

Evolving Institutional Mechanism for strengthening Public Private Partnership under ATMA through Agripreneurs – Action Research

Abstract

Agri-Clinics and Agri-Business Centres Scheme was launched during 2002 to provide value added extension services to the benefits of the farmers by qualified agri professionals. The scheme envisages free training, post training handholding support, startup loan, subsidy and integration with extension activities of ATMA. As of now more than 32000 agriculture professionals have been trained out of which around 12000 have established 32 categories of agri-ventures. Midterm evaluation of Govt. of India and other research studies indicated that an agripreneur with 32 months of business experience covered an average of 30 villages, 19 farmers in each village, provided varieties of extension services to farmers resulting in enhancement of yield by 17.4%, income by 28.8% besides creating job for other 6 people in the same rural setup. Extension Reforms has identified Agri-Clinics and Agri-Business Centres as one of the activity under cafeteria for promotion by providing service charges for the extension activities carried out by agripreneurs. Revised guidelines of Agri-Clinics and Agri-Business Centres made several provisions for integration of extension activities of agripreneurs with that of ATMA. However, field level feedback from the agripreneurs indicated that linkage between agripreneurs and ATMA is very weak and the same has been endorsed by ATMA officials. In order to achieve the main objective of ACABC i.e. supplementing the efforts of public extension there is strong need for institutional mechanism for promoting PPP through agripreneurs under ATMA. Important objectives of proposed action research are to understand the present status of linkage between ATMA and agripreneurs, to identify the weak and potential areas of linkage, to evolve PPP models through wider consultation of stakeholders for action research which address weak and potential areas of linkage, to document the process for the benefit of upscaling. Methodology includes purposive selection of a district in which around 10 established agripreneurs are available at Block level, District level consultation with ATMA officials and agripreneurs to understand present status, to identify weak and potential areas for linkage, based on the consultation evolving PPP models for action research, Operationalisation of PPP models in different blocks, documentation of entire process, suggest PPP models which strengthen the linkage between ATMA and agripreneurs and developing policy brief for the benefit of up scaling. Expected out come are PPP models which strengthen the linkage between ATMA and agripreneurs, Policy brief for the benefit of up scaling, Convergence and synergy between public and private extension service providers, better regulation of private extension services and better utilization of public fund for the benefit of farmers.

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However, field level feedback from the agripreneurs indicated that linkage between agripreneurs and ATMA is very weak and the same has been endorsed by ATMA officials.

In order to achieve the main objective of ACABC i.e. supplementing the efforts of public extension there is strong need for institutional mechanism for promoting PPP through agripreneurs under ATMA.

Important objectives of proposed action research are

1. To understand the present status of linkage between ATMA and agripreneurs.
2. To identify the weak and potential areas of linkage.
3. To evolve PPP models through wider consultation of stakeholders for action research which address weak and potential areas of linkage.
4. To document the process and to develop policy brief for the benefit of up scaling.

Methodology:

1. Purposive selection of a district in which around 10 established agripreneurs are available at Block level.
2. District level consultation with ATMA officials and agripreneurs to understand present status, to identify weak and potential areas for linkage.
3. Based on the consultation, evolving PPP models for action research.
4. Operationalisation of PPP models in different blocks
5. Documentation of entire process
6. Suggest PPP models which strengthen the linkage between ATMA and agripreneurs.
7. A policy brief for the benefit of up scaling.

Expected out come:

1. PPP models which strengthen the linkage between ATMA and agripreneurs.
2. Policy brief for the benefit of up scaling.
3. Convergence and synergy between public and private extension service providers.
4. Better regulation of private extension services.
5. Better utilization of public fund for the benefit of farmers.

Time line:

1. Purposive selection of a district in which around 10 established agripreneurs are available at Block level (April 2013).
2. District level consultation with ATMA officials and agripreneurs to understand present status of linkage, to identify weak and potential areas for linkage (May 2013)
3. Based on the consultation, evolving PPP models for action research (June - August 2013)
4. Operationalisation of PPP models (September 2013- February 2015)
5. Documentation of entire process (April 2013 to February 2015)
6. Suggest PPP models which strengthen the linkage between ATMA and agripreneurs (March 2015).
7. A policy brief for the benefit of up scaling (April 2015).

Budget Estimate:

- | | |
|--|--------------|
| 1. Travel, Lodging and boarding of researchers | 12,00,000.00 |
| 2. Remuneration for expert | 25,00,000.00 |
| 3. Miscellaneous Expenditure | 2,00,000.00 |

Total -39,00,000.00

Research Team : Dr. P. Chandra Shekara

Index Development for Quality Assurance of Training Institutions in Agriculture

Abstract

The capacity building of all relevant stakeholders involved in the value chain of agriculture and allied subjects in public, private and NGO sector is adequately emphasized in XII Plan approach paper on extension. It is in this context, the need arises for Quality Assessment and Improvement of trainers and training institutions engaged in agricultural development.

To give effect to this intent, a study is proposed to evolve, test and establish the quality parameters for trainers, training institutions and the training process so that the manpower available for agricultural development can be made more competent. The expected outcome of the study will be a Quality Index which would help users to define, assess, grade and certify the trainer, training institution and training process.

All possible variables which define quality of short and medium term training programmes related to trainer, process of training and training institution would be identified and studied by reviewing the available literature and through secondary sources of data and information.

The expert's opinion will be taken in identification and selection of the variables so that all possible and relevant variables and their sub-sets can be covered under the study.

The primary data using Survey Method through structured questionnaire with open and closed ended questions will be collected from relevant stakeholders including experts' opinion and trainees' response.

The study would also cover the respondents from EEIs and SAMETIs and other public and private sector institutions which are recognized and established by government / quasi government / independent agencies. The questionnaire will be canvassed to certified trainers, accredited training institutions, representatives of agencies like NAAC, NBA, ISO 9000 etc., also to name a few.

Index Development for Quality Assurance of Training Institutions in Agriculture

Introduction

It is a recognized fact that in a knowledge society, training and learning is a continuous process to keep pace with changes. Agricultural development is no exception to it. Agriculture in India is still treated more as a traditional occupation and way of life. It is imperative to change this scenario and therefore, necessary to infuse the latest technological, environmental, managerial and extension related innovations in agricultural development. This highly challenging task can be realized by putting an effective and qualitatively superior training and learning systems in place.

The capacity building of all relevant stakeholders involved in the value chain of agriculture and allied subjects in public, private and NGO sector is adequately emphasized in XII Plan approach paper on extension. It is in this context, the need arises for quality assessment and improvement of trainers and training institutions engaged in agricultural development. To give effect to this intent, it is proposed to study, evolve, test and establish the quality parameters for trainers, training institutions and the training process so that the manpower available for agricultural development can be made more competent.

It is presumed that -

- i) Training can certainly make an impact on learners, if it is relevant personally and professionally with a problem solving approach.
- ii) Keen and interested trainees would drive a trainer to a meaningful discourse in order to make it purpose focused and learner centric.
- iii) A lethargic and uninterested trainee may also get attracted and involved in the training and learning process, if the quality and competence of the trainer is high, mode of delivery is effective and content is suitably designed for learner. The trainer would rise to the challenge rather than blaming the trainees for their lack of interest and poor learning.
- iv) Enabling learning environment, integrating all important factors such as curriculum, pedagogy, faculty resource, duration of the training programme, size of the class, physical infrastructure etc. enhance the quality of learning and raise the confidence of other stakeholders in the training process.

Objectives

1. To identify the quality parameters and develop a quality index for trainers, training institutions and training process.
2. To propose a 'Quality Assurance Programme' with a view to assess, grade and certify the trainers, training process and training institutions engaged in agricultural development.

Methodology

1. All possible variables which define quality of short and medium term training programmes related to trainer, process of training and training institution would be identified and studied by reviewing the available literature and through secondary sources of data and information. The experts opinion will be taken in identification and selection of the variables so that all possible and relevant variables and their sub-set can be covered under the study.
2. The primary data using Survey Method through structured questionnaire with open and closed ended questions will be collected from all relevant stakeholders including experts' opinion and trainees' response.
3. The variables related to quality of trainers, training institutes and training process would be covered in questionnaire including the following subset of variables.

Trainer : Academic qualification, professional experience in research, training and consulting, pedagogical knowledge, updation of knowledge in the frontier areas, course designing, course directing, session planning, choice of training methods, preparation of study/ reading/ reference / research / case material, exposure visit, use of video and audio, games and exercises, presentations and reports, mentoring, coaching and counseling skills, handling of participants and groups, identification of resource persons, learner and purpose-centric approach etc.

Training Institutions – Classrooms, audio visual aids, board and lodging facilities, transport facilities, support system and facilities in terms of humanware, software and hardware, library and knowledge resource center, documentation and publication, training themes and focused areas for institution, computer and media lab etc.

Training Process – Training scheduling, training drill, spacing between training programmes, number of training programmes, preparatory time for training related activities, training fatigue factors, responsiveness of and relevance of participants / clients, size of class, duration, nomination process, programme evaluation, training need analysis etc.

The questionnaire also would include items about the enhancement and sustenance of quality of training programme.

4. The study would cover respondents from EEs and SAMETIs and other public and private sector institutions which are recognized and established by government / quasi government / independent agencies. The questionnaire can be canvassed to certified trainers, accredited training institutions, representatives of agencies like NAAC, NBA, ISO 9000 etc., to name a few.
5. Frequencies, percentages and the weightages would be worked out to evolve an index of quality. Also the inferences will be drawn based on data from secondary sources to enrich the findings of the survey.
6. The project proposal and the proposed methodology would be presented during the workshop on '**Accreditation/Certification of Trainers and Training Institutions**' in order to further strengthen and making suitable revisions if necessary for index development. Based on the outcome and recommendations of the study, the quality index will be developed to be used to assess the trainers and training institutions.

Expected Outcome

A self-administered index, which would help users to define, assess, grade and certify the trainer, training institution and training process.

Way forward for future –

Quality Assurance Programme (QAP-1)
Quality Assessment Programme (QAP-2)
Quality Improvement Programme (QIP)
Quality Sustenance Programme (QSP)

Time Frame - One Year

Questionnaire preparation and item selection ..	April - May, 2013
Finalization of the Questionnaire..	June, 2014
Data collection, analysis & Report preparation ..	July - Sept, 2013
Draft Report preparation in Trg.Plg. Workshop ..	Oct - Dec, 2013
Finalization of the Report ..	February, 2014
Submission of the Report ..	March, 2014

Budget

• Cost of Outstation Travel of Project team @ Rs. 15,000/- per visit X 8 visits	..	Rs. 1,20,000/-
• Boarding/Lodging charges of Project team @ Rs. 5,000/- per person per day X 25 days	..	Rs. 1,25,000/-
• Fee/Honorarium for 1 Research Officer @ Rs.40,000/- per month X 6 months	..	Rs. 2,40,000/-
• Travel of Research Officer – Outstation and other travel	..	Rs. 10,000/-
• DA for Research Officer @ Rs. 2,000/- per day X 20 days	..	Rs. 40,000/-
• Stationery and Printing charges	..	Rs. 30,000/-
• Contingency charges	..	<u>Rs. 10,000/-</u>
TOTAL	..	<u>Rs. 5,75,000/-</u>

Research Team

Dr. Vikram Singh, Dr. K. Anand Reddy and Dr.G.Jaya

Action Research on Marketing Perspective For Revisiting SREP of a District

Abstract

SREPs (Strategic Research Extension Plans) have been prepared by almost all the districts of the country. This is a strategic plan to ensure convergence of agriculture and allied departments and resources therein to have a synergistic impact at the grass-root level for effective extension services. It is observed that the SREPs, prepared so far, did not focus on the marketing gaps. Under the present dispensation, there is some inherent mismatch between the production and marketing agencies of the agriculture sector. The marketing wing, under the present system, is not a part of the mainstream administration, so it is not subject to routine Governmental monitoring for its budgetary expenditure. Furthermore, the marketing agencies work under a separate Act altogether under a strict regulatory regime with the help of a network of APMCs.

It is against this backdrop that there is a need to incorporate the marketing component in the SREPs by bringing the production and marketing agencies onto a single platform. This necessitates an Action Research to develop the requisite methodology to bridge the missing link between production and marketing wings of the agricultural sector for developing an integrated plan for the district.

The overall objective of the action research is to expand the focus of the SREP by incorporating the marketing perspective, thereby making it SREMP through convergence between marketing, agriculture and allied departments, presently hindered by their compartmentalization approach.

Methodology:

Nalgonda district of Andhra Pradesh due to its diversity in the production of crops and commodities across the different Agro-Ecological Situations (AES) has been selected as the domain of the research. For assessment of marketable surplus, representative villages will be selected for the major commodities in each AES of the district. For identification of gaps in marketing infrastructure, all the existing markets of the district will be covered under the study. For identification of gaps in marketing practices such as contract farming, retail-chain linkages, group marketing etc, the production pockets of the major crops and commodities will be covered under the study. Based on the identified gaps, strategies, thrust areas and activities will be chalked out. Structured schedule/questionnaire will be developed and administered among different stakeholders like farmers, market functionaries, commission agents, traders etc. Focused Group Discussion will be conducted with different stakeholders. Two district level workshops will be conducted before and after the Action Research.

Expected Outcome: Standardized Formats to assess the gaps in Marketing Practices, Strategies to bridge the identified gaps, Methodology to develop an annual action plan on marketing as a component of SREP (SREMP) etc.

Budget: 8.5 lakh

Duration of the project: April 2013 to February 2014.

Action Research on Marketing Perspective For Revisiting SREP of a District

Introduction

Production and Marketing aspects of agricultural produce are intertwined with each other. Market-driven production rather than production-propelled marketing is the order of the day. Under the present dispensation, the agriculture and allied departments dealing with production enhancement are totally dissociated from the marketing setup. This has led to conspicuous absence of integration in planning and implementation of different schemes at district level. The need of the hour is to bring convergence amongst agriculture and allied departments in marketing of agricultural produce. This calls for convergence of schemes and resources therein to explore the synergies for the benefit of farmers. Efforts have been made to realize this objective through ATMA platform at the district level. SREP, as a perspective plan, included Research and Extension strategies required for enhancing production and productivity of agriculture and allied commodities based on identified gaps. However, the marketing component did not get due importance in the SREP, partly because the marketing agencies are not a part of the mainstream administration through the normal state budgetary allocation and the monitoring thereof, and partly because these agencies are governed under a separate Act altogether with a network of autonomous APMCs.

It is against this backdrop that there is a need to incorporate the marketing component in the SREPs by bringing the production and marketing agencies on a single platform. This necessitates an Action Research to develop requisite methodology to bridge the missing link between production and marketing wings of the agricultural sector for developing an integrated plan at district level. The overall objective of the Action Research is to expand the focus of the SREP by incorporating the marketing perspective, thereby making it SREMP.

Objectives

- To understand the broad marketing scenario of the district in terms of marketing channels, storage, grading, packaging, transportation, system of wholesaling, retailing, financing, contract farming, group marketing etc
- To develop Standardized Formats to assess the gaps in Marketing Practices, System and Infrastructure
- To come up with strategies to bridge the identified gaps for ensuring Good Marketing Practices (GMPs) in the district
- To develop Methodology for preparing annual action plan on marketing as a component of SREP (SREMP) for the district
- To evolve strategy and mechanism for better convergence between Marketing and Agriculture and allied departments for overcoming the existing compartmentalization

Methodology

- i) The locale of the study will be Nalgonda district of Andhra Pradesh because of the diversity in the agricultural produce available in the district across different Agro-Ecological Situations (AES).
- ii) For assessment of marketable surplus, representative villages will be selected for the major commodities in each AES of the district
- iii) Identification of gaps in marketing infrastructure - all the existing markets of the district will be covered under the study.
- iv) For identification of gaps in marketing practices such as contract farming, retail-chain linkages, group marketing etc, the production pockets of major crops and commodities will be covered under the study
- v) Based on the identified gaps, strategies, thrust areas and activities will be chalked out.
- vi) Structured schedule/questionnaire will be developed and administered among different stakeholders like farmers, market functionaries, commission agents, traders etc. Focused Group Discussion will be conducted with different stakeholders.
- vii) Two district level workshops will be conducted before and after the Action Research.
- viii) Documentation of interplay of the forces for successful integration of production and marketing wing to come up with a replicable SREMP

Expected Outcome

- Standardized Formats to assess the gaps in Marketing Practices, System and Infrastructure
- Strategies to bridge the identified gaps for ensuring Good Marketing Practices (GMPs) in the district

- Methodology to develop an annual action plan on marketing as a component of SREP (SREMP)

Time line

SI.No	Activity	Time Period
1.	Schedule/Questionnaire Development	April to June
2.	District level Workshop	July
3.	Training of the Enumerators	July
4.	Collection of data	Aug - Oct
5.	Focused Group Discussion	Aug - Oct
6.	Consolidation and Analysis of Data	Nov
7.	Documentation and Submission of Report	Dec – Jan
8.	National level Workshop on Incorporating Marketing Component in SREP	Feb

Budget Estimate

SI.No	Activity	Budget in lakhs
1.	District level Workshops @Rs one lakh / workshop 2 nos.	2.0
2.	Training of the Enumerators	0.5
3.	Collection of data	2.0
4.	Focused Group Discussion	1.0
5.	Consolidation and Analysis of Data (Data entry operator)	0.5
6.	Documentation and Submission of Report (photo copying , typing, binding etc)	0.5
7.	National level Workshop on Incorporating Marketing Component in SREP	*
8.	TA/ DA for the research team from MANAGE	2.0
	Total cost of the research project	8.5

* Rs 3.5 lakhs for organizing Workshop is included in a separate proposal on Workshop

Research Team

Dr.B.K.Paty, Dr.M.A.Kareem, Dr.N.Balasubramani and Dr.B.Venkat Rao

Design, Development and Experimenting/Testing Virtual Mode of Training Module (VMTM)

Prelude:

Agriculture is faced with greater challenges than ever before. Climate change, exhaustion of soil, non-availability of farm work force, newer races of pests and diseases also compound the crisis. At the same time, productivity needs to be enhanced, quality promoted to an international status, youth to be attracted towards agriculture in as much as farming has become unviable economically.

Despite a wide range of reform initiatives in agricultural extension in India in the past decades, the quality of information provided to marginal and small farmers is uneven. There is an observation that the present extension delivery system functions only as a subsidy delivery mechanism rather than a technology delivery mechanism; because of this work culture in the extension system, ***extension education per se*** is not happening across the country. The days of mass extension are coming to a close, while demand for commodity based group extension is highly on the increase. Paid extension and or private extension through Public-Private-Partnership mode is also paying dividends in many states and this phenomenon requires our attention. The State Agricultural University and State Agricultural Extension Management and Training Institute (SAMETI) are expected to go beyond the academic boundaries and to be a partner in the development process of the State by undertaking turnkey projects, demonstration of the technologies at district level and regular conduct of PRA and SWOC analysis, the outcome of which could help the state extension system to respond to the developmental issues of the farming and farming community.

Edger Dale (1968) developed the cone of learning experience which emphasized that highly effective extension education tool from the bottom of the cone and enhancing knowledge retention and recollection to the tune of 90 % after two weeks of exposure. Further, it explains from bottom to the tip of cone various extension approaches and tools are highlighted. The reading materials like training modules, newspapers, magazines and book shall provide 10 % knowledge retention. Keeping in view the emergence of Information and Communication Technology tools (ICT), it is right time to enlist various new media tools for farm technology transfer and capacity building initiatives.

Now in the digital age, various modules and social networking sites are offering educational modules for the benefit of school, college and professional students. On the part of Agriculture, capacity building through the virtual mode has not been experimented to the desired level. Hence, it is proposed to test

out/organize a collaborative and participatory experimentation model by Tamil Nadu Agricultural University (TNAU) and MANAGE on this innovative idea.

Reviews:

Educational institutes in developed countries are switching over to the on-line or virtual capacity building module to educate the students and professionals on recent advancements. A few examples and experiments are shared hereunder;

North Carolina Education (<https://center.ncsu.edu/nc/>) is a resource for professional development, online assessments, student learning, and other activities for the North Carolina education community. Most resources located here are presented as online courses or modules. Some of the courses are available for self-enrollment. Some courses have prerequisites and require a one-time "enrollment key", which you would receive once you meet prerequisites. Several courses have access restrictions based on duties assigned and you will have been provided an "enrollment key" from someone, be automatically enrolled in these courses, or be prevented from access.

ASME Online Instructor-Supported Courses (<http://www.asme.org/kb/courses/asme-training---development/online-classes/online-instructor-supported>) allow us to pursue training on our own time at our own pace – 24/7 – while benefitting from instructor-supported learning with subject matter experts readily available through email for maximum flexibility.

Technical Requirements: To take one of the ASME online instructor-supported courses we should have a personal computer, Web browser, Internet connection and software capable of displaying PDF files (such as [Adobe Reader](#).)

Required Text/Materials: Some courses suggest accompanying texts, such as access to the related ASME Codebook but for most courses these are not mandatory. Some excerpts from ASME Codes are given as part of the course.

Class Participation: Classes are held in sessions covering a period of six weeks. During this time participants are not required to attend a specific online class, but can work through the course modules at their own pace during the session. For maximum benefit, participants should read all assignments and answer the questions in a timely manner. The assignments and quizzes are presented as a method to think about the material as well as evaluate participants' individual learning.

Communication with the Instructor: The instructor is available at any time during the six week session to answer questions via email. Additionally, some instructors choose to be available at a specific time each week should individuals

want to talk directly via the video conference to clarify certain points or questions.

Course Evaluation and Continuing Education Units (CEUs): ASME online courses provide Continuing Education Units (CEUs). Participants are evaluated on the results of exams and course assignments. To receive CEU units, the participant is expected to answer at least 70% of all test questions correctly and complete all assignments. The instructor may use other criteria, such as email discussions, to adjust the pass/fail grade of 70%.

Educomp Solutions Ltd:

Educomp

(<http://www.educomp.com/Services/VocationalEducation.aspxProposed>) has initiated various pioneering experiments with IGNOU on development of certificate programmes of **Spoken English and Personality development** with duration of six months, and an 11 month programme titled **Professional Programme for Insurance Management** in partnership with Max New York Life insurance, and is working with various state government agencies for **skill building programmes** through virtual version.

TNAU and MANAGE Collaborative Experimentation:

National Institute of Agricultural Extension Management (MANAGE) in collaboration with the Tamil Nadu Agricultural University (TNAU) is planning to experiment/ test the on-line course module for the benefit of state extension functionaries initially and later extend to the other stakeholders in agriculture including farmers.

TNAU has successfully tested online training and would be providing the technical support. MANAGE with TNAU would develop, test and fine tune the module to meet its requirements.

Objectives

1. To identify the various training needs, gaps and useful training programme/modules through a participatory workshop involving multi-stakeholders (farmers, extension officials, scientists, policy makers)
2. To evolve the course content with multimedia impact and reaching the extension officials through virtual/online mode
3. To test the developed module with SAMETI & SAU faculty, train faculty and frame an actionable strategy

Methodology:

Organizing a two day participatory workshop: A participatory workshop will be organized in Training Division of Tamil Nadu Agricultural University, Coimbatore in June, 2013 by inviting the farmers, extension officials, scientists and other stakeholders to study the information needs and sensitize on the on-line virtual capacity building module.

The outcome of the workshop is expected to be identification of the priority subject area for two modules for farmers and two modules for extension officials.



Framing need based course content on enhancing market-led agriculture: The farmer is expected to produce *what is demanded* in the market in the present WTO era. A deeper awareness of the markets and market forces thus becomes essential to every farmer. The Market is getting consolidated for high value, high quality produce in larger volumes while the small farmers produce, low quality produce in small quantities and hence there is a total mismatch. How to prepare the small farmers for the high value market and ensure a larger volume is the question to be addressed at present. How to fine tune the state extension machinery to address the current technology transfer crisis?



Design, development of virtual platform based modules: Various formats of on-line modules are available for students, professionals and field officials, on the required subject. Based on the subject area preference, multimedia based on-line module incorporating small quantum of text (downloadable), audio, streamed video, matching image flow-chart, on-line quiz, assignments and further reading links will be designed in a simple and user friendly manner. The designed and developed modules would be scanned by the subject expert for the language, content and readability. The Validated module would be hosted in i-cloud server for on-line testing, pilot testing and perception of the content fit in various operating systems like Windows, Mac, Linux.



Registration of on-line module in i-cloud: Establishment of a physical server and creating a network is a difficult task which needs high budget and meticulous initiatives. It is also not economically viable. Hence, it is scheduled to utilize the current trend of keeping the designed templates in cloud computing with registration to avail the required space.



Orientation and Hands on exposure training to the extension officials:

In collaboration with MANAGE, a three day training module will be prepared and offered to the faculty of SAMETI, SAU's, Subject Matter Specialist in KVK and Development Officials of line department at MANAGE, Hyderabad. During the training programme, a hands-on exposure of on-line module components, development process and feedback will be availed to refine and fine tune the software, content, design template etc.,



Fine tuning and refinement: Based on the feed back and suggestions from the faculty of SAMETIs and SAUs, a revised model will be prepared incorporating all aspect.



Launch of first virtual mode of training module and continuous evaluation: First version of the **Virtual Mode of Training Module (VMTM)** will be launched in July, 2014.

Phase of Project Activities:

Schedule of Work		Time Scale
Project approval and budget transfer to TNAU	:	April, 2013
Recruitment of man power	:	May, 2013
Preparation and organization of participatory workshop	:	June, July, 2013
Content scouting from various sources	:	August, September, October, 2013
Design, development, subject validation	:	November, December, 2013, January, February, 2014
Trial version and capacity building	:	March, 2014

Proposed Budget: (Amount in Lakhs) for development of four modules (two in English and two in Tamil)

Sl. No	Particulars	Amount in Rs. (Lakhs)
1.	Manpower (One Year) @Rs. 16,000/person a. One SRF IT b. One SRF in Agriculture / Horticulture	3.84
2.	Workshop for 30-35 participants includes travel, accommodation, logistics & resource fee	2.00
3.	Procurement of two hi-end workstations & tablets	2.75
4.	Registration in i-cloud and availing the server space for one year initially and renewable (\$600 / Month)	3.60
5.	Software, Content Design and Development accessories and tools	2.00
6.	Documentation, field visits and travel	2.00
7.	Consumables, fuel and miscellaneous	1.00
	Sub Total	17.19
	Institutional charge 15 %	2.57
	Total	19.76

Expected Outcome:

The following outcomes are anticipated out of the collaborative and joint initiative of TNAU and MANAGE

- Two On-line modules in Tamil for farmers and English for extension officials
- On-line assignment submission
- On-line quiz and evaluation of each unit
- On-line examination
- On-line certificate after successful completion

Deliverables: 25 % of the modules on a virtual mode

Outcome: once standardized, in course of time, at least 25% of MANAGE training programmes can be done on a virtual mode to start with

Project Team

MANAGE team: Dr.S. Senthil Vinayagam and Dr.Lakshmi Murthy

TNAU team: Dr. H. Philip, Prof. R. Venkatachalam and Dr. N. Anandaraja

A Study on Rolling-out IT enabled Agricultural Services through Common Service Centers

Abstract

Common Service Centers (CSCs) are gateway services to the rural people to deliver the citizen services at their villages. So far Ministry of IT established about 1 lakhs CSC in the country. One CSC center would provide services to the rural people of six villages. The utility services such as payment of bills to government departments are free to citizens but other Government to Citizens (G2C) services will be provided on fee. The CSCs offering web-enabled e-governance services in rural areas, including application forms, certificates, and utility payments such as electricity, telephone and water bills, rural banking, health service, education and training, DTP, printing and Internet browsing. In addition to above citizen services, the CSC Guidelines also envisage that a wide variety of content and services that could be offered in the area of Agriculture and allied sector also. However, in reality, the services on agriculture and allied sector is very minimum except one services to land records of farmers. The farmers need a quick services on day-to-day farming issues such as availability of inputs, marketing opportunities, advisory support, and more particularly availing subsidies of various scheme offered by agri and allied sector, so the farmers could save lot of time and some money. Hence, it is highly appropriate to study the various agriculture and allied sector services that can be offered through Common Service Centers gateway to the farmers.

The main objectives are a) To study the possibility of various citizen services related to agriculture and allied sector routed through CSC gateway to the farmer. b) To study the existing I.T. enabled Services (ITeS) that can be integrated with CSC gateway to cater the needs of farmers at village level. C) To work out a strategy to develop new I.T. enable Services (ITeS) that could be

routed through CSC by networking the organizations such as State Department of Agriculture and allied sector, National Informatics Center, Department of Information Technology at state level. The study confines two districts namely Nalgonda and Visakhapatnam of Andhra Pradesh and Pune of Maharashtra where CSC are established and from each district 2 blocks (mandals) will be covered. The Project is expected to come out with recommendations and proposed action plan for National Roll-out of important Agricultural and allied sector I.T. enable Services routed thru CSCs at village level. This will benefit the farmers of villages (approx. 600-800) by a single CSC.

A Study on Rolling-out IT enabled Agricultural Services through Common Service Centers

Introduction

Ministry of Information Technology, Government of India is rolling out Common Service Centers (CSCs), all across the country. It is reported that over 1,25,000 CSCs are operational (29,000 in urban areas and 96,000 in rural areas under various brand names). One CSC center would provide services to the rural people of six villages. The basic mandate of these village level IT hubs is to provide IT enabled citizen services in the rural areas. The utility services such as payment of bills to government departments are free to citizens but other Government to Citizens (G2C) services will be provided on fee. The CSCs would provide high quality and cost-effective video, voice and data content and services, in the areas of e-governance, education, health, telemedicine, entertainment as well as other private services. The CSCs offering web-enabled e-governance services in rural areas, including application forms, certificates, and utility payments such as electricity, telephone and water bills, rural banking, health service, education and training, DTP, printing and Internet browsing. In addition to above citizen services, the CSC Guidelines also envisage that a wide variety of content and services that could be offered in the area of Agriculture and allied sector also. However, in reality, the services on agriculture and allied sector is very minimum except one services to land records of farmers. Most of the CSC agents do not even know about the services related to agricultural and allied sector. The farmers need a quick services on day-to-day farming issues such as availability of inputs, marketing opportunities, advisory support, and more particularly availing subsidies of various scheme offered by agri and allied sector, so the farmers could save lot of time and some money. Hence, it is

highly appropriate to study the various agriculture and allied sector services that can be offered through Common Service Centers gateway to the farmers.

Objectives

- a) To study the possibility of various citizen services related to agriculture and allied sector routed through CSC gateway to the farmer.
- b) To study the existing I.T. enabled Services (ITeS) that can be integrated with CSC gateway to cater the needs of farmers at village level.
- c) To work out a strategy to develop new I.T. enable Services (ITeS) that could be routed through CSC by networking the organizations such as State Department of Agriculture and allied sector, National Informatics Center, Department of Information Technology at state level.

Methodology

The Research Project is highly action and process oriented and hence highly participatory approach to understand the needs of farmers that can be delivered through CSC gateway. The study confines two districts namely Nalgonda and Visakhapatnam of Andhra Pradesh and Pune of Maharashtra where CSC are established and from each district 2 blocks (mandals) will be covered. Sample size would be 3 districts x 2 blocks x 4 CSCs x 10 = 240 farmers covered. MANAGE Faculty/ investigator will observe the CSC-Farmer interactions closely so as to understand their information needs and also their willingness for payment of services.

The methodology will thus include:

- d) Data collection using Questionnaire and from secondary sources;
- e) Group discussions with farmers and CSC operators.

- f) Discussions with the stake holders of service providers such as department of agriculture and allied sectors, NIC, and Department of I.T.

Expected Outcome

The Project is an Action Research with sole objective of mainstreaming the CSCs to provide Agri and allied services at Village Level. We are looking forward to find out appropriate mix of services, which will also improve the sustainability of CSCs. The Project is expected to come out with recommendations and proposed action plan for National Roll-out of important Agricultural and allied sector I.T. enable Services routed thru CSCs at village level. This will benefit the farmers of villages (approx. 600-800) by a single CSC.

Timeline: The project will be completed within one year.

Budget

Rs.4.00 lakhs (Rs.2.00 lakhs for conducting 2-3 workshops and Rs.2.00 lakh for travel by MANAGE faculty, and to support travel of NIC / consultant faculty to visit the districts.

Project partners

As the agricultural services are to be essentially rolled out by State Agriculture and allied departments / State Agricultural and the IT enabled Services are to be provided by NIC / Department of IT of respective state, the project will have three Institutional partners namely (i) State Department of Agriculture and allied sector (ii) Local NIC state headquarters (iii) Department I.T. of concerned states.

MANAGE project team:

A three-member Faculty team from MANAGE will undertake this Research Project.

Social Benefits of Agricultural Extension Programmes: A Case of Agri-Clinics and Agri-Business Centres Scheme

Abstract

Agri-clinics and Agri-business Centers (AC & ABC) Scheme was launched on 9th April, 2002. The objective of the scheme is to strengthen the transfer of technology and extension services by supplementing the existing extension network to accelerate the process of technology transfer to agriculture and providing supplementary sources of input supply and services and also providing self-employment opportunities to unemployed agriculture professionals. Agriclincs are envisaged to provide expert services and advice to farmers on cropping practices, technology dissemination, crop protection from pest and diseases, market trends and prices of various crops in the markets and also clinical services for animal health etc., which would enhance productivity of crops and animals. Agribusiness centers are envisaged to provide inputs such as farm equipments on hire, seeds, fertilizers and other services. Already ten years over since the Scheme has come to vogue, it is high time now to examine the benefits accrued at the agripreneur and at the farmer level with a special emphasis on social capital that is being generated due to AC & ABC Scheme. Field feedback indicates that social benefits such as reduction in unemployment minimizing rural to urban migration, attracting the qualified professionals to rural areas, gender empowerment, perceiving agriculture as a respectable profession. Some benefits may be direct and some benefits may be indirect and some may be tangible and some may be intangible. Therefore it is important to evaluate the Scheme by taking into account the total benefits accrued to primary stakeholders. Important objectives of the study are to measure the tangible and intangible benefits accrued at the agripreneur and at the farmer level. The study will be carried out based on both primary and secondary data sources. The secondary data will be collected from the MANAGE Website on Agri Clinics and Agribusiness Centers Scheme. In order to have wider coverage, this study will be carried out in five regions of India viz., South, North, East, West and North Eastern regions. From each region, one state will be selected based on its share in total number of agri-ventures established under the AC & ABC Scheme. The primary data from the selected agripreneurs and farmers will be collected with the help of a well-designed pre tested schedule. The sample data so chosen will be analyzed based on various qualitative and quantitative techniques. Cost Benefit analysis will be carried out for measuring tangible benefits. The study addresses an important dimension of social impact of Agricultural Extension Programmes. The outcomes are expected to stress on tangible and intangible benefits of extension programme, thus enhancing their value.

Social Benefits of Agricultural Extension Programmes: A Case of Agri-Clinics and Agri-Business Centres Scheme

Introduction

The impact of Agricultural Extension Programmes are normally measured in terms of enhancement of knowledge, skill, change in attitude and increase in yield and income of the farmers. However, resultant social benefits which really impact the living standards of farmer's family are not part of the impact studies but which are very important. Central Sector Scheme of Agri-Clinics and Agri-Business Centres is not an exception. Several studies conducted on impact of AC & ABC have been restricted to quantifiable parameters only.

Agri-Clinics and Agri-Business Centers (AC & ABC) Scheme was launched on 9th April, 2002. The objective of this Scheme is to strengthen the transfer of technology and extension services by supplementing the existing extension network to accelerate the process of technology transfer to agriculture and providing supplementary sources of input supply and services and also providing self-employment opportunities to unemployed agriculture professionals.

Agriclinics are envisaged to provide expert services and advice to farmers on cropping practices, technology dissemination, crop protection from pest and diseases, market trends and prices of various crops in the markets and also clinical services for animal health etc., which would enhance productivity of crops and animals. Agribusiness centers are envisaged to provide inputs such as farm equipments on hire, seeds, fertilizers and other services. Already ten years over since the Scheme has come to vogue, it is high time now to examine the benefits accrued at the entrepreneur level and at the farmer level. Field feedback indicates that social benefits such as reduction in unemployment minimizing rural to urban migration, attracting the qualified professionals to rural areas, gender empowerment, perceiving agriculture as a respectable profession.

Some benefits may be direct and some benefits may be indirect and some may be tangible and some may be intangible. Therefore it is important to evaluate the Scheme by taking into account the total benefits accrued to primary stakeholders.

In the light of this background this study has the following objectives:

Objectives

- ❖ To measure the tangible benefits accrued at the agripreneur and farmer level
- ❖ To identify the intangible benefits generated at the agripreneur and farmer level
- ❖ To visualize overall impact of the scheme on agripreneurs and farmers

Methodology

The study will be carried out based on both primary and secondary data sources. The secondary data will be collected from the MANAGE Website on Agri Clinics and Agribusiness Centers Scheme. In order to have wider coverage this study will be carried out for five regions of India viz., South, North, East, West and North East. From each region, one state will be selected based on its share in total number of agri ventures established under the AC & ABC Scheme.

The period considered for the analysis is from April 2002 to December, 2009. During this period, 6985 agri ventures were established with varied activities. Maximum number of units were established in the state of Uttar Pradesh with a share of 24 per cent followed by Maharashtra (17%), Karnataka (11%), Bihar (11%), Rajasthan (9%) and Tamilnadu (7%). A state having a maximum number of ventures from each region will be selected for analysis. On the basis of this criteria, Karnataka from South, Uttar Pradesh from North, Bihar from East, Maharashtra from west and Assam from North East will be chosen.

It is observed from the secondary data that agri ventures are established in 32 activities for country as a whole and also in majority of the states selected. There is a need to analyze the benefits on agripreneurs through each one of the agri ventures. Based on this need, all 32 activities are considered for the analysis. A total sample of 160 agripreneurs will be selected at the rate of five agripreneurs for each activity.

These 160 sample agripreneurs will be divided among the five states based on the proportionate share in total number of ventures established. Based on this criteria, the sample size will be 59 for UP, 43 for Maharashtra, 27 for Karnataka, 27 for Bihar and 4 for Assam. The activities and benefits accrued to the selected entrepreneurs will be studied across various activities undertaken in selected states.

Three farmers from each entrepreneur will be selected at random with a view to analyze the benefits flowing out of the services of agripreneur. Based on this the sample number of farmers selected will be 177 in UP, 129 in

Maharashtra, 81 in Karnataka, 81 in Bihar and 12 in Assam. Thus constitutes a total sample size of 480 farmers.

The primary data from the selected entrepreneurs and farmers will be collected with the help of a well-designed pre tested schedule. The sample data so chosen will be analyzed based on various qualitative and quantitative techniques. Cost Benefit analysis will be carried out by taking into account of tangible benefits.

Expected outcome:

The study aims at measuring tangible and identifying intangible outcomes of Extension Programmes. Intangible outcomes such as social benefits are expected to enhance the total value of Extension Programmes.

Time Line: 18 Months

- ❖ Identification of agripreneurs (activity wise and State wise)-April-May 2013
- ❖ Preparation of schedule for data collection- June-July 2013
- ❖ Orientation of field investigators – August 2013
- ❖ Data collection – September – December 2013
- ❖ Data entry – January – February 2014
- ❖ Analysis of data- March – May 2014
- ❖ Writing Report – June - July 2014
- ❖ Policy brief – August - September 2014

Budget Estimate

- ❖ Travel, Lodging and Boarding of Researchers - Rs.5,00,000
- ❖ Data Collection, Data entry - Rs.4,00,000
- Total - Rs.9,00,000**

Research Team

Dr. P. Chandra Shekara and Dr. P. Kanaka Durga

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A study on the Impact of the Interventions made for Gender Mainstreaming under Extension Reforms Scheme

Abstract

One of the important components of the Extension Reforms Scheme is "Addressing gender concerns by mobilizing farmwomen into groups and providing capacity building to them". To achieve this, a minimum of 30% resources are earmarked for the programs and activities of women farmers and women extension functionaries. To understand the impact of various cafeteria of activities of Extension Reforms on women farmers, a research study has been proposed with the following objectives

The **overall objective** of the study is to assess the impact of the ATMA interventions on women farmers.

The specific objectives are:

1. To identify the activities implemented under ATMA, using the 30 % fund allocated.
2. To understand the processes adopted for identifying the women farmers needs and corresponding activities
3. To examine the role being played by women farmers representatives in Block Farmers Advisory Committee (BFAC), District Farmers Advisory Committees and Governing Board (GB) of ATMA.
4. To suggest measures to improve Gender mainstreaming under Extension Reforms

Methodology

Six states will be selected representing different regions in the country. Six Districts, three from first phase and three from second phase of Extension reforms will be selected from the six states. From each selected district, one block will be chosen based on the number of women participation under Cafeteria of activities in Extension Reforms. In order to have a holistic view about the implementation of gender component in the Scheme, it is proposed to select two blocks each from good, average and poor performing blocks. A total of 30 women representatives of various committees, and 30 officials who are involved in implementing the activities related to women components at block and district level will also be respondents of the study.

Data will be collected using pre-tested schedules. In addition to this, Focused Group Discussion (FGDs) will be conducted with officials and women farmer representatives to know their perceptions and suggestions for strengthening gender component under extension reforms.

Sample at a Glance

States	6 Region wise
Districts: One from each state	6 x 1 = 6 (3 from First Phase and 3 from Second Phase)
Blocks: One from each district	1 x 6 = 6
No. of women farmer respondents	60 /block /state x 6 state = 360 nos
No. of women farmer representatives	30 nos.
No. of officials	30 nos.

Data Analysis

Impact of the program will be assessed by applying statistical tools such as t-test (when the no. of groups is only two) and F-Test (if the number of groups is more than two), besides computation of averages and percentages.

Duration of the study 2 Years

Estimated Budget 8:88 lakhs

A study on the Impact of the Interventions made for Gender Mainstreaming under Extension Reforms Scheme

The scheme "Support to state extension programs for extension reforms" is one of the flagship programs of Department of Agriculture Cooperation, Ministry of Agriculture, Govt. of India, being implemented in all the districts in the country, with effect from 2010.

One of the components of the Reforms Scheme is "Addressing gender concerns by mobilizing farmwomen into groups and providing capacity building to them". To achieve this, a minimum of 30% resources earmarked for the programs and activities for women farmers and women extension functionaries.

Under the scheme it is envisaged to improve women's representation in decision making in different bodies such as Governing Board (GB) and District Farmers Advisory Committees (DFAC) at district level, Block Farmers Advisory committee (BFAC) at Block level. With the representation of women farmers in different bodies under the extension system it is expected that these women will be able to articulate the needs of the women farmers of their areas in the meetings conducted, both at district and block level, so that action plans prepared will be more specific, addressing the women farmers issues. Under the Cafeteria of Activities of Extension Reforms, provision has been made for trainings, demonstrations, farm schools, exposure visits, group formation and their capacity building, Farm Information Dissemination, Research - Extension - Farmer Linkage. The present research proposal aims at studying the overall improvement in the status of the women farmers, their reach to extension services under ATMA, relevance of programs and impact on their lives and livelihoods.

The objective of the study:

- The overall objective is to assess the impact of the ATMA interventions on women farmers.

The specific objectives are:

- ❖ To identify the activities implemented under ATMA, using the 30 % fund allocated.
- ❖ To understand the processes adopted for identifying the women farmers needs and corresponding activities
- ❖ To examine the role being played by women farmers representatives in Block Farmers Advisory Committee (BFAC), District Farmers Advisory Committees and Governing Board (GB) of ATMA.
- ❖ To suggest measures to improve Gender mainstreaming under Extension Reforms

Methodology

Selection of the States: Six states will be selected, one from each region i.e., East, West, North, South, North-East and Central part of the country.

Selection of the District: Six districts will be selected. Out of which, 3 states from first phase and 3 states from second phase of Extension Reforms will be selected.

Selection of the Block: From each selected district, one block will be chosen based on the number of women participation in Cafeteria of activities under Extension Reforms. In order to have holistic view about the Implementation of Gender component in the Scheme it is proposed to select two blocks each from good, average and poor performing blocks.

Selection of the Respondents: A sampling frame will be developed for all the women farmers who have been exposed to the intervention in the block during 2011 - 12 and 2012-13, from which a sample of 60 will be drawn randomly from each block.

Selection of Women Farmers Representatives: women farmers representing DFAC, GB and BFAC will be the respondents for the study. A total of five women representatives of the committees will be randomly selected from each block/district.

Selection of Officials: Project Director, Deputy Project Directors of ATMA BTT members, SMS will be the respondents for the study. A total of five respondents will be selected randomly from block and district level for the study.

Sample at a Glance

States	6 Region wise
Districts: One from each state	6 x 1 = 6 (3 from First Phase and 3 from Second Phase)
Blocks: One from each district	1 x 6 = 6
No. of women farmer respondents	60 /block/state x 6 states = 360
No. of women farmer representatives	30 nos.
No. of officials	30 nos.

Secondary data:- Registers, minutes of meetings, reports of ATMAs and monitoring reports of DAC.

Primary Data: The data will be collected from the women farmers and officials using pre-tested schedules. In addition, FGDs will be conducted with officials and women farmer representatives to know their perceptions, role and suggestions for strengthening gender component under extension reforms.

Data Analysis: Impact of the program will be assessed by applying statistical tools such as t-test (when the no. of groups is only two) and F-Test (if the number of groups is more than two), besides computation of averages and percentages.

Time frame: 2 Years

Tentative Budget Estimate: 8.88 lakhs

Estimated Budget

S.No	Particulars	Amount
I	Staff	
a	Project Associate (@ Rs. 30,000 for 6 months)	1,80,000-00
b	Project Advisor (20 man days x Rs. 3000/day)	60,000-00
c	Clerk cum typist (@ Rs. 15,000 for 3 months)	45,000-00
II	Preparation of the schedule and pre-testing	40,000-00
III	Data collection	
IV	Investigators (600 per schedule x 360 sample)	2,16,000-00
V	Interviews of officials and women farmer representatives (54 members x 600 per schedule)	32,400-00
VI	Travel cost of the principal investigator, Project Associate and field investigators	1,80,000-00
VII	Data entry, analysis & tabulation	35,000-00
VIII	Preparation of Draft Report	50,000-00
IX	Office expenses (Xerox, Stationary & other contingency expenses)	50,000-00
	Total:	8,88,400-00

Research Team: Dr K.Uma Rani and Dr N.Balasubramani

“Evolving strategies for Revitalization of Rainfed Agriculture (RRA)” in collaboration with RRA Network- Action research

Need

Rainfed areas comprise 56 percent of agriculture in India. Rainfed agriculture plays an important role in the Indian economy. More than 177 districts of India are dominantly rainfed districts. India ranks first among the rainfed countries in the world in terms of rainfed area, but ranks among the lowest in yield per hectare. The working group on NRM and Rainfed farming recommended to initiate a National Rainfed Farming Program as a part of the 12th Five Year Plan in 1000 blocks across different agro-ecological typologies in rainfed areas to pilot test a new paradigm for revitalizing rainfed agriculture. The Working Group has provided an overarching framework with the relevant paradigm shift and a (reasonably flexible) allocation pattern for all public investments under the rainfed farming program and under various programs in the block, such as MGNREGA, Integrated Watershed Management Programme (IWMP), RKVY etc. Such a program, if taken up, will be a major step in revitalizing rainfed agriculture leading to rapid and inclusive economic growth in rural India.

Scope of Research:

MANAGE proposes to collaborate with the National Revitalizing Rainfed Agriculture (RRA) Networks to take up an action research program to evolve NRM and production systems integrated and convergent strategies for the promotion of inclusive growth in rainfed agriculture. The program will evolve strategies for convergence of different developmental initiatives and public investments into integrated and sustainable rainfed agriculture. MANAGE in partnership with the RRA Network will provide operational extension research support to the consortium partners for revitalization in rainfed agriculture in identified blocks and also provides strategic capacity building support. Three blocks in three states will be identified for the action research, preferably Andhra Pradesh, Odisha and Jharkhand. Implementation of the project is by comprehensive pilots of RRA network partners through consortium approach in collaboration with ATMA and development departments, Agri- entrepreneurs, NGOs, etc. An MOU will be developed between MANAGE, RRA network (represented by WASSAN)/ the Comprehensive Pilot programme partners, ATMA, developmental departments.

Objectives

- ❖ To develop and field test strategic mechanisms for the development of NRM integrated production systems (agriculture, livestock and fisheries) on the platforms of Community Based Organisations to reduce distress among rainfed farming community

- ❖ To develop modalities for convergence based development approach by involving ATMA, Development departments, partners implementing the comprehensive pilot programs and farmers' producer organisations.
- ❖ To evolve operational strategies for Agri-Services (business, information and others) to be integrated into Block level planning and institution / business development.
- ❖ To evolve strategies for reforms in extension system in rainfed areas.

Duration: Two years

Methodology of research

MANAGE's role is to provide strategic and capacity building support to the action-research program implemented by the RRA network partner organizations in collaboration with the Government Departments. The pilots can help to develop mainstream government programmes and policies in support of rainfed agriculture in two distinct ways (a). By quantifying the investments required for the implementation of the programmes and effectiveness of such investments. (b). By designing appropriate institutional mechanisms for the delivery of the services and the programmes. To facilitate the first, the partners will integrate government programmes – MGNREGS, RKVY, NRLM, IWMP, NFSM, animal husbandry programmes, etc. – to undertake pilots' activities. For the second, a process of learning through interaction and feedback is expected for both government and the partner, which can eventually lead to the development of appropriate institutional and financial mechanisms needed to implement such programmes

The pilots will be rolled out in the following phases:

Phase 1 – Preparatory phase -- 6 months

Phase 2 – Implementation phase -- upto 2 years

Phase 3 – Scaling up

Scaling up

In this phase, partners will:

Upscale learning's through systematic way to the entire pilot area through mainstream programmes and institutions. An exercise of distilling the emerging experiences, facilitating interface with the State level extension agencies and exploring opportunities for scaling up

MANAGE may involve upto implementation phase and consolidate learning's. Harvest the learning's - strategies for scaling up will be developed. Such distilled learnings can be integrated into the regular course curriculum of MANAGE training programs and also, efforts will be made to initiate discussion with the MoA on the emergent possibilities with the proposed national rainfed farming systems program.

“Evolving strategies for Revitalization of Rainfed Agriculture (RRA)” in collaboration with RRA Network- Action research Need

Rainfed areas comprise 56 percent of agriculture in India. Rainfed agriculture plays an important role in the Indian economy. In India, 68 per cent net sown area (136.8 m ha) comes under rainfed agriculture. According to the National Rainfed Area Authority (NRAA) almost 50 per cent rural work force and 60 per cent livestock is dependent on rainfed agriculture. More than 177 districts of India are dominantly rainfed districts. India ranks first among the rainfed countries in the world in terms of rainfed area, but ranks among the lowest in yield per hectare.

Spanning several agro-ecological regions, the rainfed areas represent the geography with the largest concentration of poverty and backwardness. The key thrust in agricultural policy till now has been to extend technologies evolved to enhance productivity in well endowed areas to the rainfed areas. Analysis of past development policies and interventions reveal that the assumptions and ways of working of agricultural administration, and agricultural research and extension are inadequate to address the complexity and rich diversity of rainfed areas. While significant gains have not happened, resource degradation problems, such as loss in soil fertility, groundwater depletion, loss of biodiversity and increase in climate associated vulnerabilities have exacerbated. Inadequate support for rainfed agriculture in terms of support price, availability of appropriate inputs, credit, market access and location specific agricultural research and extension have added to the distress among farmers

A joint programme with lessons from the field feeding into and transforming both- the administration and research components is necessary. Though there is ample evidence of successful cases from the field, it is important to roll out the new paradigm in the poorest blocks in the rainfed tracts. The working group on NRM and Rainfed farming recommended to initiate a National Rainfed Farming Program as a part of the 12th Five Year Plan in 1000 blocks across different agro-ecological typologies in rainfed areas to pilot test a new paradigm for revitalizing rainfed agriculture. The suggested framework includes identifying a dedicated agency to be responsible for planning, convergence of various programs within the block, integrating and supplementing professional human resources in various programs, support in implementation, monitoring the outputs and capacity building. The Working Group has provided an overarching framework with the relevant paradigm shift and a (reasonably flexible) allocation pattern for all public investments under the rainfed farming program and under various programs in the block, such as MGNREGA, Integrated Watershed Management Programme (IWMP), RKVY etc. Such a program, if taken up, will be a major step

in revitalizing rainfed agriculture leading to rapid and inclusive economic growth in rural India.

A parallel shift towards a new paradigm of decentralized action research and learning to enhance productivity and sustainability in rainfed areas will entail changes (i) in agricultural administration – the structure and functioning of the line departments in the states and the centre to be moves more on community organization centric, and (ii) the content and direction of agricultural research and extension services to be more integrated and systemic. Spiraling from decentralized resilience building investments in farm and non-farm livelihoods in rainfed areas, the secondary economic impulses generated by new location-specific employment and incomes will sustain the new virtuous circle of a real green revolution. A new policy initiative for rainfed agriculture must be the basis for inclusive development in the coming decade.

Scope of Research

MANAGE Collaboration with RRA Networks:

MANAGE proposes to collaborate with the National Revitalizing Rainfed Agriculture (RRA) Networks to take up an action research program to evolve NRM and production systems integrated and convergent strategies for the promotion of inclusive growth in rainfed agriculture. The program will evolve strategies for convergence of different developmental initiatives and public investments into integrated and sustainable rainfed agriculture. MANAGE in partnership with the RRA Network will provide operational extension research support to the consortium partners for revitalization in rainfed agriculture in identified blocks and also provides strategic capacity building support . Three blocks in three states will be identified for the action research, preferably Andhra Pradesh, Odisha and Jharkhand. Implementation of the project is by comprehensive pilots of RRA network partners through consortium approach in collaboration with ATMA and development departments, Agri- entrepreneurs, NGOs, etc. An MOU will be developed between MANAGE, RRA network (represented by WASSAN)/ the Comprehensive Pilot programme partners, ATMA, developmental departments. (The role of comprehensive Pilot (CP) programme partners in the implementation of pilot area is enclosed as Annexure: 1).

Objectives

1. To develop and field test strategic mechanisms for the development of NRM integrated production systems (agriculture, livestock and fisheries) on the platforms of Community Based Organisations to reduce distress among rainfed farming community
2. To develop modalities for convergence based development approach by involving ATMA, Development departments, partners implementing the comprehensive pilot programs and farmers' producer organisations.

3. To evolve operational strategies for Agri-Services (business, information and others) to be integrated into Block level planning and institution / business development.
4. To evolve strategies for reforms in extension system in rainfed areas.

Duration: Two years

Locale of the Research

1. Doulatnabad Mandal in Mahabub nagar District of Andhra Pradesh
2. one block in Malkangiri District of Odisha.

Methodology

MANAGE's role is to provide strategic and capacity building support to the action-research program implemented by the RRA network partner organizations in collaboration with the Government Departments. The pilots will be rolled out in the following phases:

- Phase 1 – Preparatory phase -- 6 months
- Phase 2 – Implementation phase -- upto 2 years
- Phase 3 – Scaling up

Phase 1 – Preparatory phase upto 6 months

In this Phase partners will:

- Understand and map the physical resource, various production systems and their institutional base (community institutions, government programmes, markets, etc.) at the location.
- Understand the production potential of natural resources-based livelihood systems in the area (fisheries, animal husbandry, poultry, agriculture, commons and others), and analyze bottlenecks to realize it.
- Evolve strategic investment, programmatic and institutional options to strengthen the support systems and work out mechanisms to generate evidence on these pilot areas.
- Interact with governments, from holding initial conversations to submitting full-fledged proposals to mobilize resources and integrate with mainstreams programmes.
- Put in place human resources for the two-year pilot.
- Expand the comprehension of the RRA policy dialogue and enrich it.
- Interact with thematic anchors to develop strategies, roll out plans, research methodologies and protocols for subsequent adoption within the pilot.

- Start measures to put into operations the package of measures arrived at in at least two to three thematic areas in a cluster of gram panchayats.

Outputs

- Partnership with ATMA, Department of Agriculture and other Development departments will be established.
- An assessment report detailing the productivity and livelihood potential of various local production systems and impediments to realizing such potential.
- A perspective plan with strategic initiatives and roll-out plans duly embedded into local mainstream institutions and programmes.
- Establishing institutional collaborations with gram panchayats, community organizations, government departments and mainstream programmes with small initiatives on the ground.

Phase 2 – Implementation phase upto 2 years

In this experimental phase, partners will:

The program will be implemented by CPs. MANAGE's role is to provide strategic support to the process, provide required CB inputs, documentation and analysis.

- Roll out, at relatively small scale, a range of measures to strengthen production support systems across several livelihood options. The design of such rolling-out plans must be scalable/ applicable to the entire pilot area.
- Consolidate the building of local institutional base (including involvement of government programmes and agencies) for scaling up in the entire comprehensive pilot area.
- Firm operational linkages established among ATMA and the farmers' producers' organisations.

Outputs :

- **Implementing the action plan** and setting up support systems. Evidence created on support systems and other strategic options tested in this phase will be evaluated for their robustness of processes, effectiveness and scalability. The

evidence and wider ownership lay a foundation for mainstreaming.

Phase 3 – Scaling up

In this phase, partners will:

Upscale learning's through systematic way to the entire pilot area through mainstream programmes and institutions. An exercise of distilling the emerging experiences, facilitating interface with the State level extension agencies and exploring opportunities for scaling up

MANAGE may involve upto implementation phase and consolidate learning's. Harvest the learning's - strategies for scaling up will be developed. Such distilled learnings can be integrated into the regular course curriculum of MANAGE training programs and also, efforts will be made to initiate discussion with the MoA on the emergent possibilities with the proposed national rainfed farming systems program.

Research Agenda

1. How do we assess productivity gains, theme-wise, during research period?

The pilot locations will be long-term demonstration sites that would allow for tracking a set of bio-physical, system productivity and income related variables. Measuring these variables over a two-year period will help assess the responses of the variable (for e.g. water or soil) to a measure of physical or financial investments, but also responses to the integration of two or more variables. An understanding of the chains of causes, the magnitude of responses, the inter-relationships of responses and the time required to generate a response of a certain magnitude, provides critical insights for policy development.

2. What is the aim of the pilots' experiments?

The pilots' experiments will aim to understand specific issues, for examples, constraints, related to diffusion (farmer adoption) of a set of relevant practices and point beyond which such uptake increases exponentially – the 'tipping point'.

3. How will mainstream government programme in support of rainfed farming be developed through the pilots?

The pilots can help to develop mainstream government programmes and policies in support of rainfed agriculture in two distinct ways:

a. By quantifying the investments required for the implementation of the programmes and effectiveness of such investments.

b. By designing appropriate institutional mechanisms for the delivery of the services and the programmes.

To facilitate the first, the partners will integrate government programmes – MGNREGS, RKVY, NRLM, IWMP, NFSM, animal husbandry programmes, etc. – to undertake pilots' activities. For the second, a process of learning through interaction and feedback is expected for both government and the partner, which can eventually lead to the development of appropriate institutional and financial mechanisms needed to implement such programmes.

Roles of different partners:

MANAGE

- Testing of alternative mechanisms for convergence based development
- Alternative designs of institutions at community level and above
- Carrying out policy advocacy related to paradigm shift in rainfed farming.

WASSAN

- Facilitate partnership among MANAGE and RRA Network partners in the situation analysis, implementation, conceptualizing the strategic reforms required and action.
- Taking the successes to all other RRA-CP locations

RRA Network - CPs

- Joining MANAGE and WASSAN in the participatory analysis and preparation of plan.
- Implementation of the program in close coordination with ATMA and line departments

Research Team

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Role of comprehensive pilot partners for implementation

What are comprehensive pilots (CPs):

The comprehensive pilots are the core of the action research programme initiated by the Revitalizing Rainfed Agriculture Networks (RRA Network) to evolve support systems conducive to integrated rainfed agriculture in India.

The RRA Network aims to build a case for relevant support to rainfed agriculture by way of higher public investment. Comprehensive pilots are expected to integrate actions with mainstream government programme and departments to articulate the nature of such support and the institutional mechanisms by which it might be delivered. Comprehensive pilots help link reforms in policy and agricultural investments with efforts and evidence on the ground.

CPs anchored by experienced organization will be rolled out across selected locations covering many of the rainfed agro-ecologies of the country. CPs will aim to lay a proof of concept for a new architecture for the development of rainfed agriculture in India.

The comprehensive pilots will generate location specific solutions for the most pressing problems from a first-hand assessment of the ground situation. The results are expected to help develop solutions to improve rural livelihoods and nutrition and to help farmers better mitigate risk. The CPs has been developed on these basic tenets.

CPs will generate evidence around three areas:

1. A scaled integration of thematic or sectoral measures should lead to demonstrable gains in productivity and household incomes over three to five years.
2. The pilots will provide an understanding of the factors that lead farmers to adopt a package of appropriate measures or practices, and tipping points for mass adoption of such practices by farmers. This will provide insight into the key drivers for mainstreaming relevant best practices.
3. The pilots will work with governments to identify institutional mechanisms within government programmes and re-frame them to develop appropriate support systems for rainfed agriculture.

1. Layered Intervention

The pilots will roll out an integrated, layered package of various measures encompassing seeds, soils, fisheries, water, crop systems, livestock, credit, markets and institutions, to demonstrate enhanced system productivity and improved livelihood returns. Conservations of land, water and biomass resources, which are a part of the watershed projects, will be a basic layer here.

2. Location specific

The locations for each pilot have been chosen according to the ecological and cultural variability found across the country's rainfed areas. The pilots will also evolve generic supporting location specific solutions.

3. Mainstream programme linkage

The pilots will engage with mainstream programmes, policies and institutions to ensure targeted support for rainfed areas through public policy. Consequently, core programme funds are expected to be raised through linkages with mainstream programmes like RKVY, MGNREGS, NRLM, NFSM, IWMP, with RRA network funds used primarily to facilitate such integration.

4. Community Level Institutional Involvement

Given an understanding that rainfed areas have low levels of formal institutional penetration, the development of community level institutions will be a focus. Such local institutions will ensure that control and management lie with primary producer groups. They can also play an important role in rolling out the integrated programmes

5. Market Linkage

Wherever appropriate, the pilots will identify opportunities for tapping the power of markets and private investments as a means of enhancing returns on agriculture and animal husbandry.

Components of Comprehensive pilots:

1. Enhancing soil productivity with focus on soil organic matter.
2. Expanding protective irrigation to secure rainfed crops against rainfall failures through combination of ground and surface water sources and moisture management.
3. Developing seed systems to ensure timely availability of quality seeds for diverse cropping systems and to meet contingency requirements.
4. Taking up NRM-integrated productivity enhancement measures and value chain support systems to realize growth potential in pulses, millets and other locally relevant crops including development of infrastructure and processing facilities.
5. Strengthening rainfed agriculture and commons-integrated livestock support systems to ensure improved access to healthcare, breeding services, drinking water and forage in the commons.
6. Realizing the potential of fisheries in rainfed seasonal and perennial water bodies.
7. Promoting agro-ecological innovations such as LEISA (low external input and sustainable agriculture), NPM (non-pesticide management of insect pests) and SRI (System of Rice Intensification)

8. Promoting appropriate farm mechanization that enhances labour productivity.
9. Developing and strengthening producers' organizations for improved resource management, credit access, input supply, value addition and market linkages.