Achievements So Far

SAMETI has successfully facilitated the launching of NATP in three new project districts namely, Jamtara (5th Phase), Palamau (5th Phase) & W. Singhbhum (5th Phase).

The following milestones have been achieved during project implementation:

- Facilitated and documented the Strategic Research and Extension Plan (SREPs)
- Conducted training programmes as required by ATMAs.
- Organized State level workshop and Banner Programmes in collaboration with MANAGE, Hyderabad.
- Documented the Success Stories under NATP-ITD component.
- Conducted inter-state exposure visits for farmers.
- Provided training for promotion of Block level farmers group and farmers organization.
- Established Network with two financial institutions, seven research Institutions, three ICAR institutions, four NGOs and three autonomous institutions and with seven agriculture and allied departments
- Brought out 19 publications so far for use by extension functionaries & farmers.
- Organized 29 State level training programmes in 2004-05 for over 500 participants.

1. Background Information:

The State of Jharkhand was created in November' 2000 after carving 79 lakh hectares geographical area from the State of Bihar for better planning and execution of development activities of a ecologically different zone (Hills & Plateau region compared to Bihar plains). The agricultural scenario of the State is not very good since the cropped area is only 22 lakh hectares with average productivity of 1.0 t ha^{-1}. Under the prevailing situation, rapid transfer of improved farm technologies to meet the food deficits prevailing in the state is the goal. Prior to ITD-NATP, the system prevailing in different districts in the area of technology dissemination was as follows:

- The technology available at the state level was in operation at district level also.
- Training of farmers was not demand driven.
- Not much work on group activities.
- Not much research-extension linkage.
- Paucity of funds was a major problem.
- Practically not much awareness on the "Use of IT" in technology transfer.
- Not much concern on food and nutritional security.
- Training & visit system was not successful.
- Approach was crop based & not system based.
- No emphasis on management reforms.
- No work on institution build up.
- Not much emphasis on capacity building & skill up gradation.
- Not much linkage with local institutions involved in technology transfer.

Above aspects or limitations still exist in the non-ATMA districts of the State. However, with the intervention of SAMETI some improvements are visible.

Need to reform:

Considering the acute rural poverty in the State and peoples dependence on agriculture for livelihood, the emerging need to bring about policy reforms was felt to make the system farmer friendly and farmer receptive. Some of the priority issues which were considered are:

1) It is now recognized that public extension service (ZRS, KVK, State Department etc.) alone can not meet the specific needs of the region and different classes of farmers. Policy reforms to promote private extension service (FO, SHG, FIG, contact farmers, agriclinics, input providers etc.) to supplements the public extension service need to be pursued.
2) Role of Mass media & IT, FIACs etc. is being increasingly appreciated.
3) Promotion of a farmer participatory approach for system description, problem diagnosis, implementation, monitoring, evaluation & feedback will bring about improvement.
4) Marketing rather than production is a major constraint in enhancing farm income. Thus there should be increasing thrust on marketing extension.
5) Promotion of demand driven and farmer accountable extension will be meaningful.
6) Inter disciplinary approach in solving farmers problems should be followed.
7) SREPs should be prepared for all districts of Jharkhand through PRA involving line departments, KVK, ZRS to make it meaningful.
8) Field extension functionaries should work as farm advisors with B.Sc.(Agri) as the minimum basic qualification.
9) 'ATMA' concept should be propagated for multidisciplinary & location specific problem solving approach based on SREP.
10) Research-extension linkage needs considerable strengthening. Linkage of 'ATMA' with KVK & ZRS (ICAR, SAU) should be stronger than that at present.
11) Women empowerment and skill up gradation of farmers should be priority issues.
12) At State level training institute such as 'SAMETI' should be strengthened for capacity building of extension functionaries.

.2. SAMETI and Its Mandate

The State Agriculture Management & Extension Training Institute (SAMETI) was established and made autonomous under societies Act as per the requirement of NATP. SAMETI was established to provide extension input to the field functionaries and consultancy in areas like project planning, appraisal and implementation etc. It also focuses to conduct problem oriented studies in agriculture management, communication, participatory methodologies, post harvest technology and marketing. After the creation, it established close linkages with local institutions like KVK, ZRS, BAU, HARP, XISS,

ILRI, R. K. Mission, Holy Cross, GVT and with MANAGE and other state & National level management institutions.

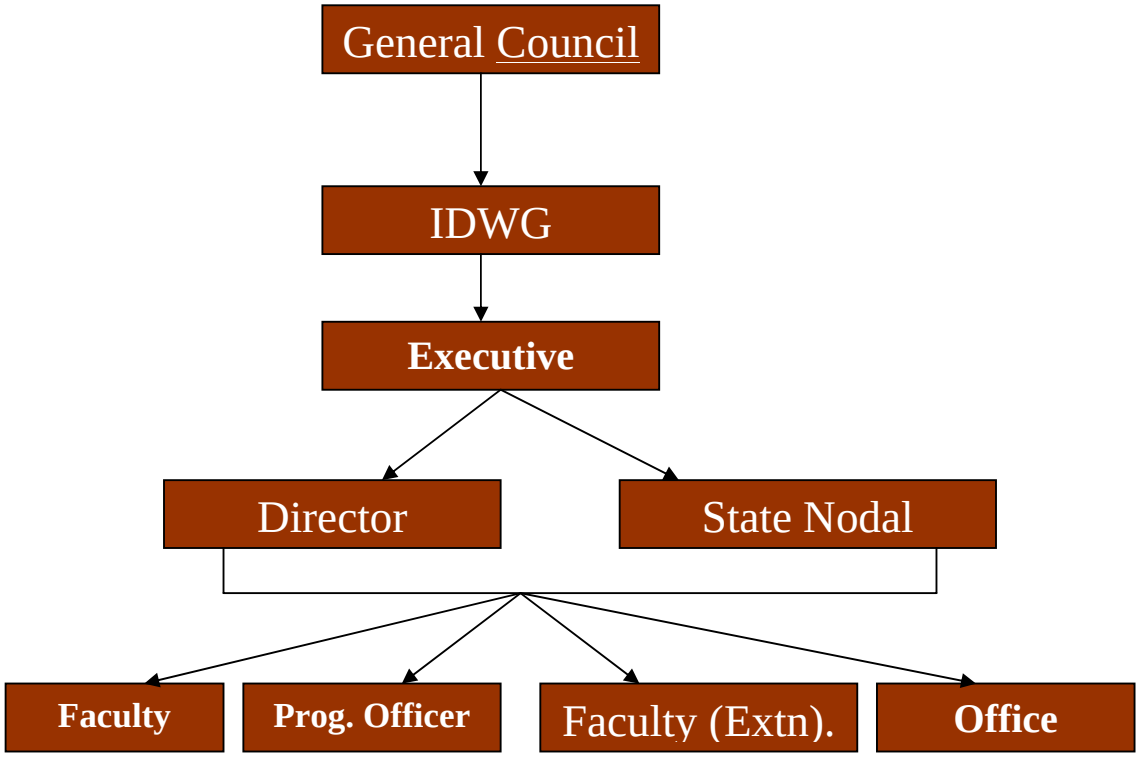


Fig: Organizational set up of SAMETI.

The Agriculture minister of the State is the Chairman of the General Council and Commissioner & Secretary, Deptt. of Agriculture & Cane Development is the Vice Chairman of the General Council. There are 15 Members in the General Council including Director, SAMETI. The meeting of the General Council is held once in year to observe the provision of MOU, the rules & such instructions Govt. of India/ Jharkhand in the departmental dealing with the affairs of SAMETI as may be issued from time to time, exercise general control and issue, directions, nominate members of the E..C for efficient management & administration of the institute.

The Executive council is headed by Commissioner& Secretary (Agriculture), Deptt. of Agriculture & Cane Development, Govt. of Jharkhand and consists of 12 members such as Director (Horticulture), Director, Soil Conservation and Addl. Secretary (Agriculture), Director (Extension), BAU and Director(Research) as the members. State Nodal Officer (NATP) is the vice-chairman of the EC and Director SAMETI is the Member Secretary. The EC is directly responsible for the management and administration of the institute in accordance with the rules and by-laws. Till now, 3 Executive council meetings were held i.e. 12.12.2002, 7.7.2003, 21.2.2004.

The Standing Committee deals with policy matters relating to training and publication. The post of Director (SAMETI) was created and a senior level University Professor cum Dean (Agriculture) from

Birsa Agricultural University has been posted to bring synergy in capacity building programmes of extension functionaries.

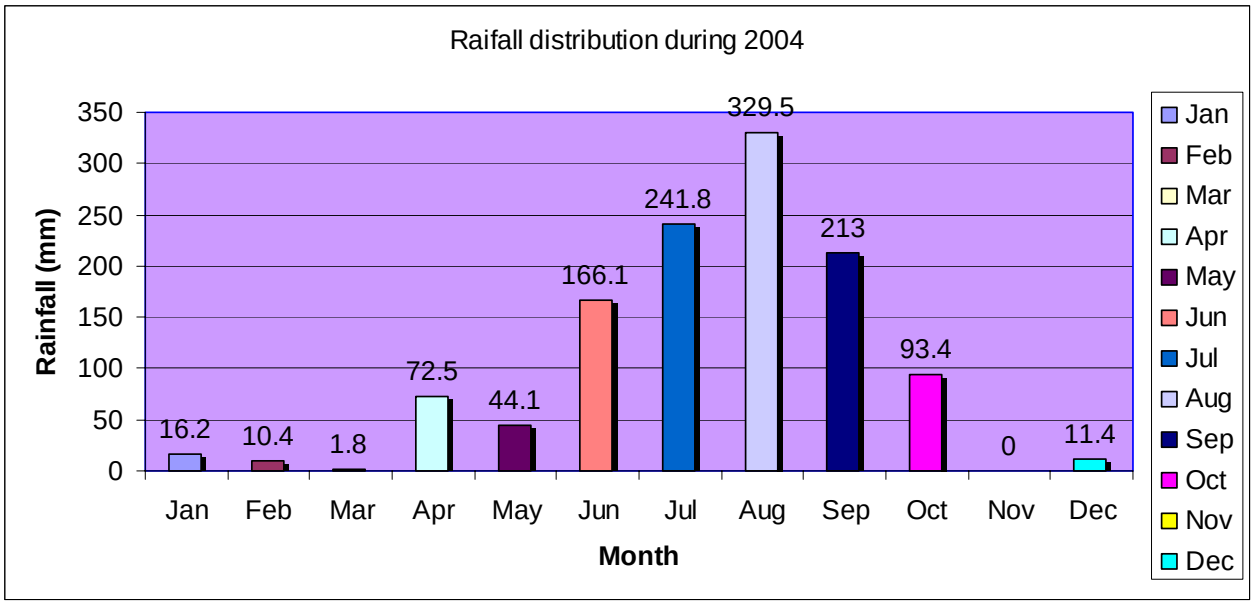
A core team consisting 2 faculty members and 1 programme officer was posted to facilitate project implementation and build the capacity of stakeholders involved in the project. The team also makes periodical visits to ATMA districts to carry out need based trainings, support project implementation and provide consultancy service

MANDATE:

1. To develop systematic linkage between State, Regional and International Institutions of outstanding accomplishment in the field for Agricultural Extension Management.
2. To gain insight into Agricultural Extension Management System and Policies together with problems and constraints at each step and stage.
3. To identify, appreciate and develop modern management tools, techniques in problem solving approaches utilizing the mechanism of personnel management, resource management, input management and the conflict management at organization level.
4. To develop skill in organizing need based field programme for training and re-training of senior field level functionaries for executing extension programme.
5. To conduct programme oriented researches in the area of Agricultural Extension Management as a sequel to provide feedback to training programme. Such kind and types of researches will generally be undertaken on the recommendation and issues emanating from training and vice-versa.
6. To serve as repository of ideas and develop information, regional communication and documentation service etc. in regard to the subject of Agricultural Extension Management.

3. Challenges in the Agriculture Sector:

Rainfed agriculture is prevalent in the State. Agriculture suffers from frequent droughts caused by low and erratic rainfall leading to wide variation in production and productivity. The State of Jharkhand with 20 lakh hectares net sown area and a population of 27 million produces less than 50% of its food grain requirements primarily because 90% of the area under agricultural crops is rainfall dependent.



Further in the State 40% of the geographical area have degraded soils (20 Lakh ha) and Soil acidity problems in 4 lakh hectares of cropped area. 75% of the population depends on agriculture but 82% of the farmers are small and marginal. Livestock is a very important component of the farming system. It is only through adoption of a farming system approach with care of natural resources, the scenario in rural areas can be changed.

Farming System:

Experience gained under NATP (Farmer Participatory Research) outlines the need for several farming system options. This will make the farm households self sufficient. Enterprise diversification will increase income, minimize risks and improve diet of farm families. NATP-ITD component has strengthened the Research-Extension farmer linkages. Successes have been achieved & documented by ATMA functionaries in the districts of Dumka, Chaibasa, Palamau & Jamtara during the past 3-4 years. Some of the possible farming system options for the State are:

- Rice-Fish Farming.
- Rice-Fish-Duck farming.
- Rice-Fish-Pig farming.
- Rice-Pig farming.
- Rice-poultry farming.
- Rice-Mushroom
- Sericulture-Vegetable cultivation-Apiary.
- Vegetable-Floriculture-Apiary-Lac cultivation
- Field crops-poultry-fish-mushroom.
- Fruit crops-vegetables-Apiary.
- Rice-vegetables-Apiary.

4. Training Programme Organized / Future Programme:

Sl No	Course/ Programme Title	Dates	No. of Participant.	Participants
1.	Regional Review workshop for ITD Component of NATP	Jan 28-30' 04(3 days)	28	PDs, DPDs, KVK/ ZRS Scientists, Line dept, , Faculty SAMETI
2.	Basic Skills in IT for ATMA, Palamau	Feb26-28' 2004(3 days)	25	District & Block Level Officers
3.	Agro-Tech Kisan Mela for farmers of Jharkhand	Feb 14-16,04 (3 days)		Farmer from 2 ATMA Districts.
4.	Documentation of Success Stories	March 23-27' 04 (5 days)	8	DPDs, Faculty of SAMETI.
5.	Documentation of Success Stories on IT.	Arpil. 28-May1st' 04 (4 days0	10	DPD, IT Faciltiator, SAMETI Faculty
6-17	New Dimension of Agriculture Extension Management for District Agriculture Officers & Block Agriculture Officers of Jharkhand	2nd May – 12 June' 2004 (12 Programme) (36 days)	148	District Level & Block level Agriculture & Allied Officers of Jharkhand.
18	Use of Information Technology In Agriculture for ATMA, West Singhbhum	July 14-16' 2004 (3 days)	24	District & Block level Agriculture, Veternary, Horticulture Officers.
19	State level workshop on "Sustainable Development of Horticulture crops"	27th Sept-1st Oct' 04 (5 days)	61	DAOs, DHOs, DSCOs, KVK/ZRS/ BAU Scientists.
20	Training Programme on " Operationalisation of Computer at FIACs	Nov 21st-25th ' 2004 (3 days)	10	BAOs & BHOs of ATMA, West Singhbum
21	Group Discussion on " Importance of P in Balanced Nutrition of Crops"	13th December' 2004 (1 day)	57	DAOs, DSCOs, DHOs & KVK/ ZRS/BAU Scientists.
22.	New Dimensions of Agricultural Extension Reforms-ATMA Model	Dec 16th -20th ' 2004 (5 days)	63	DAOs, DSCOs, DHOs & KVK/ ZRS/BAU Scientists.
23	Agro-Tech Kisan Mela-2005	2 days		Farmers of ATMA, Dumka, West SInghbum
24.	Training & Visit Programme on " New Technologies of Agriculture Extension" for Palamau District	March 3rd-5th ' 2005 (3 days)	118	Progressive Farmers of Palamau.

25.	Training & Visit Programme on " New Technologies of Agriculture Extension" for West Singhbhum District	March 7th -9th ' 2005 (3 days)	29	Progressive Farmers of West Singhbum.
26.	One day Workshop for Launching of National Horticulture Mission in Jharkhand.	10th March' 2005 (1 day)	54	DAOs, DHOs, DSCOs, Dy. Director, Joint Director, PDs, HARP Sceintists, BAU Scientists.
27.	Training & Visit Programme on " New Technologies of Agriculture Extension" for Dumka District	March 14th -16th ' 2005 (3 days)	27	Progressive Farmers of Dumka Districts.
28.	Training & Visit Programme on " New Technologies of Agriculture Extension" for Jamtara District	March 17th -19th ' 2005 (3 days)	29	Progressive Farmers of Jamtara
29.	Training & Visit Programme on " New Technologies of Agriculture Extension" for 4 ATMA districts District **(SAMETI-HARP-IFFCO)**	March 22nd -24th ' 2005 (3 days)	46	Progressive Farmers of Dumka, Jamtara, Palamau, West Singhbhum, Ranchi districts.
Total No. of Courses: 29		**Total days of Trainings: 79 days**		
Total Participant trained: 837		**Total Resource Person Used: 66**		

Future Programme:

1. Course on Communication Skills & Motivation.
2. Operationalisation of Agri-clinics & agribusiness center.
3. Workshop on" Hi-tech Horticulture".
4. Course on Leadership Development.
5. Course on "Soil & Water Management".
6. ICT initiatives & Cyber Extension.
7. Advance skill in IT.

5. Faculty:

Faculty members are mainly drawn from SAMETI, ATMA, MANAGE, Hyderabad, Birsa Agricultural University, Ranchi, XISS, Ranchi, KVK Divyayan, R K Mission, Morabadi, PRADAN, NABARD, State Department of Agriculture, BIT Mesra, HARP (ICAR) & ILRI (ICAR) Nam kum, Institute of Forest Productivity, Ranchi, SRI Bariatu and ATI, Ranchi as per need of the programme.

Faculty Involved This Year in SAMETI Programme.

S No.	Name of the Faculty	Designation & Address
1.	Dr. G. R. Desai	Project Coordinator (NATP)
2.	Dr. R. K . Tripathi	Joint Director(Extn), GOI
3.	Dr. J. P. Singh	Joint Director (Extn.), GOI
4.	Prof. R. P. Singh	Chairman, Agriculture Management Centre, IIM, Lucknow.
5.	Dr. Brajesh Kumar	PD, ATMA, Palamau
6.	Sri. Anil Kumar Singh	DIO, NIC, Palamau
7.	Sri Manoj Kabi	Faculty (IT), SAMETI
8.	Dr. A. K. Sarkar	Director, SAMETI
9.	Sri. Biswamber Patel	IT Facilitator, ATMA, Dumka
10.	Sri. Prafulla kumar Sio	Faculty, R.K. Mission
11.	Dr. S. Rath	ADR, RRTTS, Semiliguda, Orissa.
12.	Dr. G. Dev.	Consultant, IMPHOS, Ludhiana
13.	Dr. D. Kumar	Head, Coffee Res. Institute, Zimbabwe
14.	Dr. B. N. Mohanty	Manager, Horticulture, TATA Steel, Jamshedpur
15.	Dr. S. C. Kotur	IIHR, Bangalore
16.	Dr. S. Kumar	Head, HARP, Plandu, Ranchi
17.	Dr. Rajesh Kumar	NRC for Litchi, Muzaffarpur (Bihar)
18.	Dr. Ranvir Singh	Senior Scientist, HARP, Plandu
19.	Sri. V. Jayaram	Director (Agriculture), Govt. of Jharkhand
20.	Dr. R. M. Srivastava	Director (Extension), BAU, Ranchi
21.	Dr. A. Nassir	Asia Consultant (IMPHOS)
22.	Dr. T. Mrabet	Secretary General (IMPHOS), Morocco
23.	Dr. G. K. Choudhary	State Marketing Manager, IFFCO, Ranchi
24.	Sri. Bimla Baxla	Principal, ETC, Hehal, Ranchi
25.	Dr. M. N. Reddy	Director (Extension Magt), MANAGE, Hyderabad

26.	Dr. M. A. Kareem	Faculty, MANAGE, Hyderabad
27.	Dr. A. K. Singh	Head (Fisheries), BAU, Ranchi
28.	Sri. Gokul Mehra	PD, ATMA, Dumka
29.	Sri. M.S.A. Shiva	PD, ATMA, West Singhbhum
30.	Dr. Brajesh Kumar	PD, ATMA, Palamau
31.	Dr. P. B. Saha	Jr. Scientist, ZRS, Dumka
32.	Dr. P. K. Singh	Jr. Scientist, ZRS, Dumka
33.	Sri. Ajay Kumar	Programme Officer, SAMETI
34.	Dr. D. K. Sahi	Jr. Scientist, Dept. of Soil Science, BAU, Ranchi
35.	Dr. Prasant Kumar	Training Organizer, Chianki, Palamau
36.	Dr. B. K. Bhagat	Associate Director, ZRS, Chianki
37.	Smt. Supriya Singh	Trg. Assoc, KVK, Chainki
38.	Dr. Rajeev Kumar	Trg. Assoc, KVK, Chainki
39.	Dr. Ashok Kumar Sinha	Trg. Assoc, KVK, Chainki.
40.	Dr. Promod Kumar	Jr. Scientist, ZRS, Chianki
41.	Dr. Uday Kumar Singh	Trg. Assoc, KVK, Chianki
42.	Sri. Uday Prasad	Jr. Scientist, KVK, Chainki
43.	Md. Eklakh Ahmad	Jr. Scientist, KVK, Chianki.
44.	Dr. R. P. Singh	Senior Scientist, SSAC, BAU
45.	Dr. S. M. Prasad	Head (Plant Pathology), BAU
46.	Dr. Debendra Prasad	Head (Entomology), BAU
47.	Dr. Bisal Nath	Senior Scientist, HARP, Plandu, Ranchi
48.	Dr. Z. A. Haidar	Head (), BAU, Ranchi
49.	Dr. R. R. Upasani	Senior Scientist(Crops), BAU
50.	Sri. Sudhir Kumar Singh	Dy. PD, ATMA, Dumka
51.	Sri. Ranjay Kumar Singh	Dy. PD, ATMA, Palamau
52.	Dr. Sudhir Kumar Jha	Dy. PD, ATMA, West Singhbhum
53.	Sri. Sanat Kr. Sewaiyan	Res. Associate (Extension Management), SAMETI
54.	Dr. R. P. Singh ‘Ratan’	Head, Dept. of Extension Education, BAU, Ranchi
55.	Dr. Nibha Bara.	Dept. of Extension Education, BAU, Ranchi
56.	Dr. D. N. Singh	Sr. Scientist, PVG, BAU
56.	Md. Parvez Alam	Sr. Scientist, BAU
57.	Dr. Nand Kishore Rana	Assoc. Professor, SSAC, BAU
58.	Dr. N. K. Rai	University Professor, SSAC, BAU
59.	Dr. A. Sharma	Senior Scientist, SSAC, BAU

60.	Dr. Pradeep Dey	Senior Scientist, HARP, Plandu
61.	Dr. Kamal Kishore Prasad	University Prof., Dept of Horticulture, BAU
62.	Dr. B. M Choudhary	Head (Horticulture), BAU, Ranchi
63.	Dr. S. K. Singh	Jr. Scientist, BAU
64.	Dr. Jai Prakash	Sr. Scientist, HARP, Plandu
65.	Dr. Rabindra Prasad	Jr. Scientist, Entomology, BAU
66.	Dr. Raghav Thakur	Chief Scientist, Agronomy, BAU

6. Training Methodology:

In the recent past, Extension Training Programs have witnessed multi-farious changes in the training methodology. The old days' training methods like lecture are now being replaced with different multi dimensional training methods. With the introduction of modern communication techniques, the extension training has received numerous improvements. Senders (1965) commented that to make a training effective it should be based on the fundamentals that people learn by seeing with their own eyes, hearing with their own ears, saying with their mouths and doing with their own hands. Considering the above factors and all the modernization in the field of training methodology, the Institute has also incorporated latest training techniques and extension teaching methods by linkage with other institution like MANAGE, XISS, R K Mission, SRI.

A brief discussion of the training approach/methodology presently being followed by the Institute is given hereunder:-

(i) Lecture-cum- Group Discussion / Group Exercise

The participants of the training courses conducted by this Institute usually are Master Trainers/Scientists of State Agricultural Universities and State, Distt. & Sub Divisional level Extension Officers from State Govts. Since the adult/senior people do not relish too much listening to others, the talk-cum-discussion method is used to orient the participants about concept of a particular module during the training session. The opportunity is provided to the participants to discuss their field experiences and problems related to the particular module. This method is used for the modules on extension talk, skill teaching, Information Technology and other topics like leadership development, Motivation etc.

(ii) Planning Session

In all the courses conducted by the Institute, before practice or presentation on any module, the participants are provided with an opportunity to plan the particular topic in each module under the guidance of faculty members.

(iii) Sharing of Experiences:

In a many a cases, A sharing of experiences session included for better understand of problems and prospects of case studies for proper implementation of project at grass root level.

(iv) Video Films:

(v) Field Visits:

(vi) Practice Session

After planning the topic and demonstration, the participants are provided with an opportunity to practice it. The practice on letter writing and drawing techniques are given to the participants in order to develop skill in preparation of visual aids in computer. Similarly participants practice for extension talk session as well as skill session before the actual presentation. This helps in developing confidence among the participants in use of various extension methods and A.V.aids in the field situation.

(vii) Presentation.

The presentation of extension talks and the skill teaching plans by the participants forms one of the important techniques adopted in all the courses. These presentations may either be an individual or a group activity. The extension talks delivered by the participants would invariably be supported by some kinds of visual aids, which they would prepare by themselves in consultation with the faculty members. The participants are requested to present their talk plans and skill plans, after proper planning & practice/rehearsal.

(viii) Appraisal

The appraisal of the presentations of extension talks & skill teaching plans is done by the faculty members and participants on certain norms. The appraisal of the visual aids is part of the appraisal of extension talks. In the process of appraisal, the strong points are highlighted and points for improvement are given in the form of suggestions for further improvement.

(xi) Recall Session

The recall is done with the specific objectives to strengthen the remembrance of the participants on the major learnings daily/weekly. The participants are asked to recall the important/major learning's on individual/group basis, which are visualized on chart(s) and kept displayed in the classroom till concluding session.

(x) Back at work Plan

At the end of the course the participants are requested to indicate about the major learning during the course and their application in their back at home situation.

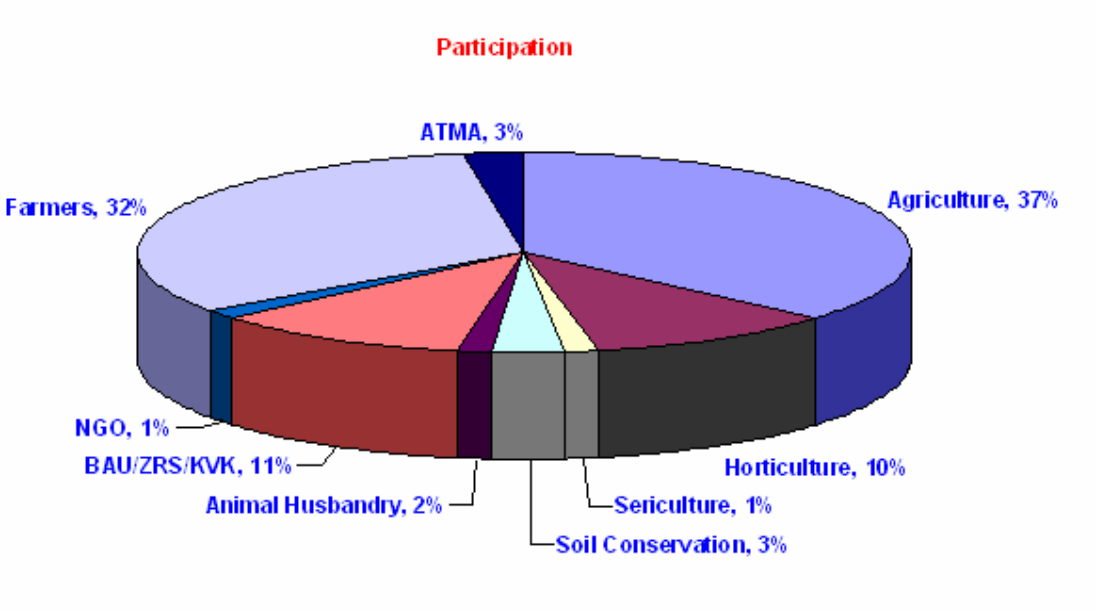
(xi) Evaluation

The training programmes conducted by the Institute are being evaluated which help in monitoring the training progress and also provide opportunity to the faculty to incorporate the topic(s)/revise methodology as per the need of the trainees while planning for future course.

(x) Inductive Learning

Generally in most of the courses the above-mentioned training methodology is adopted. However, in some courses like Extension Management, Monitoring & Evaluation Project Management & PRA Techniques and Management of Training Programme "COVERDALE" Training Methodology, in which participants are divided in sub groups and task is given, is used. The group members are requested to assemble in general session for presentation/appraisal/inputs. This provides 100 % involvement of the participants.

7. Participants:



8. Procurement of Equipments:

- Video Conferencing facility developed at SAMETI Conference Hall.
- A Lab established with 10 multimedia computers with networking.
- Laptop Computer- 2 Nos.
- Multimedia Projector- 2 Nos.
- Digital Camera (Sony)- 1 No
- Photo Copier, Fax- 1 No each.

9. Civil Works:

Particulars	Status
Conference Hall (60 Persons)	Established.
Syndicate Room (10 Persons)	Established.
IT Lab (10 Computer with Networking)	Established.
Guest Room (2 Suits)	Completed.
Hostel (40 participants)	Renovated at BAU

10. Financial Progress up to March' 2005:

Head Wise Releases and Progressive Expenditure (Rs. In Lakhs)

Head	Releases	Expenditure	Balance
Recurring			
Pay & Allowances	8.23	6.67	1.56
TA/ Workshop/ HRD	21.65	19.97	1.68
Sub-Total	29.88	26.64	3.24
Non- Recurring			
Equipment	23.32	33.23	(-) 9.91
Civil Works	38.00	32.54	5.46
Others	10.80	9.10	1.70
Sub Total	72.12	74.87	(-) 2.75
Total	102.00	101.51	0.49

11. Training Needs Identified Under NATP

1. Long term training plan to be drawn based on skill gap analysis.
2. Prioritization of farmers problems through PRA at various levels.
3. Group formation & group approach in extension.
4. Entrepreneurship development for agri-clinics & agri business.
5. Operationalisation of Farmer interest groups.
6. Market –network for agricultural & horticultural produce.
7. Mass Media for technology dissemination.
8. WTO & its implications.
9. Database creation for location Specific action plan.
10. Improved communication techniques.
11. Addressing gender concerns.
12. Increased role of IT in agriculture.

12. Long Term Researchable issues

1. Measures to increase cropping intensity under different land situations.
2. Rainwater management strategies for drought alleviation.
3. Farming system approach under rice based system.
4. Participatory varietal selection for crop improvement
5. Integrated plant nutrient management systems for rainfed uplands & lowlands.
6. Developing sustainable Fruit/ vegetable based cropping systems.
7. Agro techniques for fruits & vegetable preservation & processing.
8. Watershed development involving active participation of farmers.
9. Improved post harvest management of crops.
10. Farm mechanization with special emphasis on small & marginal farmers.
11. Rice based agro-forestry systems.
12. Medicinal plants – conservation, management, processing techniques.
13. Live stock production & nutrition.
14. Research on Piggery, Goatry, Sericulture and Lac culture using farmer participatory approach.

13. Research-Extension Linkage:

Strengthening the R-E linkage is a major step in bringing about improvements in existing farming system. Extension system puts demands on research system and receives solution from it. The research system in turn gets feedback from extension system. Farmer has found his place in this link through representation in GB and AMC.

Research extension linkage is becoming stronger with the involvement of KVK & ZRS scientists in the programme. KVK/ZRS is helping ATMA in preparation of SREP and the block action plans. KVK is also conducting adaptive trials with ATMA. Such linkages have been found to be effective between ATMA-Chaibasa & KVK Jagannathpur & ATMA Palamau & KVK Chianki.

SAMETI is helping ATMAs to strengthen this linkage by deputing scientists from BAU, Ranchi /ZRS, Dumka, Chaianki & Darisai/ KVK, Jagnnathpur after taking help and guidance from the University.

SAMETI is working on the following lines for improvement in R-E linkage.

1. Preparing technical bulletin for extension workers and farmers of ATMA districts.
2. Participation of research scientists in the ATMA GB as well as ATMA management committee.
3. Active participation of KVK /ZRS scientist in the participatory Rural Appraisal as a member of the core team entrusted with the responsibility of finalizing Strategic Research and Extension Plan.
4. Organization of demonstrations and awareness programmes for the farmers on new technologies.
5. Mainstreaming the long-term researchable issues with the production system research or mission mode research or other channels of research to be funded through ICAR/BAU.
6. Organizing district level (ATMA) workshops on Research-Extension-linkage to discuss about researchable issues under the SREP and follow up the progress made on the same.

Progress of on-farm adaptive research by RS scientists at Dumka in collaboration with ATMA, Dumka has been extremely satisfactory.

Details

14. Documentation of Success Stories

SAMETI, Jharkhand

- Revolutionizing Agriculture the Information Technology Way
- SAMETI: Managing Agriculture Better.

ATMA, Dumka

- Basmatta Basks in Attention.
- Fishing no more in choppy waters.
- Majdiha no more at the crossroads.
- Flowers too can pay.
- Weaving a good fortune.

ATMA, Jamtara

- Making a difference through greens.
- Yesterday's waste is today's buzz.
- Laying golden eggs.
- Earn lakhs from lac
- Farmer's sweat sweetens bitter gourd.
- 'Shipping' goodwill and success.

ATMA, West Singhbhum

- Growing green with none to envy
- From battle grounds to the fields.
- Sweet is the fruit of labour.
- Tapping the prosperity crawling beneath.
- Hybrid rice breeds content.

ATMA, Palamau

- Quality seeds no longer a dream
- Mushroom fillip for Palamau.
- Riding high on cooperative farming.
- Vertmicompost manna for resource starved farmers.

15. Linkage with Institution:

SAMETI has established linkage with various local as well as National Institutions.

16. Organization of State Level Workshop

I. Workshop on "Sustainable Development of Horticultural Crops" in Jharkhand.

A five days state level workshop on "Sustainable Development of Horticultural Crops" was organized from 27th Sept' 04 to 1st Oct' 2004 at SAMETI Conference Hall.

Recommendation for the State:

1. Priority areas for Horticulture in the State are:

I. Floriculture
II. Fruit & Vegetable cultivation.
III. System approach in vegetable & fruit crops.
IV. Quality planting material.
V. Regular training & upgradition of knowledge / skill.
VI. Planning to be zone wise.
VII. Promotion of INM/ IPM in crops.
VIII. Developing processing technologies.
IX. Medicinal & aromatic plants.
X. Marketing network.

2. Block nurseries & progeny orchards in the State to be rejuvenated with polyhouse facilities for preparation of quality planting materials.
3. Human resource development in Horticulture (Production, Processing and Marketing) should be regular component and different level of people to be involved. For this University, ICAR and State institutions to work together.
4. Crop plan (Vegetable, fruit and flower) should be zone wise. Execution of the plan should be integrated with involvement of local institutions & district / block officers under the guidance of State Department.
5. Market oriented development of horticultural commodities should be the approach. For this auction yards, refrigerated cargo vehicles should be started.
6. State should establish Agro-processing units or centers at each district/ Zone to encourage the farmers/ farmers groups in taking up horticulture as a livelihood option.
7. Hi-tech nursery and tissue culture to be prompted to meet the requirement of the State in supply of quality planting materials.
8. Export oriented organic horticulture should be prompted with involvement of private sector.

9. Prompting horticulture in the watersheds is important in each watershed, prioritization of the area under agriculture, horticulture, fishery & other enterprises should be done based on farmers need & perception & agro ecological situations.
10. Post harvest management should receive greater attention as fruits & vegetable are of perishable nature. Establishment of cold storage facility will help.
11. Approach should be to increase area under high value crops & value addition. Protection cultivation will help in prompting these.
12. Mushroom cultivation should receive more attention for nutritional security of people. Training of rural women & providing market facility will be required to promote this.
13. Nutrient management in horticulture crops is poor. There is need to promote INM with greater use of P & K. Lime to neutralize soil acidity, quality compost to enrich soil quality & use of secondary & micronutrients based on soil tests will help to sustain soil health.
14. State should take immediate steps to

    i. Operationalise AEZ for vegetables.

    ii. Creating a database on Horticulture.

    iii. Strengthen the infrastructure & develop a seed policy.

Use of drip & Sprinkler irrigation, mulching, root trainers, should be promoted in block nurseries for greater dissemination of knowledge among farmers.

II. **Group Discussion on "Importance of Phosphorous Application in Balanced Nutrition of Crops**:

A State level group discussion on "*Importance of Phosphorus in Balanced Nutrition of crops*" was organized by World Phosphate Institute (**IMPHOS**), Morocco in collaboration with State Agricultural Management & Extension Training Institute (**SAMETI**), Jharkhand, Birsa Agricultural University **(BAU),** Ranchi and Deptt. of Agriculture, Govt. of Jharkhand at SAMETI conference hall, Krishi Bhawan Campus, Kanke Road, Ranchi on **13th December 2004**.

The participants in the discussion were District Agricultural Officers, Animal Husbandry Officers, Soil Conservation Officers of the State Govt. and select scientists from Deptt. of Soil Science, Zonal Research Stations and Farmers Training Centres (KVK) of the University.

Important recommendations of this one-day group discussion are given below:

I. Soil testing is more relevant for P use and therefore it should be the basis for application of phosphorus in soils.
II. More attention should be given to Rabi crops than Kharif with regard to P application in crops

III. Legumes and oilseeds need more attention as far as use of P fertilizers is connected.
IV. For higher crop yield targets, more fertilizer P is to be added.
V. Under seed production programme, more emphasis on P should be given.
VI. P use should be based on cropping system. rather than for single crop, since applied P has residual effect.
VII. Rate of application and ratio of NPK application both are important for ensuring balanced fertilization
VIII. For crop quality improvement, P application is equally important
IX. In acid soils, lime application along with phosphorus is essential for high crop yields.
X. In rain fed agriculture, pre plant phosphorus application as banding especially in low P soils is recommended. Further, in rain fed agriculture, use of phosphatic fertilizers should be linked with efficient use of water.
XI. Organic manuring, residue incorporation helps in increasing P use efficiency.
XII. Soil test based use of secondary & micronutrients are essential in balanced fertilization to realize greater economic benefits.
XIII. Recommended doses of phosphorus application don't have any adverse effect on soil environment.

III. **Workshop on Launching of National Horticultural Mission in Jharkhand**:

One day workshop on "Launching of National Horticultural Mission" was organized at '**SAMETI**' conference room in Krsihi Bhawan Campus, Kanke Road, Ranchi **on 10th March' 2005** under the guidance of **Sri. M. K Mandal**, Development Commissioner of the State. State Dept. of Agriculture, Horticulture officials, NGOs, KVK, ICAR & University scientists & extension personnel participated in the workshop. Bangalore based organic farming expert **Sr. Samuel Mohan** presented a detailed presentation on the subject. Experts *from Holland on Floriculture* had interaction with officials on how to promote flower cultivation. This workshop was organized as a preparatory step prior to the launch of National Horticulture Mission in the State. Agri-entrepreneurs were invited to attend the meeting and derive benefit for the presentation of the experts.

17. Visitors:

- **Dr. G. R. Desai**, Project Coordinator (NATP) visited SAMETI, Jharkhand during Regional Review Workshop from Jan 28-30' 2004
- **Dr. M. N. Reddy**, Director (Extension Management) visited SAMETI, Jharkhand in a Banner Programme on " New Dimension of Agriculture Extension Management" from 12th May-16th May 2003.
- **Dr. M. A. Kareem, Faculty (MANAGE)** visited SAMETI, Jharkhand in a Banner Programme on " New Dimension of Agriculture Extension Management" from 12th May-16th May 2003
- **Dr. R. K. Tripathi**, Joint Director (Extension), GOI visited SAMETI, Jharkhand during Regional Review Workshop from Jan 28-30' 2004
- **Dr. J. P. Singh**, Joint Director (Extension), GOI visited SAMETI, Jharkhand during Regional Review Workshop from Jan 28-30' 2004.
- **Prof. R. P. Singh**, IIM, Lucknow visited SAMETI, Jharkhand during Regional Review Workshop from Jan 28-30' 2004.
- **Prof. R. P. Singh**, IIM, Lucknow visited SAMETI, Jharkhand during Regional Review Workshop from Jan 28-30' 2004.
- **Dr. J. P. Mittal**, Coordinator (NATP), ICAR visited SAMETI, Jharkhand during Regional Review Workshop from Jan 28-30' 2004.
- **Dr. Sabyasachi Rath**, Associate Director, RRTT&S (OUAT), Koraput visited SAMETI, Jharkhand during workshop on "Sustainable Development of Horticulture Crops " 27th Sept to 1st Oct' 2004.
- **Dr. G. Dev**, Consultant (IMPHOS), Ludhiana visited SAMETI, Jharkhand during workshop on "Sustainable Development of Horticulture Crops" 27th Sept to 1st Oct' 2004.
- **Dr. D. Kumar**, Head, Coffee Res. Institute, Zimbabwe visited SAMETI, Jharkhand during workshop on "Sustainable Development of Horticulture Crops "27th Sept to 1st Oct' 2004.
- **Dr. B. N. Mohanty**, Manager (Horticulture), TATA Steel, Jamshedpur visited SAMETI, Jharkhand during workshop on "Sustainable Development of Horticulture Crops" 27th Sept to 1st Oct' 2004.
- **Dr. A. Nassir**, Asia Consultant (IMPHOS) visited SAMETI, Jharkhand during Workshop on "Importance of P in Balanced Nutrition of Crops" on 13th December' 2004.
- **Dr. T. Mrabet**, Secretary General (IMPHOS), Morocco visited SAMETI, Jharkhand during Workshop on "Importance of P in Balanced Nutrition of Crops" on 13th December' 2004.
- **Dr. G. K. Choudhary**, State Marketing Manager, IFFCO, Jharkhand visited SAMETI, Jharkhand during Workshop on "Importance of P in Balanced Nutrition of Crops" on 13th December' 2004.

- **Dr.(Smt) Patrica Imas**, Crop Scientist (Israil) & consultant International Potash Limited visited SAMETI during Training & Visit programme on “New Technology of Agriculture Extension” from 22-24 March’ 2005
- **Dr. S. Banarjee**, Chief Executive, Farmers Association of India, Kolkata visited SAMETI during Training & Visit programme on “New Technology of Agriculture Extension” from 22-24 March’ 2005
- **Sri. V.K. J. Rao**, Senior Scientist (Agril. Extn.), NAARM Hyd visited SAMETI 5th July, Palamau 6th July, W. Singhbhum 8th July’ 2004 for reviewing SREP gap analysis.
- **Dr. R. P. Singh,** IIM, Lucknow visited to SAMETI on 19th -21st July for reviewing the activities of SAMETI.

18. Publication:

I. SAMETI NEWS (June & December’ 04)
II. Annual Report-2003
III. Integrated Fish Management (Hindi)
IV. Cultivation of Banana (Based on Tissue Culture)
V. Success Stories of NATP-ITD, Jharkhand (English)
VI. Training Book “ Management & Extension of Agriculture Technology” (Hindi)
VII. Book on “Operational Skills in Computer”
VIII. SAMETI Agro-Tech Calender-2005
IX. Mushroom Utpadan Ki Unnat Takniq(hindi)
X. Sabji Utpadan Ki Unnat Taknik
XI. Khad Aur Urbarak
XII. MadhuMakhi Palan
XIII. Vigyanik Taknik Se Dhan Ki Kheti.
XIV. PRA Techniques
XV. Training Book on “Krishi Prasar Ke Navintam Taknik”

19. Participation in Seminar / Symposium

A Training Programme on “Cyber Extension-Role of ICTs in Agricultural Extension Reforms” was held at CSAUAT, Kanpur from Jan 17-21’ 2005 for Officers of Dept of Agriculture, KVK scientists of U.P. to Orient them on new initiatives and role of Media and Information and Communication. This course was attended by Sri. Manoj Kabi, Faculty (I.T), SAMETI, Jharkhand as a resource person on request of Dr. V. P Sharma, Director (I. T & Documentation & Publication), MANAGE, Hyderabad.

A Training Programme on "*Advance Skill in IT*" was held at MANAGE, Hyderabad from Nov'29-Dec' 2 2004. This course was attended by Sri. Ajay Kumar, Programme Officer, SAMETI, Jharkhand.

Dr. A. K. Sarkar Director, SAMETI, Jharkhand attended meeting of "World Bank Mission to India for Reviewing of NATP-ITD" on 20-21 Nov' 05 at MANAGE, Hyderabad

A Summer School on "Educational Methodology and Instructional Technology in Multimedia Environment. From 3rd -23 Aug' 2004 was held NAARM, This course was attended by Sri. Manoj Kabi, Faculty (I.T), SAMETI, Jharkhand.

20. Process Introduced:

- Training programme on various aspects on Agriculture Extension Management introduced in the State.
- Better Research-Extension Linkage.
- Improved use of IT & ICT in Technology spread.
- Website for SAMETI, Department of Agriculture and its linkage with ATMA districts.
- Exposure visits on frontier areas of Agricultural development initiated in collaboration with ATMA in other states with funding support from National Horticulture Board.
- Video conferencing facility.

21. Institutional Sustainability

SAMETI is planning to initiate following steps to move towards institutional sustainability under NATP model:-

- Charging Token Money for Training/ Workshop/ Exposure Visit.
- Charging for audio visual aids provided by SAMETI.
- Priced Technical Bulletin/ Publication.
- Charging for conference room facilities.
- Charging for video conferencing.
- Institutional charges @10% is being provided by State Govt. for sponsored programmes.

22. Task Ahead.

- Closer linkage among ATMA, SAMETI & State Departments/ SUA/ ICAR
- Greater Role of mass media in technology dissemination.
- Improved & effective communication among Scientist-Farmers-Extension personnel.
- SREP of all non-ATMA districts & bottom-up planning for development.
- Propagating farming system approach.

23. Future Challenges

- Innovative marketing strategy.
- Continuous technology up gradation.
- Healthy credit growth.
- Effective system dominated work culture.
- Improving organizational setup.

24. Future Plan:

- SAMETI will organize a state level workshop on SREP Formulation involving leading agriculture scientists and extension functionaries to identify new areas in agriculture research and extension and the possibility of their dissemination to farmers field through ATMAs.
- SAMETI planning to organize an Orientation workshop on New Technology of Agriculture Extension for selected NGOs in Jharkhand.
- With funding from State Govt., SAMETI will facilitate SREP preparation for non-ATMA districts of the State.

25. SAMETI in Print Media