



MANAGE Bulletin

From the National Institute of Agricultural Extension Management

January - February, 2019



In this issue...

- ⇒ International Conference on Agricultural Extension and Advisory Services: Innovation to Impact
- ⇒ International Programs
- ⇒ Workshop on DAESI
- ⇒ Training Programs
- ⇒ Financial Inclusion, Agricultural Credit and Crop Insurance
- ⇒ Improving e-Governance in Agriculture
- ⇒ MDP on Agribusiness Supply Chain Management for Corporate Executives
- ⇒ Marketing of Agricultural Inputs
- ⇒ Extension Management Approaches for Promotion of Sericulture Industry
- ⇒ Backyard Poultry Farming
- ⇒ Change Management: Startup Perspective
- ⇒ MANAGE Academic Committee Meeting
- ⇒ PGDAEM Projects
- ⇒ Events
- ⇒ Silent Heroes

Message from the Director General

Extension through Innovation is the buzzword now. Global innovations and institutional reforms are a prerequisite in the existing extension system. We need to incubate innovations in agriculture, focus on climate smart extension approaches and other issues and challenges in agriculture. It is time to share experiences of Agricultural Extension and Advisory services in different countries.

Keeping this in view, in order to share international experiences in Agricultural extension, National Institute of Agricultural Extension Management (MANAGE) and Michigan State University (MSU) organized an International Conference on "Agricultural Extension and Advisory Services: Innovation to Impact" during February 12-14, 2019. The conference brought together around 100 stakeholders representing various countries like USA, Uzbekistan, Kyrgyzstan, Afghanistan and India.

In addition, three International Training Programs were organized, which included two programs under FTF ITT on Modern Dairy Technology, Management and Cooperatives and Seed Production, Processing and Commercialization and a program on Computer Applications in Agriculture under Indian Technical and Economic Cooperation (ITEC).

MANAGE training programs during the period focused on Agribusiness Supply Chain Management and on Marketing of Agricultural inputs for corporate executives; programs on Financial Inclusion, Agricultural Credit and Crop Insurance; e-Governance, Backyard poultry, Extension Management Approaches for Promotion of Sericulture Industry and Sustainable Livelihood through Animal Husbandry, Mainstreaming Women in Agriculture, Change Management etc. for agri and allied sector officers.

We look forward to new partnerships, new programs and projects during the year.

(V. Usha Rani, IAS)
Director General



International Conference

Agricultural Extension and Advisory Services: Innovation to Impact

In agriculture and rural development in India, it is important to underline the growing complexity of both problems and solutions, given the trend to diversify rural economies, to articulate activities (at farm and various spatial levels), to use and manage local resources adequately, to improve food quality and security, to innovate in different domains and to involve a plurality of actors. It is time to share experiences of Agricultural Extension and Advisory services in different countries, propose new concepts and theoretical perspectives, important conditions to formulate new research questions, build knowledge, and expand the capacity to learn and act.

In this connection, in order to share international experiences in Agricultural extension National Institute of Agricultural Extension Management (MANAGE) and Michigan State University (MSU) organised a three-day International Conference on "Agricultural Extension and Advisory Services: Innovation to Impact" during February 12-14, 2019 at MANAGE, Hyderabad. Representatives from five countries viz., USA, Uzbekistan Kyrgyzstan, Afghanistan and India participated in the Conference. There were around 100 delegates.

This International Conference gave an opportunity to MANAGE, Michigan State University and other Central

Asian countries to discuss issues such as: the profile of agriculture and rural development professionals and extension agents; the configuration of extension and innovation systems; the kinds of learning experiences to organize and offer; the types of approaches, methodologies and techniques to use; and the epistemological shifts to promote. The experiences in different countries, point in the direction of partnership models, collective action, participatory methodologies, and the development of interdisciplinary, trans disciplinary and systemic thinking.

The Director General, MANAGE in the inaugural address mentioned that Extension through innovation is the buzz word; Global innovations and institutional reforms are a prerequisite in the existing extension system. Director General hoped that this conference paves way to an experience sharing and learning atmosphere where decisions can be made in modernizing and strengthening extension and advisory services to better fit the present scenario. Mr. Patrick I. Cudney, Associate Director, MSU Extension in his Opening Remarks hoped that the conference provides opportunity to share knowledge, learn from the expertise and develop new strategies that would help the countries in strengthening the extension system.



Exhibition: A showcase of MANAGE initiatives

MANAGE organized an exhibition to showcase its activities in fostering extension and advisory services to farmers. Display of products/services by Agripreneurs including Palm Tree Climber, Essential Oils, Exportable Culinary herbs, Spirulina, Organic vegetables were the attractions at the exhibition. Delegates had an insight into extension models developed by Agripreneurs to extend timely Agri-advisory services and appreciated the concept of 'Extension through Entrepreneurship' which is the major goal of Agri-Clinics and Agri-Business Centers (AC&ABC) Scheme.

Dr. W. R. Reddy, IAS Director General, NIRD&PR, the Chief Guest in his address gave a snapshot of the Agricultural Extension System in India. He expressed that the extension system and advisory services requires an outlook from a different window to tap different solutions through out of box thinking to incur change in the whole approach of extension. Agricultural extension is critical now and even in future, so finding right solutions is a way forward for the prosperity of the farming community.

There were interactive presentations and panel discussions on seven important themes viz.,

Theme 1: Modernizing Extension through Institutional Innovations

Theme 2: Developing Extension Systems: A Capacity Building Approach

Theme 3: Beyond Agriculture: Catering to Advisory Needs of Allied Sectors

Theme 4: Entrepreneurship through Market-linked Extension: Incubating innovations in Agriculture

Theme 5: Looking for better impact: Navigating ICTs for AEAS

Theme 6: New Extension: Facilitating Climate Smart Agriculture, Gender, Nutrition, and Urban Agriculture

Theme 7: Policy for inclusive development: National extension policy for Agriculture and Rural Development

Smt. Vasudha Mishra, IAS, Additional Secretary, Govt. of India, DAC&FW, Ministry of Agriculture and Farmers Welfare, in the Valedictory Address suggested that rather than working in siloes we need to work together for farmers benefits.



Modern Dairy Technology, Management and Cooperatives

An International Training Program on "Modern Dairy Technology, Management and Cooperatives" was organized during 5-19 February, 2019 at ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana. The aim of the program was to acquaint the participants with knowledge in principles, planning and technical approach for establishing commercial dairy farms, processing of milk and development of a marketing network; development of value chain in milk production, processing and marketing to minimize the marketing channels; establishment of linkage among the various

stakeholders to safeguard the interest of producers as well as consumers.

There were twenty nine participants from eight Asian and African countries namely, Afghanistan, Cambodia, Myanmar, Malawi, Kenya, Liberia, Tanzania and Uganda. The Program concluded on 19th February, 2019 in the presence of the Chief guest Dr. Inderjeet Singh, Director, Animal Husbandry, Punjab; Guest of Honor, Mr. Mustapha EL Hamzaoui, Director, Food Security Office, USAID, India; Dr. R.R.B. Singh, Director, NDRI, Karnal and Dr. Mahantesh Shirur, Dy. Director, MANAGE.

Seed Production, Processing and Commercialization

An International Program on “Seed Production, Processing and Commercialization” was organized during 12-26 February, 2019 at National Seed Research and Training Centre (NSRTC), Varanasi, Uttar Pradesh. The program was designed to build capacity of the FTF ITT international participants on the areas related to seed production, processing, testing, certification, quality control and marketing. The program was inaugurated by Dr. Mangala Rai, Former Director General, ICAR, New Delhi. Dr. Arvind Nath Singh, Director, National Seed Research & Training Centre (NSRTC) and Dr. Mahantesh Shirur, Dy. Director, MANAGE were also present on the occasion.

Thirty one participants from nine Asian and African countries namely, Afghanistan, Cambodia, Myanmar, Mongolia, Malawi, Kenya, Liberia, Tanzania and Uganda participated in the program. The Program concluded on 26th February in the presence of the Chief Guest Mrs. V. Usha Rani, IAS, Director General, MANAGE, Mr. Mustapha EL Hamzaoui, Director, Food Security Office, USAID-India, and Dr. Arvind Nath Singh, Director, NSRTC.



Computer Applications in Agriculture

An International Training Program on “Computer Applications in Agriculture” under Indian Technical and Economic Cooperation (ITEC) Program was organised during 18th February - 6th March 2019 at MANAGE, Hyderabad. The program was inaugurated by Dr. P.J. Narayanan, Professor and Director, IIIT, Hyderabad and Smt. V. Usha Rani, IAS, Director General, MANAGE.

The objective of the training program was to equip policy makers, administrators, researchers and field level officials from different countries and strengthen their technical capacity regarding the concerned theme. The main objectives of the program were to orient to the role and importance of computer application in agriculture; understand the tools and modules of computer applications in agricultural extension for sustainable agriculture development; orient to latest ICT innovations used in agriculture extension system in India and other countries; and to develop an action plan for operationalization of the concepts learnt during the training program.

Twenty three delegates representing Ministry of Agriculture and Allied Departments and Agricultural Universities from Burundi, Cambodia, Kazakhstan, Kenya, Malawi, Mongolia, Nigeria, Sri Lanka, Sudan, South Sudan, Tanzania, Tajikistan and Vietnam, participated in the training program.



Workshop

Workshop on DAESI

Diploma in Agricultural Extension Services for Input Dealers (DAESI) was initiated by MANAGE in 2003 to transform the input dealers into para extension professionals by imparting technical knowledge on agriculture. Based on the significant impact of DAESI during the pilot, the Government of India launched DAESI as a central sector plan scheme from the year 2015 with 50% contribution of the Course fee. So far a total of 14977 input dealers have been trained and currently, 15560 input dealers are undergoing the program. At present, 17 states are involved in the implementation of DAESI program.

A one-day Review Workshop on DAESI was organised on 15th February 2019 to assess the implementation status of DAESI programme across the country and

elicit stakeholders' opinion on strengthening DAESI implementation. A total of 29 delegates from 16 states participated in the Workshop and included Directors of SAMETIs, State DAESI coordinators and DAESI facilitators.

Smt. V. Usha Rani, IAS, Director General, MANAGE, in the inaugural address highlighted the various ways of strengthening DAESI and emphasized that the DAESI training has resulted in increased social networking of input dealers with the line department/KVKs/other faculty and scientists of research organizations. Good practices of DAESI were shared by the participating States. Recommendations from the Workshop pertained to the monitoring mechanism, study material, cost norms, etc.

Training Programs

Financial Inclusion, Agricultural Credit and Crop Insurance

A Training Program on Financial Inclusion, Agricultural Credit and Crop Insurance was organized during February 18-22, 2019 at MANAGE, Hyderabad. The objectives of the program were to orient officers to the concepts of financial inclusion, agricultural credit and crop insurance; spell out procedures followed in crop loans in various crop insurance schemes; identify constraints in these schemes and encourage new and innovative technology in agriculture with bank finance. The modules focused on financial inclusion; crop insurance (Prime Minister Fasal Bima Yojana (PMFBY)); Risk assessment and Government policies.

Improving e-Governance in Agriculture

This program was organized at MANAGE during 4-8 February, 2019 with the objectives of bringing farmer centric, service orientation throughout the crop cycle, enhancing and integrating state and central ICT initiatives through a common framework across India for the benefit of all farmers. Twenty officers from various states in India participated in the program. Focus was on fundamentals of NeGPA implementation and transition role in Agriculture to various ICT enabled projects at national and state level.

MDP on Agribusiness Supply Chain Management for Corporate Executives

A Management Development Programme on Agribusiness Supply Chain Management was organized for Corporate Executives during February 4-6, 2019 at MANAGE, Hyderabad. There were 18 participants. The objectives were to impart an understanding of the basic concepts which underpin the formation, operation and performance of supply chain management; evaluate how the changes in the competitive environment influence the formation and management of agribusiness supply chains; and evaluate the performance of selected agribusiness supply chains in terms of value creation and sustainable competitive advantage.

This program is expected to provide executives with an opportunity to examine critical issues in the management of supply chains for agricultural food products for delivering value to consumers while remaining globally competitive. The major output from the group assignments will be to analyse an agribusiness supply chain and identify management issues associated with its operation.

Marketing of Agricultural Inputs

A training program on 'Marketing of Agricultural Inputs' was organized by MANAGE, Hyderabad during 14 – 18 January 2019 for 40 participants from National Seeds Corporation (NSC), New Delhi. The program was organized for the Senior Trainees recently recruited by

the Corporation for its agricultural marketing discipline. A comprehensive session plan was developed in consultation with the Corporation to meet a wide range of needs of the participants.

Extension Management Approaches for Promotion of Sericulture Industry

A Training Program on Extension Management Approaches for Promotion of Sericulture Industry was organized during January 28 – February 01, 2019 at MANAGE. The main objectives of the program were to orient the officials in promotion of sericulture development activities; share various sustainable employment models in rural areas under sericulture sector; and orient to various Extension Management Approaches for Strengthening the Sericulture Industry. A total of 37 participants attended the program.

Backyard Poultry Farming

A five days training program on "Backyard Poultry Management" was conducted by the ICAR- Directorate of Poultry Research, Rajendranagar, Hyderabad in collaboration with MANAGE, Hyderabad from 19 - 23 February 2019. A total of fourteen trainees from animal husbandry and agriculture departments of various states participated.

The training programme was aimed at updating the knowledge and recent developments in the backyard poultry production system and its management. The participants were exposed to various aspects of poultry breeding, breeds used for backyard poultry production, breeder management, poultry housing and management, routine farm operations, overall farm management with special reference to backyard poultry production, brood management, basic concepts of poultry nutrition, feed ingredients, least cost rations, feed formulation and feed compounding with locally available ingredients for backyard poultry farming.

The trainees were also taken to Sitarampoor village to demonstrate backyard/rural poultry farming in a village set up.

Change Management: Startup Perspective

The training program on "Change Management: Startup Perspectives" was organized from February 06-08, 2019 at MANAGE, Hyderabad. The program aimed to update the participants about the difference between Managing Change and Change Management practices. Businesses are more prone to changes in macro and micro economic factors. For business, efficiently coping up with the change is the key to sustainable growth. Experts apprised the participants about Entrepreneurship development in new India, innovative approaches for agri startups, dealing with technological changes, importance of intellectual property rights, managing and reinforcing change.

MANAGE Academic Committee Meeting



The 23rd Meeting of the Academic Committee of MANAGE was held on 7th February 2019 at MANAGE, Hyderabad. The meeting was chaired by Smt. V. Usha Rani, IAS, Director General, MANAGE. The committee reviewed the academic activities of MANAGE during 2018-19 and approved the Academic Calendar for 2019-2020. A total of 147 training programs are planned for 2019-2020.

Projects - PGDAEM

The Post Graduate Diploma in Agricultural Extension Management (PGDAEM) program of MANAGE, as part of project work provides an opportunity to the candidates to field test the learnings related to extension management skills that he/she has acquired from the program. Brief details on two of the projects are given below.

Comparative study of production and productivity of rice in Wet Rice Cultivation and Jhum areas of selected villages under Khawbung Block Champhai District

- Mr. Lalmalsawma Khawlhring*

Introduction

Mizoram state of India has the most difficult terrain, with over 80% of the total geographical area being hilly and the steep hills separated by rivers flowing North to South. Though the State's economy is predominantly agricultural, agriculture still remains under-developed and the primitive method of Jhum (shifting cultivation) predominates. Both production and productivity are relatively low. Of the total area only 21 percent has paddy/seasonal crops, while 63 percent of the total crop area is under Jhum cultivation. The forest areas are continuously under pressure of shifting cultivation, with an estimated average area of 2.00 lakh acres of Forest cover annually being destroyed by slashing and burning of trees for Jhum land. This project compares rice production and productivity under wet rice cultivation and Jhum cultivation in selected areas.

Objectives

1. To compare rice production and productivity/Hectare of selected villages with respect to area under Wet Rice Cultivation (WRC).
2. To compare rice production and productivity/Hectare of selected villages with respect to area under Jhum cultivation area.
3. To compare rice production under wet rice cultivation and Jhum cultivation areas of selected villages.

Coverage

The study area included six villages viz. Khawbung, Leithum, Vanzau, Zawlsei, Khuangthing and Sesih, under Khawbung RD Block, Champhai District where

both wet rice cultivation and Jhum cultivation are being practiced by the farmers. Data on rice production under wet rice cultivation and Jhum cultivation was collected from about 10 Progressive farmers (paddy farmers) through Group discussion and Semi structured interview.

Findings

The average productivity of rice was higher (4.95 MT/ha) in WRC areas as compared to Jhum cultivation (1.95 MT/ha). This may be due to the fact that WRC areas have sufficient amount of water available due to proper irrigation channels, whereas, Jhum cultivation is solely dependent on rain water with no irrigation channels. Besides this, Jhum cultivation areas are more prone to soil and nutrient erosion.

Conclusions and Recommendations

It was also observed that Jhum cultivation is still prevalent among the rural areas as their main source of livelihood. Such kind of land use may have a drastic effect on the natural environment. As such, conversion of such Jhum lands to permanent hill terracing should be emphasized by the Government. Such studies would help extension functionaries in identifying the area where special monitoring is required.

*Mr. Lalmalsawma Khawlhring is Block Technology Manager, Champhai, Mizoram.



Socio Economic Upliftment of Rural Fishermen through Integrated Duck cum Fish Farming in Purulia-I Block of Purulia District

- Mr. Abhishek Majhi*



Introduction

Fish culture in combination with agriculture or livestock is a unique and lucrative venture and provides a higher farm income, makes available a cheap source of protein for the rural population, increases productivity on small landholdings and increases the supply of feed for the farm livestock. This type of farming offers great efficiency in resource utilization, as waste or by product from one system is effectively recycled. It also enables effective utilization of available farming space for optimum production.

Scope of the study

Integrated fish farming has a potential of job creation, particularly for unemployed youth in Purulia and can improve the standard of living of women. The system components - pisciculture and animal husbandry (Duckery) are complementary in which duck droppings act as a nutrient source for fish culture. The rising cost of protein rich fish food and chemical fertilizers as well as the general concern for energy conservation have created awareness in utilization of rice and other crop fields and livestock waste for fish culture.

Objectives

- 1) To examine the socio-economic background of Integrated Duck cum Fish Farmers.
- 2) To find the existing culture practice and their economics among the selected Integrated Duck cum Fish Farmers.
- 3) To find the economics of culture practices after intervention of Integrated Farming.
- 4) To compare the two states of practice.
- 5) To establish a management strategy for sustainable development through Integrated Duck cum Fish Farming.

Coverage

A sample of 20 respondents was selected randomly from four villages in Purulia-I Block of district Purulia in West Bengal. The generated data were computed and analyzed through statistical tools and overall economic returns in terms of productivity of the fishery and duckery enterprises, gross returns, net returns and ultimate B:C ratio were calculated.

Major Findings

In case of 'Traditional Pisciculture', the average Investment, Income and Profit were Rs.34210/-, Rs.54325/- and Rs.20015/- respectively. On the other hand, in case of 'Integrated Duck cum Fish farming' the average Investment, Income and Profit were Rs. 53560/-, Rs. 82950/- and Rs. 29290/- respectively.

Conclusions

The research clearly shows that there is a positive impact on the farmers. Fisheries also represent a vital sector in the thrust Programme of West Bengal Government for rural development through production of fish and other ancillary activities thereby generating rural employment and improvement of socio-economic status of the fishers who are the prime contributors of fisheries production.

Some of the lacuna identified, viz.

- Small and medium water-bodies get dried up due to drought situations and early withdrawal of monsoons that make the prospects of fisheries very bleak.
- Excessive usage of surface water for irrigation purposes by the cultivators at the upper reaches, results in inadequate water for the tail reach of the canal system, which is a hindrance for fisheries.
- Due to deficiency of water volumes in water bodies, fish culture has become largely a seasonal activity and thus renders fishermen jobless for major part of the year.

Recommendations

- More emphasis needed on fresh water aquaculture in the inland fisheries sector by exploiting all possible resources to bring all the impounded water resources under pisciculture.
- Introduction of short-term credit plan to fish farmers to give a boost to fisheries sector thereby not only increasing production but also generating employment in rural areas.

**Mr. Abhishek Majhi is Block Technology Manager, Purulia, West Bengal*

Traditional Pisciculture X Integrated Duck cum Fish farming (Average Investment, gross and net returns)

Traditional Pisciculture			Integrated Duck cum Fish farming		
Investment** (Approx) (Rs/Yr.)	Income** (Approx) (Rs/Yr.)	Profit** (Approx) (Rs/Yr.)	Investment** (Approx) (Rs/Yr.)	Income** (Approx) (Rs/Yr.)	Profit** (Approx) (Rs/Yr.)
34310	54325	20015	53560	82950	29290

** Average of data collected from 15 farmers

Republic Day Celebration



200 Enterprising Agripreneurs in Rural India



A Compendium of "200 Enterprising Agripreneurs in Rural India" was released by Director General MANAGE, Smt. V. Usha Rani IAS on the occasion of Republic day 2019.

Faculty News

Dr. B.K. Paty, Director, Center for Supply Chain Management & Marketing in Agricultural Extension, retired from service on superannuation, on 28 February, 2019. He joined MANAGE as a Director in June 2012. He had over 30 years of experience in Training, Research and Consultancy. His areas of specialization included agricultural marketing and policy research.



Silent Heroes

MANAGE started a regular column in the Bulletin, to appreciate people who are working in the institute. Though they may not be at the helm of affairs, they contribute in an important way to organizational success.

This issue profiles Mrs. M. Bhagya Lakshmi, Assistant Cashier who has been with Accounts Department of MANAGE since the last 22 years. Mrs. Bhagya has a Master's degree in Economics with MBA (Finance). Her work relates to employees pay and IT calculations, filing GST returns, preparation of Annual Accounts and ACABC Accounts. Mrs Bhagya Lakshmi shares her thoughts.

When did you join MANAGE?

I joined MANAGE on March 13th 1997 as LDC and was promoted as Assistant Cashier in 2003. Prior to joining MANAGE I was working in NIRD from 1992 to 1997. I also went on deputation to NIPHM as an Office Superintendent (Accounts), for three years.

What do you find challenging in your work and what motivates you?

Learning new things, completing a difficult task and seeing it through to the end and working well on the task assigned to me, finding ways to solve a problem or overcoming a challenge. Appreciation from superiors is very motivating.

Tell us about your family

My husband is running a small business. My son is in BBA IVth year (Tourism and Hospitality) and my daughter is in BSc Agriculture IIIrd year. My family's support is my strength.

A dedicated staff member, Mrs. Bhagya Lakshmi believes that sincere effort and hard work always give good results. We wish her the best for her future.



MANAGE Bulletin is published by
Smt. V. Usha Rani, IAS, Director General
 National Institute of Agricultural Extension Management (MANAGE)
 Ministry of Agriculture & Farmers Welfare, Govt. of India.
 Rajendranagar, Hyderabad - 500 030, India.
 Tel: +91 (0) 24016702-706 Fax: +91 (0) 40 24015388

Chief Editor
Smt. V. Usha Rani, IAS

Editor
Dr. Lakshmi Murthy

Associate Editor
Dr. A. Krishna Murthy

Compilation and Design
Mr. P. Sharath Kumar