METHODOLOGY

Chatra district of Jharkhand was selected as a ATMA district under extension reform programme of Ministry of Agriculture, Government of India. An autonomous society under the name of Agricultural Technology Management Agency (ATMA) was registered (2005) to carry out the project activities in collaboration with different line departments like Agriculture, Horticulture, Animal Husbandry, Fisheries, Plant Protection along with the local Krishi Vigyan Kendra, NGOs and representatives of various stakeholders of the agricultural production system. The Strategic Research and Extension Plan for Chatra was prepared following the participatory methodology to reflect the issues, needs and expectations of farming community. The main steps followed for preparation of Strategic Research and Extension Plan (SREP) are as follows:

The SREP has basically two sections namely "diagnostic section" and "strategic section". Diagnostic section has two sub-sections namely Information and Analysis. In the Information "sub-section", information from different line departments, NGOs are gathered and recorded along with the detailed data of the representative village under each AES.

In the "Analysis" sub-section, the data so obtained are analyzed. The whole process was carried out in various steps as described in the following paragraph.

Training : -

1. A state level orientation workshop on Extension Reforms was organized for new ATMA district from 1-2 July' 2005 at SAMETI, Ranchi to Develop Specific skills in preparation of Strategic Research and Extension Plan. Following topics were discussed in the above workshop.

- i. Extension Reforms-an Overview.
- ii. Xth Plan Scheme Support to State Extension Programmes for Extension Reforms.
- iii. Experiences of ATMA Model.
- iv. Orientation on SREP.
 - Content
 - Methodology
 - Operationalization
- v. Farmers Organization & Federations.

vi. Research-Extension-Farmer Linkages

2. SAMETI in collaboration with MANAGE, Hyderabad organized a 5-days Master Trainers Training Programme from 30th Nov-6th Dec' 2005 at SAMETI, Ranchi. In this training programme following topics were covered.

- I. Farming System Approach
- II. Participatory Rural Appraisal
- III. Farming System based Extension.

Following participants participated in the Master Trainers training from Chatra District.

- i. Sri. Amresh Kumar Jha, DAO-cum-Project Director, ATMA
- ii. Sri. Ranjay Kumar Singh, Training Organiser, KVK, Chatra
- iii. Sri. Dharma Oraon, Scientist, KVK, Chatra
- iv. Sri. Ravish Chandra, Block Development Officer
- v. Sri. Arun Kumar Sinha, SHO, Chatra
- vi. **Dr. Anirudh Kumar,** SCO, Chatra

3. SAMETI in collaboration with EEI, Nilokheri organized a state level workshop on "Extension Reforms" for the officers of ATMA districts from May 8-12 ' 2006. Following topics were discussed in depth and sample data collection through field visit. In the training a field visit was organized to demonstrate primary data collection in Pithoria village.

- > Concept of Farming System Approach (FSA).
- Concept of Farming Situation Based Extension (FSBE)
- Concept of PRA
- > Field Visit for collection of Primary and Secondary data through PRA

Following officials participated in the above training from Chatra district.

- 1. Sri. Brahamdeo Kumar Yadav, Trg. Associate (Agril. Engg), KVK, Chatra
- 2. Sri. Amresh Kumar Jha, DAO-cum-PD, ATMA, Chatra
- 3. Sri. Anirudha Kumar, Soil Cons. Officer, Chatra
- 4. Sri. Premnath Munda, F.E.S, DFO, Office, Chatra

2.1 Role of SAMETI, Jharkhand in Preparation of the SREP

SAMETI, Jharkhand, Provided Technical backup of project at state level and capacity building of stakeholders in particulars. Faculty members of MANAGE, Hyderabad and facilitator of SAMETI who had been oriented on preparation of SREP. The views and suggestions of the state level SREP Coordinator; Director, SAMETI; National Consultant, MANAGE and State Nodal Officer were incorporated at various stages for the final output.

2.2 Orientation of district level officers and scientists

SAMETI, Jharkhand in collaboration with MANAGE, Hyderabad organized three state level training programme on "New Dimensions of Agricultural Extension Reform-ATMA Model" from 16-20 December 2004, Orientation workshop on "Extension Reform-ATMA Model" from 01-02 July 2005 at SAMETI, Jharkhand. Altogether 16 district level officers, Block Agriculture Officers, Block Animal Husbandry Officers, Soil Conservation Officers along with scientists of KVK, Chatra participated in the both programme. Participants were oriented to the concept and philosophy of Extension Reforms (ATMA Model), need and purpose of O & M plan for the district, existing and expected O & M plan under Extension Reforms and the procedure to develop the SREP of ATMA, Chatra.

Reorientation training programme on Extension Reform was organized at SAMET, Jharkhand in collaboration with EEI, Nilokheri from 08-12 April 2006. Altogether 8 Block level officers and Line Departments participated in the training programme. Resource person from EEI, Nilokheri facilitated the training programme.

2.3 Selection of members for core team

Representatives of different Government Development Departments like Agriculture, Animal Husbandry, Dairy, Fishery, Cooperative and Scientists from Krishi Vigyan Kendra, Chatra were selected as a core team member. The selection was done to provide them with basic training/orientation about the Extension reform for preparation of SREP.

2.4 Training of Master Trainers

The training of master trainers, for to SREP preparation was conducted successfully at SAMETI, Jharkhand, Ranchi from 30 Nov. – 05 Dec. 2005 in collaboration with MANAGE, Hyderabad. 10 participants comprising block level officers from line departments viz. Agriculture, Animal Husbandry, Dairy, Fishery, representatives of Krishi Vigyan Kendra (Chatra) and NGOs participated. The training programme was designed with the help of MANAGE facilitators. Inductive method of learning was followed as a training process. Besides conceptual clarity on Extension Reforms, relevant management tools; techniques and methodological approaches were

discussed at length. For each and every tool, brainstorming, group discussions and dummy exercises at villages were conducted to make the participants very clear on the subject so that the SREP could be made more meaningful. These selected officers and scientists were trained on various theoretical aspects by the resource persons from SAMETI, Jharkhand and MANAGE, Hyderabad.

A. Management tools and techniques such as :

- 1. Extension Reforms
- 2. Team Building
- 3. Participatory Rural Appraisal
- 4. Farming Situation based Extension (FBSE)
- 5. Integrated Nutrient Management (INM)
- 6. Gender Participation
- 7. Integrated Pest Management (IPM)
- 8. Indigenous Traditional / Technical Knowledge (ITK)
- 9. Documentation of Success Stories
- 10. Discussion on different formats and questionnaires
- 11. Steps and Participatory Procedure for preparation of SREP

B. The workshop had the following objectives:

- 1. To orient team members towares Extension Reforms
- 2. To know about roles and responsibilities of Team of Farm Advisors
- 3. To delineate the major Agro-Ecological Situations (AES) of Chatra District
- 4. TO build up the SREP Core Team for participatory probing and collection of primary issues and information from the representative AES villages.

During the workshop, along with giving inputs on basic concepts of Extension Reforms of the project; task cycles were taken up to sensitize the members and take stock of the following:

- 1. Present organizational structure and personnel available at district, block and village levels.
- 2. Major roles and responsibilities at each level.
- 3. Infrastructure, staff position available, with the line departments.
- Various schemes implemented by line departments along with budget and specific objectives.

- 5. Infrastructure, specialization, various schemes implemented by NGOs along with operational areas.
- 6. Existing coordination mechanism and linkages among line departments.
- Present role, expected role and expectations at different actors under Extension Reforms.
- 8. The participants suggested the effective organizational structure and co-ordination mechanism for achieving the overall objectives of Extension Reforms.

2.5 Identification of Agro-Ecological Situation (AESs) and Constitution of AES Teams

Based on the altitude, Soil type, Forest cover, Rainfall, Topography and farming system the AESs within the district were identified in consultation with the scientists of Krishi Vigyan Kendra (KVK), Chatra, NGOs working in the districts and the officials of Agriculture and allied departments.

2.6 Formation of multi disciplinary team :

Core team of SREP was constituted consisting of

- (a) The Leaders of Block Technical Team (BTT) from various line departments.
- (b) The Scientists of Krishi Vigyan Kendra, Chatra.
- (c) The selected NGOs, who have considerable work experience of working in remote areas.

A six days residential training programme of the Core Team was organized during the month of January 2006 at KVK Chatra in which around 40 persons participated. In this trainees were basically exposed to the need and the procedures of SREP and were trained by the Training Organizer, KVK Chatra and Resource persons on the various techniques of PRA (Participatory Rural Appraisal).

2.7 Identification of representative village for each AESs

One village, which represents that particular AES, identified for collection of relevant information and data. There were four representative villages spread over the whole district. The AES team members were called for a short briefing and input in PRA tools, formats for gap analysis in adoption of improved practices, primary information and prioritization of research & extension issue in line with K.V.K., recommendation was given by experts and the SAMETI resource persons. The 30 trained participants present were grouped into four AES teams to take up final exercise and participatory probing in

the representative villages in the 1st Phase. The Multi Disciplinary Team (MDT) and representatives conversant in local Adivasi - "Ho" dialect left for the village on the afternoon hours. They were devoted to interaction with farming community and collecting information by staying at the villages. Team members assembled at the KVK and were oriented to the mode of rearranging the information and experience gathered from representative village for presentation before farmers, district administration and scientists of K.V.K. Chatra. For this two farmers from each representative villages were invited to join the AES teams in the above exercise for the greater involvement of the farming community thus actually practicing the doctnne of bottom up approach and hence to involve the whom the SREP is actually prepared.

2.8 Collection of Secondary Information

Secondary information used for preparing SREP was collected from different publications from the records of the District Offices of Agriculture, Horticulture, Animal Husbandry, Dairy, Fishery, Co-operative, Lead bank Office, NABARD, Regional Office, DRDA, District Statistical Office, NIC and office of the Agriculture Production Commissioner, Jharkhand.

2.9 Concurrent Revision and Verification of Data

The primary data collected during field practicals were checked with various farmer groups in the village through triangulation and verified with information available from published sources and from different government departments. Some of the critical issues were also discussed with scientists and other villagers. During the field practicals, the group members were facilitated by KVK Scientists and also by officers of different line departments.

2.10 Summarization and Presentation of Data

A core team comprising ten members from the AES teams facilitated by the Training Organizer & Scientist of Krishi Vigyan Kendra, Chatra undertook the job of tabulation, analysis of data collected by various AES teams and preparation of first draft of SREP to be presented in AGB Chatra, SMAETI Jharkhand.

The data from each representative village, collected by the respective group was discussed in detail with the scientists of K.V.K. Chatra, before its summarization. Draft conclusions were prepared for presentation before the farmers, scientists, officers of different line departments and the AGB and AMC members of ATMA, Chatra. During

the presentation of SREP, emphasis was on diversification, value addition, agroprocessing, post harvest management of the produce, public-private partnership, formation of FIG, developing a committed army of service providers and marketing aspects so as to make the Chatra SREP a useful document for the different stake holders and for all those interested in the overall development of agriculture in Chatra district.

The district Core Team and Facilitators involved in drafting SREP with a vision and mission of leading Chatra district, farmers.

2.11 Approval of SREP

After thorough scrutiny by the ATMA Governing Board with constituent official and farmer members, the SREP is submitted for approval as an authenticated plan document. This document forms the basis for agricultural development in the district. Further, it helps ATMA to put forth its demand before the Government of India for release of funds.

2.12 **Preparation and Implementation of Action Plans**

Keeping in view the strategic thrust in SREP, annual/seasonal block action plans are prepared by BTT to facilitate technology dissemination using processes like exposure visits, technological and managerial training, demonstrations, field days, IT support etc. through the farmer groups. Simultaneously, a research action plan consisting of on farm trials is prepared and carried out in support of the research strategies spelt out in SREP by the Scientists of KVK to assess and refine the existing generalized technologies.

2.13 Role of MANAGE, Hyderabad & SAMETI, Jharkhand

National Institute of Agricultural Extension Management (MANAGE), Hyderabad & State Agricultural Management Extension Training Institute (SAMETI), Jharkhand the premier institute in the field of agricultural extension has been providing technical backstopping to the Extension Reform. Further, continuous interaction with state level SREP Coordinator and MANAGE Consulted and frequent telephonic conversations have been beneficial for preparing the manuscript. The constant efforts put forth by the Training Organizer & Scientists of Krishi Vigyan Kendra, Chatra and Project Directors of ATMAs have been a source of inspiration.

Information of AES team members involved in participatory data collection AES - I

Sl. No.	Name of team members	Designation	
Team L	Team Leader		
1.	Deepak Kumar Srivastav	I/C, B.A.O., Kunda	
Team N	Team Member		
1.	Md. Khalid	Ravenew Coll.	
2.	Dharma Oraon	K.V.K., Chatra	
3.	Shree Ram Mahto	I/C, B.A.O., Pratappur	
4.	Shivnandan Prasad	I/C, B.A.O., Chatra	
5.	Dr. Randhir Choudhary	B.A.H.O., Chatra	
6.	Naresh Pandey	Panchayat Sevak, Kunda	
7.	Ejaz Ahmad	Welfare point, N.G.O., Chatra	
8.	Radhey Shyam Thakur	L.E.O. Pratappur	
9.	Ramlakhan Prasad Singh	V.L.W., Pratappur	
10.	Nand Kishor Prasad	V.L.W., Pratappur	
11.	Ram Nagina	K.C., Kunda	
12.	Mr. Alam	Public Rahat Committee N.G.O.,	
		Pratappur	

AES - II

Information of AES team members involved participatory data collection

Sl. No.	Name of team members	Designation	
Team L	Team Leader		
1.	Bharat Prasad	B.A.O., Tandwa	
Team Member			
1.	Ravindra Kumar Oraon	B.C.O., Tandwa	
2.	Dr. Kamelesh Bharti	B.A.H.O., Tandwa	
3.	Dr. Anil Kumar Nayak	B.A.H.O., Simariya	
4.	Zamil Ahmad	B.A.O., Simaria	
5.	Surendra Kumar Sinha	L.E.O., Simariya I	
6.	Mithlesh Singh	B.C.O., Simariya	

7.	Govind Ravidas	L.E.O., Tandwa
8.	Sandeep Kumar Saahay	Gram Shree N.G.O., Chatra
9.	Elishma Xaxa	K.V.K., Chatra
10.	Upendra Kumar Singh	K.V.K., Chatra
11.	Vinay Kumar Raut	B.C.O., Lawalong
12.	Wasim Ahmed Gilani	L.E.O., Simariya II
13.	Dr. Md. Kalam	T.V.O., Tandwa

AES - III Information of AES team members involved under participatory data collection

Sl. No.	Name of team members	Designation	
Team L	Team Leader		
1.	Rajendra Prasad Singh	B.A.O., Itkhori	
Team Member			
1.	Rajendra Prasad	B.A.O., I/C Gidhour	
2.	Ram Shwarup Sharma	B.A.O., I/C Pathalgadda	
3.	Dr. Davendra Nath Dewdy	B.A.H.O., Itkhori	
4.	Dr. Virendra Pratap Rai	K.V.K., Chatra	
5.	Shayam Dev Singh	V.L.W., Itkhori	
6.	Smt. Ranu Devi	Gram Sevika	

AES - IV

Information for Different AES team members involved under participatory data collection

Sl. No.	Name of team members	Designation
Team Leader		
1.	Ramadhin Prasad	B.A.O., Hunterganj
Team Member		

1.	Arun Kumar Sinha	S.H.O., Chatra
2.	Vikash Kumar	L.E.O., Hunterganj
3.	Yogendra Bhokta	B.C.E.O., Chatra
4.	Ravindra Nath	L.E.O., Chatra
5.	Ashis Lal	Chatna Bharti, N.G.O.
6.	Braj Kishor Prasad	Farmer, Hunterganj
7.	Shiwendra Kumar Dubey	K.V.K., Chatra
8.	Alakh Narayan Singh	J.S.S., Chatra
9.	Dr. Suman Kumar toppo	B.H.O., Hunterganj
10.	Sanjay Kumar Sharma	B.C.O., Hunterganj