. The need is for committed extension personnel who can work closely with the farm families and give more emphasis on self help or during the withdrawal stage of SHG formation. In Indian context SHGs are emerging as reliable and efficient mode of technology transfer which can support to the Indian public extension in a big way.
- ***Women do not have land title:*** Lack of land title affects women to offer collateral for agricultural loans. However, group approach makes it easy, as the finance agencies consider them more credit worthy and repayments are also satisfactory.
- ***More women service providers needed:*** Experience shows that WSPs play an important role in providing agricultural advisory services at village level. Hence, more WSPs are required to do the challenging task in the large country like India.
- ***Efficient M & E design required:*** There are very few standard methodologies available to assess the impacts of interventions / projects. There is a need to develop the research methodologies or modify the available methodologies suited to local conditions. There is also a need for efficient M & E system to monitor these technical interventions.

- **Strengthen SHGs role in technology transfer:** SHGs are being recognized as a reliable and efficient mode of transfer of technology and positive attitude of the members is required to foster the transfer of technology (Meena *et al.* 2003). Therefore, in a large country like India where interface between scientists and farmers is a difficult task. Hence, SHGs have an important role to play to transfer the proven technologies for user population to support the Indian public extension system.

In conclusion it can be said that, MOAS can promote participatory extension and development. Hence, programmes for rural upliftment must integrate the vital dimensions, such as formation of social capital; pro-poor financial and credit support system; market-driven and decentralized extension system; diversification towards high-value enterprises, value addition and processing; need-based skill development through training; media-mix for technology transfer; informal education at rural level and strong political will. However, the extension system needs to be re-oriented and revitalized with new knowledge base in emerging technologies and methodologies. Besides effective cooperation and coordination among the stakeholders, what is most essential is to infuse positive and favorable intentions and attitude, self-confidence and capacity for self-determination among the clientele system.

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