

From the National Institute of Agricultural Extension Management



## In this issue...

- ⇒ International Program
- ⇒ National Workshop on Mainstreaming Gender in Agriculture for Doubling Income of Farm Families
- ⇒ Training Programs for Acharya N.G. Ranga Agricultural University (ANGRAU)
- ⇒ Certificate Course on Organic Farming
- ⇒ Training Program on Climate Resilient Agriculture
- $\Rightarrow$  Orientation Training Program on NICE
- $\Rightarrow$  Management Skills for Branding Silk Mark
- $\Rightarrow$  Training on Agri Journalism
- ⇒ Recent Advances in Livestock Sector
- $\Rightarrow$  Executive Council Meeting
- ⇒ Rashtriya Krishi Vikas Yojana
- ⇒ PGDAEM projects
- ⇒ Training Program on Extension Strategies for Managing Risk in Agriculture
- ⇒ Training Program on Promotion of Entrepreneurship in Livestock Sector
- $\Rightarrow$  Silent Heroes

## Message from the Director General

These last two months have been busy with training programs and activities relating to schemes. An International training program was organized under FTF-ITT on ICT Applications in Agricultural Extension Management for participants from eight Asian and African countries.

MANAGE organized a National Workshop on Mainstreaming Gender in Agriculture for Doubling Income of Farm Families. The program aimed at sensitizing on gender concerns and developing strategies for mainstreaming gender in agriculture and allied sectors. There is need for increasing participation of women extension functionaries in various capacity building programs. Models also need to be worked out to include farm women in the development schemes and provide them access to technologies and benefits.

In view of the increasing emphasis on organic produce, MANAGE conducted a one month Certificate course on Organic farming in collaboration with National Centre of Organic Farming. Focus was on skill development to create job opportunities in the organic sector particularly in the area of organic production, on-farm resource management, input production and quality control, PGS certification and marketing of organic produce.

MANAGE also organized two programs for undergraduate students of Acharya NG Ranga Agricultural University and associated colleges, on ICTs for agricultural development and Developing managerial skills.

Another interesting program on Management Skills for Branding Silk Mark was conducted by MANAGE on a request of Silk Mark Organization of India. Other programs included training on Climate Resilient Agriculture, Orientation on NICE System for NABARD KfW Project Team, Extension Strategies for Managing Risk in Agriculture, Agri Journalism, Capacity Building Program for Livestock Officers, Promotion of Entrepreneurship in Livestock Sector.

MANAGE is currently a knowledge partner of DAC&FW for execution of Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR) scheme of Government of India which aims at making farming a remunerative economic activity through strengthening the farmers' effort, risk mitigation and promoting agri-business entrepreneurship.

We look forward to a busy period ahead with international and national programs in the coming months, along with collaborative ventures.  $\bigcirc$ 

(V. Usha Rani, IAS) Director General



## ICT Applications in Agricultural Extension Management (Farmers Call Centre)

The 34th FTF ITT International training program on ICT Applications in Agricultural Extension Management (Farmers Call Centre) was organized during 11-25 March 2019 at MANAGE, Hyderabad.

The program was designed to acquaint the executives with knowledge of ICTs, concepts and process, operational mechanism, monitoring, review and documentation of Farmers Call Center (operational module) and also to provide Hands-on training in recent advanced ICT tools in agriculture and allied sectors.

Inaugurating the program, Smt. V. Usha Rani, Director General, MANAGE highlighted the importance of

Information and Communication Technologies in the agricultural extension system. The Director General discussed in brief about the extension system in India and the challenges faced by extension officers. She focused on use of ICTs in Extension providing personalized extension service, quoting the example of Kisan Call Center platform which provides two way communication between the farmers and experts.

A total of 34 participants from eight Asian and African countries namely, Afghanistan, Cambodia, Myanmar, Malawi, Nepal, Kenya, Tanzania and Sri Lanka participated in the program.

## **National Workshop**

## Mainstreaming Gender in Agriculture for Doubling Income of Farm Families

The National Institute for Agricultural Extension Management (MANAGE), Hyderabad, organized a two day National workshop on Mainstreaming Gender in Agriculture for Doubling Income of Farm Families during 8 - 9 March 2019 at MANAGE. The objective of the workshop was to sensitize participants on gender concerns in agriculture and allied fields and develop strategies for mainstreaming gender in agriculture and allied sectors.

Inaugurating the workshop, Smt. V. Usha Rani, IAS spoke about the challenges faced by women in general with a focus on farm women. She also stressed on the need for increasing participation of women extension functionaries in various capacity building programs and called for policy advocacy to work out models for farm women to be included in the development schemes, provide them access to technologies, Government funds, benefits and popularize women friendly tools.



Smt. V. Usha Rani, IAS, Director General MANAGE addressing the delegates

Senior and Middle level Women Officers from 11 States of the country, representing various departments and sectors participated in the Workshop.

# Training

# Training Programs for Acharya N.G. Ranga Agricultural University Students

# Information and Communication Technologies for Agricultural Development

The National Institute of Agricultural Extension Management (MANAGE) and Acharya N.G. Ranga Agricultural University (ANGRAU) organized а collaborative training program on Information and Communication Technologies for Agricultural Development at MANAGE, Hyderabad. The threeweek training program was conducted during 15th April - 05th May, 2019 for the undergraduate students of five associated Agricultural Colleges of Tirupati, Bapatla, Mahanandi, Naira, and College of Agricultural Engineering, Bapatla. The training program was funded by World Bank Institutional Development Project (IDP) under National Agricultural Higher Education Programme (NAHEP) of ICAR which is aimed at improving and sustaining the quality of higher education through student and faculty up gradation.

The training program aimed at enhancing the skills and knowledge in the area of ICTs for future professional career growth. The coverage was on challenges in agriculture, role of ICT in agricultural development, basics of computer applications, introduction to data bases, statistical data analysis, ICT applications in rural management, research and extension, bioinformatics, new ICT initiatives in agriculture, online education, social media for agricultural development, artificial intelligence, Internet of Things (IOT), cloud computing, Remote Sensing and GIS applications, virtual learning etc.

## **Developing Managerial Skills**

Another training program in collaboration with ANGRAU was on "Developing Managerial skills" during 25 March -14 April, 2019. A total of 45 students from different agricultural colleges under ANGRAU participated in the program. The aim was to inculcate managerial skills like career planning and goal setting, problem solving, team building and communication skills which are very important for the student community. Along with the above topics, transactional analysis, emotional intelligence and personality assessment were also covered.

Besides orientation on managerial skills, focus was also on topics like Climate Change and its impact on agriculture and allied sectors, Global Innovations and Good Practices in Extension, Overview of NRM and Rainfed Agriculture, Watershed development, Writing skills, Gender Mainstreaming, innovative ideas for development of entrepreneurship in livestock sector, marketing, Farmer Producer Organizations – issues and challenges, ICT applications etc. to build the capacities of the students in trending topics.

## **Certificate Course on Organic Farming**

There is need for Skill Development of Youth in some identified areas of organic farming to create job opportunities in the organic sector particularly in the areas of organic production, on-farm resource management, input production and quality control, PGS certification and marketing of organic produce. Keeping this in view, MANAGE in collaboration with the National Centre of Organic Farming, Ghaziabad organized a one-month Certificate Course on Organic Farming at MANAGE, Hyderabad. The training program was conducted during 07th March - 05th April, 2019 for graduates preferably rural youth.

The major objectives of the program were to increase the employment opportunity for rural youth at the village level as organic growers, stakeholders, and entrepreneurs; to create first generation organic agriculture extension workers, field workers at the village level; to create a work force which will help/guide/learn the techniques for doubling farmer's income at the village level like reducing input cost, input management, nutrient management, water management etc.; to develop trainers at the village level on organic management practices and plant protection including formulation techniques for traditional Bio-fertilizer, Biopesticides and Soil health promoters; empower trainees at the village level with skill and knowledge and develop professionals for organic certification facilitation; to impart skills required for organic farming practices and related marketing economics at the village level.

Addressing the participants, Smt. V. Usha Rani, IAS, Director General, MANAGE oriented on the importance of Organic Farming and the need for organic certification procedures in the country. Dr. Krishan Chandra, Director, NCOF focused on the status of organic farming and importance of the certification course. In addition to theoretical sessions, there were practical demonstrations and field visits.



#### **Climate Resilient Agriculture**

A training program on "Climate Resilient Agriculture" was organized during 5-8 March, 2019 at PAMETI, Ludhiana. The objectives were to sensitize the participants on the impact of climate change on agriculture; mitigation and adaptation options; effective planning and management system for a sustainable production system in Agriculture.

Twenty six participants from the departments of Agriculture, Horticulture and Animal Husbandry participated in the program. Focus was on Climate Change and its impact, potential climate resilient agricultural technologies, effect of climate change on livestock and climate resilient management strategies, implementation of NICRA Project in Punjab, role of bio-diversity and water management in the context of climate change etc. As part of the training, a field visit was organized to the School of Organic Farming, Punjab Agricultural University, wherein the participants were exposed to Integrated Farming System Model as a tool to mitigate and adapt to climate change.



## Orientation Training Program on Network for Information on Climate (EX) change

A program on NICE System was organized for NABARD KfW Project Team during 13-14 March, 2019 at MANAGE, Hyderabad. MANAGE has been identified as the National Consortium Facilitating Agency (NCFA) by the Ministry of Agriculture and Farmers Welfare (MoA&FW) for implementation of ICT enabled advisory services in the project areas of GIZ. Both NABARD and MANAGE have agreed to work jointly to implement the innovative ICT enabled advisory platform "NICE System", created under GIZ Pro-Soil project for implementation in the KfW Soil project areas of Andhra Pradesh, Chhattisgarh, Karnataka, Odisha and Telangana to offer quality advisory services to the farmers.

The aim was to create and disseminate localized, timely and quality content around climate change adaptation in the agriculture sector using ICT based platform called "Network for information on Climate (EX) change (NICE)". The advisory services are provided directly to farmers using NICE and include recommendations on selection of crops, fertilizer/pesticide applications and climate suitable technologies to be adopted by the farmers. The steering of the project is jointly carried out by KfW-NABARD, GIZ and MANAGE. The specific objectives of the program were to establish a network of expert institutions like SAUs, KVKs, IMD, ATARI etc. to develop and provide localised and validated advisories to farmers; ensure farmers get up-to-date advisories based on local farming systems and related weather forecasts, to enable them to take timely corrective measures; establish a two-way flow of communication to generate and exchange localized, quality content on agriculture; capacity building of stakeholders to better understand specific local needs and respond to farmer queries.

#### **Management Skills for Branding Silk Mark**

In response to a request from Silk Mark Organization of India, MANAGE conducted a training program on "Branding Silk Mark" during 18-22 March, 2019. The program was sponsored by Silk Mark. Interactive sessions focusing on consumer behaviour, brand promotion of quality mark, problem solving skills, communication/ presentation skills, unleashing leadership potential, vision-mission-values and challenges, work ethics, etc., were covered during the program.

#### **Training on Agri Journalism**

The challenges faced by farmers and gaps in access to agricultural information and timely access to improved technologies are well known. The information needs of farmers and other stakeholders are also highly specific, location based and time bound. This necessitates a deeper understanding of issues and concerns of farmers and other stakeholders for effective delivery of agricultural information. Though Mass media is playing an important role in disseminating technologies to farmers and other stakeholders, capacity building in use of media to create and communicate agricultural content for the farming community could help address these gaps.

This program was organized to orient officers to the importance of effective communication in agriculture, writing for different media and different audience, documenting success stories, effective writing and presentation. This program was organized during 27-29 March 2019 covering 24 participants.

## **Recent Advances in Livestock Sector**

A Refresher Training Program was conducted for Veterinarians from Tamil Nadu to update their knowledge on the latest technologies in Animal Husbandry and Livestock sector during 08-14 April, 2019 at MANAGE, Hyderabad. The training program focused on livestock management, breeding, nutrition and health care, tackling outbreaks of contagious and emerging diseases in livestock and poultry, ISO, HACCP, fodder development etc. Thirty participants from Department of Animal Husbandry and Veterinary Services, Government of Tamil Nadu participated in the program.

## **Executive Council Meeting**

The Executive Council Meeting of MANAGE was held at New Delhi on April 5, 2019. The Meeting was chaired by Shri Sanjay Agarwal IAS, Secretary, Department of Agriculture, Cooperation & Farmers Welfare, Government of India. The members reviewed the progress of activities of the institute. The Secretary also inaugurated the Online Certificate Course in Agriculture for Administrators (AFA-MOOCs).

## Programs and Schemes

## Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied Sectors Rejuvenation

RKVY-RAFTAAR – is a unique scheme of Government of India, Ministry of Agriculture and Farmers welfare (MOA&FW). It aims at strengthening infrastructure in Agriculture and Allied sectors to promote Agripreneurship and Agri-business by facilitating financial aid and nurturing a system of incubation.

## **Role of MANAGE as a Knowledge Partner**

MANAGE shall assist DAC&FW as their knowledge partner. MANAGE would provide expert advice for the smooth and efficient execution of the scheme, handhold RKVY-RAFTAAR Agribusiness Incubators (R-ABIs); which include Indian institute of Millet Research (IIMR), Tamil Nadu Agricultural University (TNAU), Acharya N.G. Ranga Agricultural University (ANGRAU) and Kerala Agricultural University (KAU), demonstrate best practices to the eco system partners during the implementation of the scheme.

## Start-up Agri-Business Incubation Program

This program supports Agri Start-ups working towards employment generation and wealth creation while tapping their innovations and technologies to upshot ventures.

## **Objectives**

- a. To ensure seed support to deserving incubatees within R-ABIs.
- b. To enable translation of minimum viable product (MVP) to marketable stage and scale up the product and business.
- c. To provide a platform for faster experimentation and modification in their approaches or Minimum Viable Product (MVP) based on innovative solutions/ processes/ products/ services/ business models etc. for scaling up.



## Major Highlights

- Grant in-aid up to Rs. 25 lakhs
- 2 years Business-Incubation program
- 8 week residential incubation workshop ٠
- Mentorship by Industry experts

#### **Agripreneurship Orientation Program**

Agripreneurship orientation program is aimed at providing an opportunity to students/ Youth/Research Scholars to work on their innovative ideas. **Objectives** 

- a. To nurture potential agripreneurs by providing training cum internship with other start-ups to provide them practical, technical and business insights
- b. To create and nurture a pipeline of agripreneurs for incubators
- c. To make pursuing entrepreneurship related to innovative ideas an attractive career option among other available career choices.

#### Major Highlights

- Grant in-aid up to Rs.5 lakhs
- Stipend of Rs.10000/month
- 60 hours specialized training program
- Mentorship by Industry experts
- Internship Opportunities with niche Start-ups



## Visitors

Dr. Gregory Harper, Director, Business Development, Veterinary & Agricultural Sciences, Research, Innovation & Commercialisation at the University of Melbourne and Dr. Anirban Deb, Business Development Manager – Agribusiness, Food & Beverage, Australian High Commission visited MANAGE, on April 16, 2019 for an interaction with faculty to discuss possible areas of collaboration with MANAGE.

# **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.

## "Critical evaluation of new extension approaches"

by Ms. Ashweta Yeshwant Khambal\*

## Introduction

Two agencies namely, Agricultural Technology Management Agency (ATMA) and Krishi Vigyan Kendras (KVKs), are playing a crucial role in dissemination of agricultural information and technology and thereby enhancing farm productivity and income. ATMA is a society of key stakeholders involved in agricultural activities for sustainable development at the district level and KVKs are district level institutions involved in vocational training, transfer of latest technologies, on-farm research for overall rural development.

Training of farmers is a critical input for the rapid transfer of technology. In this study an effort has been made to assess different aspects of training courses and their impact on the farming community.

The study was conducted in North Goa (which has convergence of one ATMA and one KVK). Five taluks were covered and 50 farmers (10 per taluk) were randomly selected as respondents. An Interview schedule was administered to generate data and the collected data was statistically analyzed.

The types of benefits that the KVKs and ATMA provide, were categorized in three groups viz, Enhanced production; Generation of employment and Domestically useful (includes provision of skills as may help in household activities and domestic chores).

## Findings

A total of 15796 farmers, 4396 rural youth and 1260 extension personnel were covered by the KVK and ATMA in North Goa, in the areas of Crop production, Horticulture, Livestock production and management, Home Science, Plant protection, Agricultural extension, group approaches.

Around 74.86% of respondent farmers have benefited from training programmes, however the adoption of technology by farmers was minimal. A few success stories have been documented.

Trainings on vermi composting and other income generation activities motivated women self help groups to take up rural enterprises indicating that such trainings were domestically useful and generated employment opportunities. A success story has been discussed.

## Public private partnership in organic red kernel rice marketing

Smt. Namita Kandeparker (Chodan Tiswadi) a traditional rice grower,



after attending Frontline Demonstration by KVK North Goa, in 2006 has taken up 'Makam' variety rice cultivation having twin advantages of high yield and non-shattering quality, instead of local Jaya and Jyoti varieties. Her major contribution is propagating the technology by systematic multiplication of breeder seed and supply of five quintals quality seed to the farmers of her village. In addition the produce is marketed through farmer groups at 75% higher price through proper post harvest grading and retail packing.

#### Conclusion

KVK's and ATMA's transfer of technology programmes have contributed in increasing productivity of farm enterprise but have very little impact on generating gainful employment for the farmers.

## Recommendations

- Selection and design of the KVK and ATMA training programmes for farmers/farm women must be done after identifying local problems and should be based on needs of targeted farming community
- There must be practical orientation.
- There is need for orienting KVK efforts for entrepreneurship development among the farming community so that farmers/trainees not only gain self employment but also create opportunity to provide employment to others.
- ATMA and KVKs under different systems –SAU, NGO and ICAR need to mutually imbibe the positive aspects of working with each other to prove more effective.

\*Ms. Ashweta Yeshwant Khambal is Block Technology Manager, North Goa district, Goa.

# "A Study on Milking Management Practices followed by Dairy Farmers of Panachikkad Grama Panchayath, Kottayam, Kerala"

by Dr. R. Bindu Raj\*, Kerala

## Introduction

Quality of milk largely depends on milking management practices followed at the primary production level. The objectives of the study were to gather information on different aspects of milking management practices and extent of adoption of scientific recommendations followed by the farmers of Panachikkad Grama Panchayath.

The study assessed the milking management practices followed by 40 dairy farmers, with an average herd size of three and who were beneficiaries of Kuttanad package scheme 2013-14, in Panachikkad Panchayath, Kottayam district, Kerala state. The study was carried out considering three aspects of milk hygiene: cleanliness of animal; milker's hygiene and cleanliness of the surroundings.

## **Findings**

Regarding cleanliness of animals, majority of the farmers (88%) used to clean the animals before milking and practiced milking twice daily. Frequent occurrence of mastitis and other teat related lesions were reported by 28% and 40% of farmers respectively. Hand milking was extensively followed by the farmers (93%) and machine milking by the remaining. Practice of thorough hand washing before milking was followed by 92%; 89% washed their hands before milking each cow in the household. Majority (75%) used water for cleaning

of udder before milking and the rest 25% used KMnO4 solution. Wiping of udder after washing, before milking, was done



by 63% and teat dipping after milking by 30% of farmers only. All the farmers gave importance to personal hygiene of the milker. Regarding cleanliness of the surroundings, 98% cleaned their sheds before milking. Proper cleaning and drying of milking utensils was done by only 10% of farmers while biogas facility was adopted by 25% of farmers as a means of waste disposal.

## **Conclusion and recommendations:**

Results from this study illustrated that, though majority of farmers were taking necessary steps in hygienic milk production, there is need for creating further awareness regarding adoption of scientific and modern trends in clean milk production. There was significant variability in skill gap among the farmers regarding the adoption of scientific management practices. It is important to initiate extension activities to increase awareness among the farmers regarding standard scientific milking management practices.

\*Dr. Bindu Raj R. is Veterinary surgeon, Kottayam, Kerala

## **Extension Strategies for Managing Risk in Agriculture**

Risk and uncertainty are integral components of the agriculture system. Farmers are confronted with risk at various levels of farm operations. Common sources of risk in farming can be divided into five areas – production, marketing, financial, institutional and human. These affect faming decisions on a daily basis. A better understanding on sources of risk and its implications on yield and production can help farmers to adopt appropriate strategies for avoidance, mitigation or transfer. Therefore, a basic knowledge of risk management becomes imperative for all the stakeholders of the agricultural system. Agricultural extension workers can help farmers improve their risk management skills.

This program was organized during April 22-26, 2019 to sensitize the participants on sources of risk in agriculture and mitigation tools for overcoming risk through preparedness. The specific objectives were to provide participants with a better understanding of various types of risks faced by the farmers, agri-entrepreneurs and agribusiness firms and discuss strategies for its management; understand the nature of agricultural decision making under uncertainty and use this in conceptualizing decision problems under risk; understand and apply methods for analysis of risky decisions that can be used in diverse agricultural applications and be able to formulate and evaluate plans and strategies for risk management in agriculture. The program covered 14 participants.

#### **Entrepreneurship in Livestock Sector**

MANAGE organised a Collaborative Training Program with College of Agriculture, Pune during 5-8 March, 2019 on "Promotion of Entrepreneurship in Livestock Sector" for senior and middle level officers of the Department of Animal Husbandry, Maharashtra.

Twenty five officers from Department of Animal Husbandry, Maharashtra State, Veterinary/Agriculture Colleges as well as Krishi Vigyan Kendras participated in the program.

Modules focused on integrated management practices for livestock enterprise, opportunities for entrepreneurship development in livestock sector, contemporary concepts, practical approaches to nutrition and management in livestock enterprises as well as effective communication skills.

## **Silent Heroes**

#### **Profile**

MANAGE has started a regular column to appreciate people who are working in our institute. Though they are not at the helm of affairs, they contribute in an important way to organizational success. This issue profiles one of our senior staff members, Mr. K. Udaya Varma, Telephone Operator, who has been with MANAGE, right from its inception in 1987. Mr. Varma is currently with the Agri - Clinics and Agri - Business Centers (AC&ABC) Scheme, handling work relating to AC&ABC Accounts such as verification of utilization certificates, processing for payment and preparing quarterly financial statements. Mr. Varma shares his thoughts.



#### When did you begin working?

I started my career as LDC/Typist at NIRD (under the project of the World Bank for MANAGE) in 1986. When MANAGE was established in 1987 I was posted in MANAGE. I was appointed as a Telephone Operator in July 1996. My initial responsibilities included protocol duties during visits of VIPs and international visitors to MANAGE and associated work in DGs office and Administration section. I am working in AC&ABC Scheme since January 2012.

#### What do you find challenging about your work?

The challenge is to do my work with perfection. I try to ensure that my work is done correctly to the best of my ability. I am thankful to my senior officers for their guidance.

#### Tell us something about your family?

My wife is a home maker. I am blessed with two children. My son is working at Accenture Company and my daughter has recently completed her MBA (Finance) and is looking for a good opportunity. My strength is my family and I am fortunate to get all their support.

#### Any other point you wish to add?

I am proud to be a part of MANAGE family and I will continue to work with dedication and honesty, keeping in view the best interests of my organization.

Mr Varma was recognized and felicitated as one of the best employees of MANAGE. We wish him good health, happiness and the best for his 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** 

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