# INTERNALIZATION OF DANIDA ASSISTED TRAINING AND EXTENSION PROJECT (TEWA) INTO

# **GENERAL EXTENSION SYSTEM**

# SUPPORTED BY

DANIDA, Bhubaneswar
&
DEPARTMENT OF AGRICULTURE
GOVERNMENT OF ORISSA
Replication Strategy By Centre for Development Action, Bhubaneswar

# Replication of Training and Extension for Women in Agriculture (TEWA) Project

A lot of consultations were made with stakeholders on internalisation of TEWA into general Extension System in Orissa.

# Objective

TEWA project was being implemented in the state of Orissa since 1987 with assistance from DANIDA to address the need of farmwomen of small and marginal farm families.

In the process the TEWA project depicted a remarkable impact on the farmwomen.

Finally the financial assistance of DANIDA for TEWA would be withdrawn from 1st April 2003.

The major learnings from TEWA were discussed for its replication in the non-covered areas of the TEWA districts as well as in the non-covered districts. As recommended by the review team of TEWA an action plan was to be developed for internalisation of TEWA into the General Extension system before closure of the Project. The action module on replication strategies was to be examined and to be applied in the non-project districts.

The replication workshop was arranged to provide an open platform for participatory sharing of experiences of the TEWA involved personnel with their counter parts working in the non TEWA covered areas towards development of a viable action plan for internalisation of TEWA into General Extension System before closure of the project.

Accordingly the Deputy Director Agriculture (DDAs), Lady Agriculture Officers (LAOs), Lady Village Agriculture Workers (LVAWs) and the Village Agriculture Workers (VAWs) from among the

TEWA covered districts shared their experiences with the DDA, (District Agriculture Officers)DAO, LAO, (Lady Demonstrators)LD from the non-covered districts.

### Pre-launch session

At the out set the JDA (TEWA) welcomed the participants and briefed the objectives of the workshop. As desired by the Chairperson, the sharing of experiences was initiated from the LVAWs followed by VAWs, LAO & DDAs respectively. The DANIDA Adviser requested the participants to share their experience as a process from the time of their entry into their respective field jobs till the date of the workshop in the context of the changes they had experienced so far.

# **Experience of the LVAWs**

- The LVAWs expressed that they invariably received active support from the VAWs already working in their circles. The VAWs help provided them initial entry to the circle, preliminary introduction with the progressive farmers of the area and the farmwomen households.
- The farmwomen were reluctant to come out of their house to discuss on farm activities.
- LVAWs in some circles during their entry motivated farmwomen to undertake mushroom cultivation. When it clicked, farmwomen of other households also approached her to undertake mushroom cultivation.
- Most of the times entry point programmes initiated by LVAWs convinced the farmwomen of the credibility of LVAWs. Farmwomen gradually started coming to her and invited her for sharing their difficulties in groups.
- In their re-posting they worked adopting family approach and succeeded in introducing TEWA skills among both male farmers and farmwomen.
- Invariably the LVAWs expressed satisfaction that they were comfortable while imparting skills to farmwomen, forming skill groups, organising demonstration programmes and study tours for farmwomen, mobilising SHGs for farmwomen to form micro-finance system to finance their agricultural activities.
- LVAWs expressed that both by imparting skills exclusively to farmwomen and by adopting family approach methodology they could succeed in enhancing household level agricultural and allied production and thereby the household economy of the small and marginal farm households.
- In certain cases the LVAW started contacting the farmwomen individually and explained them the technology through result and method demonstration. Some motivated the farmwomen through skill training with the help of inputs supplied from the project. LVAWs could convince the male members of the farm households and village leaders about the scope of enhancing the skill level of farmwomen on agriculture, which helped them to move in a positive direction.
- The initial training received by the LVAWs helped them to sensitise the male members who allowed their wives to interact with the LVAWs for skill training.
- Through family approach methodology LVAWs could introduce the concepts of biological farming, use of bio-fertilisers, mix cropping, crop diversification practices, adoption of high yielding varieties in paddy and high breed varieties in vegetable crops, integrated pest management practices.

- The LVAWs could easily develop the trained skill groups into SHGs. The SHGs have been trained to adopt sustainable income generating activities like cultivation of off season vegetables, mushroom, poultry, dairy, goatry, spices making and coir works etc. LVAWs confidently stated that the TEWA methodology could easily be replicated by all and the cluster posting of LVAWs could build up the replication process.
- Some LVAWs said that they conducted skill training and popularised the vegetable cultivation. Initially, the male members did not allow their wives for the skill training. Even the farmwomen were reluctant to participate in study tours but after the visit of the first lot of the farmwomen to other areas on study tour they became enthusiastic. Some LVAWs introduced hybrid seeds in kitchen garden that brought closer to farmwomen. For an instance one of the LVAWs said that through motivation she succeeded to cover 3 hect cotton in the first year, covered 60 hect during 2nd year and 100 hect in 3rd year.
- LVAWs expressed satisfaction about farmwomen showing interest for soil testing, rhizobium culture, azolla cultivation, mushroom cultivation, growing off-season vegetables, organic farming, integrated pest management practices, mixed cropping, farm mechanisation etc. As per their experience if the VAW would stay in the area alone then the motivation would be successful.
- In certain cases the LVAWs approached the farmwomen through the Anganwadi workers and village Gountias. In one such case where lemon was available abundantly the LVAW trained and persuaded the farmwomen for preparation of lemon squash and pickles.
- The LVAWs helped the farmwomen to grow Mushroom in large scale. Even when a girl got married she was presented with a mushroom spawn bottle. In one case the LVAW had shown spectacular result in intensive cultivation of cotton crop. During 1996, it was 50 hectares, in 1997 it rose to 100 hectares and in the last season the area under cotton in her circle was 550 hectares. She could command both farmwomen along with their male counter parts involved with cotton cultivation. She motivated the skilled trained farmwomen towards formation of SHGs. One LVAW said that replication could be successfully taken up by the VAWs if they could bring training and extension to both males and females in the farm households.

# **Experience of the VAWs**

- VAW of one of the circles expressed that he commenced replication since 8 months. He approached farmwomen through the village leaders and contact farmers. Initially though he faced some problems but later he was quite comfortable to work with farmwomen and he could organise them into skill groups. He also tried rice mini-kits through the farmwomen extensively. He opined that replication of TEWA methodology would not be a difficult task in the part of male VAWs.
- One of the VAWs expressed that he tried the replication of TEWA programme through the Sarpanch and women panchayat members. His wife also assisted him to reach and motivate the farmwomen for successful replication of TEWA methodology. He further added that to check the misuse of moong seeds through sale by certain farmers the VAW motivated the farmwomen to sow the seed and not to consume the seed since it was treated with poison. One of the VAWs said that strong mental determination and right information to farmwomen is enough for replication of TEWA methodology.
- One VAW took the help of the lady Sarpanch who selected 30-targeted farmwomen and the VAW imparted skill training in small groups. It had a spread impact to other neighbourhoods in the circle who also volunteered to learn TEWA skills and the VAW could cover more number of farmwomen in the circle. In upper caste dominated circles where farmwomen hardly participated in agricultural work, the VAW introduced activities like Mushroom cultivation, Germination Test, floriculture, seed treatment, compost making which was adopted quickly

by the farmwomen. VAWs invariably stated that the replication of TEWA methodology would be successful through family approach.

• A VAW working in TEWA ex-circle since 1997 expressed that it would not be difficult in the part of a VAW to replicate TEWA methodology among farmwomen through family approach.

# **Experience of the LAOs**

- LAO of one of the TEWA districts associated with TEWA project from 1991 and posted in more than one TEWA districts stated that TEWA should not be considered as a separate project, it should be understood as very much the part of the mainstream extension programme. She clarified that women being previously missing from the extension benefit provided by the VAWs, TEWA specifically bridged that gap to bring training and extension to farmwomen forever. Timely monitoring of the activities, guidance and motivation to VAWs and filling the needs of extension and training by the extension officers would be useful for replication and coverage of TEWA.
- One LAO stated that the aspects that needed to be taken care of for successful implementation of TEWA methodology in non-covered are:
  - Interest and courage
  - Training and orientation of VAWs on TEWA
- The same LAO stated that six months back when replication of TEWA was commenced in her district, a lot of queries were made by the VAWs about the additional volume of work due to TEWA and surprisingly after 6 months the VAWs not only perceived TEWA as their mainstream work but also realized that TEWA reduced their work load. Through family approach not only they were able to provide appropriate and improved skills to more numbers of farmers and farmwomen but the result due to TEWA skills improved their credibility in their circles. For proper execution of TEWA skills it was suggested by her that 'co-ordination from line departments is highly essential and VAWs need orientation in certain aspects like dove-tailing, convergence etc'.

The benchmark survey, PRA skill to identify the need of farmwomen and skill training built up the ability of the LVAW. The study tour, method/result demonstration is the powerful instrument under the TEWA project to motivate and build the capacity of farmwomen. To emphasized on the following aspects to be taken care of

- Male VAWs to be trained
- Pre-seasonal training to be adequately organized
- Officials to be oriented
- Skill teaching materials are to be provided
- Proper linkage with line departments to be ensured
- One of the LAOs added that family approach is a successful instrument for farmwomen extension. She suggested that the officials from the general extension system might be sent for advanced training both in side and outside the country. To assess the progress of TEWA activities in new areas periodic meetings should be organized and a timeframe approach should be adopted to achieve results.

# Views of the DDAs

• DDAs both from TEWA and non-TEWA districts stated that the replication of TEWA methodology would face problem due to vacancy of the post of VAWs for a long period.

- A LVAW should be posted in the replicated areas for a short period at least in the head quarter of the replicated areas to guide the VAWs based on her experience.
- More number of off farm activities should be introduced in addition to existing TEWA skills, which can bring the women of upper caste farm families to TEWA skill groups.
- JAOs and VAWs should visit the TEWA districts and they are to stay at least for an week in those areas for a hands on field experience.
- Farm Women taken under study tour should stay in the village and they should interact with the farmwomen of that area.
- Some incentives may be provided to the progressive farmwomen.
- As regards the plan of action to cover other non-covered areas and to strengthen the
  activities it was suggested that the LAO and LD would stay at least one week in the
  replicated areas and guide the VAWs.
- The VAWs involved in replication work should participater in all the training programmes organised under TEWA at district level.
- DDA of one of the districts proposed to cover the non-covered areas in his districts through a
  five years action plan. The VAWs involved with the replication need to be trained on
  farmwomen extension and properly guided. Adequate pre-seasonal training should be
  organised.
- It was suggested that VAWs and the farmwomen are to be trained in phased manner.
- Farm Family Approach should be adopted by all the VAWs.
- The VAWs involved with replication should be sent to TEWA districts on study tour programmes.
- The Farmwomen from replicated areas should visit and interact with farmwomen of project district.
- It was also proposed for
- Orientation of VAW on F.W extension
- The PRA techniques including transect walk are to be adopted by the VAWs.
  - Skill teaching in small groups

# Group Discussion and Presentation on Replication of TEWA

# Group-I

# Strategies to implement TEWA methodologies in the non TEWA project districts

- Family approach should be given priority
- All blocks should be covered with existing staff only
- 50 percent males and 50 percent females should be selected as contact farmers
- Frequent transfer of VAWs/LVAWs should not be done for at least for 3 years
- Phase wise orientation training should be given to non-TEWA VAWs about the concept of farmwomen extension for 2 days
- Skill up-gradation training on agriculture and allied subjects should be imparted for 3 days.
- TEWA persons from TEWA districts having practical experiences should be deputed to impart and organise the training

- Visit of LVAWs/ AAOs/ JAOs from non-TEWA district should be done to TEWA districts to have practical knowledge.
- Special emphasis should be given on farmwomen extension in bi-weekly training and JAOs' meetings.
- Monthly review should be done after implementation for the AAO/JAO/VAWs in non-TEWA district.
- Dovetailing of the on going schemes for farmwomen should be done
- In case of all farmers' trainings 50 percent farmwomen should be included as participants.

# Group-II

# Strategies to implement TEWA methodologies in the non-covered circles of the TEWA project districts

- Training to VAWs /AOs / JAOs on farmwomen extension
- Frequent visit of LAO / LD to non-covered areas to guide the VAWs /AOs/JAOs
- Formation of farmwomen skill groups and SHGs
- Involvement of farmwomen in training, demonstration etc.
- Regular tour of farmwomen groups to nearby successful TEWA areas
- Transferring the LVAWs/ VAWs working in TEWA areas to non-TEWA areas in phase basis to disseminate farmwomen extension.
- Provision of incentive in shape of seed kit/ fertliser kit and other inputs for skill teaching and demonstration.

An evaluation of the VAWs / LVAWs having outstanding performance should be awarded with commendation letter/Annual increment

 Priority should be given to the field staff working in farmwomen extension for bi-cycle and moped advance.

# **Suggestions**

- Identified blocks for TEWA project in non-TEWA districts should be limited to 20 percent of the blocks of the district during 2002 2003.
- Need based no cost and low cost technologies are to be introduced for easy acceptance.
- Minimum 50 percent of contact farmers of identified circles should be ladies.
- LAO/LD or other officer actively involved in TEWA should give intensive trainings on farmwomen extension to VAWs/JAOs.
- Farmwomen training needs to be organised at least once in a month to create awareness.
- Participation of at least 50 percent farmwomen is to be ensured in trainings, demonstrations and other activities.
- Farmwomen should participate in farmer exchange programmes, study tours etc to TEWA districts.

# Observations of the Director, Agriculture

He expressed his thanks to the LVAWs, the VAWs and other functionaries for their appreciable presentation, who clearly presented the modus of operandi of

implementing/replicating TEWA project. The TEWA approach should be mainstreamed. It will be a correct decision to internalise the

TEWA approach to build the capacity of the farmwomen. 'We are to be committed in our jobs and to act as good catalyst/facilitator'.

To fit into the work style of the VAWs, the family approach methodology seemed to be appropriate to replicate TEWA and to be followed by all field functionaries. The field functionaries are required to be trained on participatory skills. Each field functionary should conduct PRA for need assessment of his or her respective circles. Even if the DANIDA funding is withdrawn, an appropriate action plan needs to be developed for internalisation of TEWA methodology in the general extension system. He stated that it would be the mandate of the Directorate to internalise the good experience learnt under TEWA into the general extension system. To sustain the income base of the farmwomen groups of Puri, Phulbani, Ganjam emphasis should be given on:

- Training on floriculture.
- Orientation on off-season vegetable cultivation
- Study tour of farmwomen for feeling the reality
- Progressive linked farmwomen to be identified and be provided with update technology
- All five non-covered districts have to prepare an action plan with timeframe of replication with appropriate monitoring mechanism.
- An action plan to associate the panchayat members with TEWA replication is to be prepared at block level with particular focus for their induction and orientation on TEWA strategies.
- The officers of TEWA cell would move to those district and impart training on farmwomen Extension and Replication strategies. The DANIDA adviser may also accompany the state team at her convenience.

# Points made by Danida Advisor

The DANIDA Advisor suggested the participants to focus the discussion on key and critical issues of replication.

She particularly expressed her satisfaction in the aspects like:

- the presentation and the clarity level of the VAWs, LVAWs and LAOs on TEWA strategies and their ideas of replication of TEWA strategies
- the overwhelming response of the functionaries from non-TEWA districts to replicate TEWA model in their areas after hearing about its success from the functionaries of the TEWA covered districts
- the strong desire of the officials of the TEWA covered districts to cover their remaining blocks under TEWA and
- the positive and optimistic view of the Director Agriculture to replicate TEWA throughout Orissa as a mainstream extension activity.
- She stated to ensure the access of the functionaries of non\_TEWA districts to various training materials and literature developed and used by trainers and participants over the years.
- She suggested the participants time and again to read the Impact Study report of TEWA intervention. She also said to send the copies of TEWA Success Stories once the report is ready.

• In her concluding remarks she expressed her confidence on the whole hearted participation of DDAs of the TEWA and non-TEWA districts in suggesting replication strategy and their crucial role in replication of the strategies and the inbuilt sustainability of TEWA model tried, tested and developed over the years that would make it easy for its replication for the benefit of farmwomen in particular and farm families in general.

# Outcome of the Discussion on Replication Strategy

- Replication strategies, strategy of consolidation, coverage: dovetailing, convergence, internalization through village panchayats
- Time frame of replication and scheduling the progress
- Capacity building of field functionaries and farmwomen
- Strategy of coverage in the next 4 years
- Monitoring and Evaluation

# Internalization of TEWA

# IN GENERAL EXTENSION SYSTEM

griculture (TEWA) project was implemented in Orissa from 1987 by DANIDA in assistance from DANIDA in the department of agriculture of government of Orissa with the objective to address the needs of farmwomen of small and marginal farm families. In fact farmwomen of small and marginal families constituted about 76 percent of the farm community and had a greater role to play in agriculture. Enhancing food production and improving farming skills of these groups through extension approach was the primary aim of the scheme. The lady village level workers (LVAWs) posted at the village level played the critical role to provide extension and capacity building support to the target group.

The trained Lady Village Agriculture Workers (LVAWs) worked exclusively with women at her initial posting and thereafter she catered extension services to both male and female farmers through family approach. The farm families with small and marginal holdings who were actively involved in agriculture activities and carrying out the farm activities on their own hand in their farm lands were the target families under TEWA project.

The targeted contact farm families were the socio-economically representative households who were able and worthy of imitations of other farm families of the community. They were willing to adopt relevant recommendations in at least a part of their land and allow others to observe the practices.

			farm women			

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Accessibility of local agricultural/allied extension staff to farmwomen and vice versa in their
households in an otherwise conservative society where women hardly interacted with those
officials.

☐ Adaptability of messages like seed testing, seed treatment, planting of paddy seedling maintenance of plant population, plant protection measures, rising of backyard kitche gardens etc.
Adaptability of new messages like use of bacteria culture in pulses and oil seeds, roder control for storage of grains, soil health management practices, rain fed farmin technologies, water management, integrated nutrient management, integrated permanagement, post harvest technology etc.
☐ Preparation and use of bio fertiliser and its benefits for soil and agricultural practices in term of production and productivity.
□ Spread of crop diversification practices from pilot experiments like sunflower, off seaso vegetable, flower and fruit cultivation, mushroom cultivation, dairying, poultry, fisher sericulture etc.
□ Development of leadership skill including skills to listen carefully, to reason, to reflect, to participate, to contribute and to disseminate improved technology among fellow farm women.
A number of low cost and no cost technologies had been selected and further adapted to su the particular group of women and information disseminated to them in the form of training Other help in the form of seeds, plant saplings, and spawn was acquired from government sources and extended to women. Emphasizing on no cost and low cost technologies TEW, project aimed at providing an opportunity to the farmwomen of different districts since 1991 timprove their knowledge on different skills and to increase the adoption of those technologies tenhance agricultural productivity. Thus development and enhancement of capability of farmwomen was the prime consideration of TEWA.
In this background DANIDA wanted a study on the impact of TEWA project on farmwome efficiency in Orissa. In the process two districts were selected on certain criteria.
Objective
It was envisaged to study the impact of TEWA project on farmwomen in Orissa.
Scope: The scope of the study included:
$lue{}$ To study the social mobility of farmwomen families and their consumption pattern.
☐ To assess the increase in farm production and productivity in the family holdings due to TEW project.
☐ To study the recognition of farmwomen's contribution in farm production activities by other primary stakeholders.
☐ To study the pattern of crop diversification in the study area.
☐ To study the risk minimization practices adopted by farmwomen in the context of farr production activities.
☐ To study the extent of knowledge and perception of farmwomen about agriculture and allie areas in general and selected technical skills diffused through TEWA intervention in particular
☐ To assess the extent of accessibility of LVAWs with their clientele and vice versa.
☐ To study the behavioural changes in farmwomen of the study area.

lacktriangledown To study the process of institutionalisation of the TEWA approach from the angle of

sustainability in the project area.

Encouraged with the positive impact as expressed by different review teams at different times, Danida's effort was to document the impact of the project and hence the above study to assess the impact was undertaken by Centre for Agri Business Management, Bhubaneswar. The captioned study was completed in the first week of July and the draft report was submitted.

# **WORKSHOP**

A workshop was organized on 25th july, 2001 at Hotel Swosti Plaza, Bhubaneswar to discuss the findings of the study. The participants were from Agriculture and Allied departments of Govt. of Orissa who are the planners and implementers of Govt programmes. The aim of the workshop was to discuss the scope and future of Farm Women Extension and its replication/internalization of TEWA in the General Extension System for sustainability.

# Inauguration

The workshop was formally inaugurated by Shri Sanjeeb Hota, IAS, Agriculture Production Commissioner, Govt. of Orissa after the welcome to participants and dignitaries by Mr. P. R. Kapur, JDA, (TEWA). The other dignitaries present were Smt. Alka Panda, IAS, Commissioner-cum-Secretary Agri Dept; Mr. Satyabrata Sahoo, IAS, Director of Agriculture; Mrs Tine Lynghlom Perderson, First Secretary, Royal Danish Embassy, New Delhi; Mr Mahendra Pal, Sr. Programme Officer, DANIDA; Ms Sandhya Das, DANIDA Advisor and others.

# **KEY NOTE ADDRESS ON TEWA PROJECT**

Mr Satyabrata Sahoo, IAS, Director of Agriculture in his keynote address on TEWA project stated TEWA (Training and Extension for Women in agriculture) as an innovative project and was the first of its kind in Orissa. The training and extension aspects for farmwomen were considered as most Important component of the project. Through this project trained LVAWs had been inducted in the extension system to convey the scientific skill and knowledge to the Farmwomen.

In order to reach the farmwomen and bridge the technological gap between them and their male counter parts, the TEWA was launched in the State on 2nd December 1987.

The over all objectives of the project was to improve the productivity of small and marginal farms.

The immediate objectives of the project were

- To help farmwomen to know relevant agricultural and allied technologies and practices.
- To get access to agricultural and allied extension services improved for women from small and marginal farms.
- To create increased recognition of farmwomen's contribution in agriculture and allied activities.

During his address the Director presented a review of the project since its inception. He mentioned that during the first phase of the project 4 undivided districts like Puri, Dhenkanal, Ganjam and Bolangir were included and 176 LVAWs in two batches were inducted to the agriculture department. The phase-1 was completed on 30th June 1995.

The 2nd phase came in to force from 1st July 1995 to June 2000 covering another 4 new undivided districts like Keonjhar, Koraput, Sambalpur and Sundargarh. 179 LVAWs were recruited in two batches and during 1999 another 79 LVAWs of the 5th batch were recruited from all the 8 districts.

He informed that out of 434 LVAWs, 355 LVAWs had already been merged in GES and they were catering extension services to the farming community through family approach methodology. The other 79 LVAWs who were working with VAW would be reposted during August 2002. The project had been extended up to March 2003.

# **Project Strategy**

The main strategy to implement TEWA was to have a village based agricultural extension programme in the line of T&V system to work with farmwomen. The LVAW stayed in the village and worked with groups of farmwomen.

Four new strategies had been adopted for the remaining period of the project. During that period the major emphasis would be given on sustainability issue. The sustainability of extension services to the women after the end of the project was stated however as a serious issue. The LVAWs should be merged into the general extension system. The convergence rather internalization of TEWA into the General Extension system was to be thought from many angles. In fact, the Director stated, 'we are assembled here today to find out the right solution.'

The strategies to be adopted during the remaining period would be

- 1. Replication
- 2. Out reach
- 3. Completion
- 4. Consolidation

# Replication

16 non TEWA covered blocks in the 8 project districts have been identified. 80 male VAW circles @ 5 per block will replicate TEWA activities.

# Outreach

80 VAW circles within the covered blocks in project district have been identified @ 10 per district, where the VAW will cater the extension services to the farmwomen through TEWA methodology.

# Completion

The 79 nos of 5th batch LVAWs will complete their task (at present working along with male VAW for F.W extension) by July 2002 and they will be reposted to independent circles during August 2002.

# Consolidation

355 LVAWs are catering extension services to the farming community through family approach methodology and 355 VAWs who have taken over charges of farmwomen groups from the LVAWs will be looking after the sustainability issues of TEWA activities.

Activities to be under taken are

- Skill Training
- Pre-seasonal Training of Farm Women
- Farm Women Study Tour
- Farm Women Conference
- Annual Experience Sharing Workshop
- Orientation of Officials
- Training of VAWs
- GP level Training of Farm Women on new Technology
- Training of Farm Women on Agro Entrepreneurship development.

# PROJECT OUTPUT TO BE ACHIEVED AT THE END OF THE PROJECT

SL Activities Out put to be Achieved Total

No.		2001-2002	2002-2003	
1	No. of FW covered by Extension.	70,400	39,000	1,09,400
2	No. of Farm Women covered by pre-seasonal camp.	16,000	16,000	32,000
3	FW to be trained on Agro-business.	1,600	1,600	3,200
4.	FW to be trained at GP level	2,000	2,000	4,000
5.	FW groups to be formed	1,200	1,200	2,400
6.	SHGs to be formed	240	240	480
7.	FW Conference	32	24	56
8.	VAWs to be trained	500	160	660
9.	Officials to be oriented	160	160	320

The up-to-date Achievement of the project during Phase-II were

- 1. Farm Women covered by Extension 1,83,482
- 2. Farm Women covered by Pre-seasonal Camp 1,84,543
- 3. No of SHGs formed 1460
- 4. No of SHGs functional 935
- 5. No of male farmers trained through family approach 86,361
- 6. No of LVAWs trained and posted 434
- 7. No of farm women conference organized 261

# Presentation by study team

The study team comprising Dr. Sujitav Dash and Dr. B. Parasar made a presentation of the findings of their study in the following sequence supporting both baseline and impact assessment data.

# Methodology

For impact assessment the study adopted before-after and control group method for data collection. The study was confined to women engaged in agricultural operation only under TEWA covered circles in both phase-I and phase-II Districts and non-TEWA circles as control group.

Out of 8 project districts, 2 Districts (one from phase I and another from phase II) were taken for the study. Districts and blocks were selected purposively for the study purpose. One district was selected from the coastal area and another was selected from the tribal pocket. From the coastal districts Ganjam and from the tribal pocket Sundergarh District was taken for the study. From each sample district two blocks were taken for the study. The Blocks selected were Digapahandi and Sankhemundi from Ganjam District and Sadar Sundergarh and Badagan from Sundergarh District. Circles for the study were selected by means of stratified (irrigated and non-irrigated) random sampling method.

# From the selected TEWA project blocks

- □ 4 LVAW withdrawn circles where LVAWs were exclusively working among farmwomen were taken out of which two were irrigated and the remaining two were non-irrigated circles with a total sample size of 50 each.
- ☐ Two VAW circles not covered under TEWA were taken with sample size of 50 each.
- ☐ The total size of sample was 300 for both the districts.

☐ The variables studied were increase in production, productivity increase, crop diversification/risk reduction, technical perception degree of accessibility of farm woman to extension personnel and vice-versa, etc.

# **Data Collection**

Data collection was made by interview schedule, PRA (particularly before TEWA and after TEWA situation), focus group discussion, case interviews, participatory evaluation technique (PET), and demonstration of key techniques by the respondents in the field involving all other stakeholders. Secondary data included base line data, progress reports of TEWA, training material, records maintained on consumption of fertilizer, seeds etc. Discussion was also made with LAO, Lady Demonstrators, LVAWs, VAWs, retailers and whole sellers of seeds, fertilizers, other inputs and agriculture implements, male members of the farm women households, local unemployed youths, lead farmers of the areas etc.

# **Findings**

- Training and extension focusing women with family approach by TEWA provided a holistic approach on agriculture to farm women in TEWA clusters which was found absent in case of farm women in non-TEWA clusters.
- Savings in small and marginal farm households was influenced by the adoption of new and innovative practices; extent and quality of participation and value addition brought by farmwomen in agriculture and allied activities.
- With rise in production of cereals, pulses and vegetables (food crops) in TEWA clusters, household consumption in small and marginal farm households increased but cash spent from household savings on food items had decreased in general, and within the TEWA cluster the decrease was more prominent in the irrigated clusters and households having irrigation facility.
- The values learned by the farmwomen from their reference group influenced their decisions to priorities the needs for utilization of savings in productive ways.
- The values learned by the farmwomen from their reference group significantly contributed to their awareness level on health and personal hygiene aspects.
- Increasing adoption of extension practices through TEWA brought changes in the socioeconomic conditions of farmwomen.
- Higher saving and increasing access of farmwomen to extension staff and vice versa influenced the reference group behaviour and aspiration level of the TEWA beneficiaries.
- Cost effectiveness of technology and increasing adoption of extension practices contributed to increase in crop area in acreage, increase in number of farm units for different crops, production and productivity and sustainable use of land.
- Due to lesser post training follow up and higher risk perception of farmwomen, the rate of adoption of newly introduced/tried practices like sericulture and bee keeping was relatively thin
- Self-realization of farmwomen about the worth of their skill and the recognization of their contribution by other stakeholders stimulated the extent and quality of farmwomen's participation.
- Rise in adoption of extension practices, risk minimization and higher return influenced crop diversification practiced in the TEWA clusters.
- Livestock practices received lesser clientele response due to lesser emphasis of allied sector extension network.
- Degree of post training follow up through extension influenced the extent of learning of new practices measured in terms of farmwomen's level of awareness and adoption.

- With increasing accessibility of farmwomen to agricultural extension staff in TEWA project and vice versa, the project impact continued in LVAW withdrawn clusters.
- The women friendly Training and extension support (also exposure provided to farm women) and family approach of TEWA project influenced behavioural changes in farmwomen like improved communication skill, open interaction with males in terms of exchange of ideas, higher level of self confidence, greater risk taking and problem solving ability.

### **Observations**

- The extension programme delivered services optimally to the farmwomen.
- Regarding extension education programmes at the circle level, activities initiated by LVAWs had largely benefited farmwomen.
- Women had greater access to extension staff and vice versa, access to inputs and technology, control over income etc.
- Project benefits were generally reached evenly but in some cases more benefits accrued to better off households within small and marginal farm households.
- Not much effort was made to involve and identify farmwomen to voluntarily carry forward the ongoing activities to sustain the extension system after the phasing out of the TEWA project in different circles.
- Besides socio-economic changes among farmwomen in the TEWA circles in general those farmwomen who were particularly organized into groups like mahila mandals or SHGs had become relatively better aware of their rights and privileges than where such groups were not formed and they found a platform and a LVAW as facilitator for discussion on improved methods of farming, benefits of extension service, facility of credit etc.
- TEWA belie the common view held by researchers that adoption of technology displace women. On the contrary, they are avid and once they accepted a technology, they put in their best efforts to learn and use it. Women actually outnumbered men in most of the agricultural operations due to TEWA in TEWA clusters.
- The project improved the quality of life to a greater extent and stimulated self-help initiatives, participation of women and economic activity.
- Indirectly TEWA project besides generating agricultural surplus had helped males to undertake non-farm activities both within and outside of their village when most of the agricultural operations were handled by women and agriculture was perceived by women as a full time value added activity in TEWA clusters.
- However an interesting observation made in the study was that unless there were drudgery removing and time saving devices, women would not welcome more yield in their farming.
   'More production means more work for them and more time spent away from their families that they cannot afford.'

### **Recommendations**

□ Farmwomen in non-TEWA clusters/districts/blocks should be activated in the same pattern as in the TEWA clusters by regular meetings. They should discuss issues, needs, and ways and means for improved extension support, thrift, and modalities of receiving active support from VAWs/ extension staff.

SHGs of farmwomen in a cluster should be registered in the Societies/New Co-operative Act as tried in Andhra/any other legal instrument to mobilize resources for integrated development. Field level extension staff can take initiative in this regard.
Consideration of alternative approaches like adoption of circles by the registered Society of SHGs of farm women with integrated community development approaches, integration with PRIs, identification and training of progressive farm women as animators/paraworkers/volunteers, etc is needed.
Co-ordination and collaboration (convergence) with other allied extension services is needed. Active farmwomen in the TEWA clusters should find representation in "Pani Panchayats."
In addition to development of technologies/skills for women there is need to strengthen the extension system with induction of farmwomen as animators trained in agriculture extension skills, behavioural skills including communication, leadership and motivational skills. It would be good to impart agricultural training to lead women farmers in the hamlets so that they are equipped to carry out transfer of agricultural technology to their fellow farm women. Trainees should be identified with a view to creating animators/community volunteers, i.e., women who will in turn train other women in technical methods for improvement in agricultural activities and can as well take follow up steps after training.
Farmwomen are to be oriented to participate on the discussion of financial matters of SHGs, utilization of money as credit, interest rate etc.
The project tasks assigned to the VAWs who replaced the LVAWs (working in circles with family approach) should receive priority in their agenda. They are to be oriented on the vision and objectives of the TEWA project and they should be gender sensitized through systematic gender training package. There should be regular and continuous monitoring of their performance relating to TEWA project.
In addition to orienting the female animators, males from circles should as well be oriented on TEWA skills to provide extension skills to males, a majority of whom was yet to appreciate the innovative practices introduced through TEWA.
Post training follow up should be made in cases of skills in general and particularly new skills like mushroom cultivation, sericulture, floriculture etc.
The criticality of linkages of allied extension system, open to alternative ideas at all levels, were some of the issues to be carefully looked into for sustainability of TEWA project.
A fresh training need assessment is desired to equip them for the changing context in TEWA clusters.
For greater co-ordination, openness, monitoring and team accountability, the entire TEWA structure (state, districts, blocks and circles) in Orissa should undergo Organisation Development (OD) intervention process (through methods like gender sensitivity training to change attitude, perception, social distance, communication barriers, etc of male extension staff towards female staff/farmwomen through unstructured group interaction, survey feedback to identify discrepancies among perception of different levels of functionaries, process consultation to give the extension staff insight into his/her surrounding and to identify processes that needs improvement, team building for greater convergence of effort and resource, inter-group development to improve interactions between allied department extension personnel for greater convergence, etc).
Trainers with substantial work experience including research, studies, pilot experiments, consultancy in the same or similar projects should be hired as resource persons to conduct refresher programmes for extension staff and as far as possible case method, group works,

visit of successful cases should be used to train the participants with follow up through extension.

- □ Stress should be given on joint gender sensitization programme for officials and extension functionaries particularly the VAWs with farmwomen. The target groups for gender awareness would be DDs, DAO, ADAO, AOs, VAWs etc and the programmes should be joint programmes.
- □ The need for attention of children of women in agriculture needs emphasis. This is necessary not only to provide support services for the mother but also for the all-round development of the child of the working mother. However, these services are lacking in villages except the effort of the Anganbadi centers in some villages. Usually, the children of women in agriculture do not get the full attention of the mothers as they are away from homes for most part of the day. The children are either looked after by the older siblings-mostly girls-thereby denying them the opportunity to go to school, or the mother to the work place carries them.

# Participants Reactions, Questions, Suggestions, Observations

- Mr. Sanjeeb Kumar Hota, IAS, Agricultural Production Commissioner desired to know the methodology of the impact assessment study. In that context he expressed the vital importance of base line data to measure the impact of TEWA project implemented in different districts. In fact the impact assessment study report was prepared by before-after and control group data using a variety of research techniques. APC also highlighted on the issue of value-addition due to TEWA intervention on farm produce.
- Smt. Alaka Panda, IAS, Commissioner cum Secretary, Department of Agriculture expressed her interest to know about the change in the nutritional status and consumption pattern of the TEWA beneficiary families particularly women and children. Although it was not in the present scope of the study, but data was available with the study team to support the overall increase of nutritional status of the TEWA household due to TEWA project. It was suggested by the participants to conduct a separate study on the nutritional status and vulnerability of TEWA beneficiary families in different TEWA districts. With rise in production of cereals, pulses and vegetables (food crops) in TEWA clusters, household consumption in small and marginal farm households increased but cash spent from household savings on food items had decreased in general, and within the TEWA cluster the decrease was more prominent in the irrigated clusters and households having irrigation facility.
- The study team in its response informed that after TEWA with agricultural practices round the year and women becoming skilled to manage agricultural activities both surplus from agriculture and money from non-farm activities earned by males in both rural and urban areas not only relieved them to a greater extent from debt but helped them to buy productive assets like land, to spend on such basic needs like education, health care etc. In TEWA clusters the over all debt of respondents was reduced by 52 to 86 percent while the same was only 03 percent in non-TEWA clusters in the last four years.
- Mrs Tine Lynghhlom Perderson, First Secretary, Royal Danish Embassy, New Delhi, probed the issue of cost effectiveness of the TEWA project and the situation in LVAW withdrawn clusters later taken over by VAWs. As per the findings of the study, the project had become sustainable in LVAW with drawn areas with a 10 percent of the amount used as programme cost in the overall budget of the project. This indicated the cost effectiveness of TEWA intervention and the need of TEWA to be extended to non-TEWA districts/blocks of Orissa.
- A number of participants including Mr. Sanjeeb Kumar Hota, the APC, Smt. Alaka Panda, Commissioner cum Secretary, Department of Agriculture, Sri Mahendra Pal, Sr. programme Officer, and Mr. R. V. Singh Addl Secy P&C Dept discussed about the status of LVAW-withdrawn circle and a model from the learning of the Impact Study which could be accepted for implementation through the main-stream extension system.

- Dr Kornal Das, DANIDA Advisor, ILDP, Jeypore, shared his experience on Self Help Groups (SHGs) in his project areas.
- The district functionaries shared the success of TEWA project in their areas.

# Participants' Discussion on a Replicable Model

- As a replicable model in the frame of the findings of the study team the participants suggested to train the VAWs on TEWA package and to create master agriculturist to act as animators after the withdrawal of LVAWs.
- In the mainstream extension system it was suggested to train the VAWs on TEWA package and to train progressive farmwomen as master agriculturist to act as animators to assist VAWs to organize activities for farmwomen.

# **Suggestions and Future Action Plan**

# It was suggested

- To cover all district level agricultural extension staff on gender training package.
- To design appropriate training modules and to cover the panchayat, block, and district level extension staff in a time frame.
- To have a review of the literature and data available on TEWA project since its inception and to develop a process document with a development perspective.
- To document successful cases in the form of a book on case studies through appropriate case research to support programme management, policy development and training.
- To strengthen convergence of normal activities with TEWA during the current year by dovetailing of normal schemes with TEWA.
- To expedite the process of completing the documentary titled TEWA Kahani for a video coverage on TEWA activities to be telecasted through Door Darshan.