

Report on Feed The Future India Triangular Training Program









National Institute of Agricultural Extension Management (MANAGE) (An organization of Ministry of Agriculture and Farmers Welfare, Govt. of India) Rajendranagar, Hyderabad-500 030, Telangana, India



Report

on

Feed The Future India Triangular Training Program

Submitted to

United States Agency for International Development (USAID) American Embassy, Shantipath, Chanakyapuri, New Delhi - 110021, India

Authors

Mahantesh Shirur Jyothi S S P

Documentation Support

Dharmaraj B M B Chinna Rao Sharath H N

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National Institute of Agricultural Extension Management (MANAGE) (An organization of Ministry of Agriculture and Farmers Welfare, Govt. of India) Rajendranagar, Hyderabad-500030, Telangana, India

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सत्यमेव जयते

भारत सरकार कृषि एवं किसान कल्याण मंत्रालय कृषि, सहकारिता एवं किसान कल्याण विभाग Government of India Ministry of Agriculture & Farmers Welfare Department of Agriculture, Cooperation & Farmers Welfare

MESSAGE

India has achieved incredible progress in food production and productivity despite the challenges of dwindling land and water resources, fragmented landholding dominated by the small and marginal farmers, adversities of climate change and globalization of agriculture trade. The country has evidenced a transition from food scarcity to a food surplus situation. Presently, India is leading in the production of many agricultural products. Thanks to the technological advancements, scientific research, innovations and timely extension services witnessed in the country. Despite the advances in agriculture sector across the globe, the food security is still a challenge in pockets of many developing nations of Africa and Asia. Building on India's strength of having an effective Agriculture Innovation and extension System, the USAID proposed to partner with the Government of India to promote global progress in the area of food and nutrition security.

India and the United States signed the new agriculture partnership agreement to help the developing countries in achieving evergreen revolution and ensure global food security. The Triangular Cooperation effort involving Africa and Asia was conceived for adapting technological advances and innovative solutions to address food security challenges in developing nations. In this direction, the progress made by Feed The Future India Triangular Training (FTF ITT) Program implemented by USAID India and National Institute of Agricultural Extension Management (MANAGE) is laudable.

Training over 1100 officers from 21 partner countries through 44 training programs during 2016-20 is a significant achievement which I believe will start showing desired result in the field in the coming years. The partnership between USAID India and MANAGE to complete the program in the most professional way to benefit the partner countries is heart-warming. The efforts of all the partner training institutes and cooperation of trainees to make the program successful is praiseworthy.

I congratulate the Director General, MANAGE and her team, for exhibiting the highest standards of team work, professional commitment in timely completion of a program of global scale such as the FTF ITT. I wish that, the journey of success of FTF ITT will grow from strength to strength with the trained officials showing continued commitment in addressing the challenges of global food security.

(Sanjay Agarwal)

September 24, 2020

Office : Krishi Bhawan, New Delhi-110001, दूरमाग / Phone : 23382651, 23388444 फॅक्स सं० / Fax No : 23386004 E-mail : secy-agri@gov.in



Mustapha El Hamzaoui Director-Food Security Office USAID India



Message

Over the past seven decades, India and the United States of America have shared a mutually rewarding relationship. The United States Agency for International Development (USAID) has partnered with the Government of India to enhance the agriculture sector as a driver of the Indian economy and to alleviate poverty in rural areas through the deployment of technologies and human and institutional capacity development in agriculture and food systems. This productive partnership resulted in India's designing and leading the Green Revolution, which increased agricultural production, through the transition from traditional agriculture to the use of high-yielding varieties of seeds and associated technology. The collaboration and cooperation between American land-grant universities, the Indian agriculture research and extension institutions, and the private sector resulted in India becoming a food self-sufficient country, a net exporter of staple foods across the world, and the establishment of India agricultural universities.

Since 2010, the Governments of India and the United States have engaged in several partnerships to sustain the impact through approaches such as the "Evergreen Revolution," to address global food security challenges. This partnership was implemented with the objective to transfer Indian technology and innovative solutions to address agriculture productivity and food security issues in Africa and Asia.

During the period 2013-2015, the implementation of the Training in Agriculture and Enterprise Development program benefitted 230 agricultural professionals from Kenya, Liberia and Malawi and in turn thousands of smallholder farmers. Following on the successes of the previous programs, the Government of India and the United States expanded the program through the implementation of the Feed the Future U.S. India Triangular Training (FTF ITT) program during 2016-2020. The program is part of the US Government's global Feed the Future initiative with a goal to address the root causes of hunger, poverty, and malnutrition by employing proven strategies to increase farm productivity and income for achieving large scale and sustainable impacts. The objective of the program in India is to enhance individual and institutional capacities of eleven African and nine Asian countries. The execution of this program was successfully carried out by the National Institute of Agricultural Extension Management (MANAGE) which partnered with 30 Indian agricultural research and educational institutions to deliver 44 sector-specific trainings, which benefitted 1144 mid- to senior-level agricultural professionals, with over 40% of them being women. The training strengthened their knowledge and experience on specialized farming practices such as agricultural marketing, dairy management, food processing, and ways to prevent post-harvest crop losses that resulted in improved agricultural extension programs that have benefited thousands of farmers in Africa and Asia.

The testimonials received from senior government officials in the partner countries, their Ambassadors to India, agriculture extension officers and farmers have all confirmed that the program is in line with the Indian philosophy of 'Vasudhaiva Kutumbakamm" (the world is one family) in addressing food security challenges globally.

I sincerely thank the Ministry of Agriculture and Farmers Welfare for the long-running and successful relationship that has made tremendous accomplishments in support of the agriculture sector in India. I also want to extend my warm gratitude to MANAGE for the outstanding implementation and administration of the U.S.-India Triangular Training Program.

September 24, 2020

(Mustapha El Hamzaoui)

American Embassy, Shantipath, Chanakyapuri, New Delhi, Delhi - 110 021.



Smt. G. Jayalakshmi, IAS Director General, MANAGE



राज्यीय कृषि विरुतार प्रबंध संस्थान (मैनेज) (श्री में किंगत कलाग काका, ताल काका क काका) NATIONAL INSTITUTE OF AGRICULTURAL EXTENSION MANAGEMENT (N) Darabased Mana, d Angulator & Farmer Man. Overweet of tel

Message

The agriculture sector continues to be the vital sector to boost the rural income and sustain food and nutritional security in most countries of the globe. In this context, agricultural strategies that improve livelihood of the poor, maximize productivity in agriculture and create employment opportunities for the rural population are critical. The role of training and capacity building of agricultural extension personnel through skill based and hands on experiential learning is not less important.

The 'Feed The Future India Triangular Training' (FTF ITT) is an outcome of the shared responsibility of two powerful democracies of the world- India and the United States. It envisaged the role of training as a means to drive the desired changes in the spread and adoption of technologies and innovations in agriculture and allied disciplines in Asia and Africa. The program was designed and delivered by the joint efforts of USAID, India and National Institute of Agricultural Extension Management (MANAGE) with the support from the Ministry of External Affairs, Ministry of Agriculture and Farmers welfare, Government of India.

The onerous task of training 1144 officers from 21 countries in four year period was rendered possible because of the technical and scientific strength of 31 reputed institutes belonging to ICAR, CSIR, CGIAR and other national institutes. The program touched upon the diverse topics in agriculture and allied sectors to develop the human skills in most comprehensive manner. The program adequately recognized the role of women in agriculture by training 444 women officers. This will serve as a social capital for partner countries.

The training program is not an end in itself, but is the start of knowledge sharing to the farmers and ground level extension personnel by the master trainers. With this idea, the trainings were designed with a unique feature of Back At Work Plan (BAWP) to address prevailing problems pertaining to agriculture and allied disciplines. Most of the trained officials have taken the BAWP with highest commitment. The best implemented BAWPs with notable impact at the ground level are documented as 'Success Stories' which will serve as a reference for dissemination and upscaling of the demonstrated technologies in partner countries.

It is heartening to note that, all programs were completed within the timeframe and all training programs were consistently rated very high by the trainees. The Program Management Unit (PMU) team at MANAGE has responded to the challenges of global level training program with poise and professionalism. I congratulate all the team members for this success. I also appreciate the POCs, Heads of partner Institutes, trained officials in rising to the task of taking larger responsibility of addressing the global concerns of food and nutritional security in the world.

I wish success to everyone in their future endeavors.

L. propulati

(G. Jayalakshmi, IAS)

September 24, 2020

Office: Rajendranagar, Hyderabad-500 030, Ph.: 040-24015253, Fax No.: 040-24015388 Email: dgmanage@manage.gov.in

Preface

The training and capacity development activities are pivotal in disseminating innovations and technologies in agriculture. Despite several obvious gains, the long gestation period of capacity development initiatives to witness the desired outcome and low visibility of trickling-down benefits have made them a less preferred area for investing resources. However, the Feed The Future India Triangular Training (FTF ITT) implemented with the collaborative effort of USAID India and National Institute of Agricultural Extension Management (MANAGE), Hyderabad took the mantle of addressing the global food and nutritional security problems through training and capacity development approach.

To see the FTF ITT program concluding fruitfully as per the time line is very satisfying. The recollections of FTF ITT trainees sharing about their good experiences during their training in India will always remain close to our hearts. The trainees understood the challenges and constraints of International training programs of being with trainees and trainers of diverse background and tastes and made use of the unique opportunity to see and learn new things and take it forward to implement in their work places.

The FTF ITT final report and the two volumes of success stories are testimony to the commitment of all stakeholders involved in FTF ITT program to contribute to the progress of agriculture in their regions. Program Management Unit (PMU), MANAGE appreciate their efforts and congratulate them for their success. We also appreciate the points of contact in partner countries, officers nominating the trainees and family members of trainees for helping them to participate in the FTF ITT trainings.

I was fortunate to be given the responsibility of leading the PMU team for implementing FTF ITT program at MANAGE. The constant guidance from Mrs. G. Jayalakshmi, IAS, Director General, MANAGE, Mrs. V Usha Rani, IAS, Former Director General, MANAGE and Mr. Mustapha El Hamzaoui, Director, Food Security Office, USAID India were of immense help. The credit for the success of FTF ITT also goes to the predecessor Program Directors Dr. P. Chandra Shekara and Dr. Saravanan Raj, colleagues at MANAGE and all the staff of PMU, MANAGE. The heads of the institutes and program directors of all FTF ITT programs took keen interest in delivering the program to the expectations of the FTF ITT trainees. Sincere thanks to all of them.

All the support received in successful completion of FTF ITT is gratefully acknowledged.

24 September, 2020

nehine. (Mahantesh Shirur)

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ABBREVIATIONS

	Abbiteviations
AESA	Agro Ecosystem Analysis
AI	Artificial Insemination
AICRPs	All India Coordinated Research Projects
APMC	Agricultural Produce Market Committee
ATIC	Agricultural Technology Information Centre
BAWP	Back at Work Plan
BIRD	Bankers' Institute of Rural Development
CAD	Computer Aided Design
CAFRI	Central Agroforestry Research Institute
CFMTTI	Central Farm Machinery & Tractor Training Institute
CFTRI	Central Food Technological Research Institute
CGIAR	Consortium of International Agricultural Research Centers
CIAE	Central Institute of Agricultural Engineering
CIFT	Central Institute of Fisheries Technology
CIMMYT	International Maize and Wheat Improvement Center
CIPHET	Central Institute of Post-Harvest Engineering & Technology
CRIDA	Central Research Institute for Dryland Agriculture
CPCRI	Central Plantation Crops Research Institute
CTCRI	Central Tuber Crops Research Institute
DAESI	Diploma in Agricultural Extension Services for Input Dealers
DPR	Directorate of Poultry Research
FCRI	Forest College and Research Institute
FFS	Farmers Field Schools
FTF-ITT	Feed The Future India Triangular Training
FPOs	Farmer Producer Organizations
GAPs	Good Agricultural Practices
HQCF	High Quality Cassava Flour
HRD	Human Resource Development
ICAR	Indian Council of Agricultural Research
ICRAF	World Agroforestry Centre (International Centre for Research in Agro-Forestry)
ICRISAT	International Crops Research Institute for the Semi-arid Tropics
ICT	Information and Communication Technologies
IIFPT	Indian Institute of Food Processing Technology
IIHR	Indian Institute of Horticulture Research
IIMR	Indian Institute of Millets Research
IIOR	Indian Institute of Oilseeds Research
IIRR	Indian Institute of Rice Research

IISR	Indian Institute of Spices Research
IISS	Indian Institute of Soil Sciences
IIVR	Indian Institute Vegetable Research
IMD	Indian Meteorological Department
IPNS	Integrated Plant Nutrient Supply
IPM	Integrated Pest Management
IWMP	Integrated Watershed Management Program
КСС	Kisan Call Centre
LCC	Leaf Color Chart
MAIL	Ministry of Agriculture, Irrigation and Livestock
MANAGE	National Institute of Agricultural Extension Management
MAP	Modified Atmosphere Packaging
MoUs	Memorandum of Understanding
NABARD	National Bank for Agriculture and Rural Development
NBPGR	National Bureau of Plant Genetic Resources
NCU	Neem Coated Urea
NDRI	National Dairy Research Institute
NIAM	National Institute of Agriculture Marketing
NIAP	National Institute of Agricultural Economics and Policy Research
NIFPHATT	National Institute of Fisheries and Post-Harvest Technology and Training
NIPHM	National Institute of Plant Health Management
NSRTC	National Seed Research & Training Institute
PDCO	Participatory Diagnosis Of Constraints And Opportunities
PMU	Program Management Unit
POCs	Points of Contact
PPP	Public and Private Partnership
RBI	Reserve Bank of India
RTP	Rural Technology Park
SAT	Semi Arid Tropics
SHGs	Self Help Groups
SOP	Standard Operating Procedure
USAID	United States Agency for International Development
UAS	University of Agricultural Sciences
UHS	University of Horticultural Sciences
US	United States
WALAMTARI	Water and Land Management Training and Research Institute

EXECUTIVE SUMMARY

India has made tremendous progress in the field of agriculture and allied sectors by unleashing the potential of technological innovations and their effective transfer to the farming community. Despite the enormous challenges like large number of smallholder farmers, huge labour force depending on agriculture, disguised unemployment, and migration of youth to urban areas, etc., Indian agriculture has been successful in keeping pace with the food production demand of the growing population. Most of the countries in Africa and Asia face similar challenges and constraints as in India. Therefore, it was thought that, the success of the Indian agriculture can be aptly replicated in African and Asian countries through the transfer of successful innovations and technologies. In this context, Feed The Future India Triangular Training (FTF-ITT), a collaborative program of the United States of America represented by USAID and the Government of India represented by the National Institute of Agricultural Extension Management (MANAGE), was designed and implemented with the objective of addressing human and institutional capacity gaps to deal with the food security challenges in selected African and Asian countries. This was pursued by imparting need-based training to mid to senior-level agricultural professionals from public and private sectors on recent technological advances and innovative solutions from Indian agriculture.

After consultation with the Government of India, 11 African and 9 Asian countries were selected to benefit from the FTF ITT program. The program implementation started with an exhaustive training needs assessment. The capacity gaps and training needs from these countries were enlisted and analyzed for prioritizing training themes. From this, 44 training programs (of 15 days duration) were designed on topics such as agribusiness and management, agricultural marketing, agricultural extension and policy issues, animal husbandry, dairy, poultry and fisheries, women empowerment, plant health management, mechanization, value addition and processing in horticulture crops, climate-smart agriculture and natural resource management. Successful implementation of these trainings benefited 1144 mid- to senior-level agricultural professionals from 20 African and Asian countries.

MANAGE designed and used a Standard Operating Procedure (SOP) for participant selection, training process, training methods and tools, evaluation and feedback of the program etc. MANAGE collaborated with 31 state-of-the-art Indian research and academic institutions to organize the training sessions. Private companies were also involved in some trainings, by inviting their experts as resource persons and by organizing exposure visits to their manufacturing/ research facilities. The trainings were participatory in nature, which included lectures, panel discussions, group discussions, case studies and field visits. The Back at Work Plan (BAWP) was an in-built feature to guide and monitor the trainees to work on a specific problem in their region by identifying an innovation or a new technology learnt during the training. The training effectiveness and participant learning was assessed by feedback, pre-training and post-training tests during the course of training period.

The FTF-ITT program showed incredible success in terms of trainee participation across 20 countries with fair gender representation (38.8%), and involvement of private sector and civil society organization representatives. Substantial cumulative increase in the knowledge level of the trainees (52.07) and very good feedback of the trainees (9.08 on a scale of 10) indicated the efficiency and successful organization of the program. Majority of the trained professionals have initiated activities to apply their newly acquired knowledge in their respective countries. As a sign of recognition and motivation to the trainees, selected examples of successful execution of BAWP have been documented and widely distributed by MANAGE. The first edition of the FTF ITT success stories was published by MANAGE in 2018 and the second one in September 2020. MANAGE used social media, including facebook and whatsapp, to ensure continuous sharing of knowledge among the trainees, and with the Indian experts who trained them.

Besides successful execution of the BAWP, the FTF ITT program has created impact in several countries because of the collective efforts of the trainees and the commensurate support by their Governments or from the development agencies. Few of the major accomplishments of the FTF ITT are;

- Ministry of Agriculture, Irrigation and Livestock (MAIL), Afghanistan started the Kisan Call Center on the lines of Kisan Call Centre (KCC) in India. FTF ITT program trained the officers to run the KCC in Afghanistan.
- The officials working in Department of Agriculture, Government of Nepal and USAID funded KISAN-II project have been trained under FTF ITT programs to support the ICT initiative in agriculture in Nepal.
- In Uganda, trainees have taken up the task of promoting entrepreneurship and collective farming to improve their economic independence through thrift and saving and small enterprise promotion, based on the *Kudumbashree* model. In Kenya also, the *kudumbashree* model of collective approach in small entrepreneurship has been started as '*Imashree*'.
- The technology of soil and water conservation through GAPs and promoting the adoption of legume inter-cropping, mixed cropping, farm pond and conservation tillage practices are being promoted in Tanzania, Uganda, Botswana, Malawi, Kenya and Nepal.
- The training programs under FTF ITT at ICAR-CIAE, Bhopal, ICAR-IISS, Bhopal, ICAR-CIFT, Cochin etc. promoted the adoption of small scale machinery in Africa especially in Kenya and Uganda.
- Promoting the spirit of collective farming, collective marketing and cooperative strength through Farmer Producer Organizations (FPOs).
- The effective management of Fall Army Worm pest of cereals, especially in maize has been promoted in the partner countries through the FTF ITT program.
- FTF ITT promoted the entrepreneurship and commercialization of agriculture to make the agriculture profitable, remunerative and sustainable in developing countries.

With the financial support from the USAID India and the organization capacity of MANAGE, the over-arching success of the FTF-ITT program is indicative of the strength of partnership between USAID and MANAGE to organize international training programs to reach more target beneficiaries across two continents. The program experience will serve as a baseline for building on the development activities initiated by the trainees and upscale the same for further dissemination. With the network of trained manpower in two continents, the agricultural challenges can be tackled at grass root level with focused clientele approach. In the future MANAGE, Hyderabad can lead the efforts on tackling the developmental challenges and issues affecting global food security, strengthening the institutional capability in secondary agriculture activities, consultancy and policy advocacy for developing nations, multi-institute training and capacity development activities for international institutions and officials.

The report on the FTF ITT consists of the details of all the stages of program planning, training curriculum, implementation and monitoring which will be shared with all the relevant stakeholders focusing on effective extension delivery strategies and who impact the farming fraternity. The annexures will serve as database for future programs on training and capacity development in agriculture field for global level outreach. It is also worth mentioning that, the reading of this report is complete only with the reading of the two documents of compilation of success stories based on the BAWPs of FTF ITT trainees.

1. INTRODUCTION

1.1 IMPORTANCE OF TRAINING AND CAPACITY DEVELOPMENT IN AGRICULTURE

The agriculture sector is vital to the economic development of most developing nations in Africa and Asia. Transforming subsistence agriculture into a modern sector has demonstrated agriculture's potential as a driver of growth and development. The agriculture sector in most developing countries is the major contributor to employment and gross domestic product. However, it is affected by several challenges like dwindling resources, unsustainable production practices, unemployment, market failure, etc. If agriculture has to prosper, the piece-meal approach of diagnosing and addressing the problems of individual component of agriculture system is not sustainable. In the words of Mahatma Gandhiji, "Poverty is the worst form of violence". A holistic view of the issues and an integrated approach to offer solutions to the problems of third world countries is essential in the interest of the whole globe. The holistic approach we are referring to should accommodate the training and capacity gaps of the officials involved in agricultural extension and agricultural technology transfer to complement the efforts of developmental initiatives in these countries. This approach should lay equal emphasis on production, environment and ecological concerns, processing and value addition, marketing and supply chain management and profitability through agri-business ventures. In addition, the social issues are also equally important and relevant in the changing context of agriculture developmental challenges. The community approach, the gender sensitive practices in agriculture, farm mechanisation through custom hiring centres, etc. will aid in driving the social change in a desired direction.

1.2 BACKGROUND AND GENESIS OF THE PROGRAM

A new agriculture partnership between the United States and India announced in November 2010 during the State visit of the US President Mr. Barack Obama to India is a giant effort in meeting the above global developmental challenges. The partnership talked about achieving the evergreen revolution to ensure Global food security. The effort included Triangular Cooperation adapting technological advances and innovative solutions to address food security challenges in Africa and Asia. Further, it includes areas such as health, energy, women empowerment and sanitation under the statement of guiding principles on triangular cooperation for global development. Despite the enormous challenges such as large number of small holding farmers, huge labour force depending on agriculture for their livelihood, disguised unemployment, and migration of youth to urban areas, etc., India's progress in the field of agriculture and allied sector is praiseworthy. Most of the countries in Asia and Africa face many similar challenges and constraints. Therefore, it was thought that, the success of the Indian agriculture can be aptly replicated in many countries of Africa and Asia through the transfer of its successful innovations and technologies. At the same time, the very advanced technologies developed and practiced in the developed West may not be a good fit in the sociocultural and economic background of majority countries in Africa and Asia. This idea gained momentum over the years and the strength of Indian innovations and technologies for Africa was tested through a pilot project "New Dimensions in Agricultural Extension Management" for agriculture professionals during 16 July - 3 September, 2015. The initial pilot project focused on three African Countries i.e., Kenya, Liberia and Malawi with potential to expand throughout the African Continent in later stages. National Institute of Agricultural Extension Management (MANAGE), Hyderabad and the National Institute of Agricultural Marketing (NIAM), Jaipur conducted seven training and capacity development programs covering 219 executives from Kenya, Liberia & Malawi. Feedback surveys conducted among the participants of the beneficiary countries was overwhelming and showed the merit in expanding its scope for bigger region covering broad areas of agriculture.



Fig.1: Inaugural ceremony of FTF-ITT program on 25 July 2016 at New Delhi

Driven by the success of the pilot project, the new agriculture partnership conceived the Feed The Future India Triangular Training (FTF ITT) to address the training and capacity gaps in the field of agriculture and allied discipline with the following broad objectives.

1.3 OBJECTIVES

- 1. To conduct a demand analysis and assess the capacity gaps in the field of agriculture and allied sectors in the beneficiary countries of Africa and Asia.
- 2. To address human and institutional capacity gaps to deal with food security challenges in select third world countries by training field level extension functionaries on recent technological advances and innovative solutions from Indian agriculture.
- 3. To guide the officials during training to plan and implement the back at work plan in their respective countries based on an Indian innovation or technology learnt during the program.

1.4 LAYOUT OF THE REPORT

The report is organized into four chapters. The introductory chapter gives a brief about of importance of agriculture in the economy of developing countries and the role of training and capacity development to drive the growth in agriculture sector. The chapter also gives a brief account of background and genesis of the program with the objectives set for the program. The second chapter 'Program planning and implementation', gives details about the methodology followed in demand analysis, partner country selection, trainee selection, partner training institute identification and the training approach followed in delivering the FTF ITT program. The third chapter 'Key accomplishments' focuses on major results and targets achieved under the program and presents the feedback of the participants about the trainings and the impact. The major impact points and outcome as a result of the efforts of implementing back at work plans by the trained executives are also included in this chapter. The chapter four 'Lessons learnt and way forward' provides the list of lessons learnt and prospective actionable points as way forward for MANAGE and other training institutes. The annexures I-VI follows after the chapters.

2. PROGRAM PLANNING AND IMPLEMENTATION

2.1 DEMAND ANALYSIS AND TRAINING NEED ASSESSMENT

To achieve the program objectives, an exhaustive demand analysis survey in 17 countries of Africa and Asia was conducted by the experts from India and partner countries. The demand analysis survey was conducted for Afghanistan, Botswana, Cambodia, Democratic Republic of Congo, Ghana, Kenya, Lao PDR, Liberia, Malawi, Mongolia, Mozambique, Myanmar, Rwanda, Sudan, Tanzania, Uganda and Vietnam. The capacity gap from the 17 partner countries were enlisted and analyzed for prioritization of training themes. Complete details of the results of the demand analysis and the training need assessment are provided in annexure-I. From the exhaustive inventory of training needs

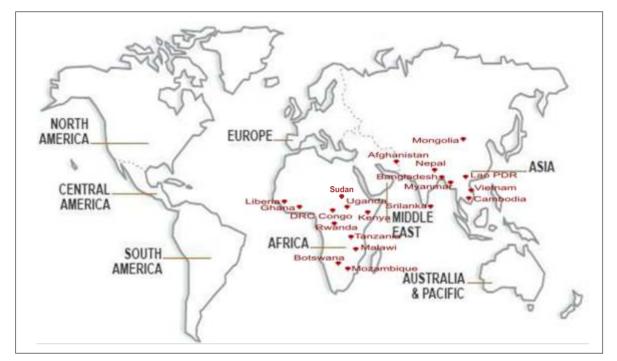


Fig. 2: List of partner countries from Africa and Asia under FTF ITT

of all partner countries, the training themes were prioritized to identify the relevant partner training institutes in India to train the officials and facilitate field exposure visits and hands on practical training sessions. The most common needs identified for training were on agribusiness and management, agricultural marketing, agricultural extension and policy issues, animal husbandry, dairy, poultry and fisheries, women empowerment, plant health management, mechanization, value addition and processing in horticulture crops, climate-smart agriculture and natural resource management.

2.2 TARGET AND OUTREACH OF THE PROGRAM

The program set an ambitious task of creating a pool of 1400 trained manpower (later revised to 1100) in the field of agriculture and allied sciences through 44 demand driven training and capacity development programs. The partner countries in the program included: Afghanistan, Bangladesh, Botswana, Cambodia, Democratic Republic of Congo, Ghana, Kenya, Lao PDR, Liberia, Malawi, Mongolia, Mozambique, Myanmar, Nepal, Rwanda, Sri Lanka, Sudan, Tanzania, Uganda and Vietnam (Fig.2). The program initially proposed to conduct thirty two, 15 days duration training courses (excluding travel period) at select Indian institutions with an average of 25 participants in each program, and twelve, 10 days duration trainings (excluding travel period), in selected partner countries in Africa and Asia, for up to 50 participants per program. However, owing to a rich research and training expertise of Indian Agriculture institutes and feedback from the participants of the partner countries on the effectiveness of hands-on and field visit based trainings in India, it was decided to convert 10 partner country training programs to trainings in Indian Institutes. Two partner country training programs were organised for international participants- one each in Afghanistan and

Uganda while the remaining 42 programs of 15 days duration were organised in India thereby successfully achieving the set target to organise 44 training programs. Through these 44 programs, 1144 field level extension functionaries were imparted knowledge and skill on different themes of agriculture and allied subjects (Annexure-II). Each of the training course module of the program focused on themes or sub sectors of agriculture in which Indian institutions of repute with proven scientific knowledge were identified to offer such training and to ensure that it effectively responds to the target countries' capacity gaps. The method of training, training features, training curriculum, etc. are discussed in subsequent sections.

2.3 TRAINING PROCESS

USAID India representing the US Government and the National Institute of Agricultural Extension Management (MANAGE), Hyderabad representing Ministry of Agriculture and Farmers Welfare, Government of India were given the responsibility of implementing the FTF ITT during 2016-20. The Feed the Future - India Triangular Training Program (FTF ITT) was officially launched on 25th July, 2016 at New Delhi to start the training and capacity development programs. The first step of the Training is the announcement of the FTF-ITT programs and their wide publicity in target countries. During the launching of the FTF ITT program, first three International training programs on "e-Extension: ICT Applications in Agricultural Extension Management" (in Kabul, Afghanistan during 10-19 October, 2016), "Public Private Partnership in Agricultural Extension Management" (in MANAGE, Hyderabad during 17-31 October, 2016) and "Emerging Trends in Marketing of Fruits and Vegetables" (at National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan during 16-30 November, 2016) were announced. After the announcement, the programs were advertised through MANAGE website, e-mails and social media and communication to Points of Contact (POCs) in partner countries. The subsequent training programs were announced phase wise. The first phase was announced on 28 December, 2016 consisting of four training programs. From the experience of organizing three training programs, during 2016 and the discussion during a workshop with selected training partner institutes, a Standard Operating Procedure (SOP) was designed for organizing subsequent FTF ITT programs. In this SOP, the method of training, curriculum designing, training material, training tools, guidelines for expenditure, type of accommodation and reimbursements and allowances for participants, back at work plan, etc. were described and elucidated to maintain highest standard of training in terms of delivery and logistic support. The SOP also aimed to give clarity about roles and responsibilities of all stakeholders like partner training institutes and POCs in all partner countries so that, the larger objective of the program is not compromised. All the 44 training programs were announced in seven phases as per the timeline developed to keep the programs in a properly staggered manner so that, there is no overlap of programs and there is sufficient time to take care of monitoring of preparedness of partner institutes about training curriculum designing, literature support, logistics, etc. The themes addressed during the program implementation have been discussed under key accomplishments.



Fig.3: Group photo of dignitaries at the FTF-ITT Inaugural ceremony

2.4 PARTICIPANT SELECTION

As decided in the SOP, the participants from all the 20 partner countries were nominated by the POCs of their respective countries. Each country has one or two POCs for FTF ITT. The POCs receives the advertisement of the programs announced by the Program Management Unit (PMU), MANAGE, India and send suitable nominations for the notified training programs. The PMU team at MANAGE scrutinizes the participants according to their eligibility criteria like Educational qualifications, professional experience in the relevant subject/ field and able to speak and understand English. Once the participants are finalized based on their applications and telephonic verification, the invitations were sent to the eligible and suitable candidates. The candidates were expected to submit their visa, passport copies, physical fitness reports and document on self-authorized terms and conditions for clearance. On receipt of the duly signed documents, the travel tickets were booked by MANAGE and PMU team in close coordination with local coordinators of the training institutes to facilitate the travel arrangements and stay during the 15-day training program at different partner training institutes in India.

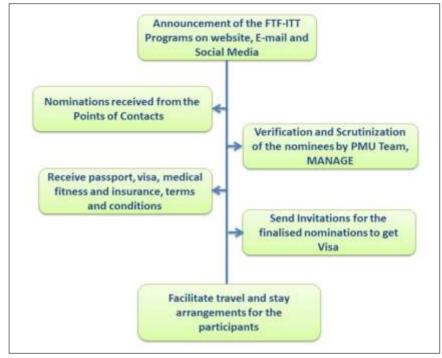


Fig. 4: Schematic representation of trainees selection and their participation in FTF ITT training program 2.5 TRAINING APPROACH TO ADDRESS DEVELOPMENTAL CHALLENGES

The training approach was adopted to meet the expectations of the vast geographical area representing 20 countries from Africa and Asia. The program provided opportunity for the participants representing Government, Private and Non-Government sectors. This was basically done to motivate the private sector and Non-Government sector to work in close collaboration with the Government institutes in implementing their back at work plans. The multi-institute engagements in the developmental works will be demand driven, responsive to local problems and implemented through resource sharing approach. The FTF ITT program encouraged the women participants to attend the training as women have an increasingly important role in the developmental issues at the community level. Some of the programs were meant exclusively for women empowerment to address the gender concerns in developing countries. The list of training needs identified from the demand analysis exercise in partner countries was exhaustive. Any single institute delivering the trainings on such diverse aspects from agriculture and allied sector is unlikely to yield desired results and cannot do justice to the expectations of the trainees. MANAGE being a lead program implementing institute, invited the premier national level institutes with proven domain expertise and logistic support to train participants from different geographical and cultural diversity. Wherever, the demand was more for a particular theme, a single training institute was allotted more than one program (Eg. Kudumbashree

MANAGE created a special cell Program Management Unit (PMU) for coordinating, implementing and monitoring of the FTF ITT program. The PMU was headed by the Program Director who is assisted by a program team consisting of Program Manager, Program Executive and a Junior Program Executive. The other necessary support to the PMU was extended by the administration and finance division of MANAGE.

for women empowerment, NIPHM for plant health management, ICAR-NDRI on dairy management, etc.). In all, 30 partner institutes worked in collaboration with MANAGE and USAID India to complete the targeted 44 training programs (Annexure-II). The complete list of 30 partner training institutes (Fig. 5) is given as annexure-III. Brief profile of all partner institutes involved in organizing the FTF ITT program is given as annexure-IV.

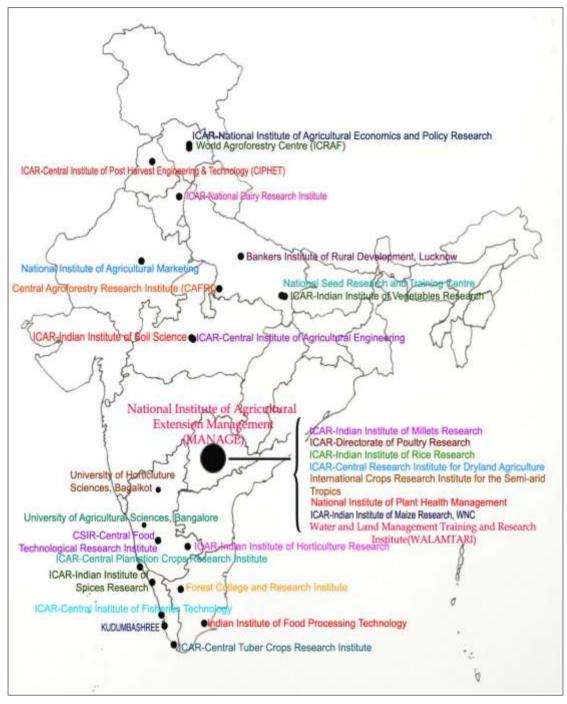


Fig. 5: Partner institutes of MANAGE in organising FTF ITT programs

The training programs were designed to be participatory in nature. Programs included a right blend of lectures, panel discussions, group discussions, case studies and field visits. Each trainee was expected to contribute ideas and take part in group activities for effective participative learning. The experiential learning methodology was effectively incorporated with sufficient time for trainees to practice the hands on skills in laboratories and also during field and exposure visits. A Back at Work Plan (BAWP) was in-built in the program to guide the trainees to work on a specific problem in their region by identifying an innovation or a new technology learnt during the training.

2.6 BACK AT WORK PLAN

Back at Work Plan (BAWP) is a plan of work proposed by the participants of the FTF ITT training to address one important agriculture problem in their jurisdiction of work. Broadly the BAWP is an individual choice of the trainee to pick an important lesson which can potentially offer a solution to the problem of their region. The trainers and subject domain experts from the training institutes will help the trainees for problem identification, analysis of problem, framing objectives of work plan, identifying actions/ follow-up actions of work plan, anticipate the developmental challenges in their country, working out strategies to work with superiors and subordinates, expected outcome and time required to achieve the objective/s of work plan. A model of BAWP is given in figure 6. The questionnaire designed to orient the trainees and collect the data for their BAWP is given as annexure-V.

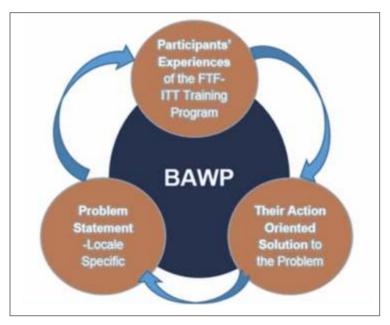


Fig 6: Back At Work Plan

2.7 EFFECTIVENESS ASSESSMENT AND FEEDBACK

The effectiveness of each of the training was proposed to be monitored on two fronts. The first was assessment of change in knowledge among the participants through Pre-training & Post-training teacher-tests. The formula used to calculate the change in knowledge is as below.

Change in Knowledge (%) =
$$\frac{(Post test Score-Pretest score)}{(Pretest score)} \times 100$$

The second aspect of the evaluation of each of the training was done by taking trainees' feedback separately on the individual technical sessions and on the overall impression about the program on a scale of 1-to-10 (1 being the lowest and 10 being the highest rating).

3. KEY ACCOMPLISHMENTS

3.1 TRAINING NEED ASSESSMENT THROUGH DEMAND ANALYSIS

Through the FTF ITT program, a demand analysis was conducted in seventeen countries of Africa and Asia to identify the areas of training needs and capacity gaps (Annexure-I). Subsequently, the training needs were prioritized and training themes were finalized to address the capacity gaps. The table 1 gives the list of number of trainings organized under different themes. Some trainings were conducted on a single theme (Eg. Climate Smart Agriculture) while some trainings were organized on more than one theme. (Eg. Entrepreneurship for Rural Women, Recent Trends in Harvest and Postharvest Technologies in Fisheries, etc.).

SI. No.	Training Theme	No. of Trainings *
1.	Post-Harvest Technologies and Value Addition	13
2.	Agribusiness Management/Entrepreneurship Development	9
3.	Horticulture (Tuber crops, Plantation crops, Spices)	8
4.	Agriculture Extension/ ICT Application in Agriculture/ Credit and Agriculture Policy	7
5.	Agricultural Marketing	5
6.	Plant Health Management	4
7.	Women Empowerment	4
8.	Animal Husbandry and Dairy	3
9.	Climate Smart Agriculture/ GAP	2
10.	Natural Resource Management	2
11.	Fisheries/ Poultry	2
12.	Mechanization in Agriculture	1
13.	Agroforestry	1

Table 1: Training themes and number of trainings organized

3.2 HUMAN RESOURCE DEVELOPMENT (HRD)

The FTF ITT program provided the opportunity for 1144 field level officials from 20 countries of Africa and Asia. These officials were selected and trained on their area of working under 13 important training themes mentioned in table 1. The country wise and gender wise participation of officials from all the partner countries are given in table 2. The annexure- VI gives the details of officials trained under different FTF ITT programs along with their back at work plans.

Sl.No.	Country	Male	Female	Total
1	Afghanistan	142	17	159
2	Bangladesh	10	5	15
3	Botswana	14	12	26
4	Cambodia	27	18	45
5	DR Congo	3	8	11
6	Ghana	38	18	56
7	India*	8	2	10
8	Kenya	70	55	125
9	Lao PDR	0	1	1
10	Liberia	45	35	80
11	Malawi	52	59	111
12	Mongolia	22	24	46
13	Mozambique	23	8	31
14	Myanmar	42	36	78
15	Nepal	64	13	77
16	Rwanda	0	0	0
17	Sri Lanka	35	22	57
18	Sudan	7	17	24
19	Tanzania	15	11	26
20	Uganda	91	74	165
21	Vietnam	1	0	1
	Total	709	435	1144

Table 2: Country-wise and gender-wise representation of participants under FTF ITT

The trained officials represented the Government development departments, Universities, Non-government and private sectors. Majority of the respondents (80 per cent) attending the FTF ITT programs were working in the Government and Department of Agriculture sector, 8 per cent in private companies, 7 per cent in Universities and 5 percent belonged to civil societies and cooperatives. The representation of trainees attending the FTF ITT belonging to different sectors is given in table 3 and the adjacent graph.

Table 3: Sector wise representation of participants

Sector	Number of
	participants
Dept. of Agriculture	915 (80%)
Private Companies	98 (8%)
Universities	78 (7%)
Civil societies /	53 (5%)
cooperatives	

3.3 PROGRAM EFFECTIVENESS AND FEEDBACK

The cumulative results from all the 44 FTF ITT programs showed a significant improvement in the level of their knowledge due to the training. The average cumulative change in knowledge (%) was found to be 52.07%. The figure 7 gives an account of increase in the knowledge level of participants from 43 training programs. Through the trainings, the FTF-ITT program has achieved considerable rate of success resulting in satisfaction of the trainees (9.08 on a scale of 10)

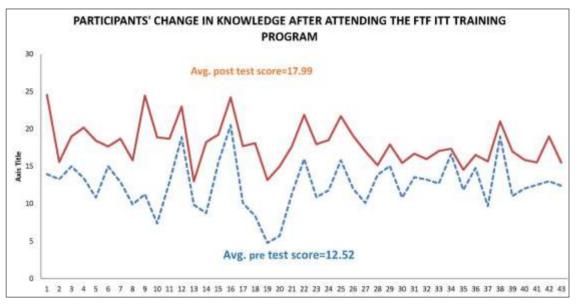


Fig.7: Increase in knowledge among participants after attending the FTF ITT training programs





3.4 BACK AT WORK PLAN PROGRESS BY TRAINED OFFICIALS

Back At Work Plan (BAWP) being an integral part of the FTF ITT program provided the participants the scope for implementing the learnt technologies at their place. The trainees were given continuous technical support in implementing these BAWPs by MANAGE and the training institute for 6 months after they complete their training in India. This process was carried out with utmost professional approach to ensure an over-arching success of the program. The executives trained through FTF ITT Programs have shown considerable interest to work on their BAWP and they are motivated to give their best to be part of such a global platform. As part of this exercise, almost all executives submitted their back at work plan and committed to work on the same to address a

problem through a technology intervention. Majority of the trained officials have made use of knowledge from the FTF ITT program in their day to day works. However, MANAGE has documented the success stories from more than 100 such officers and published periodically in the International e-Bulletin or Success story document. From these participants who reported progress of their BAWP, selected examples of successful execution of BAWP have been documented as success stories by MANAGE. This exercise was done with an idea of recognizing the efforts of these officials and also to motivate other trainees and extension functionaries to take up the dissemination of advanced technological interventions and proven innovations to deal similar problems in their countries. The first document of selected success stories of 40 trained executives under FTF ITT was published by MANAGE in 2018. The second document of another 64 success stories is also compiled by MANAGE for distribution among the trainees and other stakeholders along with this report (September, 2020).

Among the different success stories of the program, few have made significant progress due to the collective efforts of the trainees and the support by the respective Governments or development agencies. Some of these examples are listed below.

- Ministry of Agriculture, Irrigation and Livestock (MAIL), Kabul, Afghanistan started the Kisan Call Center on the lines of Kisan Call Centre (KCC) in India. Under FTF ITT, 71 call center operators from Afghanistan were trained under FTF ITT to operate the Kisan Call Centre (KCC) in Kabul, Afghanistan. All the trained staff are taking up different activities for supporting the information delivery to farming community in their country. Subsequently, 19 officials were trained to upgrade their skill in extension advisory delivery through ICT initiatives especially through KCC.
- The officials from Department of Agriculture, Government of Nepal requested for support on their KCC model to support farmers in Nepal. The officials working in Department of Agriculture, Government of Nepal and USAID funded KISAN-II project have been trained under FTF ITT programs to support the ICT initiative in agriculture in Nepal.
- Motivated by the efforts of women groups of 'kudumbashree' (meaning Kudumba-family; Shree-prosperity in Malayalam) in Kerala, the trainees in Uganda have taken up the task of promoting entrepreneurships and collective farming to improve their economic independence through thrift and saving and small enterprise promotion. In Kenya also, the kudumbashree model of collective approach in small entrepreneurship has been started. They have started these activities under a similar name "Imashree" in Nairobi county of Kenya.
- The promotion of mechanization in the African and Asian nations hold key to agriculture sector development in these countries. Mechanization holds key for labour productivity as well as agriculture productivity because of timely operations. The training programs under FTF ITT at ICAR-CIAE, Bhopal, ICAR-IISS, Bhopal, ICAR-CIFT, Cochin, ICAR-CTCRI, Thiruvanthapuram etc. promoted the adoption of small scale machinery in Africa especially in Kenya and Uganda. The trainees have made efforts to design and promote small prototypes of several machines seen in India to suit their local conditions.
- Promoting Good Agricultural Practices (GAPs) and focus on secondary agriculture activities in developing countries. The technology of soil and water conservation through GAPs and promoting the adoption of legume inter-cropping, mixed cropping, farm pond and conservation tillage practices are being promoted in Tanzania, Uganda, Botswana, Malawi, Kenya and Nepal.
- Capacity Building for food security and farmer producer organizations and farmer cooperatives. The spirit of collective farming, collective marketing and cooperative

strength was replicated in several countries by the officials trained at ICAR-NDRI, Karnal, CCS NIAM, Jaipur, *Kudumbashree*, Thiruvanthapuram and MANAGE, Hyderabad.

- The effective management of Fall Army Worm pest of cereals through integrated approuch, especially in maize through integrated approach has been promoted in the partner countries through FTF ITT program. The training programs especially from NIPHM, IIMR- Winter Nursery, and IIMR (Millets) in Hyderabad have spread the recent effective technology to manage the FAW and also promote the integrated pest and disease management for ecological safety have been promoted in most of the partner countries in Africa, Nepal and Bangladesh.
- FTF ITT promoted the entrepreneurship and commercialization of agriculture to make the agriculture profitable, remunerative and sustainable in developing countries. The start-up to scale up, agribusiness management, the value addition and post-harvest training programs on horticulture sector organized under FTF ITT have greatly influenced the trainees to work with a changed mind set and goal driven approach to address the unemployment, malnutrition and labor and women welfare in their regions.
- Based on the exposure to policy reforms and their impact in Indian agriculture, many trainees have influenced the reform process in agriculture marketing, processing, agribusiness and entrepreneurship, insurance and Direct Benefit Transfer (DBT) in their countries.
- MANAGE and USAID organized two international webinars as follow up programs to help them in implementing their back at work plans effectively during covid-19 pandemic. These webinars were designed after a cross-country survey on the effect of pandemic on agriculture in their countries. The webinars on the topic "Agricultural extension strategies for Asian and African countries during covid-19 pandemic" and the "Core competencies of extension professionals" were organised. The details of the webinars are provided in annexure-VI.

4. LESSONS LEARNT AND WAY FORWARD

MANAGE has emerged as a strong institution in fostering the strength of collaborative programs of international standards. MANAGE with its organizational skills, brought 30 premier institutes together in delivering the FTF ITT- a program benefiting two populous continents of the globe. In this collaborative effort, besides USAID India and MANAGE, 17 institutes of the Indian Council of Agricultural Research (ICAR), 2 CGIAR Institutes, 8 national institutes and 3 agriculture universities were associated. During the implementation of the FTF ITT program, several lessons were learnt and many other opportunities were created to address the global challenges of hunger, poverty, unemployment, malnourishment, migration, agribusiness activities through processing and value addition etc. The important lessons learnt and way forward have been presented in this chapter.

4.1 LESSONS LEARNT

During the organization of FTF ITT, MANAGE has created an environment for itself and other partner institutes to enhance their organizational skills in delivering the programs to the expectations of the international delegates and address the global developmental issues with Indian agricultural innovations and technological advances. The program gave an opportunity to understand the issues, challenges involved in international trainings and ways to address the problems. It was not possible to organize exclusive training programs on few of the themes which were in huge demand (Eg. Mushroom production technology and bee keeping and honey processing were the priority of 9 out of 17 countries). However, these themes were touched during the training programs on horticulture themes.

The program was a great opportunity for learners as well as trainers to understand the agriculture scenario from other countries as the program gave opportunity for trainees to share and discuss the agriculture scenario of their respective countries. The group activities helped the participants to learn lessons from the diverse points of view coming from different socio-cultural and economic background and professional experiences. The opportunities in multi-country, programs are enormous and the collaborations among multiple players is a way to succeed as they combine the strength of partners and alleviate the weaknesses if any.

The program focused exclusively on training the executives through training and capacity development programs in Indian training institutes. However, the partner countries did not have a required follow-up and monitoring feature in the program. Future international programs should be designed to involve institutions from third country to join hands with Indian training institutions to train the participants and monitor their progress.

From the feedback of the participants, it was evident that, the FTF ITT programs focusing more on field visits and practical sessions were received very well. Therefore, the programs with international delegates should have more number of field visits, exposure to demonstrations and hands on practical sessions with less number of lectures and theory sessions.

The participants were expected to identify an important learning from the program and pick up an idea or technology that potentially offer solution to a problem observed in their country. However, most of the participants in their feedback mentioned that, they need financial resources to adopt the new technology and deliver the results. The program in future can allocate financial resources for implementing their BAWPs.

In the current approach of the program, majority of the training programs were on single commodity basis. However, agriculture in a rural set-up is quite dynamic involving interdependent enterprises with many challenges spread across sectors. Therefore, the future trainings can design programs based on multi-institute partnership to address developmental challenges in the third world countries.

With passage of time, the cross cultural barriers among the coordinators and resource persons involved in training programs started getting obliterated and the trainees were also feeling at home with the increasing experience among the program team and training coordinators.

Since, most of the officials are engaged in their organizational activities, carrying out additional activities as per their committed BAWP demands their time and energy. The selected successful executives showing exemplary commitment in developmental works in their regions must be suitably recognized with appropriate financial and professional rewards.

4.2 WAY FORWARD

- Tackling the developmental challenges and issues affecting global food security in two populous continents through spread of potential and cost-effective technologies and successful innovations from Indian agriculture. MANAGE in collaboration with global level partners will explore the future opportunities to carry forward the good work done under FTF ITT.
- MANAGE will focus on strengthening the institutional capability in secondary agriculture activities as they are having enormous scope to offer solutions to major problems affecting agriculture. The International centre of excellence on agricultural extension and centre for climate change and adaptation in MANAGE will collectively find suitable platform to design training modules on secondary agriculture for developing countries.
- MANAGE will take up the consultancy and policy advocacy for developing nations with the countries that have Memorandum of Understanding (MoU) with Ministry of Agriculture and Farmers' Welfare, Government of India on the capacity building for policy formulation on farmer producer organizations.
- Several countries have expressed the need for immediate transfer of technology rather than
 investing their time and resources to develop a machine or a technology. Therefore,
 Ministry of Agriculture, Government of India may explore the options of disseminating
 technologies through MoU with other nations that are in demand in their countries such as
 soil testing kits, maize and cassava harvesters, small implements of cultural operations in
 the field, etc.
- MANAGE will continue to work on the strength of collaborations developed with Institutions of ICAR, National institutes and International institutes for multi-institute training and capacity development activities. The experts from India may be deputed to follow up with the trainees for technical guidance through short courses in their countries. Some important themes not covered under FTFITT may also be addressed through such arrangement.
- With the accumulated experiences of organizing 44 training programs under FTF ITT, MANAGE will start a special course on training and capacity development of trainers' training program on designing and delivering international training programs with developmental challenges and their monitoring and evaluation. Effort will be made to develop a team with core competencies on developmental studies and program planning, implementation and evaluation of global level programs.

ANNEXURE I

Survey Results of Demand Analysis and Training Needs Assessment in Partner Countries

SI.No	Country	Training needs identified
1.	<section-header><section-header><image/><image/><section-header><image/><image/><image/></section-header></section-header></section-header>	 Fraining needs identified Seed Production Farm Mechanization Post-Harvest Technology Rain-fed Farming through Watershed Management Integrated Farming Systems Green House Technology Bee Keeping: Production, Processing and Marketing Modern Dairy Technology and Management Management of Soil Testing Laboratories Agri-entrepreneurship Development Management of Agriculture Cooperatives Good Practices in Agricultural Marketing Mushroom Production and Marketing CIT Application in Agricultural Extension Agricultural Extension Management
2.	<section-header></section-header>	 Improved crop production methods in millets and pulses Plant protection management in field crops Post-harvest management Improved vegetable farming methods Improved fruit production techniques Commercial dairy farming Commercial poultry and piggery farming Reservoir fisheries management Climate proof technologies for resilient agriculture Rainwater harvesting and water conservation techniques Mixed farming and IFS models Bee keeping and pollination
3.	<section-header><section-header><section-header><section-header><section-header><image/><image/><image/><image/></section-header></section-header></section-header></section-header></section-header>	 Natural Resource Management Marketing Management Agricultural Finance Fisheries Management Animal Husbandry Joint Forest Management Climate Resilient Agriculture Agricultural Policy Agricultural Extension Crop Production Human Resource Management

SI.No

Country

Democratic Republic of Congo



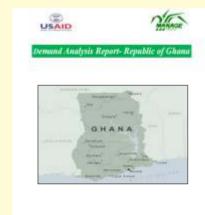




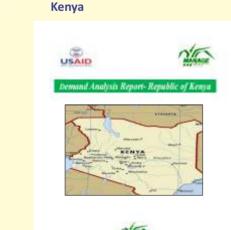


6.

Ghana









Training needs identified

- Crop Production
- Food Technology
- Seed Production and Processing
- Soil , Water Management And Protected Cultivation
- Farm Machinery
- Environment And Climate Change
- Entrepreneurship, Marketing And Finance
- Livestock Management and Dairying
- Fisheries
- Agricultural Extension Management
- Agricultural Research Management And Education
- Gender Mainstreaming
- Improved water management for drought and flood management
- Soil and water management practices
- Flood control measures upstream
- Investments in medium to large scale irrigation and drainage schemes
- Improved pest and disease management system
- Plant health management strategies for the major crops.
- Training on regulatory activities in the pesticide & fertilizer sectors
- Improving the crop pest diagnostics capacity
- Improving access of farmers to knowledge about improved pest and disease management through multiple channels (extension, ICT, input dealers, farmer field school, etc.).
- Public and Private Sector Research and Extension Partnership
- Creating FBOs and strengthening existing ones for Information & Knowledge Facilitation
- Post-Harvest Technology and Management
- Agricultural Extension Management
- Public Private Partnership in Agriculture Extension
 Management
- ICT application in Agricultural Extension
- Agri-entrepreneurship Development
- Agribusiness, Value Addition of Agricultural Products and Marketing
- International Agricultural Trade and Policy
- Food Processing Technologies and Management
- Advancement in Fisheries Technologies
- Farm Mechanization for small Farmers
- Modern Technology in Dairy and Poultry Management
- Bee Keeping and Production of Mushrooms
- Soil & Water Conservation and Management

Country Training needs identified SI.No 7. Liberia ICT based extension Gender Mainstreaming in Agriculture USAID Agripreneurship Demand Analysis Report-Market-led Agriculture **Republic** of Liberia Public-Private Partnership Supply Chain Management Modern Food Processing Serra Leone Formulation of a National Plant Protection Policy of Liberia Liberia Water Resource Development and Management Sustainable Agriculture Empowering livestock farmers in selected counties of Liberia through improved livestock practices Capacity building of Liberian farmers through Farmer OTF-ITT Field Schools (FFS) Farm business management for animal husbandry and horticulture sector in Liberia Promotion of urban and peri-urban production and marketing of vegetables 8. Lao PDR Modern Rice Production Technology USAID Integrated Crop Management Methods in Maize Integrated Farming- Crop-Fodder-Animal-Poultry-Fisheries Floriculture and Raising of High-Value Crops in Controlled Atmosphere Demand Analysis Reportle's Democratic Repub Value Addition of Horticultural Produces Soil and Water Conservation Management of Forests and Forest products **Commercial Dairy Farming** Food/Dairy Processing Technologies and Management Production Technology of Bio-Pesticides Bio-Control Agents- Opportunities and Production Methods Fish Products Development and Value Addition Techniques A OFTE-ITT 9. Malawi Involvement of Private sector, Farmers Organizations and NGOs in extension Nutrition and Income security through Horticulture USAID development Promoting gender equality and equity in agricultural Demand Analysis Reportextension service Republic of Malawi Use of Information and Communication Technologies (ICTs) in Extension Mushroom production-Opportunities and challenges Agribusiness opportunities for income security Agriculture Mechanization **Fish production** Livestock development for diversity Agriculture Marketing Climate Change and Environmental Issues RIETE-ITT Food and Nutrition Security Agriculture Extension Management

Crop Production technologies

SI.No

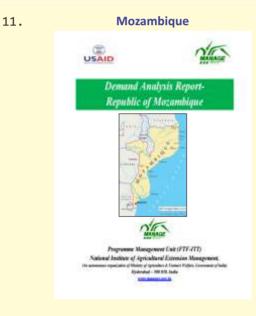
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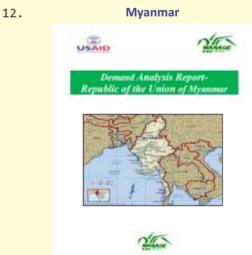
Country

Mongolia









Programme Assessment Unit (TTF-ITT) social featime of Assessment Unit (TTF-ITT) social featimet of Units of Sociales of Traver Information Heasingtonics and Programme and Traver Information Heasingtonics Assessment of Headerson - 200 Strates Information Strategy (1996)

Training needs identified

- Soil conservation and fertility management
- Irrigation management
- Livestock management
- Fodder development
- Pasture management
- Value chain management for meat and milk
- Improved cultivation technologies on wheat and potato
- Kitchen garden for promotion of vegetables
- Technologies for commercial fish production
- Custom hiring model for farm mechanization
- Crop insurance schemes
- Climate resilience in agriculture
- Forest Management
- Capacity building for sustainable agricultural development
- Advanced methods of production of quality seed and planting material
- Effective crop management, irrigated farming and compatible crop pattern for nutritional security
- Farm Mechanization
- ICT for using market intelligence and other farm services
- Farmer collectives, Producer companies, Self Help Groups, Joint liability groups
- Preparedness and Mitigation of Natural Disasters
- Agro-processing

- Seed production technology
- Diversified farming
- Market led extension
- Establishing Farmer Producer Organisations
- Farmer Participatory Extension
- Small farm mechanization
- Value added production technology
- Community telecentres
- Public private partnership for farm development
- Farm credit system for Supply chain
- Backyard poultry rearing
- Responsible fisheries and conservation of fish resources
- Drought management
- Paddy-fish integrated farming
- High value crops for small farmers

SI.No Country **Training needs identified** 13. Rwanda Crop products processing Safe application of modern biotechnology tools in agriculture and allied sectors USAID Animal and Fish products processing Farm Mechanization for Small Farmers d Analysis Report-Republic Bee Keeping: Production processing and marketing Post-Harvest Technology and Management Modern Dairy and Poultry Technology and Management RWANDS Food Processing Technologies and Management Agricultural value chains Marketing and market analysis BUBUND Agri-entrepreneurship development Extension methods including participatory extension methods and approaches Information and communication technology (ICT) GTT-117) management Gender and youth in agriculture 14. Sudan Improved Sorghum Production Technology Integrated Cereal Production Program USAID Agroforestry Management Fish Processing Technology **Demand Analysis Report Republic of Sudan** Modern Dairy Technology Management for livelihood Enhancement Post-harvest Technology Women Empowerment in Agriculture Extension strategies for Sustainable Livestock Management Extension strategies for sustainable Cereal production Organic Horticulture for Livelihood Enhancement Improved Rice Production Technology to ensure household food security Integrated nutrient and pest management in cereal iit (FTF-ITT) production 15. Tanzania Crop products processing Animal and Fish products processing USAID Farm Mechanization for Small Farmers Bee Keeping: Production processing and marketing Demand Analysis Report-Post-Harvest Technology and Management United Republic of Tanzania Modern Dairy and Poultry Technology and Management Food Processing Technologies and Management Climate resilient agriculture and allied sectors. Agricultural value chains Marketing and market analysis Agri-entrepreneurship development Extension methods including participatory extension methods and approaches Information and communication technology (ICT) management Public Private Partnership in Agricultural Extension Management

SI.No

16.

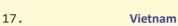
Country

Uganda











Training needs identified

- Gender Mainstreaming
- Agripreneurship
- Post-harvest processing and storage
- Fish and Aquaculture
- · ICT enabled agri-marketing
- Capacity building of farmers through Farmer Field Schools (FFS)
- Participatory extension approaches
- Extension management approaches for promotion of sericulture industry
- Farm Mechanization
- Agri-business Management
- Postharvest and food processing technologies of horticultural crops
- Commercial dairy farming and modern dairy technologies
- Public-Private Partnerships (PPP)
- Improved production technologies on major crops (a)
 Rice (b) Coffee (c) Pepper, and (d) cashew nuts
- Improved production technologies on major horticulture crops (a) banana; (b) pineapple; (c) citrus; (d) mango; (e) dragon fruit; (f) longan; (g) lychee; and (h) Rambutan.
- Soil Health Management
- Agribusiness Management
- Forest Resource Management
- Agriculture Trade
- Farm Mechanization
- Modernized value storage
- Food Processing Technology
- Agricultural Marketing System
- Post-Harvest Management
- Public Private Partnership
- ICT in Agricultural Extension
- Gender Sensitization
- Youth in Agriculture

ANNEXURE II

List of Training Programs and	Number of Participants
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S.No	Training topic	Dates	Training Institute and Venue	No. of Participants	
	Year 2016				
1.	e-Extension: ICT Applications in Agricultural Extension Management	10 -19 October, 2016	Ministry of Agriculture, Irrigation and Livestock (MAIL), Kabul, Afghanistan	71	
2.	Public Private Partnership in Agricultural Extension Management	17-31 October, 2016	National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India	29	
3.	Emerging Trends in Marketing of Fruits and Vegetables	16-30 November, 2016	National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan, India	27	
		Year	2017		
4.	Agripreneurship Development among Farm Women	1-15 March, 2017	Kudumbashree, Thiruvananthapuram, Kerala, India	25	
5.	Production and Post-harvest Technology for Tuber Crops	4-18 April, 2017	ICAR-Central Tuber Crops Research Institute (CTCRI), Thiruvananthapuram, Kerala, India	23	
6.	Farm Mechanization for Small Farmers	11-25 April, 2017	ICAR-Central Institute of Agricultural Engineering (CIAE), Bhopal, Madhya Pradesh, India	23	
7.	Modern Dairy Technology and Management	15-29 April, 2017	ICAR- National Dairy Research Institute (NDRI), Karnal, Haryana	24	
8.	International Partnership Convention" for Point of Contacts (POCs) of Africa and Asian Countries	28 June 1 July, 2017	National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India	22	
9.	Modern Storage Technologies in Agriculture	1-15 September, 2017	ICAR - Central Institute of Post-Harvest Engineering & Technology (CIPHET), Ludhiana, Punjab, India	20	
	Plant Health Management Technologies and Approaches India	4-18 September, 2017	National Institute of Plant Health Management (NIPHM), Hyderabad, Telangana, India	24	
11.	Recent Trends in Harvest and Post- harvest Technologies in Fisheries	12-26 September, 2017	ICAR-Central Institute of Fisheries Technology (CIFT), Cochin, Kerala, India	20	
	Post-harvest Technology in Horticulture Crops	6-20 November, 2017	ICAR-Indian Institute of Horticultural Research (IIHR), Bengaluru, Karnataka, India	26	
13.	Entrepreneurship Development among Rural Women	13 -22 November, 2017	St. Augustine Training Institute, Nsambya, Kampala, Uganda	56	

S.No	Training topic	Dates	Training Institute and Venue	No. of Participants
	Year 2018			
14.	Linking Farmers to Market: Opportunities and Challenges	09-23 January, 2018	CCS National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan, India	20
15.	Strategies for Enhancement of Farmers Income in Dryland Agriculture	16-30 January, 2018	ICAR - Central Research Institute of Dryland Agriculture (CRIDA), Hyderabad, Telangana, India	22
16.	Value Addition and Market Linkage Mechanisms in Millets	23 Jan- 06 Feb, 2018	ICAR - Indian Institute of Millets Research (IIMR), Hyderabad, Telangana, India	20
17.	Management of Technology and Extension for Soil Testing based Advisory Services to Farmers	30 Jan- 13 Feb, 2018	ICAR - Indian Institute of Soil Sciences (IISS), Bhopal, Madhya Pradesh, India	21
18.	Production, Processing and Marketing of Organic Vegetables	06-20 February, 2018	ICAR - Indian Institute of Vegetable Research (IIVR), Varanasi, Uttar Pradesh, India	21
19.	Agricultural Credit for Sustainable Livelihoods	06-20 February, 2018	Bankers' Institute of Rural Development (BIRD), Lucknow, Uttar Pradesh, India	20
20.	Income Generating Enterprises in Plantation Sector	13-27 February, 2018	ICAR-Central Plantation Crops Research Institute (CPCRI), Kasaragod, Kerala, India	21
21.	Critical Production and Processing Technologies in Rice	20 Feb- 06 March 2018	ICAR-Indian Institute of Rice Research (IIRR), Hyderabad, Telangana, India	20
22.	Plant Bio-security and Food Safety	3-17 March, 2018	National Institute of Plant Health Management (NIPHM), Hyderabad, Telangana, India	20
23.	Management of Dairy cooperatives	10-24 April, 2018	ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana, India	22
24.	Entrepreneurship Development in Food Processing	17 April- 01 May, 2018	Indian Institute of Food Processing Technology (IIFPT), Thanjavur, Tamil Nadu, India	20
25.	Modern Poultry Management	01-15 May, 2018	ICAR - Directorate of Poultry Research (DPR), Hyderabad, Telangana, India	29
26.	Entrepreneurship Development among Rural Women	09-23 May, 2018	Kudumbashree Mission, Thiruvananthapuram, Kerala, India	23
27.	Value Addition in Spices	15-29 May, 2018	ICAR-Indian Institute of Spices Research (IISR), Calicut, Kerala, India	22
28.	Modern Storage Technologies in Agriculture	11-25 June, 2018	ICAR - Central Institute of Post-Harvest Engineering & Technology (CIPHET), Ludhiana, Punjab, India	21
29.	Value Chain and Innovations in Agriculture Marketing	01-15 October, 2018	CCS National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan, India	30

S.No	Training topic	Dates	Training Institute and Venue	No. of Participants
30.	Entrepreneurship Development among Rural Women	06-20 November, 2018	Kudumbashree Mission, Thiruvananthapuram, Kerala, India	26
31.	Plant Health Management, Bio-security and Quarantine	27 Nov- 11 Dec, 2018	National Institute of Plant Health Management (NIPHM), Hyderabad, Telangana, India	20
		Year 2019		
32.	Modern Dairy Technology and Management and Cooperatives	05-19 February, 2019	ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana, India	29
33.	Seed Production, Processing and Commercialization	12-26 Februaty, 2019	National Seed Research & Training Institute (NSRTC), Varanasi, Uttar Pradesh, India	31
34.	ICT Applications in Agricultural Extension Management (Farmers Call Centre)	11-25 March, 2019	National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India	34
35.	Agribusiness and Management	18 June- 2 July, 2019	National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India	26
36.	Agribusiness: Start-up to Scale-up	10-24 July, 2019	National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India	26
37.	Climate Smart Agriculture	20 Aug- 3 Sept, 2019	ICAR-Central Research Institute for Dryland Agriculture (CRIDA), Water and Land Management Training and Research Institute (WALAMTARI) and National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India	27
38.	Integrated Technology for Production, Processing and Value addition in Tuber Crops	16-30 September, 2019	ICAR-Central Tuber Crops Research Institute (CTCRI), Thiruvananthapuram, Kerala, India	29
39.	Agroforestry: Policy, Practice and Impact	10-24 October, 2019	World Agroforestry Centre (ICRAF), New Delhi, India	26
40.	Integrated Management Strategies for Major Crop Pests & Diseases in Developing Countries (With special focus on Fall Army Worm)	19 Nov- 3 Dec, 2019	National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India	26
41.	Agricultural Policy Formulation, Review and Analysis	21 Jan- 4 Feb, 2020	National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India	26
42.	Good Agricultural Practices for Sustainable Agriculture in Developing Countries	11-25 February, 2020	International Crops Research Institute for Semi Arid Tropics (ICRISAT), Hyderabad, Telangana, India	25
43.	Food Processing and Value Addition Technologies for Agripreneurship	4-18 March, 2020	CSIR-Central Food Technological Research Institute (CFTRI), Mysuru, Karnataka, India	23
44.	Production to Post Harvest Management in Horticultural Crops	9-23 March, 2020	University of Agricultural Sciences, Bangalore & University of Horticultural Sciences, Bagalkot, Karanataka, India	23

List of Points of Contact (PoCs) in all Partner Countries from Africa and Asia.

S.No	Country	Points of Contact (PoCs)
1.	Afghanistan	Dr. Najib Malik Senior Policy and Strategy Advisor, General Directorate of Extension, Ministry of Agriculture, Irrigation and Livestock (MAIL), Kabul, Islamic Republic of Afghanistan Mob: 0093 700172696, Alternate Mobile: 0093-799 26 96 83 Email: najib.malik@mail.gov.af, najibmalik 1@hotmail.com Mr. MirwaisKhogiani Senior Extension Adviser, General Directorate of Extension, Ministry of Agriculture, Irrigation and Livestock (MAIL), Kabul, Islamic Republic of Afghanistan Mob: 0093-799269683 Email: mirwais.khogiani@mail.gov.af, mir.khogiani@gmail.com,
2.	Bangladesh	Mr. M. Shahidur Rahman Bhuiyan, Ph.D Sr. Food Security & Ag. Policy Advisor Economic Growth Office USAID / Bangladesh Tel: +880-2-5566 2518, Fax: +880-2-5566 2926 Email: sbhuiyan@usaid.gov
3.	Botswana	Dr. Nelson Motlapele Tselaesele Lecture Botswana University of Agriculture and Natural Resources Private Bag -0027, Gaborone, Botswana Tel: +267 3650 100, Mob: +267 71498036, Email: ntselaesele@bca.bw
4.	Cambodia	Ms. Bunry Reakshmey Vice Chief Department of Personnel and Human Resource Development Ministry of Agriculture, Forestry and Fisheries 200, Preah Norodom Blvd, SangkatTanleBasak, Khan Chamkarmon, Phnom Penh, Cambodia Tel: +023 726 128, +855 11996333, Fax: +855 23217320 Email: <u>reaksmey_bunry@yahoo.com</u> Mr. Tith Sara Chief of HR Development Department of Personnel & Human Resource Development, Ministry of Agriculture, Forestry and Fisheries, #200 Preah Norodom Blvd, SangkatTonleBasak, Khan Chamkamon, Phnom Penh, Cambodia Tel: +85512658904, +855 8146581 Email: <u>hrdsaratith@gmail.com</u>

S.No	Country	Points of Contact (PoCs)
		Dr. Prum Somany Director Department of International Cooperation (DIC) Assistant to Minister of Agriculture, Forestry and Fisheries Ministry of Agriculture, Forestry and Fisheries, #200 Preah Norodom Blvd, SangkatTonleBasak, Khan Chamkamon, Phnom Penh, Cambodia Telephone No: +855 78 767 366 Email: prumsomany35@gmail.com
5.	DR Congo	Mrs. Ifemo Basele Marie-Caroline Deputy Director in Ministers Office Ministry of Agriculture Democratic Republic of Congo Tel: + 243 (0) 822 158000 Email: <u>basele1@live.com</u> ,
6.	Ghana	Mr. Jeremy Agyemang Assistant Director Agribusiness Unit, P.O.Box M37, Ministries, Ministry of Food Agriculture Accra, Ghana Ph: +233 303965094, + 233 267582868 Email: <u>kwespo@hotmail.com</u>
7.	Kenya	 Mr. Ndeka William Omunandi Principal Agricultural Officer, Ministry of Agriculture, Livestock, Fisheries and Irrigation, 30028 00100, Nairobi, Kenya Tel: +254 722212235 Email: ndekawilliam@yahoo.com Mrs. Ruth Mwangi Senior Assistant Director of Agriculture, State Department of Agriculture, Ministry of Agriculture, Livestock and Fisheries, Nairobi, Kenya. Tel: +254 2718870, Mob: +254 722 337107, Email: mwangir2012@gmail.com
8.	Liberia	Ms. Deborah Junius Williams Training Coordinator Ministry of Agriculture, P.O.Box.10-90100, 1000 Monrovia, Liberia Tel: +231886553197, +231770469847 Email: dbrawilliams@gmail.com, Mr. Raphael Z. Collins Assistant Director/Training Ministry of Agriculture Monrovia, Republic of Liberia Tel: +231 886 525 874, +231777195344 Email: <u>zephanielc@gmail.com</u> ,

S.No	Country	Points of Contact (PoCs)
9.	Lao PDR	Ministry of Agriculture , Vientiane, Lao PDR
10.	Malawi	Mr. Limbani Noel Emmanuel Assistant Chief Agricultural Extension Officer, Department of Agriculture Extension Services, Ministry of Agriculture, P.O.Box.30145, Lilongwe-3, Malawi Phone: +265 995615602, Mobile No: +265 0888524598 Email: noellalimbani@gmail.com, nevlimbani@yahoo.com
11.	Mangolia	 Ms. Batkhishig Zaya Foreign Relations Officer International Cooperation Division Ministry of Food, Agriculture and Light Industry Government Building #9 Enkhtaivan Avenue 16/A 210349 Ulaanbaatar, Mongolia Tel: 976-51-261908 office Mob: 976-99880846 Email: zayasant@yahoo.com, Website: www.mofa.gov.mn Mr. Bilguun Enkhtungalag Officer in International Cooperation Division Ministry of Food, Agriculture and Light Industry Government Building #9, Enkhtaivan Avenue, 16/A, 210349, Ulaanbaatar, Mongolia Tel: 976-51-261908 (Off), Mob: 976-1198114801, Fax: 976-51-262853 Email: bilguun@mofa.gov.mn, bilguunmop@yahoo.com,
12.	Mozambique	 Mrs. Guilhermina Matiquite National Director of Agricultural Extension Ministry of Agriculture and Food Security Maputo, Mozambique Email: gmatiquite@gmail.com, guicamilo@yahoo.com Ms. Muhacha Emerciana Antonio Tel: +258 0842018494 Email: emuhacha@gmail.com, Mr. Manuel Ali da Silva Head of Training Sector, National Directorate of Agricultural Extension, Ministry of Agriculture and Food security, Maputo, Mozambique Tel: +25821415025, Fax: +258 21415023 Email: dasilvaali@gmail.com Mrs. Sandra Silva National Director of Rural Extension, Ministry of Agriculture and Food security Maputo, Mozambique Tel: +25821415025, Fax: +258 21415023 Email: dasilvaali@gmail.com Mrs. Sandra Silva National Director of Rural Extension, Ministry of Agriculture and Food security Maputo, Mozambique Email: dasilvaali@gmail.com

S.No	Country	Points of Contact (PoCs)
13.	Myanmar	Dr. Tun Lwin Assistant Permanent Secretary, Ministry of Agriculture, Livestock and Irrigation Office No. 36, Nay Pyi Taw, Myanmar Tel: +95 673 408053, Mob: +95 9 450069010 Email: tunlwin@yahoo.co.jp, tunlwindda@gmail.com Anne-Claire Degail Senior Technical Manager Winrock International, Value Chains for Rural Development 23(A) Min Ye KyawSwa, 14 Ward, Yankin Township, Yangon, Myanmar www.winrock.org Tel: 01 2332 088, mobile 09 250 536549 email anneclaire.degail@winrock.org
14.	Nepal	Ms.Shreya Shrestha Feed the Future Nepal Knowledge-based Integrated Sustainable Agriculture in Nepal (KISAN) II Project Sanepa, Lalitpur, Nepal. Tel: <u>+977 (0) 1 5541961, 5544962, 5543861, 5543961</u> Mob: +977 9844378912, +977 98432 37782, Email: <u>Shreya.Shrestha@winrock.org</u> , <u>shreya.sthaa9@gmail.com</u>
15.	Rwanda	Dr. Octave Semwag Director General Incharge Strategic Planning and Programme Coordination Ministry of Agriculture and Animal Resources Kigali, Rwanda Telephone: +250788810123 Email: <u>osemwaga@yahoo.com</u> ,
16.	Sri Lanka	Ms. Priyanga Senior Assistant Secretary (HRD), Official in charge of Foreign Training Ministry of Agriculture, Colombo, Sri Lanka Mob: 0094-715353327 Email: foreigntrainingmoa@gmail.com, Mr. B. Wijayaratne, Secretary, Ministry of Agriculture, 288, Sri JayawardenapuraMawatha, Rajagiriya, Sri Lanka Email: sec.agri@yaaho.com, Kamani Jayasinghe Foreign Training Unit Ministry of Agriculture Sri Lanka Email: foreigntrainingmoa@gmail.com

S.No	Country	Points of Contact (PoCs)
17.	Sudan	Mr. Almojtaba HassaboFocal Point of the ProgramTraining UnitMinistry of Agriculture & Natural ResourcesKhartoum, SudanMob: +249910390921Email : shorbji12@gmail.com, agrictrainad@gmail.com,Ms. Asmaa AbdouMinistry of Agriculture, SudanPhone No: +249 912255397Email: asmaaabdu2007@yahoo.com, fatimarahma111@hotmail.com,
18.	Tanzania	Dr. Wilhelm L. MAFURU,Director,Training, Extension Services and Research,Ministry of Agriculture,P.O. Box 2182Dodoma,TanzaniaMob: +255652768873Email ID: wilhelm.mafuru@gmail.com,ZanzibarMr. Shehaldrisa HamdanDirector for Planning, Policy and ResearchTel: +255 777 475136Email: shehahamdan64@yahoo.co.uk,
19.	Uganda	Dr. Muteekanga George W.T Assistant Commissioner, Department of Schools and Institutions, Ministry of Education and Sports, Legacy Towers, Nakasero, Kyadondo Road, 3 rd Floor, Block A & B, Kampala, Uganda Telephone No: +256 772448240, +256704 448240 Email: <u>gmuteekanga@gmail.com</u>
20.	Vietnam	Mrs. Nguyen Phuong Thanh, MBA Official Bilateral Cooperation Division International Cooperation Department Ministry of Agriculture and Rural Development of S.R. Viet Nam Add: No. 2, Ngoc Ha Str., Ba Dinh, Ha Noi, Viet Nam Tel: +84-4-38437450, email: thanhnp.htqt@mard.gov.vn Mr. Le Thanh Van Officer Bilateral Cooperation Division, International Cooperation Department Ministry of Agriculture and Rural Development No. 2 NGOC Ha Street, Badinh District, Hanoi, Vietnam Tel.: +844 38436812, Fax.: (+844) 37330 752 Email: vanlv.htqt@mard.gov.vn

ANNEXURE IV

Brief Profile of Partner Institutes Involved in Organising the FTF ITT program

1. USAID- The United States Agency for International Development



The USAID is an independent agency of the United States federal government that is primarily responsible for administering civilian foreign aid and development assistance. USAID is the world's premier international development agency and a catalytic actor driving development results. USAID is advancing global food security by helping families and individuals meet their need for a reliable source of quality food and sufficient resources to produce or purchase it. This, in turn supports global stability and prosperity. By addressing the root causes of hunger, USAID is increasing economic opportunity and growth among vulnerable communities. Feed the Future is America's initiative to combat global hunger. Led by USAID, the initiative brings several partners together to address the root causes of hunger and poverty by boosting agriculture-led growth, resilience and nutrition in countries with great need and opportunity for improvement.Created in the wake of the devastating 2007 and 2008 food price spikes, Feed the Future has since helped millions of people in vulnerable communities around the world reduce hunger and malnutrition, increase their incomes through agriculture, and create economic opportunities both on and off the farm. Feed The Future India Triangular Training is funded by the USAID India in collaboration with the contribution by MANAGE in kind.

Feed the Future helps partner countries accomplish the following objectives:

- Improve agricultural production and markets and create new opportunities.
- Strengthen the resilience of communities to shocks.
- Reduce hunger and improve nutrition, especially among mothers and children.
- Increase the exchange of ideas, technologies and products that benefit citizens at home and communities abroad.

Contact details:

Mission Director, USAID India, American Embassy Shantipath, Chanakyapuri New Delhi, Delhi India 110 021 Phone +91 (11) 24198000 / Fax +91 (11) 24198612

2. National Institute of Agricultural Extension Management (MANAGE)



MANAGE was established in 1987, as the National Centre for Management of Agricultural Extension at Hyderabad, by the Ministry of Agriculture & Farmers Welfare, Government of India as an autonomous Institute. The acronym 'MANAGE' is derived from its name. In recognition of its importance and expansion of activities all over the country, its status was elevated to that of a National Institute in 1992 and re-christened to its present name i.e., National Institute of Agricultural Extension Management. MANAGE is headed by the Director General who is appointed by the Ministry of Agriculture and Farmers' welfare.MANAGE is the Indian response to challenges of agricultural extension in a rapidly growing and diverse agriculture sector. MANAGE offers its services in the following five streams viz., Management Training, Consultancy, Management Education, Research and Information Services.

Feed The Future India Triangular Training (FTF ITT) was part of the new agriculture partnership implemented by the USAID India representing US Government and National Institute of Agricultural Extension Management (MANAGE), Hyderabad representing Ministry of Agriculture and Farmers Welfare, Government of India. FTF ITT was having a target of organizing 44 training and capacity development programmes for the field level officers of Africa and Asia during 2016-20. The partner countries in the programme included: Afghanistan, Bangladesh, Botswana, Cambodia, Democratic Republic of Congo, Ghana, Kenya, Lao PDR, Liberia, Malawi, Mongolia, Mozambique, Myanmar, Nepal, Rwanda, Sri Lanka, Sudan, Tanzania, Uganda and Vietnam to train 1144 participants.MANAGE created a special cell Program Management Unit (PMU) for coordinating, implementing and monitoring the FTF ITT program. The PMU was headed by the Program Director who is assisted by a program team consisting of Program Manager, Program Executive and a Junior Program Executive. The other necessary support to the PMU was extended by the administration and finance divisions of MANAGE.





Contact details: The Director General, National Institute of Agricultural Extension Management, Rajendranagar, Hyderabad - 500 030, Telangana, India Ph: 040-24594533 Email: pmu.manage@manage.gov.in

3. CCS National Institute of Agricultural Marketing (NIAM)



The Ch. Charan Singh National Institute of Agricultural Marketing (NIAM) is a premier National level Institute set up by the Government of India in August 1988 to offer specialized Training, Research, Consultancy and Education in Agricultural Marketing. NIAM is an autonomous body under the aegis of the Ministry of Agriculture, Government of India. It was set up as a Registered Society to cater to the needs of Agricultural Marketing personnel in India as well as from South East Asian countries. The Union Minister for Agriculture is the President of the General body of NIAM and Secretary, Department of Agriculture and Cooperation is the Chairman of the Executive Committee.

NIAM is playing a vital role in expediting the reform process and availability of quality managers through its mandate. NIAM is engaged in organizing training programmes in the field of agricultural marketing and allied areas for senior and middle level officers from various line departments of State Governments, Cooperatives, Marketing Boards and Agribusiness Entrepreneurs. The institute is also playing an active role in orienting agricultural extension personnel towards agricultural marketing.



Contact details

The Director General, CCS National Institute of Agricultural Marketing Bambala, Kota Road, Jaipur-302033 (Rajasthan), India Tel: 0141-2770027 (Fax): 141-2771938, 2770027 Email:dgccsniam@gmail.com

4. KUDUMBASHREE



Kudumbashree is the poverty eradication and women empowerment programme implemented by the State Poverty Eradication Mission (SPEM) of the Government of Kerala. The name Kudumbashree in Malayalam language means '*prosperity of the family*'. The name represents 'Kudumbashree Mission' or SPEM as well as the Kudumbashree Community Network. Kudumbashree was set up in 1997 following the recommendations of a three member Task Force appointed by the State government. Its formation was in the context of the devolution of powers to the Panchayat Raj Institutions (PRIs) in Kerala, and the Peoples' Plan Campaign, which attempted to draw up the Ninth Plan of the local governments from below through the PRIs.

Kudumbashree has a three-tier structure for its women community network, with Neighbourhood Groups (NHGs) at the lowest level, Area Development Societies (ADS) at the middle level, and Community Development Societies (CDS) at the local government level. The community structure that Kudumbashree accepted is the one that evolved from the experiments in Alappuzha Municipality and Malappuram in early 1990s. In 2011, the Ministry of Rural Development (MoRD), Government of India recognisedKudumbashree as the State Rural Livelihoods Mission (SRLM) under the National Rural Livelihoods Mission (NRLM).



Contact Details Mission Director, Kudumbashree State Mission, 2nd Floor, TRIDA Rehabilitation Building, Medical College P.O.,Thiruvananthapuram - 695011,Kerala, India Phone: 91-471-2554714, 2554715, 2554716 E-Mail- info@kudumbashree.org, kudumbashree1@gmail.com

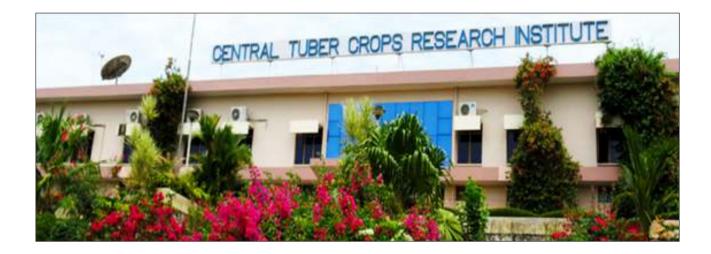
5. ICAR-Central Tuber Crops Research Institute (CTCRI)



The ICAR-Central Tuber Crops Research Institute (CTCRI) a constituent Institute under the Indian Council of Agricultural Research (ICAR) is the only research organization in the World dedicated solely to the research on tropical tuber crops. The Institute was established in 1963 with its Headquarters at Thiruvananthapuram (Trivandrum), Kerala has grown over the years into a premier research organization of international repute.

The Institute has a broad mandate of generating research information on tropical tuber crops that help to enhance productivity and improve the utilization potential.

- To undertake basic, strategic and applied research for generating technologies to enhance productivity and utilization potential of tuber crops (other than potato).
- To act as a national repository of scientific information on tuber crops
- To coordinate network research with State Agricultural Universities and ICAR Institutes for generating location specific technologies
- To act as a centre for human resource development for various clientele systems involved in research and development of tuber crops.
- To undertake transfer of tuber crops technology through consultancy, outreach programmes and linkage with developmental agencies.



Contact Details The Director, ICAR-Central Tuber Crops Research Institute, Sreekariyam.P.O, Thiruvananthapuram, Kerala, India Telephone: (+91)(471) 2598551 FAX: (+91)(471) 2590063 E-mail:ctcritvm@yahoo.com , <u>director.ctcri@icar.gov.in</u>.

6. ICAR - Central Institute of Agricultural Engineering (CIAE)



The Central Institute of Agricultural Engineering (CIAE), Bhopal was established on 15th February 1976 with an aim to develop and popularize technologies for mechanization of Indian agriculture. ICAR-CIAE is nationally and internationally premier Agricultural Engineering Research and Development Institute in India devoted to develop and promote appropriate technologies for land development, farm mechanization, irrigation, processing of agroproduce, utilizing renewable, animate and mechanical power sources.

Central Institute of Agricultural Engineering, Bhopal during the past three decades has come to be recognized as the pioneer research institute in the field of agricultural engineering. The institute has developed technologies for farm mechanization, post-harvest management and value addition, efficient energy management in agriculture and harnessing the potential of natural resources. Improvement in profitability of agricultural enterprise along with reduced human and animal drudgery and gender specificity have been shown to be the much-needed incentive for farmers and farm workers of tomorrow.

Mandate

- Research on agricultural mechanization, post-harvest food processing, and energy management in agriculture
- Human resource development and capacity building through outreach and training programs; commercialization and utilization of agricultural engineering technologies.



Contact Details The Director, ICAR-Central Institute of Agricultural Engineering, NabiBagh, Berasia Road, Bhopal - 462038 (Madhya Pradesh) India Cell: +91 7552737191 E-mail: <u>director.ciae@icar.gov.in</u>

7. ICAR - National Dairy Research Institute (NDRI)



The National Dairy Research Institute as country's premier Dairy Research institution has developed considerable expertise over the last five decades in different areas of Dairy Production, Processing, Management and Human Resource Development. Information generated at the Institute and the services offered have contributed to the growth of Dairy Industry as a whole and well-being of millions of milk producers and consumers of milk and milk products. The National Dairy Research Institute, Karnal was originally started as Imperial Institute of Animal Husbandry and Dairying in 1923 at Bangalore. It was expanded and renamed as Imperial Dairy Institute in 1936 and was known as National Dairy Research Institute after independence in 1947. Subsequently, in 1955, NDRI Headquarter was shifted to Karnal. The National Dairy Research Institute undertakes research, teaching and extension activities towards dairy development in the country. Being the National Institute, it conducts basic and applied research with the objective to enhance animal productivity and also to develop cost effective technologies for the benefit of the teeming millions. Further, the Institute provides high quality manpower to meet the human resource requirements for the overall dairy development in the country. The Institute also undertakes extension programmes for transferring the know-how from the laboratory to the farmers' fields.

Mandate

- Conducting research in the areas of Dairy Production, Processing and Marketing.
- Demand driven 'Human Resource Development' to meet the requirements of Dairy Industry & R&D Institutions.
- Dissemination of innovative dairy production and processing technologies for socioeconomic transformations



Contact Details The Director, ICAR-National Dairy Research Institute Karnal-132001, Haryana, India Phone: +91-184-2259084 (O), +91-184-2252800 / 2259002 Email: <u>dir.ndri@gmail.com</u>

8. ICAR-Central Institute of Post-Harvest Engineering and Technology (CIPHET)



The ICAR-Central Institute of Post-Harvest Engineering and Technology (CIPHET) was established on 3rdOctober 1989 at the Punjab Agriculture University Campus, Ludhiana, Punjab, India as a nodal institute to undertake lead researches in the area of the Post-Harvest Engineering and Technology appropriate to agricultural production catchment and agro-industries.

Mandate

- Research on post-harvest processing, preservation, storage and value addition of agricultural commodities.
- Human resource and entrepreneurship development in post-harvest engineering and technology.

Mission

 Creating prosperity through minimization of post harvest losses from 15% to 5% and increase in value addition from present level of 10% to 30% to produce and by-products from crops, horticulture, livestock and fisheries sectors.

Vision

Higher profitability of agricultural production systems ensuring better income to farmers and increased employment opportunities in rural sector through efficient post harvest engineering and technological interventions for loss reduction and value addition to agricultural produce and byproducts resulting in high quality and safe food and feed at competitive prices for domestic and export markets.



Contact Details The Director, ICAR-Central Institute of Post-Harvest Engineering and Technology P.O. PAU Ludhiana - 141004 (Punjab), India Phone: 0161-2313101/ Fax: 0161-2308670 Email: <u>director.ciphet@icar.gov.in</u>



9. National Institute of Plant Health Management (NIPHM)

NIPHM is a National level institute under the administrative control of the Department of Agriculture & Cooperation, Ministry of Agriculture & Farmer's welfare, Government of India established in the year 1966 as Central Plant Protection Institute (CPPTI) at Hyderabad. The Institute was rechristened subsequently as National Plant Protection Training Institute (NPPTI).It became an autonomous body in the year 2008 with the expanded scope of promoting environmentally sustainable Plant Health Management practices in diverse and changing agroclimatic conditions, Plant Biosecurity Management and Pesticide Management through capacity building programmes, besides providing inputs for policy formulation on Plant Health Management, Plant Biosecurity, Invasive Alien Species, market access, Pesticide Management etc. at state and national level. The NIPHM provides its services to organizations in both the public and the private sector.

Mission

- Assist the States and the Government of India in increasing the efficiency of the existing pest and disease surveillance and control system,
- Certification and accreditation systems through a core role as a training and adaptive research centre in the field of extension and policy developments related to plant protection.
- To develop an international role as a leading centre for plant protection and quarantine capacity building within the region for building capacity in neighboring countries.



Contact Details The Director General, National Institute of Plant Health Management, (An Organization of Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture, Govt. of India) Rajendranagar, Hyderabad - 500 030 (Telangana) India Ph : 040-24013346/Fax : 040 24015346 Email: infoniphm@nic.in / niphm@nic.in 10. ICAR-Central Institute of Fisheries Technology (CIFT)



The Central Institute of Fisheries Technology (CIFT) set up in 1957 is the only national centre in the country where research in all disciplines relating to fishing and fish processing is undertaken. The institute started functioning at Cochin in 1957. Research centres function at Veraval (Gujarat), Visakhapatnam (AP) and Mumbai (Maharashtra).

Mandate

- Basic and strategic research in fishing and processing.
- Design and develop energy efficient fishing systems for responsible fishing and sustainable management
- Development of implements and machinery for fishing and fish processing.
- Human resource Development through training, education and extension.



Contact Details

The Director, ICAR-Central Institute of Fisheries Technology CIFT Junction, Willingdon Island Matsyapuri P.O., Cochin-682 029, Kerala, India Ph: 0484-2412300; Fax: 091-484-2668212 E-mail:aris.cift@gmail.com; cift@ciftmail.org Website:<u>www.cift.res.in</u>

11. ICAR-Indian Institute of Horticulture Research (IIHR)



The Indian Institute of Horticultural Research (IIHR) is an autonomous organization acting as a nodal agency for basic, strategic, anticipatory and applied research on various aspects of horticulture such as fruits, vegetable, ornamental, medicinal and aromatic plants and mushrooms in India.[1] The institute has its headquarters in Bengaluru, Karnataka, India and is a subsidiary of Indian Council of Agricultural Research (ICAR), New Delhi, under the Ministry of Agriculture, India. The IIHR, the first horticultural research institute in the country under the Indian Council of Agricultural Research (ICAR), was established on 5 September 1967 at New Delhi. Later, the base of IIHR was moved to Hesaraghatta located 25 km away from Bangalore in Karnataka, on 1 February 1968.

Mandate

- To undertake basic and applied research for developing strategies to enhance productivity and utilization of tropical and sub-tropical horticulture crops viz., fruits, vegetables, ornamentals, medicinal and aromatic plants and mushrooms.
- * To serve as a repository of scientific information relevant to horticulture.
- To act as a centre for training for up gradation of scientific manpower in modern technologies for horticulture production and
- To collaborate with national and international agencies in achieving the above objectives.



Contact Details The Director, ICAR-Indian Institute of Horticulture Research, Hessaraghatta Lake Post, Bengaluru-560 089, Karnataka, India Tel: 080-28466471/080-28466353 E-mail: <u>director.iihr@icar.gov.in</u>

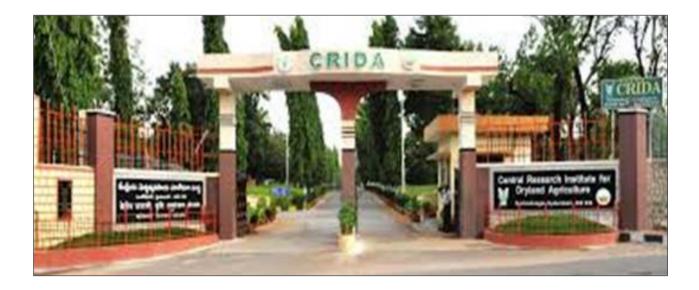
12. ICAR-Central Research Institute for Dryland Agriculture (CRIDA)



Central Research Institute for Dryland Agriculture (CRIDA) is a National Research Institute under the Indian Council of Agricultural Research (ICAR) established in 1985 with a mandate to carry out basic and applied research in rainfed farming. The Institute also undertakes National / International Collaborations and Consultancy Projects. All India Coordinated Research Programmes (AICRPs) of ICAR on Dryland Agriculture and Agro meteorology with 25 partners each are in CRIDA. This is the lead Institute and the National Nodal point for the National Innovations in Climate Resilient Agriculture (NICRA) which is being implemented at large number of Research Institutes of ICAR, State Agricultural Universities and 100 KVKs.

Mandate

- Basic and applied for sustainable and climate resilient agriculture in rainfed areas.
- Co-ordinate network research for generating location-specific technologies in rainfed areas.
- Centre for capacity enhancement in natural resource management in drylands.



Contact Details The Director, ICAR-Central Research Institute for Dryland Agriculture, Santoshnagar, Hyderabad - 500 059 Telangana, India Tel: +91 -040 24532243, 24530161 Fax: +91 -040 24531802, 24535336 Email: <u>director.crida@icar.gov.in</u>

13. ICAR-Indian Institute of Millets Research (IIMR)

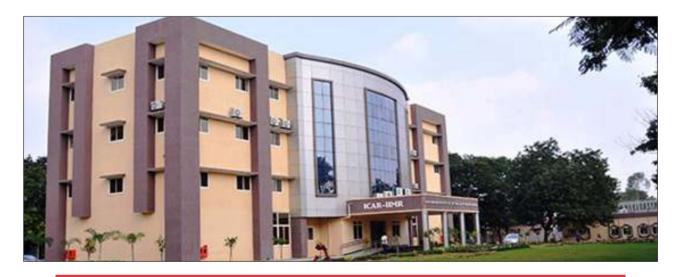


Indian Institute of Millets Research (IIMR) is a premier agricultural research institute engaged in basic and strategic research on sorghum and other millets under Indian Council of Agricultural Research (ICAR).IIMR coordinates and facilitates Millets research at national level through All India Coordinated Research Projects on Millets, Pearl Millet and Small Millets and provides linkages with various national and international agencies.

The vision is: "Transforming millets cultivation from subsistence farming to globally competitive through cost-effective and environment friendly production, processing and value addition technologies and supply chain networks". While grain production is the main focus, forage and stover uses and quality are also of equal priority. National priorities, networks and international linkages, support and technology exchange will be integrated in the research agenda.

Mandate

- Basic and strategic research to increase productivity of millets and their diversified utilization for enhancement of profitability.
- Coordination and development of improved crop production and protection technologies of millets.
- Training and consultancy on millet production and utilization.
- Dissemination of technologies and capacity building.



Contact Details The Director, ICAR-Indian Institute of Millets Research Rajendranagar, Hyderabad-500 030 Telangana, India E-mail: <u>millets.icar@nic.in</u> Tel:+91 - 040 - 2459 9300 / Fax : +91 - 040 - 2459 9304

14. ICAR-Indian Institute of Soil Science (IISS)



The Indian Institute of Soil Science (ICAR-IISS) was established on 16thApril, 1988 at Bhopal with a mandate of "Enhancing Soil Productivity with Minimum Environmental Degradation". To accomplish the mandate of the institute, it has given the priority to soil health related issues faced by farmers and other stakeholders. IISS has emerged as a leader in basic and strategic research on soils in the country. It has achieved significant success in the areas of integrated nutrient management, impact on soil under long-term cropping, technology for preparation of enriched composts, soil test based nutrient prescriptions, generation of districtwise GIS based soil fertility maps, organic farming practices, carbon sequestration in soils, sink capacity of soils for heavy metal pollutants, recycling of wastes, soil microbial diversity and bio fertilizers, quality standards for municipal solid waste composts etc.

Mandate

- The Institute has the mission of "Providing scientific basis for enhancing and sustaining productivity of soil resources with minimal environmental degradation" with following mandates:
- Basic and strategic research on physical, chemical and biological processes in soils related to management of nutrients, water and energy
- Advanced technologies for sustainable soil health and quality
- Coordinate the network research with State Agricultural Universities, National, International and other Research Organizations



Contact Details The Director, ICAR-Indian Institute of Soil Sciences Nabibagh, Berasia Road, Bhopal - 462038 Madhya Pradesh, India. Email: <u>director.iiss@icar.gov.in</u>, <u>patraak@gmail.com</u> Phone: (Off.) : 0755-2730946 Fax: 0755-2733310



ICAR-Indian Institute of Vegetable Research IIVR, Varanasi is a field unit of Indian Council of Agricultural Research under the aegis of the Department of Agricultural Research and Education, Ministry of Agriculture and Farmers Welfare, Government of India.Vegetables are important constituents of Indian agriculture and nutritional security due to their short duration, high yield, nutritional richness, economic viability and ability to generate on-farm and off-farm employment. Our country is blessed with diverse agro-climates with distinct seasons, making it possible to grow wide array of vegetables.

In view of the importance of vegetables, Indian Council of Agricultural Research (ICAR) established All India Coordinated Research Project on Vegetable Crops (AICRP-VC) in the year 1971 at the Indian Agricultural Research Institute (IARI), New Delhi to plan, coordinate and monitor the research activities on vegetable crops. To further boost systematic vegetable research in the country a full-fledged Indian Institute of Vegetable Research (IIVR) was established in 1999 at Varanasi.

Mandate:

- Basic, strategic and applied research to enhance and sustain productivity, monitor quality and utilization of vegetable crops.
- Repository of vegetable crops, genetic resources and scientific information.
- Transfer of technology, capacity building and impact assessment of technologies.
- Coordinate research and validation of technologies under AICRP on vegetable Crops.



Contact Details The Director, ICAR-Indian Institute of Vegetable Research Post Bag No. 01, P. O. Jakhini (Shahanshapur) Kelabela, Uttar Pradesh - 23130, India Tel: 0542 263 5247 Email: directoriivr@gmail.com

16. Bankers Institute of Rural Development (BIRD)



BIRD is a Learning Institution promoted by National Bank for Agriculture and Rural Development (NABARD) to cater to the training requirements of the stake holders of agriculture and rural banking. BIRD is actively engaged in identifying and documenting issues critical to expansion of inclusive rural credit and facilitating policy discussions on these issues of national importance. BIRD conducts in–house, on-location and overseas training programmes for bankers from within and outside the country, officials of central and state governments and NGOs. The training programmes cover a wide range of subjects that include Banking, Finance, micro Finance, Financial inclusion, Projects, Development themes, IT applications in banking, Human Resource Management, Climate Change, Sustainable Development, Natural Resource Management(NRM) etc. BIRD also conducts studies, research and consultancy on contemporary topics in related fields.

Vision

To emerge as the premier Institute of the Developing World offering Training, Research and Consultancy services to its customers and undertaking other related activities in the field of agriculture and rural development banking.

Mission

- Commitment and competence building of people in Rural Financial Institutions (RFIs) and other partners in Rural Development through training.
- Help building viable and vibrant RFIs through Organisation Development, Consultancy and Research.
- Help building appropriate systems for delivery of financial services.
- · Promote policy debate on Rural Development Strategies.



Contact Details The Director, Bankers Institute of Rural Development, Sector-H, LDA Colony, Kanpur Road, Lucknow - 226 012, Uttar Pradesh, India. Ph No.: <u>+ 91-522-2425917</u> Email: <u>bird@nabard.org</u>

17. ICAR-Central Plantation Crops Research Institute (CPCRI)



The Coconut Research Station at Kasaragod in Kerala was initially established in 1916 by the then Government of Madras and subsequently it was taken over by the Indian Central Coconut Committee in 1948. Central Plantation Crops Research Institute (CPCRI) was established in 1970 as one of the agricultural research institutes in the National Agricultural Research System (NARS) under the Indian Council of Agricultural Research (ICAR).

The Institute had the mandate to undertake research on coconut, arecanut, cocoa, cashew, oil palm and spices at the time of establishment. The research on cashew, oil palm and spices were later delinked from CPCRI to form separate institutes.

Mandate

The present mandate of the institute is to conduct research on coconut, arecanut and cocoa.

- Basic, strategic and applied research to enhance sustainable productivity, quality and utilization of coconut, arecanut and cocoa,
- Repository of plantation crops genetic resources and scientific information,
- Transfer of technology, capacity building and impact assessment of technologies,
- Coordinate research and validation of technologies on plantation crops through AICRP on Palms.



Contact Details The Director, ICAR-Central Plantation Crops Research Institute Kudlu.P.O, Kasaragod - 671124 Kerala, India Phone : 04994-232894 E-Mail :<u>director.cpcri@icar.gov.in</u>, <u>cpcri@yahoo.com</u> 18. ICAR-Indian Institute of Rice Research (IIRR)



Indian Institute of Rice Research (formerly Directorate of Rice Research) IIRR is a rice research institute located in Rajendranagar near Hyderabad. Indian Institute of Rice Research, formerly All India coordinated Rice Improvement Project (AICRIP), was established by the Indian Council of Agricultural Research (ICAR) in 1965 with its national headquarters at Hyderabad to organize and coordinate multi-location testing of genetic lines and technologies for crop production and protection generated across the country. The Project was elevated to Directorate of Rice Research in 1975 with an added mandate of research in the thrust areas of irrigated rice. The Directorate continues its multi-location.

IIRR mainly coordinates multi-location testing at national level to identify appropriate varietal and management technologies for all the rice ecosystems and conducts various strategic and applied research in the major thrust areas of irrigated rice aimed at enhancement of production, productivity and profitability and at preserving. environmental quality. Also, it initiates and coordinates research networks relating to problems of national and regional importance. IIRR serves as major centres for exchange of research material and information.



Contact Details The Director, ICAR-Indian Institute of Rice Research Rajendranagar, Hyderabad - 500030 Telangana, India Tel: 040 2459 1218 Email: director.iirr@icar.gov.in

19. Indian Institute of Food Processing Technology (IIFPT)



The Indian Institute of Food Processing Technology (IIFPT) is a pioneer Research and Educational Institution under the Ministry of Food Processing Industries, Government of India. Dr. V. Subrahmanyan. an eminent scientist and founder Director, Central Food Technological Research Institute, Mysore, after his retirement, started PPRC in 1967 as R & D laboratory in the Modern Rice Mill complex of Thanjavur Co-operative Marketing Federation (TCMF) at Tiruvarur, Tamil Nadu, India. The Institute was later upgraded as a national laboratory with the name Paddy Processing Research Centre (PPRC) in 1972. Considering the vital importance of strengthening R & D efforts in the post-harvest processing Industries (MoFPI) strengthened and upgraded the PPRC as a National Institute in February 2008 and renamed as Indian Institute of Crop Processing Technology (IICPT).Indian Institute of Food Processing Technology (IIFPT) was christened on 31st March 2017 and will focus on providing solutions to all food processing areas including fish, meat and dairy products processing through intensive research and development activities.

Vision

- To serve as a national institution for research, education and training in the area of post harvest processing of crops of wetlands and storm prone regions.
- To establish linkages with related processing industries and other academic as well as R&D institutions for achieving its goals effectively.

Mission

- Gaining an increased understanding of living organisms with a view to increasing its application in the grain industry.
- Providing a sound scientific basis for decision making in food security, safe environment and addressing the concerns of the consumers.



Contact Details The Director, Indian Institute of Food Processing Technology, Ministry of Food Processing Industries, Government of India, Pudukkottai Road, Thanjavur - 613 005, Tamil Nadu, India. Tel: +91 4362 228155/ Fax: +91 4362 227971 Email: <u>director@iifpt.edu.in</u>

20. ICAR-Directorate of Poultry Research (DPR)



The ICAR-Directorate of Poultry Research (DPR) formerly Project Directorate on Poultry (PDP) is one of the constituent research institutes of the Indian Council of Agricultural Research (ICAR), an autonomous organization under the Department of Agriculture Research and Education, Ministry of Agriculture and Farmers Welfare, Government of India.

The objectives of the Directorate are to coordinate research at AICRP centers located across the country and conduct research on the development and improvement of chicken lines for commercial and rural poultry production. The ongoing research programmes at DPR are focused on research relevant to societal needs, and application-oriented research towards commercialization. These include the areas of poultry breeding, molecular genetics, applied nutrition, immunomodulation, disease diagnosis and health management etc. DPR has taken lead in the promotion of rural poultry farming through propagation of chicken varieties, Vanaraja, Gramapriya and Srinidhi.

Mandate

- Basic and applied research to enhance productivity of poultry.
- Development of new germplasm for poultry husbandry.
- Capacity building.



Contact Details The Director, ICAR-Directorate of Poultry Research Pillar No. 216, Dairy Farm Chowrastha, Rajendra Nagar Rd, Rajendranagar, Hyderabad - 500030 Telangana, India Tel: 040 2401 5651, Email: pdpoult@nic.in

21. ICAR-Indian Institute of Spices Research (IISR)



A major step in initiation of sustained research on spices was the launching of All India Coordinated Spices and Cashew Improvement Project (AICSCIP) at Central Plantation Crops Research Institute (CPCRI) at Kasaragod, Kerala during 1971 by Indian Council of Agricultural Research (ICAR). Later the ICAR felt the need for intensifying research on spices and established a Regional Station of CPCRI at Kozhikode, Kerala during 1975, exclusively for conducting research on spices by the ICAR. The Regional Station was upgraded as National Research Centre for Spices (NRCS) in 1986 by merging with the Cardamom Research Centre of CPCRI at Appangala, Karnataka as its regional station. The NRCS was further elevated to the present Indian Institute of Spices Research (IISR) during 1995.

Mandate

- Basic, applied and strategic research on genetic resource management, crop improvement, crop production and protection technologies for enhanced production of safe spices.
- Transfer of technology, capacity building and impact assessment of technologies.
- Coordinate research and validation of technologies under AICRP on Spices



Contact Details The Director, ICAR-Indian Institute of Spices Research Marikunnu P.O., Kozhikode (Calicut), Kerala – 673012. India. Tel: 495 – 2730294 E-mail: director.spices@icar.gov.in

22. National Seed Research and Training Centre (NSRTC)

National Seed Research and Training Centre (NSRTC) is the apex centre to maintain the uniformity in seed testing results and HRD at national level. NSRTC monitors the all State Seed Testing Laboratories and try to overcome their difficulties. It makes efforts to expertise seed entrepreneurs and other stakeholders involved in seed development programme and make them more potent. Through National Trainings, National Workshops and National Seed Congress, NSRTC is continuously disseminating the knowledge of new techniques of seed testing, role of quality seed etc. to the various seed development agencies and other stakeholders.The Govt. of India, Ministry of Agriculture & Farmers Welfare, Department of Agriculture, Cooperation & Farmers Welfare, KrishiBhawan, New Delhi has started the National Seed Research and Training Centre (NSRTC), Varanasi during October 2005.

Objectives

- Promote quality seed availability to meet the challenges of science based Agriculture.
- Making of promising Technologies reach the seed entrepreneurs and other stakeholders through innovative Trainings, Conferences & Symposia.
- Establishing uniformity in Seed production & Quality Control programmes at National level.
- Innovative curriculum planning and implementation to make Seed Science & Research more vibrant and responsible to match the vision and needs of present and future.



Contact Details The Director, National Seed Research & Training Centre Ministry of Agriculture and Farmers Welfare (DAC & FW) G.T. ROAD, Collectry Farm, P.O. Industrial Estate, Varanasi - 221 106 (Uttar Pradesh), India Ph No.: 0542-2370222; FAX: 0542-2370298 E-mail: <u>dir-nsrtc-up@nic.in</u>

23. Water and Land Management Training and Research Institute



The Water and Land Management Training and Research Institute (WALAMTARI) was established in the year 1983 under World Bank aided project by the erstwhile Government of Andhra Pradesh to impart training to the in-service engineers involved in the activities of Irrigation and Command Area Development, Agriculture officials of Agriculture Department and farmers. It was registered as a Society in the year 1992, under the Societies Registration Act.WALAMTARI is envisaged to function as a Center of Excellence in water and land management training and research in general and Participatory Irrigation Management (PIM) in particular. It addresses the training needs of engineers in the fields of planning, investigation, design, construction, operation & maintenance and application of Information Technology and also carries out training and research activities in Agriculture field on optimum water utilization and increase in crop productivity.



Contact Details

The Director, Water and Land Management Training and Research Institute Himayathsagar, Rajendranagar, Hyderabad - 500030, Telangana, India Phone No: 040-24006201, Fax: 040-24006202 <u>E-mail: dg.walamtari@gmail.com</u>

24. World Agroforestry Centre (ICRAF)



World Agroforestry (ICRAF) is a center of science and development excellence that harnesses the benefits of trees for people and the environment leveraging the world's largest repository of agroforestry science and information, we develop knowledge practices, from farmers' fields to the global sphere, to ensure food security and environmental sustainability. ICRAF is the only institution that does globally significant agroforestry research in and for all of the developing tropics. Knowledge produced by ICRAF enables governments, development agencies and farmers to utilize the power of trees to make farming and livelihoods more environmentally, socially and economically sustainable at scales.

ICRAF India office played a key role in the development and formulation of the National Agroforestry Policy of India, released in 2014 during the 3rd World Agroforestry Congress in New Delhi. ICRAF is also an implementing partner of the Sub Mission on Agroforestry with the Ministry of Agriculture and Farmers Welfare, Government of India along with ICAR.

Vision: An equitable world where all people have viable livelihoods supported by healthy and productive landscapes.

Mission: To harness the multiple benefits trees provide for agriculture, livelihoods, resilience and the future of our planet, from farmers' fields through to continental scales.

Contact Details The Director, ICRAF, Regional Office for South Asia, CG Block, NASC complex, DPSM, New Delhi-110012, India Tel: +91 11 25609800/25847885/6 Email: j.rizvi@cgiar.org

The Forest College and Research Institute (TNAU), Mettupalayam (TN) also associated with ICRAF, New Delhi and ICAR-CAFRI, Jhansi to organize the 39th FTF ITT on Agroforestry: Policy, Practice and Impact.

Contact Details

The Dean (Forestry), Forest College and Research Institute, Tamil Nadu Agricultural University, Mettupalayam, Tamil Nadu - 641 301, India Phone:+91 4254 222010, E-Mail:deanformtp@tnau.ac.in

25. ICAR-Central Agroforestry Research Institute (CAFRI)



To conduct basic, strategic and applied research on agroforestry National Research Centre for Agroforestry (NRCAF) was established in the year 1988 at Jhansi. As approved in the XII Plan w.e.f. 1st December 2014 NRCAF has been upgraded as ICAR-Central Agroforestry Research Institute (ICAR-CAFRI).

Mission:

To improve quality of life of rural people through integration of perennials on agriculture landscape for economic, environmental and social benefits.

Vision:

Integration of woody perennials in the farming system to improve land productivity through conservation of soils, nutrients and biodiversity to augment natural resource conservation, restoration of ecological balance, alleviation of poverty and to mitigate risks of weather vagaries.



Contact Details The Director, ICAR-Central Agroforestry Research Institute Gwalior Road, Jhansi-284 003, Uttar Pradesh, India Ph: 91-510-2730214 Fax: 91-510-2730364 Email: <u>director.cafri@gmail.com</u>

26. ICAR- Indian Institute of Maize Research (IIMR)



The ICAR- Indian Institute of Maize Research (ICAR-IIMR) is a premier national institute under the aegis of the Crop Science Division of the Indian Council of Agricultural Research, New Delhi. Indian Council of Agricultural Research (ICAR) established the first Coordinated Crop Improvement Project on maize (CCIPM) in 1957. The headquarters of ICAR-IIMR was shifted from New Delhi to Ludhiana in 2016. The off-season nursery, Winter Nursery Centre (WNC) was established at Amberpet, Hyderabad in 1962 to accelerate the maize improvement programme of north Indian maize research centres where winter temperature is not conducive for maize cultivation. Subsequently, the WNC was shifted to Rajendranagar, Hyderabad in 2008.

Mandate

- Basic and strategic research aimed at enhancement of productivity and production of maize, including specialty corn.
- Coordination of multi-disciplinary and multi-location research to identify appropriate technologies for varied agro-climatic conditions.
- Dissemination of improved technologies, capacity building and developing linkages.
- Coordination of the All India Coordinated Research Project (AICRP) on Maize and to carry out extension and outreach programs.



Contact Details

The Director, ICAR-Indian Institute of Maize Research PAU Campus, Ludhiana (Punjab)-141 004 India Fax: +91-161-2430038 / Phone: +91-1612440048 Email: <u>director.maize@icar.gov.in</u>, <u>pdmaize@gmail.com</u>

27. ICAR-National Institute of Agricultural Economics and Policy Research (NIAP)



ICAR-National Institute (formerly Centre) of Agricultural Economics and Policy Research (NIAP) was established by the Indian Council of Agricultural Research (ICAR) in March 1991 to strengthen agricultural economics and policy research in the national agricultural research system. Applications of principles of economics in planning and evaluation of agricultural R&D and policy research to promote science-led agricultural and rural development have been the main goals of ICAR-NIAP. The Institute is committed to provide a leadership role in strengthening agricultural policy research, undertaking empirically sound policy research, and providing knowledge-based input for policy decisions. The Institute also acts as a think tank of ICAR and helps it to actively participate in policy making.

Mandate

- Agricultural economics and policy research on markets, trade and institutions
- Growth and development models for sustainable agriculture
- Technology policy, evaluation and impact assessment

Vision

Leveraging Innovations for Attaining Efficient, Inclusive and Eco-friendly Agricultural Growth through Agricultural Economics and Policy Research

Mission

To strengthen agricultural economics research for providing economically viable, socially-acceptable and environmentally-feasible policy options for science-led agricultural growth



Contact Details The Director, ICAR-National Institute of Agricultural Economics and Policy Research D.P.S. Marg, Pusa New Delhi - 110012, India Tel: +91-11- 25847628 / Fax - +91-11-25842684 Email: <u>director.niap@icar.gov.in</u>

28. International Crops Research Institute for Semi-Arid Tropics (ICRISAT)



The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) is an international organization which conducts agricultural research for rural development, headquartered in Patancheru (Hyderabad), Telangana, India) with several regional centers (Bamako (Mali), Nairobi (Kenya) and research stations (Niamey (Niger), Kano (Nigeria), Lilongwe (Malawi), Addis Ababa (Ethiopia), Bulawayo (Zimbabwe).

It was founded in 1972 by a consortium of organisations convened by the Ford and the Rockefeller foundations. Its charter was signed by the FAO and the UNDP. ICRISAT performs crop improvement research, using conventional as well as methods derived from biotechnology, on the following crops: Chickpea, Pigeon pea, Groundnut, Pearl millet, Sorghum, Finger Millet and Small millets.ICRISAT adopts Integrated genetic and natural resources management as its overarching research strategy. The aim is to combine tested methods of crop commodity research with well-established practices in research in natural resources management.

ICRISAT conducts its research under four themes:

- Agro-ecosystems development,
- Harnessing plant biotechnology and bioinformatics,
- Crop improvement and management, and
- Institutions, Markets, policy and Impacts.



Contact Details The Director General International Crops Research Institute for Semi-Arid Tropics Patancheru - 502 324, Hyderabad Telangana State, India Ph: +91 40 3071307 / Fax: +91 40 30713074 E-mail: <u>icrisat@cgiar.org</u>

29. CSIR-Central Food Technological Research Institute (CFTRI)



CSIR-Central Food Technological Research Institute, Mysore is a premier National Institution of the Council of Scientific & Industrial Research, New Delhi. CSIR-CFTRI is committed to excel in research & innovation, knowledge dissemination, Technology transfer and Human Resource Development in the areas of Food Science and Technology through various quality attributes practiced and implemented various levels. The focus of research & innovation in diverse disciplines of food science and technology including Food Engineering (Process development and Equipment design, Biochemical Engineering, Downstream Processing and Bioreactor design) etc. is very well supported by excellent infra-structure, stateof-the-art instruments and pilot plant facilities and advanced research training.

Research focus of CSIR-CFTRI has been revolved around broadly into the following areas:

- Engineering Sciences
- Technology Development
- Translational Research
- Food Protection and Safety
 Services
- Business Development
- Food Product Analysis & Quality Assurance
- Pilot Plant Services



Contact Details The Director, CSIR-Central Food Technological Research Institute Cheluvamba Mansion, Valmiki Rd, opp. Railway Museum, Devaraja Mohalla, CFTRI Campus, Kajjihundi, Mysuru - 570020, Karnataka, India Ph: 0821 251 7760 Email: jandp@cftri.res.in

30. University of Agricultural Sciences (UAS)



The University of Agricultural Sciences-Bangalore (UAS-B) was the first State Agricultural University (SAU) in Karnataka established in 1963 through an act of the Legislature of the then Mysore State. The visionary leaders of the nation realized the importance of modern science and technology and higher education as means to shore up the woefully inadequate food production in the country. In less than a decade of the establishment of UAS-B and a few other SAUs in the country India recorded a phenomenal jump in food production and the English language acquired a new phrase - Green Revolution.

Objectives

- To establish a dynamic system of agricultural education to train highly skilled and competent manpower to address the challenging tasks with new emerging areas of research, extension and industry.
- To develop suitable end-use technologies to solve farmers' problems vis-à-vis agricultural production including animal husbandry and fisheries and foster research aimed at conceptual advances in all disciplines for technology development in the long run.
- To ensure that the research findings and innovations, after their proven demonstration, are communicated to the farmers on a logistically feasible scale.



Contact Details The Vice-Chancellor, University of Agricultural Sciences, GKVK, Bangalore - 560 065, India Tel: +91-80-2333 0153 / 2333 0984 Email:vc@uasbangalore.edu.in,<u>registrar@uasbangalore.edu.in</u>

31. University of Horticultural Sciences (UHS)



Realising the importance and foresightedness of the Karnataka Government, His Excellency, the Governor of Karnataka has approved the establishment of the University of Horticultural Sciences (UHS) at Bagalkot through a special Ordinance No 2 of 2008 dated: 22-11-2008. Thus, the exclusive University of Horticultural Sciences came in to being with effect from 22-11-2008 at Bagalkot. The choice of Bagalkot as the headquarters of the University is rightly justified because of the rich horticultural production base of grapes, pomegranate, sapota, fig, lime, sweet lime, ber, varieties of vegetables, spices and medicinal plants: Besides, the bordering districts of Belgaum on West, Dharwad and Koppal on South, Bijapur on North and Raichur on East are the hub of horticulture because of the favourable climate for horticulture crops in the area.

The Mission

The mission of University of Horticultural Sciences, Bagalkot (UHSB) is to enhance the growth of horticulture sector by providing leadership in teaching, research and extension services in horticulture and allied sciences through continuous innovation and assimilation of emerging paradigms, concepts and technology developments.



Contact Details The Vice Chancellor University of Horticultural Sciences Udyanagiri, Near Seemekeri Cross, Hubli Bypass Road, Navanagar, Bagalkot, Karnataka 587104, India Phone: 083542 30279 Email: <u>vc@uhsbagalkot.edu.in</u>

ANNEXURE V

Back At Work Plan Questionnaire

S.No	Question type	Response type
1.	Personal information and contact details	Brief information
2.	PROBLEM identified in your service AREA/PROVINCE/REGION: (Title)	A short and convincing title
3.	Nature of the problem (Specific)	Multiple choice question with one or more than one possible answers
4.	Description of the problem	Long answer text to describe the origin and background of problem.
5.	Approximate number of PEOPLE AFFECTED by the problem identified in your REGION/PROVINCE Approximate number of PEOPLE AFFECTED by the problem identified in your COUNTRY Extent of AREA AFFECTED in PROVINCE/REGION in which you are working (Approx. in %) Extent of AREA AFFECTED by similar problem in your COUNTRY (Approx. in %)	
6.	Indian experience learned from the training that offer solution to the problem identified by you (Back at work Plan):	Short answer
7.	What is the important objective of your Back at work Plan?	Short and action oriented answer with one or two objectives
8	What is first action you have planned that can help you to achieve your objective?	Short answer related to your objective
9.	What is/are the follow up action/s you wish to take after first action?	Short answer
10.	What kind of support /assistance do you expect from your supervisors?	Short answer
11.	What strategy /plan you want to adopt to motivate your subordinates?	Short answer
12.	What is the scope of duration to work on the problem identified?	Multiple choice question with single answer
13.	What do you expect with your interventions/solution?	Short answer
14.	What challenges do you foresee in working with your BAWP?	Short answer
15.	What is your BIGGEST motivation to achieve results in your back at work plan?	Multiple choice question with one or many possible answers

ANNEXURE VI

Details of Individual Training Programs

1. e-Extension: ICT Applications in Agricultural Extension Management

- Title of the Training Program: e-Extension: ICT Applications in Agricultural Extension Management
- Date: 10 -19 October 2016
- > Venue: Ministry of Agriculture, Irrigation and Livestock (MAIL), Kabul, Afghanistan
- Program Directors

MAIL

Dr. P. Chandra Shekara,	Dr. V.P. Sharma
Director (Agricultural Extension)	Director (ITBD)
MANAGE, Rajendranagar,	MANAGE, Rajendranagar,
Hyderabad – 500 030, Telangana, India.	Hyderabad – 500 030, Telangana, India.
Website: <u>http://www.manage.gov.in</u>	Website: http://www.manage.gov.in

> Participants profile: 71 executives (63 male & 8 female)

The executives comprised of Extension Managers, ICTs Officers, Communication Specialists, Officers from Agriculture and allied sectors, Change agents, Heads of Projects under the MAIL representing all 34 provinces in Afghanistan. Faculty from department of Agriculture, Kabul University, Senior Official from extension directorate, IT department and project in-charge and IT internees from MAIL also participated.

> Training objective:

 Developing an innovative ICT mediated Agricultural Education Knowledge Management Platform for strengthening MAIL's Agricultural Research-Extension-Education Continuum.

Training Curriculum

- 1. Introduction of the ICT applications in agriculture
- 2. Agricultural Extension and NeGP-A National e-Agricultural Initiatives in India
- 3. Farmers' Portal and mKisan National e-Agricultural Initiatives in India Kisan (Farmers) Call Center (KCC) and
- 4. Extension Reforms through ICT Initiatives National e-Agricultural Initiatives in India Marketing Information Systems and Reforms: AGMARKNET, eNAM and Private Initiatives
- 5. Agricultural Knowledge Management: Climate Change Knowledge Advisory
- 6. AGROPEADIA, MOOCs and MIS
- 7. Access to Agricultural Information / Knowledge
- 8. Social Media in Agriculture and Opening Access to Agricultural Knowledge Resources.

> Training Outcome:

- Greater information and knowledge flows at MAIL.
- Improved access to data, information and knowledge to various agricultural stakeholders.
- Modernized agricultural research-extension-education approaches
- Contemporary agricultural marketing approaches

Change in Knowledge of the participants

The percentage of knowledge of participants in the pre-training test was 34.78 whereas the average percentage knowledge of post training was 62.16. Thus it is found that the level of knowledge of executives was increased by 27.38 percent after the training Program.

> Evaluation

Feedback of Executives was collected on all technical and practical sessions by resources persons on a scale of 1-to-10 ('1' being the poor and '10' being the excellent). The executives gave a score of 9.02 for the technical and practical sessions while the objectives of the program achieved 8.82. The overall impression of the executives about the program stands at **8.93** indicating **VERY GOOD**.

S.No	Name and Address, BAWP Title & Objectives
1.	 Mr. Abdul Malik Cereal Crops General Manager, Paktia DAIL, Afghanistan. (Mobile: 796169971) Title: Awareness program of all ICT sites to the extension workers and farmers in villages Objective: Acquaint the extension personnel and farmers with the ICT services available and facilitate to leverage the opportunity for better farming practices
2.	 Mr. Abdul Shakor Plant Protection and Quarantine Dept, Konduz DAIL, Afghanistan. (Mobile: 799012216) Title: ICT for IPM Objective: Precise diagnosis based on visuals and images for better management of pest and diseases of cropsed and seases and seases of cropsed and seases and seases and seases and seases and seases and seases and cropsed and seases and seases an
3.	 Mr. Abdul Alim Extension Manager, Badghis DAIL, Afghanistan.Mobile: 797808815 Title: Social media in Agriculture Objective: Popularize the use of social media like facebook and whatsapp for information on agriculture
4.	Mr. Esmatullah IT Officer, Daikundi DAIL, Afghanistan. Mobile:777855547 Title: Agriculture marketing through Social Media Objective: To use whatsapp and facebook for marketing of agricultural products
5.	Mr. Farhad Hamdard IT Officer, Helmand DAIL, Afghanistan. Mobile:704595800 Title: Farmer call centre in Afghanistan Objective: To familiarize the farmers to use the Call Centre for information and advisory services
6.	Mr. Ali Sena Sadiqi IT Officer, Ghazni DAIL, Afghanistan. Mobile: 799009616 Title: Agriculture television programs for farmers Objective: To broadcast agri-info on television which is the most used technology in rural areas
7.	 Mr. Mohammad Hanif IT Officer, Badghis DAIL, Afghanistan. Mobile: 799858935 Title: Social media for Agriculture Objective: Popularize the use of social media like facebook and whatsapp for information on agriculture
8.	 Mr. Mohammad Zaker Extension Officer, Panjshir DAIL, Afghanistan. Mobile: 747406252 Title: Introduction of ICT for lead farmers Objective: Lead farmers are more ready to innovate and experiment. Using ICT services by them will eventually lead to use by most of the farmers in that area
9.	 Mr. Qasim Mohammadi Saffron Specialist, Jawzjan DAIL, Afghanistan. Mobile: 791327451 Title: Awareness about ICT techniques to farmers and officials. Objective: To organise training programs on ICT tools and techniques to officials
10.	 Mr. Mirwais Ahmady IT Officer, Parwan DAIL, Afghanistan. Mobile: 700656104 Title: Awareness about social media to farmers Objective: To create awareness among the farmers to use the social media for agriculture information
11.	 Mr. Borhanuddin Extension Manager, Samangan DAIL, Afghanistan. Mobile: 776242298 Title: e-Extension through social media (Facebook page) on Saffron cultivation. Objective: To create a facebook page and provide information advisory services to the farmers on saffron cultivation

S.No	Name and Address, BAWP Title & Objectives
12.	 Mr. Ziaulhaq Coperative Officer, Paktika DAIL, Afghanistan. Mobile: 772357812 Title: ICT in Extension Objective: To enable use of ICT based technologies and services for extension outreach activities by the extension professiosnals
13.	 Mr. Tahsinullah Extension Manager, Khost DAIL, Afghanistan. Mobile: 797805384 Title: Agro Advisory services to farmers Objective: To provide agro-advisory services to the farmers using ICTs
14.	 Mr. Mohibullah Extension Manager, Kunar DAIL, Afghanistan. Mobile: 774741125 Title: Educating extension officers on ICT and data analytics Objective: To provide trainings on ICT and data analysis for the extension officers
15.	 Mr. Borhanuddin IT Officer, Nuristan DAIL, Afghanistan. Mobile: 792259248 Title: Awareness training programs on Internet and ICT technologies to farmers in Afghanistan Objectives: To conduct training programs on use of Internet and other services like facebook and WhatsApp for agriculture information
16.	 Mr. Taj Mohammad Extension Manager, Afghanistan. Mobile: 744281413 Title: Implementation of livestock sector in districts and villages in Afghanistan Objective: To implement the livestock management technologies among the farmers at the village and district levels in Afghanistan
17.	 Mr. Zaki Regional Agronomist, Kunduz DAIL, Afghanistan. Mobile: 787807276 Title: Agro Advisory through SMS Objective: To provide information and services related to agriculture using mobile SMS to the farmers
18.	 Mr. Enayatullah Rastogi Extension Manager, Takhar DAIL, Afghanistan. Mobile: 700707525 Title: ICT for value chain of rice production in Afghanistan Objective: To use ICT for the value chain involving various stakeholders in Rice production
19.	 Mr. Hasamuddin IT Officer, Ghor DAIL, Afghanistan. Mobile: 778861514 Title: Agriculture call centre for farmers Objective: To establish Famer Call Centre for dissemination of agro-advisory services to farmers
20.	Mr. Shukrullah Extension Manager, Baghlan DAIL, Afghanistan. Mobile: 707504022 Title: Introducing ICT trainings to farmers Objective: Provide trainings on use of ICT by the farmers
21.	 Mr. Ehsanullah Extension Manager, Badakhshan DAIL, Afghanistan. Mobile: 797316223 Title: Extension services through Facebook Objective: To provide extension services using the facebook page
22.	 Mr. Mujeebullah Anwari Extension Manager, Nangarhar DAIL, Afghanistan. Mobile: 780072924 Title: Awareness about social media to farmers Objective: To make the farmers aware about the potential and use of social media like the Whatsapp and Facebook for agriculture information

S.No	Name and Address, BAWP Title & Objectives
23.	 Mr. Abdul Samad MIS Manager, Faryab DAIL, Afghanistan. Mobile:776961759 Title: Training on e-extension through SMS to the farmers Objective: To train the farmers on how to send and receive agricultural information using SMS
24.	Ms. Habiba IT Manager, Nimroz DAIL, Afghanistan. Mobile: 793705997 Title: ICT in Agriculture Objective: To use ICT like the facebook, Whatsapp, mobile phone and smart phones for agricultural information
25.	Ms. Hameeda Social Mobilizer, Nimroz DAIL, Afghanistan. Mobile: 799888788 Title: Farmers Call Centre, e-Extension in Agriculture Objective: To establish Farmers Call Centre and familiarize the use of mobile phone services for agricultural information
26.	Ms. Kerishma Faizi Communication Manager, Extension General Directorate, Afghanistan. Title: Conducting capacity building training for farmers for improvement in their income Objective: To build the capacity of the farmers on use of improved technologies for enhanced income
27.	 Ms. Sharifa Stanizkai Cucurbit Manager, Extension General Directorate, Afghanistan. Mobile: 700408622 Title: Conducting capacity building training programs for women about food security due to no access of women to good food. Objective: To train the women farmers about food security and access to safe and nutritious food
28.	Mr. Abdul Rashid Irrigation Statistic Manager, Statistics Directorate, Afghanistan. Mobile: 700617368 Title: Irrigation system development in Afghanistan through extension for farmers Objective: To train the farmers on proper irrigation management strategies
29.	 Mr. Mohammad Khalis Extension Agent, CARD-F, Afghanistan. Mobile: 788657931 Title: Use of posters and websites for Poultry development Objective: To disseminate information on poultry using display posters and websites.
30.	Mr. Abdul Qader Intern, Extension General Directorate, Afghanistan. Mobile: 780346456 Title: Promoting e-Extension and inputs supply to farmers Objective: To popularize ICT based extension services for farmers and provide the required inputs
31.	Mr. Nad Ali Sadiqi Expansion Network Manager, IT Directorate, Afghanistan. Mobile: 799313648 Title: KCC, Agro Advisory Objective: To replicate the Indian model of Kisan Call Centre advisory services among the farmers
32.	Mr. Habibu Rahman ICT Officer, IT Directorate, Afghanistan. Mobile: 773626160 Title: Sharing agriculture information through ICT Objective: To disseminate agricultural information using ICT services to the farmers
33.	 Mr. Nasratullah Raheeq Head of Demonstration Unit, Extension General Directorate, Afghanistan. Mobile: 792444290 Title: Documentation on Afghanistan Agriculture System through digital media Objective: To create a documentary database on Afghanistan Agriculture System using the digital media

S.No	Name and Address, BAWP Title & Objectives
34.	 Mr. Waheedullah Sardar GIS Officer, IRD –KFZ, Afghanistan. Mobile: 792442290 Title: Awareness of ICT for farmers Objective: To create awareness among the farmers regarding the use of ICT services
35.	 Mr. Abdul Hameed Karimi Crop Manager, Kabul DAIL, Afghanistan. Mobile: 700248405 Title: Social Media for agriculture professionals Objective: to sensitize the agriculture professionals involved In information dissemination and delivery services about the use of social media platforms
36.	Mr. Nabil Ahmad IT Officer, Horticulture Directorate, Afghanistan. Mobile: 786924141 Title: Educating farmers through agriculture videos Objective: To educate farmers on modern agricultural practices using videos
37.	 Mr. Wasiqullah Intern, Extension General Directorate, Afghanistan Mobile: 706233183 Title: Collecting farmers problems in agriculture and recording agriculture videos Objective: To provide solutions to farmers problems relating to agriculture by recording and disseminating through videos
38.	Mr. Mohammad Samim Intern, Extension General Directorate, Afghanistan. Mobile: 747209802 Title: Documentation of farmers' activities through agriculture videos Objective: To create a video database of farmer activities in agriculture
39.	 Mr. Sulaiman Safi ICT Officer, IT Directorate, Afghanistan. Mobile: 789403498 Title: Introduction of new crop varieties through ICT applications Objective: To familiarize and disseminate information about new crop varieties using ICTs
40.	Ms. Spozhmai Livestock M&E Officer, CLAP Project, Afghanistan. Mobile: 782930071 Title: Awareness and conducting training programs on Crazy Dog Disease to the people of Kabul Objective: To make people aware about the Crazy Dog Disease
41.	Ms. Zakia Livestock M&E Officer, CLAP Project, Afghanistan. Mobile:792412299 Title: Replicate the concept of Digital Green and Facebook for farmers



2. Public-Private Partnership in Agricultural Extension Management

- Title of the Training Program: Public-Private Partnership in Agricultural Extension Management
- Date: 17-31 October, 2016
- Venue: National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana



Program Director

Dr. P. Chandra Shekara, Director (Agricultural Extension) MANAGE Rajendranagar, Hyderabad – 500 030, Telangana, India. Website: <u>http://www.manage.gov.in</u>

> Participants profile: 29 executives from 8 countries (13 male & 16 female)

Country	Number of Participants
Afghanistan	4
Cambodia	4
Ghana	4
Liberia	4
Kenya	4
Malawi	4
Mongolia	2
Mozambique	3

> Training objective:

To introduce and discuss the concept and potential benefits of Public Private Partnership in Agricultural Extension through case studies.

Training Curriculum

- 1. Concept, need and potential of PPP in Agricultural Extension Management (AEM)
- 2. Principles of PPP
- 3. Designing PPP models
- 4. PPP Memorandum of Understand (MoUs)
- 5. PPP models involving partners
- 6. PPP case studies and experiences
- 7. PPP learnings
- 8. PPP policies
- 9. Develop work plans for track progress

> Training Outcome:

- Formation of Cotton and pomegranate growers' cooperatives and other women based cooperatives in Afghanistan.
- Promotion of private advisory services in Liberia in PPP mode.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 13.28 (53.12%) whereas the average score of post-training was 15.59 (62.36%). Thus, it is found that the level of knowledge of executives was increase by **17.39** percent after the training program.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10 ('1' being the poor and '10' being the excellent). Executives rated the overall training program with a score of **9.21** on 10 point continuum i.e. **Excellent**

> Field Visits

During the course of training, the participants were exposed to various fields, farms and research institutions of practical importance for hands on experiential learning. The executives were exposed to various field visits i.e. Mulkanoor Co-operative Society, Mulkanoor Women's Cooperative Dairy, Rice Mill, Cotton Ginning Mill, etc. to interact with the experts in specific areas and exposed them with live examples and success stories.



Back At Work Plans (BAWPs)

Sl.No.	Name & Address	BAWP Title & Objectives
	I. Afghanistan	
1.	Mr. Sultani Atiqullah Senior Cooperative Development & Grant Officer, Comprehensive Agriculture & Rural Development Facility (CARD-F), House #8, First Street, KartehSolj District - #7, Near Mashal Balkh Private High School, Behind Park Afghan Turk, Maar-e-Sharif City, Balkh, Afghanistan. Tel: 0093(0)798242071 (o) / Mob: 0789454817 Email: atiqullah.sultani@cardf.gov.af	Title: Developing Cotton Growers Cooperative Society Objective: Appraisal of raw cotton producers to take part in Cooperative
2.	Prof. Sayeed M. Kabir (Maien) Head of Department, Agriculture Faculty Economics and Extension, Department of Kandahar University, #9, LoyaWeila, Afghanistan. Tel: +93 700315295, Mob: +93 700302901 Email: kabiragha2010@gmail.com	Title: Pomegranate Juice Processing Association (PJPA) Objective: Farmers or gardeners will make more money during Pomegranate season.
3.	Ms. Amina Azizi Cooperative Facilitator, Horticulture Cooperative Development Project, Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mina, Kabul, Afghanistan. Tel: + 0700281489 / Mob: 93 0700163701 Email: azizi_amena@yahoo.com	Title: Promoting Vegetables and Fruits Processing Women Cooperative Objective: Establish women cooperative and linkage for their products with market.
4.	Dr. Mariam Habib Extension Manager, SNAPPZ, Ministry of Agriculture, irrigation and livestock (MAIL) Jamal Meena, Opp: Kabul University, Kunduz Province, Kabul, Afghanistan Telephone/Mobile: +93(0) 799041947 Email: dr_mariam_habib@yahoo.com	Title: Women Farmers Field School (FFS) trainings Objective: To learn concept of FFS and implement FFS in their places.
	II. Cambodia	
5.	Ms. Bunry Reaksmey Civil Servant, Ministry of Agriculture, Forestry and Fisheries, 200, Preah, Norodom Blvd, Sangkat Tanle Basak, Khan Chamkarmon, Phnom Penh, Cambodia. Tel: +023 726 128, Mob: 0011996333 Email: reaksmey_bunry@yahoo.com	 Title: Input Dealers and Farmers training on Fertilizer and Pesticide use. Objective: Farmers will know how to use fertilizer and pesticide properly. Input dealers will acquire both knowledge and certificate from the agricultural xperts.
6.	Ms. OukSavy Civil Servant, Ministry of Agriculture, Forestry and Fisheries, 200, Preah Norodom Blvd, SangkatTanleBasak, Khan Chamkarmon, Phnom Penh, Cambodia Tel: +023 726 128, Mob: 0098660703 Email: ouksavy77@gmail.com	

SI.No.	Name & Address	BAWP Title & Objectives
7.	Ms. Lay Liny Technical Officer, Department of Agricultural Extension, No.200, Preah Norodom Blvd, SangkatTanleBasak, Khan Chamkarmon, Phnom Penh, Cambodia. Tel: +023 210 948, Mob: 0015788178 Email: layliny22@gmail.com	Title: Promoting partnership between Department of Agricultural Extension and Private Company (Agricultural input company) on Agricultural technique supported by ICT to farmers.
8.	Ms. Meach Sary Technical Officer, Department of Agricultural Extension, No.200, Preah Norodom Blvd, SangkatTanleBasak, Khan Chamkarmon, Phnom Penh, Cambodia. Tel: +023 210 948, Mob: 0015777803 Fax: +855 23210948 Email: smeach98@gmail.com	Objective: To increase connection between Department of Agricultural Extension and Private Companies to promote technical support to farmers.
	III. Ghana	
9.	Mr. Akpablah Prosper Afelete Kofi Assistant Agricultural Officer Directorate of Agricultural Extension Services, Ministry of Food & Agriculture, P.O.Box. M37, Ministries, ACCRA, Ghana. Tel: + 0302665282, Fax: 0302668576 Mobile No: + 233 279 245 992 Email: champacshakur@ymail.com	Title: Public – Private Partnership model for Agro-advisories in Ghana Objective: To partner one of the private sector players like USAID to fund the material cost.
10.	Mr. Appiah-Agyekum Kwadwo Debrah Agricultural Officer, Directorate of Agricultural Extension Services, Ministry of Food & Agriculture, P.O.Box. M37, Ministries, ACCRA, Ghana Tel: 0302-668576, Mobile No: 0242560227, Fax: 0302-665282 Email: boski1989@yahoo.com	Title: Strengthen the Utilization of ICT in e-Extension Objective: Access to one time information by farmers at the call centres
11.	Mr. Gedo Kennedy Adams Assistant Agricultural Economist Directorate of Agricultural Extension Services, Ministry of Food & Agriculture, Agribusiness Unit, P.O.Box. M37, Ministries, ACCRA, Ghana. Tel: 0233208198931, Mob: 0266 186 017, Email: kwamejnr2@gmail.com	Title: Promotion of Agri-business Development through Public- Private Partnership in Ghana Objective: Introduce and establish Public Private Partnership in Accra.
12.	Mr. Antwi Godfred Assistant Agricultural Economist, Projects Coordination Unit, Directorate of Agricultural Extension Services Projects Coordination Unit, Ministry of Food & Agriculture, P.O.Box. M37, Ministries, ACCRA, Ghana. Tel: +233 303 695 094, Mob: 0240098769 Email: kennedygedo@gmail.com	Title: ICT for Agriculture Development Projects (Public Private Partnerships) Objective: Use of ARCTGIS Software to create integrative App to map all projects in the sector and the use of App by all stakeholders before the start of new project.

il.No.	Name & Address	BAWP Title & Objectives
	IV. Kenya	
13.	Ms. Mwanza Rosemary Ndunge Principal Livestock Production Officer Ministry of Agriculture, Livestock and Fisheries, State Department of Livestock, P.O.Box.34188 (Hill Plaza), Nairobi - 00100, Kenya Mob: +254 722 763 039 Email: rnmwanza@gmail.com	 Title: Promoting private sector investment/ participation for agricultural development Objective: Improvement in regulating policy environment for improved private sector investment in agriculture.
14.	Ms. Kibwage Jane Mokeira Senior Assistant Director of Fisheries, State Department of Fisheries & The Blue Economy, P.O.Box. 58187, Nairobi - 00200, Kenya Tel: +254 720370099, Mobile No: 0722715517 Email: jmkibwage@gmail.com	Title: Technology innovations for fish production Objective: Ability to produce quality fish feeds and improved productivity
15.	Ms. Jane Wanjiru Wambugu Assistant Director of Agriculture, Ministry of Agriculture Livestock and Fisheries, State Department of Agriculture, P.O.Box. 30028, Nairobi – 00100, Kenya Tel: +2540278870/Mobile No: 0723245636 Email: chirumbugua@yahoo.co.uk	Title: Promoting Casava production and marketing in Lareward, Njoro Sub County, Nakuru County Objective: Improved farmer group organization.
16.	Ms. Mwirigi Jecinta Wairimu Assistant Director of Veterinary Service ASDSP County Coordinator, Nyandarua Ministry of Agriculture, Livestock and Fisheries, P.O.Box. 630, Olkalou. Kenya Tel: +254 726620177, Mobile No: 0722774080 Email:rivavet@yahoo.com	 Title: Capacity Building Training to Irish potato Marketing and storage CBOs and Co-operatives in the 5 Sub-Counties of Nyandarua Kenya Objective: Increase in farmer income; create sources and conversion of cooperative to company.
	V. Liberia	
17.	Mr. Teekpeh Oliver Boye Plant Pathologist, Ministry of Agriculture, Department of Regional Development, Research & Extension, P.O.Box. 10-9010, 1000, Monrovia-10, Liberia Tel: + 770526501/Mobile No: 0770526501 Email: oteekpeh@moa.gov.lr	Title: Agro – Input Dealers capacity building replication of DAESI model of MANAGE Objective: To improve farmers' handling and use of agro-chemical safely
18.	Ms. TuahYounn E Musu County Agriculture Coordinator (CAC), Ministry of Agriculture, Department of Regional Development, Research & Extension, P.O.Box. 10-9010 1000, Monrovia 10, Liberia, Tel: +231 886385172 Email: emusuyounn@gmail.com	Title: Improved Cassava Varieties Multiplication Objective: Farmers will have enough improved Cassava production and be able to process in to different kinds of food.
19.	Mr. Tamba Philip Saamoi Agriculture Coordinator, Technical Services, Ministry of Agriculture, P.O.Box. 10-9010, 1000, Monrovia, Liberia. Tel: +231 886412449, Mobile No: 0886412449 Email: philiptamba42@yahoo.com	Title: Boosting Vegetable Farmer incomes in Montserrado County Objective: Doubling vegetable farmers income

SI.No.	Name & Address	BAWP Title & Objectives
20.	Ms. Koffi Andreanna Pierrlyn Coordinator, Agriculture Technical School &	Title: KISAN CALL CENTRE model replication in Liberia
	Agro Mechanization Business Association of Liberia, Monrovia, Liberia Mobile No: 0886242640 Email: andreannakoffi87@gmail.com	Objective: Farmers will have access to the call centre and also for it to extend in the entire Country.
	VI. Malawi	
21.	Mr. Limbani Noel Emmanuel Assistant Chief Agricultural Extension Officer, Department of Agriculture	Title: Establishment of Horticulture Farmer Producer Organizations (FPOs)
	Extension Services, P.O.Box.30145, Lilongwe-3, Malawi. Fax: +265 (0) 01730233 Email: noellalimbani@gmail.com	Objective: Improved access to agricultural extension information which will increase the horticultural production
22.	Ms. Magombo Mphatso Mary Principal Agriculture Officer (Extension Methodology) Ministry of Agriculture, Irrigation &	Title: Up scaling stakeholder participation in agriculture clusters
	Water Development, Department of Agriculture Extension Services, Lilongwe -3, Malawi. Office Phone: +265 2630040999392230 Email: mphatso08@gmail.com	Objective: Improved livelihoods and good nutrition, food security of naval households.
23.	Mr. Mkochi Malaki Principal Agriculture Gender Roles & Support Services Officer, Ministry of Agriculture, Irrigation & Water Development, Department of Agriculture Extension Services, Karanga Add, Private Bag.4, Karonga, Malawi. Mob: 0998537372, Email: mkochim@yahoo.com	Title: Formation of Cooperative Societies for Promotion of Ground nuts and Soya Bean Production and Marketing Objective: Increased Soya and Ground nut seed production.
24.	Ms. Zgawa Beatrice TemwaniLuhanga District Agricultural Development Officer, Ministry of Agriculture, Irrigation & Water Development, Mzimba North Agriculture Office, P.O.Box.8, Mzuzu, Malawi. Mob: 0888554405, Email: temwaluhanga@yahoo.co.uk	Title: Promoting demand driven Extension service provision among smallholder farmers Objective: A Joint Action Planning, monitoring and evaluation of extension activities by all implementing partners in Robert Mseteka Model Village- Mzimba north.
	VII. Mongolia	
25.	Ms. Baatarjav Bolorzul Senior Officer of Monitoring & Evaluation Department, The Governor's Office of Selenge Province, 2 nd Bag, SukhbaatarSoum, Selenge Province, Mongolia.	Title: Improving capacity of Small- medium sized business women of such Baatar City of Selenge Province
	Office Phone: +976 70363834, Mobile No: 0099053393/Fax: +976 70363834 E-Mail: bbonj25@yahoo.com	Objective: Improved their capabilities in how to cooperate and how to make benefits together

SI.No.	Name & Address		BAWP Title & Objectives
26.	Mr. Lkhagvadori Purevkhishig Head of Foreign Relations and Trade Department, Foreign Relations and Trade Department, Gatsuurt Headquarter, Building, Bayangol District-20, Tolgoit 37,P.O.Box-436, Ulaanbaatar, Mongolia. Phone: +97670001711 / Mobile No: 0099906536 Email: dealer_officer@gatsuurt.mn		Title: Establishment of Milk-Cooperative federation Objective: Establish a milk processing plant and no more imported milk or milk powder
	VII. Mozambique		
27.	Mr. Nair Afonso Afonso Technician Department of Extension and Communication,National Directorate for Agricultural Extension, Maputo,		 Title: Introduction of Youth Incubation Centres through PPP Objectives: ➢ Create job to youth
	Mozambique Phone: +258 21415025, 0824750580 Email: afana014@gmail.com		 Create Interest on farming for youth Increase Agricultural Production.
28.	Ms. Chiziane Helena Adolfo Technician Market and Producers Organization, Ministry of Agriculture & Food Security of Mozambique, National Directorate for Agricultural Extension, Rua Da Resistencia, N 1746, 5Andar, CP1406, Mozambique. Office Phone: Tel:+258-821319119/ +258 21415025 Mobile No: 2584114450 Email: h_chiziane@yahoo.com.br	J. I'm	 Title: Small Machine for by Honey processing Objectives: > Increasing of honey production. > Increasing of honey quality. > Increasing of income of bee keeping.
29.	Mr. Agostinho Daniel Rural Extension Chief of Department, Ministry of Agriculture & Food Security of Mozambique, National Directorate for Agricultural Extension, Maputo, Mozambique. Mobile No: 0825336330 Fax: +258 272221555 Email: danielagostinho71@hotmail.com		 Title: Youth Incubation Centres Objectives: Create job opportunities for youth Create Interest on farming for youth Produce food sufficiently.



3. Emerging Trends in Fruits and Vegetables Marketing

- > Title of the Training Program: Emerging Trends in Fruits and Vegetables Marketing
- Date: 16-30 November, 2016
- > Venue: National Institute of Agriculture Marketing (NIAM), Jaipur, Rajasthan
- Program Director/coordinator

Program Director	Dr. Hema Yadav Director National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan Mob: + 919829210019 Email: <u>hyadav.niam@gov.in</u>
Program Coordinator	Mr. Shanmukh Sagar, Associate Coordinator National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan

Participants profile: 27 executives from 9 countries (11 male &16 female)

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Training objectives:

- The main Objective of the training program was to build capacity of officers, executives and managers in the area of marketing of fruits and vegetables by bringing an understanding of market trends and new developments.
- To inform about online marketing and application of IT Tools for marketing of fruits and vegetables so as to design projects and applications to avail these opportunities.

Training Curriculum

The program is designed around the following themes:-

- 1. Consumer demand and market trends
- 2. Food safety and quality and traceability
- 3. E marketing and alternative marketing system
- 4. Wholesale, Retail, and Hyper market
- 5. Aggregation models and producer organizations
- 6. Fair trade and marketing of organic produce
- 7. Value addition and packaging
- 8. Supply chain management and Logistics
- 9. Branding, segmentation and consumer behavior
- 10. Marketing Infrastructure
- 11. Storage and Cold Chain Management
- 12. Agri-preneurship and Innovations in marketing
- > Training Outcome:
 - Promotion of value addition technologies of various crops like mango, oranges, pineapple, peas, lady finger etc. in the partner countries.

> Change in Knowledge of the participants

From the pre- training test marks of the participants, it was analyzed that 56% of the students scored marks below 50%. From the post- training test marks, it was observed that only 14% of the students scored a percentage below 50% and 86% of the participants scored marks ranging from 60% to 80% which showed a substantial increase in their knowledge and understanding.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10 ('1' being the poor and '10' being the excellent). Executives rated the overall training program as **EXCELLENT**.

> Field Visits:

As part of the Feed the Future India Triangular Training Program on emerging trends in marketing of fruits and vegetables, a field trip was organized for the participants to visit the Muhana terminal market, the market is located in Jaipur.



Back At Work Plans (BAWPs)

SI.No	Name & Address	BAWP Title & Objective
	Afghanistan	
1.	Mr. Zabihullah Awloiyazada Agriculture Affairs Officer Ministry of Agriculture, Irrigation and Livestock (MAIL), Department of Horticulture Jamal Mina, KarteChaar, Kabul, Afghanistan. Tel: +93799066140	Title:Developing website and social media for Fruits & Vegetables marketingObjective:All the farmers, producers, traders, retailers will know the process of marketing of F & V and also they will be aware of products, value addition, new techniques of emerging trends.
2.	Mr. Arash Mohammad Fawad House #7, First Street, Masjid Baba Haji, Charikar City, Parwan, Afghanistan	Title: Developing a business plan for mini cold storageObjective: To develop a business plan for Mini Cold Storage and share with traders and retailers.
3.	Mr. Omid Abdul Herat University, Herat, Afghanistan Tel: +93 (0) 799101630, +93 798408002 Email: rahim_omid2@yahoo.com	Title: Opening an Institute for ABM students (20 persons)Objective: Introducing agri marketing capacity building for the students of ABM
	Botswana	
4.	Ms. Madisa Kgotso Department of Crop Production, Private Bag 00435, Gaborone, Botswana. Tel: 002 6771536215, Fax. No. 00267-3907057 Email: knmadisa@gov.bw	Title: Value Chain Analysis of Fruits Objectives: To reduce post harvest losses by 10% and To increase profit by 10%, commercialize locally processed
5.	Ms. Senkeleng Onkgomoditse Amanda NAMPAADD, Department of Agriculture, Ministry of Agriculture, Post Box. No.240, Pala- pye, Botswana Tel: +267 73 300 639, Fax:+267 4920140 Mob: 267 0777184397 Email: asenkeleng@gmail.com , dseaba@gov.bw	vegetables and fruits.
6.	Mr. Molefi Golebaone Meswele Scientific Officer, NAMPAADD, Ministry of Agriculture, Private Bag 0036, Gaborone, Botswana Tel: + 0267 3190022 / Fax: 0267 3190156 Email: glmmolefi@gov.bw, smanyeula@gov.bw	
	Cambodia	
7.	Mr. Ny Vannak Planning and Statistics N 200 Reah Norodom Blud, SangkotTonheBasak., Khan, Chamarmon, RhnomRenh, Cambodia, Tel: +855 092129552 Email: ny.vannak01@gmail.com	Title: Value chains of cassavaObjective: To promote value chains to other countries and explore the opportunity/ constraints to exporting Cassava

SI.No	Name & Address		BAWP Title & Objective
8.	Ms. Bou Socheata #20 Preah Norodom Blud, SankatTonleBasak, Chamkamon, Phnom Penh, Cambodia Tel: +855 89355865 Email: bousocheata@yahoo.com	A	Title: Value chain analysis on Logan Fruit Objective: To understand the price information of logan fruit compared to two different countries, the flow of prodcuts (supply chain of logan fruit) and the potential of products to the international markets
9.	Ms. Sao Sreyleak Resource Development N 200 Reah Norodom Blud, SangkotTonheBasak., Khan Chamarmon, RhnomRenh, Cambodia. Tel: +(023) 726128, Mob: +855 0017580897, Fax: +855 23 217320 Email: taekzyleak@gmail.com,		Title: Value chain study of banana Objective: To promote the value chains to other countries, To understand the opportunities and constraint in exporting banana
10.	Ms. Thon Ayoura Resource Development N 200 Preah Norodom Blud, Sangkat Tonele Basak, Khan Chamkarmon, Phnom Penh, Cambodia Ph: 023- 726128; Fax: +855-23217320, Mob: (+855) 69548682 Email: ayourathon@gmail.com		Title: Value chain Analysis of Mango Objective: To promote the value chains to other countries, To understand the opportunities and constraint in exporting Mango
	Ghana		
11.	Ms. Charlotte BaahOppang House Number F8B, Ashongman Estate Accra Ghana Tel: +233 303695094 / 303965065, Email: agribusiness-unitmofa@googlegroup.com richcob24@ymail.com		Title: Value chain study of pineapple Objective: To reduce post harvest loss and encourage product diversification by farmers for a better income
12.	Mrs. Alina Naa Densua Albereto Djanie Directorate of Crop Services Ministry of Food and Agriculture PO Box M37, Ministries, Accra Ghana. Tel: +233 244810604, +233 244810604 Email: alinadjanie@gmail.com		Title: Value Addition to Mango Objective: To reduce post- harvest losses and encourage diversification of products
13.	Mrs. Eunice Arhin P. O Box DT 1987 ADENTAACCRA, Ghana. Tel: +233 244701896, Email: eunicebrakua@gmail.com		Title: Value addition to oranges Objective: To reduce post harvest losses in Oranges
	Kenya		
14.	Ms. Nyambura Lydia Manjeru Ministry of Agriculture, Livestock and Fisheries, P.O.Box. 30028 Nairobi, Kenya Tel: 020-2046856, +254 721540149 Fax No. + 020-316731 Email: info_amdi@yahoo.com, Iydiamanjeru@yahoo.com		Title: Capacity building for value addition Objective: Prolonged shelf life of Kales, less wastage, better prices and healthy products

SI.No	Name & Address	BAWP Title & Objective
15.	Mr. Ochieng Patrick Okaka Ministry of Agriculture Livestock and Fisheries, P.O.Box -30028-00100 Nairobi, Kenya Tel: +254 722349490, 737222865 Email: okakapato@yahoo.com okakapats@gmail.com	 Title: Develop an implementation strategy to formalize the wholesale price setting mechanisms Objective: A policy and legal framework to be put in place to formalise all activities in the wholesale markets, leaving retail markets to supply and demand.
16.	Ms. Njeru Jane WandiWanjira Chief Agricultural Officer, Ministry of Agriculture, Livestock and Fisheries, P.O.Box. 66730-00800, Westlands, Nairobi, Kenya Tel: +254 792925859, + 254 722796000 Email: agrinfodata@gmail.com	Title: Develop information pamphlets Objective: Packaged information pamphlets for use in training farmers that can address one product and then be rolled out to other food &Vegetables and other countries
	Liberia	
17.	Ms. Peters Jerryline Choko Field Supervisor, Buchannan Front Street, National Farmers Union of Liberia Monrovia, Liberia Tel: +231886940415 / 0770771423 Email: jerrylinepeters4@gmail.com	Title: Establishment of nursery for farmersObjective: Women will be able to sell their crops to other farmers and the income received will in turn help them boost additional production
18.	Mr. Voker Roland Kerdoue Ministry of Agriculture, P.O.Box. 10-9010, 1000, Monrovia, Liberia Tel: +231 777229014, Email: rolandvoker.k@yahoo.com	Title: Creating awareness about marketing of fruits and vegetablesObjective: Every women is expected to be able to sustain themselves through the production of vegetables/ crops
19.	Ms. Bowman Beatrice Sede Ministry of Agriculture, P.O.Box. 10-9010 1000, Monrovia 10,Liberia Tel: +231 777538968, 886434763 Email: bbowman994@gmail.com	 Title: Farmers lack knowledge of new techniques in producing and marketing of vegetables Objective: To impact the lives of women group by teaching new techniques in production and linking them to market
	Malawi	
20.	Mr. Christopher Amoni Machinga Add, Private Bag 3, Liwonda Malawi Tel: +265 888707985 Email: chrisamoni@yahoo.com	 Title: Supporting FBO with marketing skills and knowledge development in vegetables, maize and peas Objective: Improved knowledge and skills on marketing of crops, business management and improved household income through farming business
21.	Ms. Brenda Mwagomba Ministry of Agriculture, Irrigation and Water Development District Agriculture Office Zomba, Malawi. Tel:+265 999982294; 0884533566 Email: bremwago@yahoo.co.uk	Title:Improvedvalueadditiontechnologies for improved nutritionObjective:Improvedvalueadditiontechnologies for improved nutrition forsmallholder farmersproducing sweetpotatoes.

SI.No	Name & Address		BAWP Title & Objective
22.	Ms. Chifuniro Somanaje Ministry of Agriculture, Irrigation and Water Development Mwanza District Agriculture Office, P O Box 99, Mwanza, Malawi Tel: +265 888 595 647 Email: funisomanje@gmail.com		Title: Develop training material and build capacity of farmers Objective: To reduce post harvest losses in onions and tomatoes and improve incomes from selling of onions and tomatoes
	Mongolia		
23.	Mr. Sergelen Badarch Department of Crop Production, Food & Agricultural Organization 6 Bag, SubaatarSoum, Selenge Province, Mongolia Tel: +976-70363414 Email: barhas_74@yahoo.com		Title: Management of wholesale, retail markets of vegetables Objective: Good chain wholesale, retail markets, increasing income, good logistics channel, government promoted wholesale, retail markets
24.	Ms. Battuya Tsetsegmaa Economist on Vegetable "Gatsuurt" LLC Office building, 20th Sub-District, Bayangol District, Ulaanbaatar city, Mongolia. Tel: 976-7000-3357, Mob: 976 – 0070003357 Fax: 976-7000-1711, Email: officer1@gatsuurt.mn	A	Title: Vegetable Business Total Solution Project Objective: To increase current sales to 3 times per month, decrease the storage wastage upto 3-5% and to launch new e-marketing techniques
	Mozambique		
25.	Ms. Ziote Julieta Milcinho Eliseu Rua Da Resistencia Nr. 1746, t Andar, Caixa, Post Box. No.1406 National Directorate of Agricultural Extension, Ministry of Agriculture and Food Security, Mozambique Tel: 258-21-415276, 258-843899175, Email: jmeliseu22@gmail.com		 Title: Develop training material on fruits processing technologies for extension workers Objectives: To prepare two manuals for training extension workers on banana and pineapple processing technologies and To provide technical material for extension workers about postharvest management of banana and pineapple,
26.	Mr. Ivane Sarmento Maunze Rua da Resistencxia Nr.1746., 5 Degree Andra,Caxia Postal 1406 National Directorate of Agriculture Extension, Ministry of Agriculture and Food Security, Mozambique, Tel: +258-21415276, Mob: 258 - 0843899175, Fax: +258 - 21415023 Email: ismaunze@gmail.com		Title: Develop a training material on fruits processing technologies for extension Objective: To prepare a manual for tomato and carrot processing techniques and availability of tomato and carrot processing information for extension worker
27.	Mr. Assane Fernando DPASA – AVENIDA DA Liberdabe Post Box. No.65 Mozambique Tel: + 258 825708280, +258 0845464940, Email: fernandoassane@yahoo.com.br		 Title: Training farmers on drying processing technology for vegetables and fruits Objective: To reduce postharvest losses and improve conservation methods of fruits and vegetables, To introduce packaging method and availability of vegetable in rain season

4. Agri-Preneurship Development Among Farm Women

- > Title of the Training Program: Agri-preneurship Development Among Farm Women
- Date: 1-15 March, 2017
- > Venue: Kudumbashree, Thiruvananthapuram, Kerala
- Program Director

Dr. Rahul Krishnan Thematic Anchor-Farm Livelihood Kudumbasree, Trivandrum, Kerala Mob: 8281655705, Email: <u>rahulvet231@yahoo.com</u>

Participants profile: 25 executives from 8 countries (4 male & 21 female)

Country	Number of participants
Afghanistan	2
Ghana	4
Kenya	4
Liberia	2
Malawi	5
Mongolia	4
Mozambique	1
Uganda	3

Training objective:

To introduce and discuss the concept and potential of Public Private Partnership in Agricultural Extension.

> Training Curriculum

- 1. Concept, need, potential, Opportunity and challenges in Agripreneurship
- 2. Scale and scope of Agripreneurship among farm women
- 3. Best practices and its adoption barriers
- 4. Value, Challenges and risk involved
- 5. Support environment required for Agripreneurship
- 6. Plan for tracking progress

> Training Outcome:

- The proposed training program primarily focuses on understanding the kudumbashree model of economic empowerment of the women.
- Detailed understanding of the community institution and sufficient and necessary conditions for creating an ecosystem for supporting a entrepreneurship among women were focused.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 15 whereas the average score of post-training was 19. Thus, it is found that the level of knowledge of executives was increased by 26.67 percent after the training program.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10 ('1' being the poor and '10' being the excellent). The executives expressed their satisfaction level by rating the program on an average score of **8.64** on a 10 point continuum indicating the overall impression on the program was **VERY GOOD**.





Field Visits The executives were exposed to various fields i.e. Thennela Agro Producer Company, Nutrimix unit, Micro enterprise unit of Ernakulum, Community structures of Nadathara Panchayat, Kerala Agriculture University through which the executives were able to relate the theory sessions with filed realties. Also they could participate in the women day celebration on 08th March, 2017 at Mallappuram district.



Back At Work Plans (BAWPs)

SI.No	Name and Address		BAWP Title & Objective
	Afghanistan		
1.	Ms. Ruqia Azimi Executive Manager to the Deputy Minister of Technical Affairs Office of Deputy Minister Technical Affairs Ministry of Agriculture, Irrigation and Livestock (MAIL), Kabul, Afghanistan. Tel: 0744384878 Email: raqia_azimi@yahoo.com		Title: Introduce mushroom cultivation among women, and collectivization of the women cultivation groups
2.	Ms. Sajea Amarkhail Food Security and Nutrition Manager Home Economics Department, Ministry of Agriculture, Irrigation and Livestock, (MAIL), Kabul, Afghanistan. Tel: 0799778173 Email: sajea.amarkhail50@gmail.com		Objective: To economically empower the women by group mobilization
	Ghana		
3.	Ms. Theresa Akleh Wayo Deputy Director, Women in Agricultural Development Directorate, Ministry of Food and Agriculture, ACCRA, Ghana. Tel: +233 0507041382 Email: tcawayo@yahoo.com		
4.	Ms. Juliet Ama Safoah Assistant Agriculture Officer, Women in Agricultural Development Directorate, Ministry of Food and Agriculture, ACCRA Ghana. Tel: +233 0244933113, +233 0244746075 Email: amasafoahj@yahoo.com	R	 Title: Sensitize women on concept of group dynamics and processing of Cashew fruits Objectives: Cashew fruits were processed into five commercial food products. These products can be an income generating activity for a number of women in the cashew production areas to economically empower them.
5.	Ms. Danlette Elorm Quashigah Assistant Agriculture Officer, Agricultural College, Ministry of Food and Agriculture, Human Resource Development and Management, ACCRA Ghana Tel: + 233 502313566, Email: edanlettequash@gmail.com		
6.	Ms. Amy EsiBuah Assistant Agriculture Officer, Policy, Planning and Budget Directorate, Ministry of Food and Agriculture, Accra Ghana Tel: +233 244211007, +233 Email: amyebuah@gmail.com		
	Кепуа		
7.	Ms. Nancy Ruguru Kagau Senior Assistant Director, State Department of Fisheries and The Blue Economy, Directorate of Fisheries Nairobi, Kenya. Tel: +254 0721453291, Fax: +254 2713207 Email: fisheries@kenya.go.ke		Title: Farm fish marketing Objective: To organize Women groups who can conduct marketing of fish and Fish products and enhanced income from Aquaculture thereby improving the nutrition

SI.No	Name and Address	BAWP Title & Objective
8.	Ms. Morara Mary Kerubo Principle Agriculture Officer / County Co ordinator Agriculture Sector Development Support Program (ASDSP), Nairobi, County, Ministry of Agriculture, Kenya. Tel: +25420 -2222382, Fax: +254 20340196 Email: mkmorara@gmail.com	 Title: Broiler value chain group development to form Producer company in Nairobi Objective: To establish a Broiler producer company initiation with the aim of coming up with branded products
9.	Ms. Rael Jelimo Lagat Agricultural Officer, Country Department of Agriculture, Livestock & Fisheries Elgeyo Marakwet County, Kenya. Tel: +254 721883666, +254721619946 Email: raelagat@yahoo.com	Title: Promotion of collective farming/ marketing among members of Bidii women group Objective: Collective farming and marketing which will lead to high bargaining power hence better prices for their farm produce
10.	Mr. John Silikhani Mukhwana Principal Assistant Livestock Production Officer, Department of Agriculture, Livestock & Fisheries Homabay, Kenya Tel: +254 700411013, +254 725268202 Email: silikhani2000@yahoo.com,	Title: Record management by farmer groups Objective: To facilitate updated and well documented records of the groups and activities in finances
	Liberia	
11.	Ms. Kona S. Kollie Extension Officer, Young Liberian Women Organization for Improvement (WOFIM) Ministry of Agriculture, Monrovia, Liberia Tel: +231 886597460, Email: ylbwofim@yahoo.com	Title: Capacity building of women groups Objective: To build the capacity of women groups in agricultural and income generation activities
12.	Ms. Elizabeth K Mulbah CEO of Nunu Farm Paynesvillie, Neezoe, Monrovia, Liberia Tel: +231 886520670, Email: elizabethkamumulbah67@gmail.com	Title: Capacity building of farmers to manufacture fish feed to increase the income from fish rearing Objective: To enhance to productivity from own fish farming
	Malawi	
13.	Ms. Mirriam Atuswile Mwambila Agricultural Extension Development Officer, Lilangwe, Malawi Tel: 0992710725, Email: lovmimi2020@gmail.com	Title: Microenterprise group of women in food processing unit and canteen unit Objective: Collective marketing, better participation and recognition of women in agriculture.
14.	Ms. Phiri Chisomo Agriculture Extension Development Officer, Malawi Tel: +265 888897308, Email: phirichisomo9@gmail.com	

Sl.No	Name and Address	BAWP Title & Objective
15.	Ms. Nazonsa Cecilia Agriculture Extension Development Officer Ministry of Agriculture Irrigation and Water Office, Manjawira, Malawi Tel: +265-991659199, 0884528046 Email: cecillianazonse150@gmail.com jeronkhoma@yahoo.co.uk	Title: Microenterprise group for women Objective: Sharing of labour, capital, credits and ideas among women will reduce poverty increase confidence among women
16.	Ms. Nancy Chideru Agricultural Extension Development Officer, Blantyre 7, Malawi Tel: +265-999943906, +265-9999856811 Email: nrchideru@gmail.com	
17.	Ms. Uledi Eliza Agricultural Extension Development Officer Karonge, Malawi Tel: +265-0999343881, Mob: +265995539877 Email: uledieliza@gmail.com , perrinaphewa@gmail.com	Title: Poultry farming groups of women Objectives: To provide Access to loan at the bank Poverty eradication
	Mongolia	
18.	Ms. Nandintsetseg Sookhuu Senior Officer of Crop Production Technology Transfer & Agricultural Extension, Ulaanbaatar, Mongolia	Title: Introduce vegetable cultivation among women and collectivise women for forward and backward linkages
19.	Ms. Nanrantungalag Surenjav Agronomist, "Munkh-Ulz" LLC Ministry of Food, Agriculture and Light Industry, Mongolia	
19	Ms. Nanrantungalag Surenjav Agronomist, "Munkh-Ulz" LLC Ministry of Food, Agriculture and Light Industry, Mongolia	 Objectives: Create a good source of income and increase the economic situation of targeted households Access of poor households to nutrient and complementary food.
20	Ms. Ganchimeg Surenkhorloo Agronomist, GUNA Agricultural Company, Mongolia	Create job opportunity at their home level among the targeted households



Sl.No	Name and Address	BAWP Title & Objective
21	Ms. Altantuya Namsrai Agronomist, Lchka Co. Ltd. Mongolia	 Objectives: Create a good source of income and increase the economic situation of targeted households Access of poor households to nutrient and complementary food. Create job opportunity at their home level among the targeted households
22.	Ms. Emerciana Antonio Muhacha Training Technique, National Directorate of Agricultural Andar, Mozambique	 Title: Processing of cashew pulp for marketing and medicinal value purposes Objectives: ➢ Provide solid knowledge in cashew pulp processing material
	Uganda	
23.	Mr. Muteekanga George Principal Education Officer, Department of Schools and Institutions, Ministry of Education and Sports (MOES), Kampala, Uganda	 Title: Develop a Monitoring mechanism for both formal and non-formal institutions and trainees in Uganda (piloting in one domain for further scaling up) Objective: > Clear record of number of training agencies in Uganda (Both formal and non-formal), number of courses and course content offered.
24.	Mr. Luyimbazi Tonnie Stieve Monitoring and Evaluation Specialist, Caritas Uganda, Ministry of Education, Science, Technology & Sports, Uganda	 Title: Promote active participation of the local government structures in the leadership and management of women development initiatives. Objectives: ➢ Improved access to technical knowledge and skills on agribusiness and micro enterprise management among farm women.
25.	Mr. Tubwangye Samuel Agronomist, Green Innovation Technologies, Department of Agriculture Extension, Kansanga, Kampala, Uganda	 Title: Promote Agricultural knowledge and skills through school gardens and greenhouses Objectives: ➢ Positive mind set towards Agriculture instilled among the young generation. ➢ Increased involvement of the young population in agricultural activities.



5. Production and Post-harvest Technology for Tuber Crops

- > Title of the Training Program: Production and Post-harvest Technology for Tuber Crops
- Date: 4-18 April, 2017
- > Venue: ICAR-Central Tuber Crops Research Institute (CTCRI), Thiruvananthapuram, Kerala
- Program Director/Coordinator



Program Director	Dr. Sethuraman Sivakumar Senior Scientist ICAR-Central Tuber Crops Research Institute (CTCRI), Trivandrum, Kerala Tel : 0471-2598551-54, Mob: +91 9496550999 Email :sethu_73@yahoo.com
Program Coordinator	Dr. H. Kesava Kumar, Associate Coordinator ICAR-Central Tuber Crops Research Institute (CTCRI), Trivandrum, Kerala

> Participants profile: 23 executives from 7 countries (14 male & 9 female)

Country	Number of participants
Botswana	4
Ghana	4
Kenya	4
Liberia	3
Malawi	3
Mozambique	1
Uganda	4

Training objectives:

- To introduce production system-specific technological advances of tropical tuber crops
- To build capacities of participants on cultivating tuber crops in a profitable and sustainable way using improved technologies
- To sensitize the participants on diversified applications of tropical tuber crops to improve economic security of farmers
- To equip participants to identify and use potential value added tuber crops

Training Curriculum

- 1. Developing tuber crops varieties for food security and industrial use.
- 2. Production of quality planting materials of tuber crop
- 3. Agro-techniques for profitable cultivation of cassava, sweet potato, yams, aroids and minor tuber crops
- 4. Site-Specific Nutrient Management and customized fertilizer applications for tubercrop production
- 5. Tuber crops based farming systems
- 6. Organic farming of tuber crops
- 7. Technologies for developing bio-intensive pest and disease management
- 8. Primary and secondary processing equipments for processing of tuber crops
- 9. Extrusion processing of tuber crop starches/flour
- 10. Bio-chemical analysis of tuber cops and their products
- 11. Functional foods from tuber crops
- 12. Industrial products from tuber crops
- 13. Production and potential uses of cassava starch
- 14. Ready to eat bakery products from tuber crops
- 15. Technologies for production of high quality cassava flour (HQCF)
- 16. Strategies for increasing shelf-life of tuber crops



- 17. Technology incubation for entrepreneurship development
- 18. Participatory tuber crops technology development
- 19. Essential Business planning skills for creating tuber crops-based enterprises

Training Outcome

The training outcomes was the promotion of mini sett technology by participants from Kenya, Uganda, Malawi, Mozambique, Malawi production of better quality of planting material for Cassava.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 13.44 whereas the average score of post-training was 20.18. Thus, it is found that the level of knowledge of executives was increase by 50.15 percent after the training program.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10 ('1' being the poor and '10' being the excellent). The executives expressed their satisfaction level by rating the program on an average score of 9.10 on a 10 point continuum indicating the overall impression on the program was **EXCELLENT.**

Field Visits

As a part of the training program, the executives were exposed to real-life farming situations. A filed visit to Mr. M. Robinson, a progressive farmer from Kazhakuttam, Thiruvananthapuram district, Kerala was arranged.



Back At Work Plans (BAWPs)

Sl.No	Name & Addresses		BAWP Title & Objectives
	Botswana		
1.	Mr. Tlotlego Gaafele Principal Technical Officer, Department of Crop Production, Ministry of Agriculture, P.O.Box.15, GANTSI, Botswana Tel: 00267-75140841, Fax:00267- 6596217 Email: gtlotlego@gov.bw		
2.	Mr. Sebonywe Tshoganetso Agricultural Scientific Officer, Ministry of Agricultural Development and Food Security, P.O.Box.15, GANTSI, Botswana Tel: 00267-6596217 Email: tsebonywe@gov.bw		 Title: Introduction and promotion of tuber crops in Botswana - Cassava & Sweet potato Objectives: ➢ Increase in numbers of farmers pro-
3.	Mr. Makgale Nti Bashima Horticultural Officer, Department of Crop Production, District Agricultural Office, Ministry of Agriculture, P.O.Box.14, Machaneng Village,Gaborone, Botswana Tel: +267 4940238, Fax: +267 4940035, Email: nmakgale@gov.bw, babagwasi@gov.bw,		 Availability and easy access of plant- ing materials for farmers. Good extension linkage between research and farmer Increased number of farmers cultivating tubers and adopting new tech- nologies.
4.	Mr. Polelo Joel Principal Horticultural Officer, Southern Rural Training Centre, Department of Crop Production, Ministry of Agriculture, Private Bag No.38, Labatse, Botswana Tel: +267 5440313, Fax: +267 3905096 Email: jpolelo@gov.bw, isebetwane@gov.bw,		
	Ghana		
5.	Mr. Amoh Korang Paul Regional Crops Officer, Regional Agricultural Development Unit (RADU), P.O.Box. 3820, Kumasi, Ghana Tel: +233 03220-38565, +233-208631759 Email: paulkorang85@gmail.com		Title: Promote quality planting material to increase productivity of cassava and yams Objective: Increase the knowledge and skills of district officers and farmers in selection of disease free planting mate- rial of cassava and yams
6.	Mr. Owusu Michael Agriculture Officer,Directorate of Crop Services, Ministry of Food and Agriculture, P.O.Box.M37, ACCRA, Ghana Tel: +0248386529, +233 302662471 Email: mickyy05@yahoo.com, michaelowusu05@gmail.com	es Fu	 Title: Production of cassava planting materials at the ASUANSI agriculture adaptive trails station and linking farmers to planting materials of improved varieties Objectives: ➢ Enhanced farmer access to planting
7.	Ms. Quartey Naa Oyoe Agricultural Officer, Women in Agricultural Development Directorate, Ministry of Food and Agriculture, P.O.Box.M37, Ministries, ACCRA, Ghana Tel: +233 244966970, +233 240 440024 Email: naa_quartey@yahoo.com		 materials of improved varieties to increase crop yield Enhance income and improved livelihood of farmers to ensure food security

SI.No	Name & Addresses	BAWP Title & Objectives
8.	Ms. Yelipoie Comfort Assistant Agricultural Officer, Directorate of Crop Services, Ministry of Food and Agriculture, P.O.Box.M37, Ministries, ACCRA, Ghana Tel: +233 242564484, Fax: +233 302662471 Email: yelipoiecomfort@gmail.com	Title: Processing cassava into flour for consumption using the soaking method Objective: Reduction of post-harvest losses across the country
	Kenya	
9.	Mr. Ndubi Mike O.R. Chief Agriculture Officer (CAO)/ Sub-County Crop Development Officer (SCCDO) State Department of Agriculture, Box. No.273, Ugunja, Kenya Tel: +254 725722133, +254 727986171 Email: daougunja@gmail.com	Title: Farmer capacity building on utiliza- tion of mini-sett technology for the rapid multiplication of clean healthy cassava planting material
10.	Ms. Mwafungo Gladys Murira Senior Agricultural Officer, Country Government of Kilifi, Ministry of Agriculture, Livestock & Fisheries, P.O.Box.19-80108, Kilifi, Kenya Tel: +254 0721592954, +254 0721593919 Email: scaokilifinorth@gmail.com,	 Objectives: ➢ Increased acreage under cassava ➢ Enhanced availability of clean plant- ing material
11.	Mr. Tica Nelson Ngugi Principal Agricultural Officer/ Value Chain Development Officer, Ministry of Agriculture, Agriculture Sector Development Support Programme, P.O.Box. 937-80108, Kilifi County, Kilifi, Kenya Tel: +254 707803320, +254 722670211, Email: kilifi_asdsp@yahoo.com, ngugiticha@yahoo.com,	 Title: Promote rapid multiplication of healthy cassava planting materials through use of mini sett technology. Objectives: > Seven cassava cuttings production groups of Rimato Cooperative Society in Kilifi North Sub County- Train them on rapid multiplication of cassava planting materials
12.	Mr. Oyunga Wycliffe Otieno Subcounty Crop Development & Agribusiness Officer, Sub County Agricultural Office, Kabondo Kasipul Subcounty, Department of Agriculture, Ministry of Agriculture, Livestock & Fisheries, P.O.Box.2, Kadongo, Kenya Tel: +254 719668723, +254 733558344 Email: wikioyunga@yahoo.com	 Two Cassava cottage processing groups (Rimato coop) in the county
	Liberia	
13.	Ms. Famatta Kamara Jebbeh Research Assistant, Department of Technical Services, Ministry of Agriculture, P.O.Box.10-9010, 1000 Monrovia 10, Liberia Tel: +231 886428281, +231 776688148 Email: famattakamara123@gmail.com	Title: Tuber Crops production with le- gume intercropping (cow pea) Objective: The intercropping system will improve soil fertility, suppress weed hence saving farm labour, control soil erosion, and improve family nutrition.

SI.No	Name & Addresses		BAWP Title & Objectives
14.	Ms. Woheel Annie Yamah Executive Director, Agro Food Processing, Ministry of Agriculture, Seventy Second (72) Road, Paynesville City, Liberia Tel: +231 886440377 / +231 886543672 Email: woheelannie@gmail.com,		 Title: Organic farming , Processing and value addition Objectives: > Tohnlo women will be able to prepare starch out of cassava to make paper glue and hair styling gel. > Small skill enterprises will develop. Finances will increase.
15.	Ms. Wonyene Rugie Barry Executive Director Liberia Business Incubator, Ministry of Agriculture, Lower Vergenia, Monrovia, Liberia Tel: +231 880424833, Email: rugieb@yahoo.com, libbusinessincubator@gmail.com		 Title: Training of women farmers in High Quality Cassava Flour (HQCF) Objectives: > Reduction in Post harvest Loss > Value added to the crop > Increase in income
	Malawi		
16.	Ms. Chisesa Emelesi Agriculture Extension Development Officer Department of Agricultural Extension Services, Ministry of Agriculture, EPA, P.O.Box.149, Mitundu, Lilongwe, Malawi Tel: +265 999950341, +265 993779421 Email: chisesaemmie@gmail.com, echisesa@gmail.com,	R	
17.	Ms. Twailbu Amina Agriculture Extension Development Officer Ministry of Agriculture, Govt. of Malawi,Nasenga Extension Planning Area, P.O.Box. 136, Mangochi, Malawi Tel: +265 099594732, 088427139 Email: aminatwaibu@gmail.com, dadomangochi@yahoo.com,		 Title: Processing, preservation and utilization of cassava and sweet potato tubers Objectives: Improved living standards of the people Increase in utilization of the tuber crops Extended shelf life of cassava and sweet potato
18.	Ms. Waluza Ireen Agriculture Extension Development Officer Ministry of Agriculture Irrigation and Water Development, Ntcheu District Agriculture Office, NSIPE Extension Planning Area, P.O.Box.19, Ntcheu, Malawi Tel: +265 996422783, +265 884449920, Email: ireenwaluza@live.com, geokapele- mera@gmail.com,		
	Mozambique		
19.	Mr. Luis Julio Maria Fernando Extensionist XAI-XAI, Chongoene, N 102, Districal Services of Economics Activities, XAI-XAI/ Agriculture and Fishing Department,Mozambique Tel: +258 28241020, Email: julioluis05@gmail.com	R	 Title: Establishment of minisetts demonstration field Objective: The small famers can use the minisett method in their farms to multiply vegetative disease free material of cassava

Sl.No	Name & Addresses	BAWP Title & Objectives
	Uganda	
20.	Mr. Sserwanga Joseph Principal Lecturer Bukalasa Agricultural College, P.O.Box. 174, Wobulenzi, Uganda Tel: +256 752627143, + 256 704131678 Email: kisololule@gmail.com, joseserwanga@yahoo.com,	 Title: Production and Training of Trainers in Quick Multiplication of Improved Cassava and Sweet potato Variety Material Objectives: Well trained trainees in rapid multiplication of root crop planting material. Production of vigorous and quality planting materials. Production of big amounts of planting material in limited space.
21.	Mr. Katumba Joseph Agricultural Officer, Masaka District Local Government, Bukakata Sub-Country Local Council, Office of the Agricultural Officer, P.O.Box.634, Masaka, Uganda Tel: +256 700994267, +256 714594131	 Title: Multiplying certified cassava planting materials through minisetts and disseminating the technology amongst farmers. Objective: Reduction of food insecurity and increase the household income in our communities.
22.	Mr. Kaweesi Henry Senior Agricultural Officer Nakasongola District Local Government, Ministry of Education, Science, Technology & Sports, P.O.Box.1, Nakasongola, Uganda Tel: +256 772894876, +256 703705229 Email: kaweesihenry@ymail.com, kaweesihenry1@gmail.com,	 Title: To evaluate and upscale different improved cassava production technologies and best management practices through different agronomic technologies Objective: Farmers will be equipped with knowledge on different agronomic practices such as rapid multiplication of cassava planting materials
23.	Mr. Baguma Gerald Researcher, NARO Crop Department, Ministry of Education, Science, Technology & Sports, Kachwekano ZARDI, Box.421, Kabale Uganda Tel: +256 781857788 Email: bagumagerald@gmail.com	 Title: Mass propagation of improved clean cassava, using the mini-setts technology Objective: Mass propagation of improved cassava seed using mini-setts will be promoted and popularised for adoption, to reduce disease incidence hence improving rural household food security and income.

6. Farm Mechanization for Small Farmers

- > Title of the Training Program: Farm Mechanization for Small Farmers
- Date: 11-25 April, 2017
- > Venue: ICAR-Central Institute of Agricultural Engineering (CIAE), Bhopal, Madhyapradesh



Program Director / Coordinator

Program Director	Dr. K.K. Singh, Chairman, FAD-11 & Director Central Institute of Agricultural Engineering, Bhopal
Program Coordinator	Dr. Praveen Bargale Principal Scientist ICAR- Central Institute of Agricultural Engineering (CIAE), Bhopal, Madhya Pradesh Mob: +91 9893337808 Email: <u>pcbargale@yahoo.co.in</u>

Participants profile: 23 executives from 9 countries (18 male & 5 female)

Country	Number of participants
Afghanistan	2
Botswana	3
Ghana	2
Kenya	3
Liberia	2
Malawi	3
Mongolia	3
Mozambique	2
Uganda	3

Training objective:

The present course was proposed considering the vital need of human resource development and capacity building for effective mechanization of small farms in African and Asian countries.

Training Curriculum

- 1. Farm mechanization of small farms of African and Asian countries.
- Concept of mechanization, an insight to improved tools, implements and machinery suit able for crops grown in selected Afro-Asian countries and developed by ICAR-CIAE and its AICRPs Farm planning and irrigation systems & equipment,
- 3. Seeding and planting, weeding and intercultural, plant protection, harvesting and threshing.
- 4. Animal operated, power tiller and tractor operated equipment,
- 5. Precision farming,
- 6. Conservation agriculture;
- 7. Horticultural crop mechanization and covered cultivation and
- 8. Women friendly tools
- 9. Ergonomics and safety in agriculture machinery
- 10. Computer Aided Design (CAD) and manufacturing technology of simple agriculture implements,
- 11. Testing of agricultural equipment,
- 12. Entrepreneurship through agribusiness and custom hiring of agricultural machinery for small farms and renewable energy gadgets for small farms.
- Training Outcome:
 - The training outcomes are the replication of the Indian innovations in farm machinery in partner countries. Eg: Maize shellers, Twin Wheel Weeder, etc.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 10.83 whereas the average score of post-training was 18.43. Thus, it is found that the level of knowledge of executives was increase by 70.18 percent after the training program.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10 ('1' being the poor and '10' being the excellent). The executives expressed their satisfaction level by rating the program on an average score of 9.20 on a 10-point continuum indicating the overall impression on the program was **EXCELLENT.**

> Field Visits

The executives were exposed to various field visits i.e. Central Farm Machinery & Tractor Training Institute, (CFMTTI), Budhni, ITC e-chaupal, Vidisha, TMTL – TAFE Motors and Tractors Limited, Bhopal, Kachibarkhera-village etc., to interact with the innovative, agriprenuer farmers and experts in specific areas and exposed them with live examples and success stories





S.No	Name & Address	BAWP Title & Objective/s
	Afghanistan	
1.	Mr. Wesal Mohammad Qasim Head of Agricultural Mechanization Department Mechanization Department, Ministry of Agriculture, Irrigation and Livestock (MAIL) Kabul, Afghanistan Tel: 700261242, Email: <u>gasim_wesal@yahoo.com</u>	 Title: Women Empowerment Objectives: Increase farmers income due to mechanization Increase in employment opportunity Increase the Production Productivity of Agriculture Investors
2.	Mr. Omid Farhad Executive Manager Danesh-e-Nawen Agriculture Company, Jadehal, Lichea Mehri, Shirdel Market, 3 rd Floor, #8, Herat, Afghanistan Tel: +0093-798408002, 40230678 Email: farhad.omid24@gmail.com; dads.agricompany@gmail.com	 Title: Promotion of custom hiring of agricultural machineries and technologies Objective: Increase in employment opportunity to youths when demand of agricultural machinery will rise leads to expansion of agricultural machinery industry
	Botswana	
3.	Mr. Otisitswe Thapelo Principal Technical Officer, Department of Crop Production,Ministry of Agricultural Development & Food Security, Private Bag.No.00435, Gaborone, Botswana, Tel: +267 71813464, Email: totisitswe@gov.bw,	 Title: Promotion of Tubular Maize Sheller Objectives: Reduce shelling cost Timeliness of shelling will be realized Increase in output capacity Reduction in drudgery
4.	Mr. Dintwe Rebaone Agricultural Engineer Department of Crop Production, Ministry of Agricultural Development & Food Security, Private Bag - 003, Gaborone, Botswana Tel: +267 71779214, +2675390282 Email: rebaoned@gmail.com	Title: Increase of Groundnut Production In Botswana Objectives: To increase the number of Groundnut growing farmers in Botswana
5.	Mr. Modukanele Alpha Senior Agricultural Engineer, Department of Crop Production, Ministry of Agricultural Development & Food Security, Private Bag.No.00435, Gaborone, Botswana Tel: +267 71336664, Email: <u>amodukanele@gov.bw</u>	 Title: Reduction in cost and drudgery of transplanting vegetables Objectives: > Growth in horticulture production > Reduction on cost and drudgery
	Ghana	
6.	Mr. Barakah Nana Kuuku Assistant Agricultural Officer, Department of Agriculture, GA-East, Abokobi, Greater Accra, Ghana Tel: +0553058233, 0502297378, 0574666300 Email: triller1a@yahoo.com	 Title: Women friendly technologies for cultivation of Maize, Groundnut and Rice for empowering rural woman Objective: To improve capacity of woman workers by at least 25% by the use of women friendly machines in Central Gonja district

S.No	Name & Address	BAWP Title & Objective/s
7.	Ms. Atchulo Azara Assistant Agricultural Officer, Directorate of Agricultural Engineering Services, Ministry of Food and Agriculture, P.O.Box. 50,BUIPE, Ghana Tel: +0208074437, Email: atchuloazara@gmail.com	 Title: Training and education to vegetable and maize growers Objectives: Increase in productivity and income Effective and efficient use of water Reduce drudgery
	Kenya	
8.	Mr. Opar Samwel Odoyo Superintendent Engineer, ATDC Mtwapa, Ministry of Agriculture, P.O.Box. 244, Mtwapa, Kenya Tel: +254 0722764503, +254 0721942368 Email: <u>atdcmtwapa2006@yahoo.com</u>	 Title: Pulses Farming Mechanization In Kenya Objective: To increase farmers income and improved food security in the country
9.	Ms. Wangila Catherine Namboko Senior Assistant Livestock Production Officer Ministry of Agriculture , Livestock & Fisheries, State Department of Livestock, P.O Box 449-20117 Naivasha, Kenya Tel: +254 (0) 50-50176, Email: dtinaivasha@yahoo.com	 Title: Land development for increasing agricultural productivity Objective: Increased land put under agriculture production and productivity Increased income for farmers and food security for the country
10.	Mr. Macharia Simon Assistant Director of Fisheries, National Aquaculture Development Centre - Sagana, P.O.Box. 26, State Department of Fisheries and the Blue Economy, Ministry of Agriculture, Livestock and Fisheries, Sagana, Kenya Tel: +254 770021277, Email: <u>natdc@yahoo.com</u>	 Title: Pressurizzed Irrigation Objectives: > Increase water efficiency > Increase area of irrigation > Increase animal feeds
	Liberia	
11.	Mr. Paye Archie Saye Extension Officer SAPEC, World Bank Community, Kakata, Margibi County, Liberia Tel No: +231-886909306, Email: archiespaye@yahoo.com,	Title: Farm mechanization for smallholder farmers of Liberia (FMSOL) Objectives: To see agricultural transformation in yields, productions, storage facilities, transportations, postharvest
12.	Mr. Woods Basie Konah General Manager, Boss Investment Limited, Ministry of Agriculture, Big Joe Town, Grand Bassa County, Liberia Tel No: +231775124038 Email: bosstransport@verizon.net	handling, soil and water management, mechanization to commercialization of farmers produce, enhancement of farmers income generational changes, reductions of food insecurity
42	Malawi	
13.	Ms. Muhama Constance Agriculture Extension Development Officer, Extension Department, Ministry of Agriculture Irrigation and Water Development, Mulanje District Agriculture Office, P.O.Box.49, Mulanje, Malawi Tel: + 265 999600942 mail: comuhama@gmail.com	 Title: Farm mechanization for rice Production in Malawi Objectives: Mechanization package for rice production High yield of Rice Drudgery will be reduced Saves time

S.No	Name & Address		BAWP Title & Objective/s
14.	Mr. Chiomba Mathews Mike Agriculture Extension Development Officer, Salima District Agriculture Office, Ministry of Agriculture and Food Security, P.O.Box. 491,Salima, Malawi Tel: +265 999059988 Email: <u>matthewschiomba@gmail.com</u>		 Title: Farm mechanization and uses of hand tools Objectives: > To train atleast at least 30 farmers on farm mechanization > Increase in maize production (yields)
15.	Ms. Kalinga Charity Agriculture Extension Development Officer, Department of Agricultural Extension Services, Ministry of Agriculture Irrigation and Water Development, Neno District Agriculture Office, P.O.Box.55, Neno, Malawi Tel: +265 8884555353, Email: <u>charityafonso1982@gmail.com</u>		 Title: Sowing interculture & threshing of rice and maize Objectives: ➢ Increase in area under rice and maize cultivation. ➢ Knowledge transfer to fellow extension workers.
	Mongolia		
16.	Mr. Tserenpil Zundui Director Nyambaigal davaa LLC Ministry of Food, Agriculture and Light Industry of Mongolia, Mongolia Tel: +976 99398833 Email: zundui@yahoo.com, mofa@mofa.gov.mn		 Title: Mechanization of Maize cultivation in Mongolia Objectives: Maximum crop yield by intervention of maize mechanization packages. More feed stock available for livestock. Training and demonstration to the farmers for better experience on the use of mechanization package for maize production technology.
17.	Mr. Narankhuu Khurts General Agronomist of Selenge Province, Mongolia Department Crop Production, Food and Agricultural Organization of Province Selenge 6 Bag , Sukhbaatar Solum, Selenge Province, Mongolia Tel: +976 70362500/Fax: 976-70363414 Email: <u>barhas_74@yahoo.com</u>	Q.	 Title: Zero Tillage agriculture machine utilization for small farmers in Mongolia Objectives: Minimum soil erosion and maximum crop residue incorporation in soil. High production of crop, with low energy input. Training and demonstration to the farmers on the use of zero tillage machine/technology.
18.	Mr. Purev Batjargal Agri-technical Specialist National Creation and Establishment, Agriculture and Livestock Department Ministry of Food and Agriculture and Light Industry ""Khalkh Gol"" Khan -Uul District 3th Khoroo Crop Promotion Fund Building N206 Ulaanbaatar, Mongolia Tel: +976 83141455, Email: govihangai@gmail.com		 Title: Micro irrigation system for small farmers in Mongolia Objectives: > Maximum use of available water. > Maximum crop yield. > Training and demonstration to the farmers on the use of Laser Land Leveller and Micro Irrigation System technology.

S.No	Name & Address	BAWP Title & Objective/s
	Mozambique	
19.	Mr. Danca Jose Manuel Jose Technology Officer, National Directorate of Agrarian Extension, Ministry of Agricultural and Food Security, Rua da Resistencia, Nr. 1746, 5 Andar, Caixa Postal 146, Maputo, Mozambique Tel: +258 21415023, Fax: +258 21415023 Email: jmjdanca@gmail.com	 Title: Mechanization for cereals, pulses and vegetables Objectives: Reduced post-harvest losses and improved final quality produce To benefit small farmers with some production and agro-processing
20.	Mr. NovidadeCiro Alexander Matlaba Supervisor of Rural Extension, Planner and Agriculture Technician District Service of Economic Activities Street of Cathlica Church, Magude, Magude, Mozambique Tel: +25821910028; Fax: +258 21415026 Email: cironovidade@yahoo.com	machinery
	Uganda	
21.	Mr. Oluka William Farm Officer Sugar Cooperation of Uganda Limited, Ministry of Education, Science, Technology & Sports, Lugazi, Uganda Tel: +256 701765969 Email: welomsuccess@gmail.com	 Title: Establishment of rain water harvesting structure & micro irrigation system for vegetable production in covered cultivation Objectives: To increase the vegetable production by 30% Cases of malnutrition among children and expecting mothers will reduce by 20% To increase the income status of the community especially women and youth by 15-20%
22.	Mr. Jafer Abubakar Assistant Lecturer Bukalasa Agricultural College, Ministry of Agriculture Animal Husbandry and Fisheries, P.O. Box 174, Wobulenzi, Stationed in Bukalasa Agricultural College, Kampala, Uganda Tel: +256 6774249795, Email: jafarabubakar59@gmail.com	 Title: Promotion and use of covered cultivation technology in production of vegetables Objectives: > New employment opportunities for woman with reduced drudgery > Increased food and vegetable production > Reduction in poverty level
23.	Ms. Nakitto Sarah Agricultural Officer, Luweero District Local Government, Ministry of Education, Science, Technology & Sports, Mityana, Uganda Tel: + 256 772470904 / +256 701470904, +256 0776875594, + 256 773468804 Email: hamidah.kyeyune@gmail.com	 Title: Introduction of New Mechanization Technologies for Maize Cultivation among Women Farmers in Uganda Objectives: Reduced seed wastage and improved crop establishment for subsequent field operations Reduced drudgery among the women farm workers in different field operations Reduced injuries during maize shelling

7. Modern Dairy Technology and Management

- > Title of the Training Program: Modern Dairy Technology and Management
- Date: 15 -29 April, 2017
- Venue: ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana
- Program Director

Dr. Gopal Sankhala Principal Scientist ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana Mob: + 91 9416952786 Email: gssitaram@gmail.com

Participants profile: 24 executives from 9 countries (16 male & 8 female)

Country	Number of Participants
Afghanistan	02
Botswana	03
Ghana	03
Kenya	03
Liberia	03
Malawi	03
Mongolia	03
Mozambique	01
Uganda	03

Training objectives:

- To acquaint the participants with knowledge in principles, planning and technical approach for establishing viable dairy farms, processing of milk and development of marketing network
- Development of value chain in milk production, processing and marketing to minimize the marketing channels with emphasis on dairy cooperatives.

Training Curriculum

- 1. Breeding policies and programs for improvement of Cattle and Buffalo
- 2. Quick tests for checking adulteration in dairy products
- 3. Utilization and Management of dairy farm waste
- 4. Feed Resource management and ration formulation for dairy animal
- 5. Liquid milk processing
- 6. Post harvesting technology in dairy processing
- 7. Care in artificial Insemination, frozen semen handling and pregnancy diagnosis in large animals
- 8. Advances in Digital learning for empowering livestock farmers
- 9. Extension policies for livestock development
- 10. Typing of Milk for A1 and A2 beta casein
- 11. Dairy Animal Welfare standards
- 12. Automation of dairy processing unit

> Training Outcome:

 Capacity building on improved animal health practices and dairy cooperative management strategies undertaken by participants in Mongolia, Botswana and Kenya.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 15 whereas the average score of post-training was 17.66. Thus, it is found that the level of knowledge of executives was increase by 70.18 percent after the training



program.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10 ('1' being the poor and '10' being the excellent). The executives expressed their satisfaction level by rating the program on an average score of 9.10 on a 10 point continuum indicating the overall impression on the program was **EXCELLENT.**

Field Visits

The executives were exposed to various field visits i.e. Lakshya Milk Plant (Jind) which is successful Dairy Cooperative of Haryana, cattle yard, ABRC, Biotechnology labs, fodder farm and visits to farms of progressive dairy farmers in Karnal and Kurukshetra districts followed by dairy entrepreneurs involved in the value chain of production to marketing from small scale to large scale.



Sl.No	Name & Address	BAWP Title and Objectives
	Afghanistan	
1.	Ms. Rana Hassan Saidy Head, Veterinary Public Health Lab Department of Horticulture, Ministry of Agriculture, Irrigation and Livestock (MAIL), Kabul, Afghanistan, Tel: 702644650 Email:dr.ronahassansaidy@yahoo.com	Title: Knowledge dissemination through trainings to farmers on cattle breeding technologies
2.	Mr. Safi Omed Khan Dairy Lab Technician Integrated Dairy Scheme, Farm Hada, IDS Jalalabad-Nangarhar Afghanistan Tel: 772279520 Email: safi_omed2006@yahoo.com	Title: Milk Quality Testing in Nanaghar (Afghanistan)Objective: To train and facilitate the Cooperative Milk Collectors on milk quality testing for adulteration.
	Botswana	
3.	Ms. Pelaelo-Grand Tiyapo Chief Agricultural Scientific Officer, NAMPAADD, Ministry of Agricultural Development and Food Security, P.O.Bag. 00360, Gaborone, Botswana Tel: +267 3689170, +267 3928010 Mob: +267 73251012, Fax: +267 3190156 Email: tiyapogrand2013@gmail.com	 Title: Feed acquisition and conservation of animal feed for year round feeding. Objective: To help the farmers make use of all the available feed recourses conserve crop residue (rice straws, wheat, silage making silage and fresh planting)
4.	Mr. Moloi Inspector Phineas Principal Agricultural Scientific Officer I- Dairy NAMAADD Ministry of Agriculture Development and Food Security PIBAG 00360, Gaborone, Botswana Tel: +267-3190156, Email: imoloi@gov.bw	Title: Promote Feeding mixed rations with green fodderObjective: To advise the farmers to secure green fodder such as Dolichos Lab, Lucene, Maize silage and help them with formulation of TMR.
5.	Ms. Lepono Kebafilwe Scientific Officer-II Department of Animal Production, Ministry of Agricultural Development & Food Security, P.O.Box. 4, Molepolole, Botswana Tel: + 267 71824334, Email: klepono@gov.bw	Title: Use of AI technique in Dairy FarmingObjective:Help the farmers to breed their cattle at the right time using AI technique
	Ghana	
6.	Mr. Eshun Emmanuel Chief Health Officer Veterinary Service Directorate (Head Quarters) Ministry of Food and Agriculture, Box M161, Accra, Ghana, Tel : +233 302775377, Email: vsdghana@gmail.com,	Title: Provide Trainings, workshops and Seminars on Good reproductive health program of CattleObjective: To increase the production in calving intervals and improved knowledge on animals
7.	Ms. Darkoh Gifty Agriculture Officer Animal Production Directorate, Ministry of Food and Agriculture Post Office Box 3820, Adum-Kumasi Ghana Tel: 03220-36585/6 Email: darkogifty2015@gmail.com,	Title: Training in pasture establishment and fodder preservation. (Zero grazing) like Silage and Hay makingObjectives: To increase the Milk production

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SI.No	Name & Address	BAWP Title and Objectives
8.	Mr. Assan Ishmael Kojo Assistant Agriculture Officer Ministry of Food and Agriculture P.O. Box 5779, ACCRA-North, Ghana Tel: +233 (0)274747847 Email: eddbekoe@yahoo.com	Title: Development of pastures Objective: To obtain well developed pastures to supplement animal feed both in the wet and dry season.
	Kenya	
9.	Mr. Orenge Juvinalis Stevan Kenaly Principal Livestock Production Officer, Ministry of Agriculture, Livestock and Fisheries, P.O.Box.379 40500, Nyamira, Kenya Tel: +254 0722245454, Email: orengejuvinalis@yahoo.com	Title: Sensitize dairy farmers on herd health and management.Objective: To create awareness on vaccinations of dairy calves of 3-8 months age to improve ways to control mastitis
10.	Ms. Walya Sarah Mwende Senior Lecturer Ministry of Agriculture , Livestock & Fisheries, State Department of Livestock P.O Box 449-20117, Naivasha, Kenya, Tel: +254 (0) 50-50176 Email: dtinaivasha@yahoo.com	Title: Production/ Processing of new dairy products Objective: To promote production/ processing and consumption dairy products
11.	Mr. Obewe Maurice Hezekiel Senior Assistant Livestock Production Officer Ministry of Agriculture , Livestock & Fisheries, State Department of Livestock Kabete Vterinary Laboratories Bag Kangemi, Kenya, Tel: 0722439557 (O) Email: obewam@yahoo.com	Title: Pasture Preservation Objective: To help farmers preserve excess forage and use it during drought.
	Liberia	
12.	Mr. Chea Blamo Assistant Monitoring & Evaluation Officer Community of Hope Agriculture Project, M& E Section, Zubah Town, Paynesville City, Liberia Tel:+231886543735 Email: chapsriliberia@gmail.com	Title: Education on Dairy Animals/ Livestock Welfare Objectives: > To improve Dairy animal health > To provide safe meat for public consumption
13.	Mr. Karngbo Patrick Gargar Project Director Community Based Farmer Association Ministry of Agriculture, New Georgia Estate, Gardnersville, Liberia, Tel: +231886412857 Email: pkarngbo2006@yahoo.com,	Title: Trainings on goat farming/Dairy goat/ Livestock Objective: To promote low cost dairy and goat farming among the farmers
14.	Mr. Murphy Mehin Wondal Agricultural Extension Technician Karate, Margibi County Liberia Tel: (+231)888484425/ +231777330020 Email: murphymehin@yahoo.com	Title: Value chain analysis, production processing marketing – (Management) using the farming system approach.Objective: To train women group in dairy farming, value chain analysis, production, processing and marketing of dairy products

SI.No	Name & Address	BAWP Title and Objectives
	Malawi	
15.	Mr. Chiwale Enock Noxie Devson Agriculture Extension Development Coordinator, Ministry of Agriculture Irrigation and Water Development, Thyolo District Agriculture Office, P.O.Box.22, Thyolo, Malawi Tel: +265 884320241, +265 888585533 Email: enockchiwale@yahoo.com	Title: Improvement of Dairy Milk Yield ProductionObjective: Using the Dairy Farm Business Schools a a platform to train the farmers on silage preparation, fodder preservation and improved milk production
16.	Mr. Banda Madalitso Agriculture Extension Development Officer (AEDO) Ministry of Agriculture Irrigation and Water Development Bilila Extension Planning Area, P.O Box 19, Ntcheu, Malawi Tel: :+265 995295860/8887 2291 Email: bandamadalitso277@gmail.com	Title: Improvement in local breeds Objective: To improve local breeds by 6% by use of AI to produce more milk.
17.	Ms. Staubi Chifundo Agriculture Extension Development Officer, Ministry of Agriculture Irrigation and Water Development, Thyolo District Agriculture Office, P.O.Box.22, Thyolo, Malawi Tel: +265 999 387 618, +265 999 811 508 Email: staubichifundo@gmail.com	Title: Improve Milk Quality and Quantit Objectives: Reduce cases of mastitis by at-least 50%, Increased milk yield and Produce high fat content milk.
	Mongolia	
18.	Ms. Tuvshintuya Gombo Ganbaatar Officer for Breeding Registration and Information, Production and Technology Department National Center of Livestock Gene Bank, Ministry of Food, Agriculture and Light Industry, Government Building 9A, Peace Avenue 16A, Bayanzurkh District, Ulaanbaatar, Mongolia, Tel: +976 456890, Email: otgoo_tuvshuu@yahoo.com,	Title: Improvement of milk production from milch animals Objective: To promote embryo technology for higher milk production from milch animals
19.	Mr. Nayantsogoo Batbileg Officer Veterinarian of Science Province, Department Veterinarian Food and Agricultural Organization of Selenge, Province of Mongolia, 2 Bag, Sukhbaatar Soum, Selenge Province, Mongolia Tel: +976-70363414; +976-99512665 Email: seri3000@yahoo.com	Title: To promote Animal Health Technology
20.	Mr. Nergui Munkhbayar Researcher and Project Coordinator Livestock Management Department SUUL BUGA, 4 th Bag, Tseel sum, Tuw Province, Mongolia Tel: +976-89632155, Email: muugii1985@gmail.com,	Title: Artificial Insemination Objectives: To create specialized breeding center in farmer's community To produce more quality milk To increase farmer income

SI.No	Name & Address	BAWP Title and Objectives
	Mozambique	
21.	Mr. Nguiliche Gasper Sumundence Banda District Service of Economic Activities Rua da Missao, Mozambique Tel: +258910028; +258 847899390; +258 846022925 Email: nguilichebanda@gmail.com	Title: Training small scale dairy processingObjective: To introduce low cost milk processing techniques, Cheese production and innovative the packaging
	Uganda	
22.	Mr. Matsiko Mark Senior Reserach Technician Uganda Industrial Reserach Institute, Ministry of Education, Science, Technology & Sports, P. O Box 7086 Kampala, Uganda Tel: +256 414286245; Fax No: +256 414 286695 Email: matsiko88@gmail.com	Title: Promoting value addition to milk by use of appropriate technology Objective: Empowered small holder farmers in milk value addition
23.	Mr. Asiimwe Karimu Grace Veterinary Officer, Kiruhura District Local Government, P.O.Box.5, Rushere, Uganda Tel: +256 782672805/ +256 702672805, Email: asiimekg@yahoo.com	Title: Dairy Extension on feeds and feedingObjective: Sensitizing farmers for the need ofsupplement feeding with concentrates and legumes for better productivity
24.	Ms. Ninabbanja Eve Lecturer, Bukalasa Agricultural College, Training Division, Ministry of Agriculture Animal Industries and Fisheries, P.O.Box. 174, Wobulenzi, Uganda Tel: +256 772569424, +256 7754569426, Email: reumah77@gmail.com	 Title: Capacity building TOT (training of trainers) for extension workers about modern breeding technologies Objectives: > Increase production of milk and one calf per cow per year > Disseminate knowledge of genetic potential of livestock

8. International Partnership Convention for Points of Contact (PoCs) of Partner **Countries from African and Asian Countries**

- Title of the Training Program: International Partnership Convention for Point of Contacts (PoCs) of Partner Countries from African and Asian Countries
- Date: 28 June 1 July, 2017
- Venue: National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana
- **Program Director**

Dr. P. Chandra Shekara,

Director (Agricultural Extension) MANAGE, Rajendranagar, Hyderabad - 500 030, Telangana, India., Website: http://www.manage.gov.in

Country	Number of participants
Afghanistan	01
Botswana	01
Cambodia	01
Ghana	01
Kenya	01
Liberia	01
Malawi	01
Mongolia	01
Mozambique	01
Myanmar	01
Uganda	01
Vietnam	01
India	10

Participants profile: 22 executives from 13 countries (19 male & 3 female)

Training objective:

To make aware, sensitize, role and responsibilities of the POCs in entire process of nomination. It is imperative that in order to achieve higher impact, the future training programs should be designed in consultation with Partner Countries and Partner Institutions.

Training Curriculum:

- 1. Discussion of training themes, prioritization, program planning, implementation and evaluation.
- 2. Guidelines for participant selection
- 3. Discussion about Standard Operating Procedures (SOP)
- 4. Terms and conditions for participants to attend FTF ITT.
- 5. Rules for reimbursement of health insurance, visa, in-country travel, airfare etc.

Training Outcome:

The Partner Institutions are given an opportunity to organize International Training Programs during the project period up to 2020.





9. Modern Storage Technologies in Agriculture

- > Title of the Training Program: Modern Storage Technologies in Agriculture
- Date: 1- 15 September, 2017
- Venue: ICAR Central Institute of Post-Harvest Engineering & Technology (CIPHET), Ludhiana, Punjab
- Program Director/Coordinators



Program Director	Dr. R.K. Singh
	The Director (Acting)
	ICAR - Central Institute of Post-Harvest Engineering & Technology,
	Ludhiana-141004, Punjab
	Off. Phone: 0161-2313101, Fax: 0161-2308670
	Email: ciphetludhiana1989@gmail.com,
Program Coordinators	Dr. R. K. Vishwakarma
	Head (Acting), Horticultural Crop Processing Division & In-charge
	ICAR - Central Institute of Post-Harvest Engineering & Technology (CIPHET),
	Ludhiana, Punjab
	Mob: +91 9463100973, Email: rkguptaciphet@gmail.com
	Dr. V. EyarkaiNambi
	Scientist (AS&PE)
	CIPHET, Ludhiana.
	Mob: +91 9465667772 (Punjab)+91 99522 4(Tamil Nadu)
	Email: eyarkainambi@gmail.com,

> Participants profile: 20 executives from 11 countries (11 male & 9 female)

Country	Number of participants
Afghanistan	2
Botswana	2
Cambodia	1
Ghana	2
Kenya	2
Liberia	1
Malawi	2
Mongolia	1
Myanmar	2
Sudan	3
Uganda	2

Training objectives

- Different storage techniques/systems available for major food grains and horticultural produce storage in developing countries.
- Design, construction and management of low-cost evaporative cooled storage structures for perishables.
- Sensitizing the participants about insect control, fumigation and other quality control of stored grain ecosystems
- Demonstrate the bulk storage systems with effective handling of food grains, Controlled Atmosphere (CA) storage & Modified Atmosphere storage for horticultural produce.

Training Curriculum

- 1. Overall perspective about the different storage systems
- 2. Recent developments in handling and storage

- 3. Concepts of stored grain ecosystems,
- 4. Quality and insect control in the stored grains,
- 5. Different type of fumigation methods/systems and Fumigation standards,
- 6. Plant quarantine operations
- 7. Evaporative cooled storage, cold storage, modern methods like CA storage, delayed ripening Processes, multi-commodity cold storage systems
- 8. Concept of cold chain and its management
- 9. Bulk grain handling, transportation and storage
- 10. Issue/ problems with the existing system of storage in the developing countries

Training Outcome

The mass awareness on safe food handling and proper management of post harvest produce was organised in Botswana. Sensitization of food safety programs in other partner countries taken up by the FTF ITT trainees.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 9.9 whereas the average score of post-training was 15.8. Thus, it is found that the level of knowledge of executives was increase by 59.60 percent after the training program.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.50 on a 10 point continuum indicating the overall impression on the program was **EXCELLENT.**

> Field Visits

The participants were exposed to field visits of practical importance like the Twin screw extrusion unit of FG&OP Division, food grain processing lab of FG&OP Division, Non-destructive quality evaluation lab of AS&EC Division, Agro Processing Unit, Punjab Post Harvest Technology Centre, Field Fresh Private Limited., Cold Chamber / Ripening Chambers at Punjab Agricultural University and the Punjab Post Harvest Technology Centre.



SI. No	Name and Address	BAWP Title
	Afghanistan	
1.	Mr. Fazli Rahullah Cereal Strategic Storage and Food Security Department, Ministry of Agriculture, Irrigation and Livestock, Jamal Mina,District-3, Kabul University Road,Kabul, Afghanistan Tel: + 93 (0) 748000362, Email: <u>r.fazli1979@gmail.com</u>	Implementation of Advanced Storage technology for perishables
2.	Mr. Noori Abdul Sami Food Security and Grain Strategic Reserves Department, Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mina, District-3, Karta Sakhi Squire, Kabul, Afghanistan Tel: + 93 (0) 774317375, Email: sami.noori11@yahoo.com	Implementation of Advanced Storage technology for perishables
	Botswana	
3.	Ms. Moatswi Chakubinga Private Bag 0091, Ministry of Agriculture, Crop Production, Gabrone, Botswana. Tel: +267 72614383, Fax: +267 39287628 Email: ccmoatswi@gov.bw, mgmoatswi@gov.bw	Cold Chain Storage/ Minimum Processing
4.	Mr. Thero Peter Ministry of Agriculture, Development and Food security, Crop Production, P.O.Box. 300, Mahalapye, Botswana Tel: +256 71633346, Fax: +256 4710678 Email: <u>pthero@gov.bw</u> , <u>imorapedi@gov.bw</u>	Storage technology awareness and adoption
	Cambodia	
5.	Ms. Khieu Sokny Prek Leap National College of Agriculture, Highway 6A, SangkatPrek Leap, Khan Chroychangva, Phnom Phen, Cambodia. Tel: +855 236910595, +855 12588010 Email: <u>khieusokny@yahoo.com</u> ,	Capacity building for Storage Technology Adoption
	Ghana	
6.	Ms. Kwawu Patience Ministry of Food and Agriculture, Women in Agriculture Development, P.O.Box.M37, Ministries, ACCRA, Ghana. Tel: 023324966970, 00233249615225 Email: pgbediame@yahoo.com, gershon@gmail.com,	Capacity building for modern storage techniques

SI. No	Name and Address		BAWP Title
7.	Mr. Frimpong Manso Justice Agricultural Engineering Services Directorate of MOFA, P.O.Box. M82, Gifford Road, Burma Camp, Accra, Ghana. Tel: +233302777789, +233244409133 Email: <u>aesdmofa@hotmail.com</u> ,		Capacity building for modern storage techniques
	Kenya		
8.	Mrs. Gitahi Faith Wangui Department of Livestock Production, Ministry of Agriculture, Livestock and Fisheries Development, P.O.Box. 34188, Nairobi, Kenya Tel: 0725208143 Email: <u>faithwanguigitahi@yahoo.com</u>		Capacity building for post harvest storage
9.	Mr. Gichuki Stephen AHITI Ndomba Institute, Ministry of Agriculture, Livestock and Fisheries Development, P.O.Box.32 10300, Kerugoya, Nairobi, Kenya. Tel: 0702096724, 0722610008 Email:gichukiwajoy@yahoo.com		Capacity building for storage technologies
	Liberia		
10.	Mrs. Lydia P. Kerkula Central Agriculture Research Institute (CARI), P.O.YMCA Community, GSA Road, Bong County, Liberia. Tel: +231 886375191 Email: <u>zephanielc@gmail.com</u> , <u>akarnuah9@gmail.com</u> ,		Storage of rice
	Malawi		
11.	Mr. Frank John Ministry of Agriculture, Irrigation and Water Development (Agricultural Extension Services Department), Chiradzulu, Agricultural District, P.O. Box 28, Chiradzulu, Malawi. Ph:(265) 999002180/881368 077 Email: johnfrank261@gmail.com	Republic of Stationed	Storage mechanisms for crops
12.	Ms. Musaiwa Priscilla Lunzu EPA, P.O.Box. 32, Ministry of Agriculture /Extension, Blantyre, Malawi. Mob: 0999704955, 0884011912 Email: <u>mikedaka2016@gmail.com</u>		Storage structures establishment
	Mongolia		
13.	Mr. Lkhagvasuren Khosbayar USUH TARIA LLC, Room No.115, Selenge Trade Centre, SukhbaatarSoum, Selenge Province, Mongolia. Telefax: 97670492233, Mob: 97699882126 Email: jester.hosoo@yahoo.com,	1	Awareness on modern storage technologies

Sl. No	Name and Address		BAWP Title
	Myanmar		
14.	Mr. Zeya Kyaw Office No.43, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Nay Pyi Taw, Myanmar. Tel: +95 9428134356, Fax: +95 674410067 Email: <u>kyawzeyapma@gmail.com</u>		Capacity building for fumigation and storage of perishables
15.	Mr. Win NaingTun Department of Agriculture, Minkin Township, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Sagaing Region, Myanmar. Telefax: +9567 410067, +9598302460 Email: <u>nandasoe@gmail.com</u> , <u>director.extension.doa@gmail.com</u> ,		Capacity building of farmers for advanced storage techniques
	Sudan		
16.	Mr. Mohammad Ammar Balla Agricultural Engineering and Services Administration, Ministry of Agriculture, Kharthoum, Sudan. Tel: 49183765680, 0024 9912263722 Email: <u>e.ammar.hamad@gmail.com</u>	C S M	Adoption of cold storage mechanism
17.	Mrs. Omer WeldonMohammad Osman Agricultural Engineering and Services Administration, Ministry of Agriculture, Kharthoum, Sudan Tel: 0049193765680, 002 49127126817 Email: weldanosman@gmail.com,		Storage practices for Post-Harvest technologies
18.	Mrs. Thowiba Omer Elhassan Mustafa Agricultural Engineering and Services Administration, Ministry of Agriculture, Kharthoum, Sudan. Tel: 0049193765680, 002 4918594433 Email: <u>nadiahamza14@gmail.com</u> ,		Storage practices for Post-Harvest technologies
	Uganda		
19.	Ms. Nakamya Sarah Officer Production Department, Nakasongola District Local Government, P.O.Box. 1, Nakasongola Uganda. Tel: +256 777525652 Email: <u>xnakamya@gmail.com</u> ,		Capacity building for storage mechanisms
20.	Mr. Lubwama Joseph Ntege Schools Directorate of Education Standards C/o. Ministry of Education and Sports, -Kyambogo, P.O Box, 7063, Kampala, Uganda. Telephone/Mobile: 0772822554 Email: <u>lubwesa@yahoo.com</u>		Improvement of storage of crops

10. Plant Health Management Technologies and Approaches

- Title of the Training Program: Plant Health Management Technologies and Approaches
- Date: 4- 18 September, 2017
- Venue: National Institute of Plant Health Management (NIPHM), Hyderabad, Telangana
- Program Directors

Dr. K. Vijaya lakshmi

Director

(Plant Health Management) National Institute of Plant Health Management (NIPHM) Rajendranagar, Hyderabad - 500 030 Email: dirpmniphm-ap@nic.in, Ph. No. (O): 040-24015932

Dr. Cherukuri Sreenivasa Rao,

Director (Pesticide Management) NIPHM, Hyderabad, Ph. No. +91 40 24010106, +91-9441026576 Email: dirpmniphm-ap@nic.in

Dr. Om Prakash Sharma

Joint Director (A & AM) Ph. No. 040-, 040-24015346 (Fax) Email: jdagroniphmap@nic.in

> Participants profile: 24 executives from 10 countries (12 male & 12 female)

Country	Number of participants
Afghanistan	4
Botswana	1
Ghana	3
Kenya	4
Malawi	4
Mongolia	1
Mozambique	1
Myanmar	2
Sudan	2
Uganda	2

Training objective

To introduce the concept of Agro ecosystem analysis (AESA) and Ecological Engineering based Plant Health Management, impart skills on new and innovative soil and plant health management strategies for sustainable agriculture leading to conservation of natural resources in different cropping systems and to impart training on pest risk analysis for quarantine pests.

Training Curriculum

- 1. Agro ecosystem analysis (AESA) based PHM in conjunction with Ecological Engineering;
- 2. Integrated Soil Health and Nutrient Management and Integrated Pest Management (IPM) using biocontrol agents, bio pesticides & bio fertilizers in agricultural practices
- 3. Pest surveillance for early detection, identification and timely control of pests,
- 4. On farm production of Biocontrol agents, bio pesticides, bio fertilizers, Entomopathogenic fungi & nematodes, etc.
- 5. Biosecurity and incursion management, stored grain pest management and phytosanitary measures,
- 6. Safe and Judicious of pesticides, pesticide application technology, pesticide residue analysis,



7. Vertebrate pest management, urban integrated pest management etc.

> Training Outcome:

The training outcomes were seen by way of practising effective control of soil born diseases using bio control agents in Myanmar, Afghanistan & other countries.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 11.27 whereas the average score of post-training was 24.46. Thus, it is found that the level of knowledge of executives was increase by 117.04 percent after the training program.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.10 on a 10 point continuum indicating the overall impression on the program was excellent.

> Field Visits

The executives were exposed to various field visits i.e. ICRISAT (International Crops Research Institute for the Semiarid Tropics), CRIDA (Central Research Institute for Dryland Agriculture) IIRR (Indian Institute of Rice Research), IIMR (Indian Institute of Millets Research), IIOR (Indian Institute of Oilseeds Research), Farm Machinery Workshop PJTSAU.



SI.No	Name & Address	BAWP Title and Objectives
	Afghanistan	
1	Mr. Jahed Jamhoor Agha Plant Protection Manager, Parwan Province, Charikar City, Jangle Bagh Area, Kabul Norgh Highways, Directorate of Agriculture, Irrigation and Livestock, Parwan, Afghanistan Tel No: +93744354067; +93765314662 Email: <u>abdulk.farzam@yahoo.com</u>	Title: Provision of training and promotion of Trichoderma in Parwan, AfghanistanObjective: To train extension workers, plant protection officers and farmers on control of fungal diseases using Trichoderma
2	Mr. Babori Abdul Ghafoor Head of Plant Pests and Diseases Diagnostic Lab Plant Protection and Quarantine Directorate, Kabul, Afghanistan Tel No: 00937 00259618 Email: <u>abdghafoor.babori@yahoo.com</u>	
3	Mr. Saifullah Abdulali Plant Pests and Diseases Diagnostics Specialist Parwan Directorate of Agriculture, Irrigation and Livestock, Parwan, Afghanistan Tel No: 0744354067 Email: abdullk.farzam@yahoo.com; sarwarisaifullah@yahoo.com	Title: Establishment of ecological engineering based management tactics for tomato pest complex and capacity building of target groups in Kabul, AfghanistanObjectives: Minimizing the application of toxic chemicals
4	Mr. Nawakht Noor Agha Integrated Pest Management (IPM) Specialist Ministry of Agriculture, Irrigation and Livestock Jamal Mina (Karte - Sakhi), Kabul, Afghanistan Tel No: +93 784949836 Email:nooragha.nawakht@mail.gov.	Title: Provision of training to extension workers, plant protection officers and farmers on plant parasitic nematodes in Badambagh, Kabul, AfghanistanObjective: To train extension workers, plant protection officers and farmers on control of nematode diseases
	Botswana	
5	Ms. Lechina Joyce Sheila Bonolo Agricultural Scientific Officer Pest Management Unit, Ministry of Agriculture P.Bag 0091 Gaborone, Botswana Tel No: 00267 3928745/ 00267 72556205; Fax: 00267 3928768 Email: <u>blechina@gov.bw</u>	Title: Establishment of ecological engineering based pest management on TomatoObjective: To reduce the heavy use of chemicals and adopting other pest control methods aimed at promoting a balance in agro ecosystem.
	Ghana	
6	Mr. Donkoh Alex Ankomah Senior Agricultural Officer Plant Protection and Regulatory Services Department Ministry of Food and Agriculture Post Box KD 08, Koforidua, Ghana Tel No: 0243437534 Email: <u>donankolex@yahoo.com</u>	Title: Promotion of vermi-technology in Ghana Objectives: > Improve soil fertility > Reduce the overdependence on chemical fertilizers and pesticides > Improve product quality ,quantity > Increase export market of crop produce > Improve economic gains

Sl.No	Name & Address	BAWP Title and Objectives
7	Mr. Mensah Victor Kofi Chief Technical Officer Project Coordination Unit, P. O. Box. 26, Nsawam, Eastern Region, Ministry of Food and Agriculture Accra Ghana Tel No: +233 244185816, +233 208198931 Email: <u>vmensah27@yahoo.com</u> ,	Title: Ecological engineering based pest management for Pine Apple pest Objective: To provide trainings to extension workers and plant protection officers on ecological engineering methods like use of natural enemies, repellent plants, trap crops etc., to reduce the excess use of chemicals
8	Mr. Appiah-Nti Charles Seed Analyst & Seed Inspector Plant Protection and Regulatory Services Directorate P.O. Box M37, Ministry of Food and Agriculture, Accra, Ghana Tel No: 0209780116; Email: appintic@yahoo.com	 Title: On farm production of Rhizobium with farmers at Mayera, Accra Objectives: ➢ Isolation and Production of Biofertilizers ➢ Mass production of Rhizobium using low cost technology
	Kenya	
9	Ms. Mungai Teresia Wambui Head, Pathology, Weed & Pesticide Advisory Section; State Department of Agriculture (SDA), Plant Protection Services Ministry of Agriculture Livestock and Fisheries (MOALF) P.O.Box 14733-00800, Nairobi, Kenya Tel No: +254 722267909 , +254 7222232467 Email: trzkaranja1@gmail.com	 Title: Promotion of low cost Vermitechnology in Kenya Objectives: Improved Food and Nutrition security especially among the vulnerable farmers Improved income and livelihoods among rural and peri-urban farmers due to higher sales of vegetables Less use of pesticides and improved food safety of vegetables grown from compost
10	Mr. Lusweti Charles Mamati Chief Agricultural Officer M&E and Knowledge Management on Plant wise Project Ministry of Agriculture Livestock and Fisheries (MOALF) P.O.Box 30028-00100, Nairobi, Kenya Tel No: +254 721898087 Email: <u>cmamati@yahoo.com</u>	 Title: On-farm production of mycorrhiza to enhance soil fertility and food production Objectives: > Improved soil fertility > Use of the mycorrhiza to boost soil fertility and hence food production
11	Ms. Magoti Rahab Nyakwea Research Officer Kenya Agricultural and Livestock Research Organization P. O. Box 27-60100, Embu,Nairobi, Kenya Tel No: +254 728599728; 727444638; Email: rahabmagoti@gmail.com	 Title: Mass multiplication of parasitoids Objectives: To use parasitic parasitoids to control fall Army worm in Kenya To train farmers on best practices of IPM and multiplication of parasitoids for control of FAW
12	Mr. Zablon James Opapah Principal Livestock Production Officer P. O. Box 34188,00100, Ministry of Agriculture, Livestock and Fisheries Niarobi, Kenya Tel No: +254 721328200; 202718870, Email: <u>ptrmusembi@yahoo.com</u>	Title: Implementation of push pull technology in two sub counties of Busia county in Kenya Objective: To minimise usage of pesticides in the control of pests

Sl.No	Name & Address	BAWP Title and Objectives
	Malawi	
13	Ms. Mulomole Janet Agricultural Extension Development Officer (AEDO) Lilongwe Agricultural Development Division P.O Box 259, Ministry of Agriculture, Irrigation and Water Development Lilongwe, Malawi. Tel: +265 (0) 999 354 712 Email: janet.mphande@gmail.com,	 Title: Ecological engineering based insect pest management tactics of maize Objectives: Capacity building of extension workers and smallholder farmers on use of Agro-ecological engineering approach to control insect pests. Decrease in the use of pesticides
14	Mr. Chamanza Franceton Davis Agricultural Extension Development Officer (AEDO) Nkbotakota District Agricultural Office, P.O.Box41, Ministry of Agriculture, Irrigation and Water Development Nkhotakota, Malawi Tel: +265 999296815, 0999298850 Email: <u>fdchamanza@gmail.com</u>	Title: Establishment of low cost Vermicompost & vermiwash type of fertilizers in MalawiObjectives: > To replace the chemical fertilizer usages and manage the pest and disease with vermicompost > Improve soil fertility
15	Mrs. Nyirongo Fumanikire Agriculture Extension Development Officer (AEDO) Nkhotakota Rural Development Projects, Ministry of Agriculture, Box 41, Nkhotakota, Malawi Tel: 088426397, 0992770060 Email: <u>fumanikire@gmail.com</u>	Title: cological engineering based insect pest management tactics of Ground nutObjectives: To promote use of cultural techniques to effect habitat manipulation and enhance biological control
16	Ms. Mtsendero Mercy Natasha Agriculture Development Officer Department of Agricultural Extension Services, Ministry of Agriculture, Private Bag 3031 Lilongwe, Malawi Tel No: +265 999599630 Email: <u>mtsenderomercy@gmail.com</u>	Title: Ecological engineering based insect pest management tactics of Maize insect pestsObjectives: Promote the strategy for controlling pests by using repellent push plants and trap pull plants in cereals like maize and sorghum
	Mongolia	
17	Ms. Altan Ochir Munguntsatsal Plant Protection Officer, Department of Crop Production Policy Implementation and Coordination Department Government Building - IX B, Peace Avenue- 16A, Ulaanbaatar, Mongolia Tel No: +976 88083545; +976 88083545 Email: tsatska_a@yahoo.com	 Title: On farm production of Phosphate Solubilizing Bacteria (PSB) Objectives: Awareness programs researching to increase soil fertility On-farm mass production of bio- fertilizers
	Mozambique	
18	Mr. Joaquim Crimildo Head of Rural Extension Services Provincial Directorate of Agriculture and Food Safety of Inhambane, Inhambane, Mozambique Tel: 00258-847164540, Fax: 00258 93 20929 Email: <u>filo.maiopue@gmail.com</u>	Title: Pest Management in maize Objective: To reduce pest damages or losses in Maize

SI.No	Name & Address	BAWP Title and Objectives
	Myanmar	
19	Ms. Cho Cho San Junior Research Assistant Plant Pathology Research Section, Department of Agricultural Research, Ministry of Agriculture, Livestock and Irrigation, Yezin, Nay Pyi Taw, Myanmar Tel No: +95 67416531, Fax: +95 67 416535 Email: dgdar.moai@gmail.com	Title: Mass production of trichoderma as biological control agents against important crop diseases Objective: To promote mass production of trichoderma in Nay Pyi Taw Council Area, Central Myanmar
21	Ms. Htat Htat Nay Win Research Technician Entomology Research Station, Department of Agricultural Research, Ministry of Agriculture, Livestock and Irrigation Yezin, Nay Pyi Taw, Myanmar Tel No: +95 67416531, Fax No: +95 6741635 Email: dgdar.moai@gmail.com;	 Title: Ecological engineering based insect pest management tactics for Rice insect pests Objective: To make the farmers adopt E tactics for control of Brown Plant Hoppe (BPH) Yellow stem borer and golden snail
	Sudan	
22	Ms. Nagwa Sidahmed Mohamed Elkhadir Plant Quarantine Inspector Plant Quarantine Directorate- Plant Quarantine Unit Ministry of Agriculture- Plant Protection Directorate, Khartoum International Airport Khartoum, Sudan Tel: 00249 153999968; 0122256940 Email: pgairport@gmail.com	 Title: Biological control of soil pests using entomopathogenic nematodes (beneficial nematodes) in Citrus in Sulait District Sudan Objectives: Isolation of Plant Parasitic Nematode (PPN) Mass Production of Entomopathogen
23	Ms. Manal Hussein Mohamed Omer Plant Quarantine Inspector Plant Quarantine Directorate-	nematodes (EPN) Title: Mass multiplication of parasitoids Objectives:
	Plant Quarantine Unit- Ministry of Agriculture- Plant Protection, Khartoum International Airport, Khartoum, Sudan Tel: 00249 153999968; 129590070 Email: <u>pqairport@gmail.com</u>	 To use parasitic parasitoids to control Tuta absoluta on tomato in Sudan To train farmers on best practices of IPM and multiplication of parasitoids for control of Tuta absoluta
	Uganda	
24	Ms. Luwedde Mariam Agriculture Officer Nkokonjeru Town Council, P.O.Box. 64, Kampala, Uganda Tel: 0784964842, 0705318432, 0772364976 Email: <u>luwedde.mariam@gmail.com</u>	 Title: Establishment of Banana demonstration farm Objectives: ➢ To promote the use of Nematode free clean suckers ➢ Reduced prevalence of the banana nematodes
25	Mr. Ezati Charles Palms District Project Assistant Yumbe District Local Government Post Box 1, Ministry of Agriculture, Animal Industry and Fisheries, Yumbwe, Uganda Tel No: +256 593709/ +256 772442301 Email: <u>charlesezati@gmail.com</u>	 Title: On-farm mass production technique for trichoderma using NIPHM white medium and Sorghum grains Objectives: Enhanced beans and Sunflower productivity Improved income dues increased crop yields and use of low cost Bio- pesticides

11. Recent Trends in Harvest and Post-harvest Technologies in Fisheries

- Title of the Training Program: Recent Trends in Harvest and Post-harvest Technologies in Fisheries
- Date: 12-26 September, 2017
- > Venue: ICAR Central Institute of Fisheries Technology (CIFT), Cochin, Kerala
- Program Director/Coordinator



Program Director	Dr. Ravishankar C. N Director, Central Institute of Fisheries Technology CIFT Junction, Willingdon Island Matsyapuri Post, Cochin-682 029, Kerala Ph: 0484-2412300; Fax: 091-484-2668212 Email: aris.cift@gmail.com, cift@ciftmail.org
Program Coordinator	Dr. Amulya Kumar Mohanty Head, Extension Information & Statistics ICAR – Central Institute of Fisheries Technology (CIFT), Cochin, Kerala Tel: 0484-2312316 ; Mob: +91 94851 75853 Email: dramulyakumar@gmail.com

Participants profile: 22 executives from 08 countries (17 male & 5 female)

Country	Number of Participants
Afghanistan	4
Ghana	4
Кепуа	1
Liberia	5
Malawi	2
Mongolia	1
Sudan	3
Uganda	2

Training objective

To introduce the recent trends in fish harvest and post-harvest technological developments suitable for African and Asian countries.

Training Curriculum

- 1. Innovative and cost effective technologies for fish harvesting, responsible fishing
- 2. Development and standardization of different post harvest practices, value addition, and packaging
- 3. Techniques for extraction of biomedical, pharmaceutical and industrial product from aquatic organisms,
- 4. Biotechnological approaches for disease diagnostic tools
- 5. Quality control, management and maintaining food safety standards
- 6. Design and development of tools and techniques for harvesting and storage of fishes
- 7. Effective extension methodologies, value chain management and entrepreneurship development in fishery

Training Outcome

Fish processing techniques popularized among small scale fisheries farmers in Malawi. Fish descaling machine refabricated to suit local conditions.

Change in Knowledge of the participants

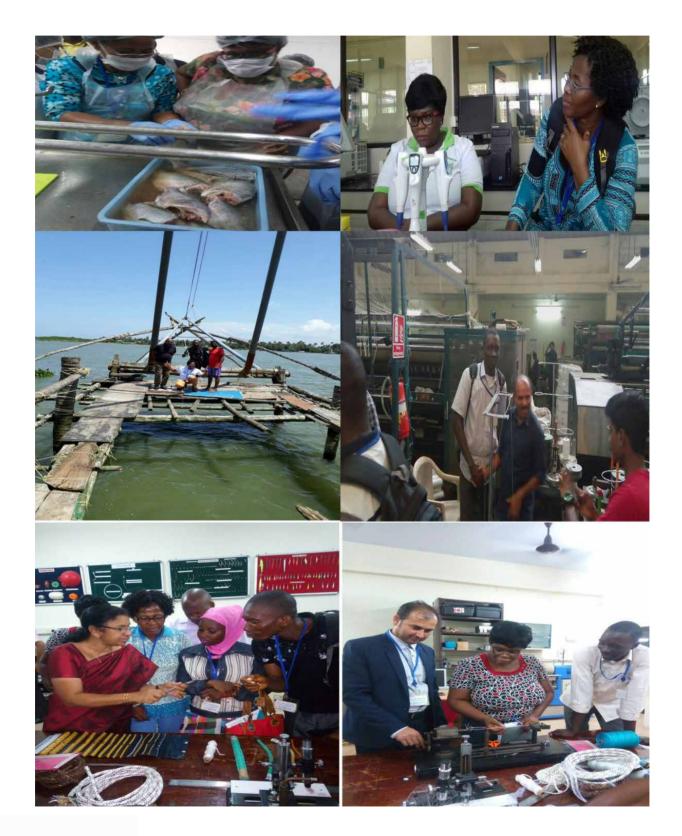
The average score of executives in the pre-training test was 7.36 whereas the average score of post-training was 18.88. Thus, it was found that the level of knowledge of executives increased by 156.52 percent after the training programme.

> Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program 8.90 as **VERY GOOD**.

Field Visits

The trainees were taken for field visits covering major research and development organizations in Kerala like the National Institute of Fisheries and Post-Harvest Technology and Training (NIFPHATT), Matsyafed Net making factory, ICAR-Central Marine Fisheries Research Institute, ICAR-Central Inland Fisheries Research Institute and ICAR-National Bureau of Fish Genetic Resources, Kochi.



SI.No	Name & Address		BAWP Title
	Afghanistan		
1.	Dr. Hamdard Bahadar Khan Provincial Veterinary Epidemiology Officer Directorate Agriculture Irrigation and Livestock, Mandakol Road, Asadabad, Kunar Province, Afghanistan Tel: 0093777641317, 0093 700641317 Email: <u>dr.bahadar@yahoo.com</u>		
2.	Mr. Frogh Khalilullah Director Department of Fisheries, Darula Aman Road, Sanatorium Street, General Directorate of Animal Health and Protection, Kabul, Afghanistan Tel: 0093 797118386, Email: <u>khalilullah.frough@gmail.com</u>		Public awareness program on fish processing at Kunar Province of Afghanisthan
3.	Mr. Abdulhadi Babury Livestock Specialist Nangarhar Agriculture Irrigation and Livestock Directorate, Nangarhar Province, Baburyan Village,Jalalabad City, Afghanistan Tel: + 0093(0)700619732, 093(0)788976398 Email: abdulhadi.babury@yahoo.com	20	
4.	Mr. Zalmai Rokhan Technical Advisor and Secretary for GDE General Directorate of Extension, Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Maina, Karti Sakhay Square, Kabul, Afghanistan Tel: 0777635023, Email: <u>rokhan.zalmy@mail.gov.af</u>		Promotion of aquaculture to increase fish production at Kunar Province of Afghanistan
	Ghana		
5.	Mr. Anthony Appiah Senior Fisheries Officer P.O.Box 140, Winneba-Central Region Ghana Tel: +2330208123127 Email: <u>appiahanton@gmail.com</u>		Production of fish silage in the central region of Ghana
6.	Ms. Janet Anchirinah Assistant Director of Fisheries Fisheries Commission, P.O.Box AK138 Akosombo, Ghana Tel: +233 546413188, +233 509396923, +233 244364702 Email: <u>akozonfic@gmail.com</u> ,		Production of silage from Tilapia waste in the central region of Ghana
7.	Mrs. Neils Palme Ruby Deputy Director Ministry of Food and Agriculture-Monitoring and Evaluation Directorate C/o Ministry of Food and Agriculture, P.O. Box: M37, Ministries, ACCRA, Ghana Tel: +233242304040, Fax: 0392252698 Email: <u>naamerya@gmail.com</u>		Production of silage from Tilapia waste in the central region of Ghana

SI.No	Name & Address		BAWP Title
8.	Ms. Fuseina Issah Assistant Fisheries Officer Fisheries Commission (Administration and Operations Department- Monitoring and Evaluation), Box GP 630, Accra- Ghana Tel: 0249133567, 0242825329 Email: <u>issahfuseina15@yahoo.com</u>		Hygienic fish handling practices on board in the central region of Ghana
	Kenya		
9.	Mr. Japhet Mworia Manampiu Assistant Director of Fisheries State Department for fisheries and Blue Economy, Ministry of Agriculture, Livestock and Fisheries. P.O.Box. 1200-00100 Meru, Kenya Tel: + 0720040945, Email: <u>mworiajap@yahoo.com</u>		Production of fish silage in Kenya
	Liberia		
10.	Mr. Alfred David Agriculturist Ministry of Agriculture, P.O.Box 10-9010 1000 Monrovia 10, Liberia Tel: (+231)777929359 Email: <u>alfreddavidjr@yahoo.com</u>		Promotion of fish smoking techniques at Paynesville, Monrovia, Liberia
11.	Ms. Beatrice Kuesh Newland Quality Assurance Technician Ministry of Agriculture Bureau of National - Monrovia, Liberia Tel: (+231)886976778, (+231)770418428 Email: <u>newlandbeatrice49@gmail.com</u>		Chilling and handling of fish at West Point Beach, Liberia
12.	Mr. Peter M. Sesay Technician Ministry of Agriculture, P.O.Box 10-9010 1000 Monrovia 10, Liberia Tel: (+231)886630690, (+231)777068307 Email: <u>petermsesay1@gmail.com</u>		Gender mainstreaming activities in grand Cape-mouth county and Bomi County, Liberia.
13.	Mr. Victor F. Nah Fisheries Quality Assurance Technician Department of Technical Services Bureau of National Fisheries, Ministry of Agriculture, Monrovia, Liberia Tel: (+231)886672466, (+231)770220985 Email: <u>nah.v@yahoo.com</u>		Chilling and handling of fish among banjour community, Liberia.
14.	Mr. Sovie Joseph Manjoe Agricultural Extension Technician Smallholder Agricultural Productivity Enhancement and Commercialization Project (SAPEC), Ministry of Agriculture, South Cooperation, Monrovia, Liberia Tel: (+231)880708599/ 777711800 Email: josephsovie@yahoo.com , josephsovie2@gmail.com	R-10	Improved Transfer of Technology (ToT) methods in Maryland County, Liberia

SI.No	Name & Address		BAWP Title
	Malawi		
15.	Mr. Mbalaka Mwamad Salim Fisheries Research Officer, Department of Fisheries, Monkey Bay Fisheries Research Station, P.O.Box.27, Monkey Bay, Mongochi, Malawi Tel: +265 01587249, 01587360 Fax: +265 01587249 Email: ms.mbalaka@gmail.com		Popularisation of Fish de-scaling machine at Mangochi, Malawi.
16.	Mr. Letson Yoyola Phiri Principal Fisheries Officer Malawi College of Fisheries, Private Bag 7, Mangochi, Malawi Telephone/Mob: (265)999687649I, (265)885228396, (265) 991039594 Fax No.: (265) 1580066 Email: yoyola_phiri@yahoo.co.uk		
	Mongolia		
17.	Mr. Munkhbaatar Gyalbaa Specialist of Livestock Conservation Fund Ministry of Food, Agriculture and Light Industry of Mongolia, Government House 9A, Peace Avenue 16A, Bayanzurkh District, Vlaunbaatar, Mongolia Tel: +97611453233, +97688110534 Fax: +97611450292, Email: <u>munkhu15@gmail.com</u> , <u>dambaa.tb@gmail.com</u>	C.	Promotion of modern fish nets in Mongolia
	Sudan		
18.	Mr. Arafat Abdelrahman Dahab Hagar Fisheries Officer Ministry of Animal Resources, P.O.Box 293, Khartoum Directorate of Fisheries General, Sudan Email: <u>arafatdahap@gmail.com</u> , <u>arafatdahab2017@gmail.com</u>		Ornamental fisheries for income generation at Khartoum, Sudan
19.	Mr. Khider Shakheldeen Ahmed Jamaleldeen Fisheries Officer Ministry of Animal Resources, P.O.Box 293, Directorate of Fisheries General Khartoum, Sudan Tel: +24983475996, +24 9914385351 Email: <u>khidersh@gmail.com</u>	Rin	Popularisation of modified fishing gears at Khartoum, Sudan
20.	Ms. Nasma Abdelbagi Altegani Abubaker Fisheries Officer Ministry of Animal Resources, P.O.Box 293, Directorate of Fisheries General, Khartoum, Sudan Tel: +249917955054, +249114065230 Fax: +24983475996 Email: <u>nasma19923@gmail.com</u>		Promotion of fish dying techniques and production of fish powder



SI.No	Name & Address	BAWP Title
	Uganda	
21.	Mr. Kitamirike Joseph Blender Fisheries Officer ARUA District Local Government, Department of Production and Marketing, P.O.Box. 1, ARUA, Uganda Tel: +265 772636778, +265 773858003, 773168965 Email: <u>victortoa2005@yahoo.co.uk</u> , <u>kitamirikejoseph@yahoo.com</u>	Promotion of low temperature preservation of fish
22.	Mr. Nsamba David Nsole Principal Fisheries Officer/ District Fisheries Officer, Production Department, Nakasongola District Local Government P.O.Box 1, Nakasongola, Uganda Tel: +256392252699, +256774083148, +256772470353 Fax: 0392252698 Email: <u>nakasongoldlog@gmail.com</u> , <u>nsambansoledavid@gmail.com</u>	Advanced fishing techniques and fish processing activities

12. Post-harvest Technology in Horticulture Crops

- > Title of the Training Program: Post-harvest Technology in Horticulture Crops
- Date: 6- 20 November, 2017
- Venue: ICAR-Indian Institute of Horticulture Research (IIHR), Bangalore, Karnataka
- Program Directors

Dr. Harinder Singh Oberai

Principal Scientist & Head, ICAR- Indian Institute of Horticultural Research (IIHR), Bangalore, Karnataka Mob: 9417426649 Email: <u>harinder@iihr.res.in</u>

Dr. R Venkattakumar,

Principal Scientist & Head, Division of Social Science & Training, ICAR- Indian Institute of Horticultural Research (IIHR), Hessaraghatta Lake Post, Bengaluru-560 089, Karnataka, India Tel: 080-7760835475, Mob: 77608 35475, Fax: 080-2846291 Email: <u>venkat@iihr.res.in</u>

Co-Course Directors

Dr. DV Sudhakar Rao,

Dr. RB Tiwari,

Mr. GA Atheequlla,

Participants profile: 26 executives from 12 countries (16 male & 10 female)

Country	Number of participants
Afghanistan	3
Botswana	2
Cambodia	2
Ghana	5
Kenya	2
Liberia	1
Malawi	3
Mongolia	1
Mozambique	1
Myanmar	2
Sudan	2
Uganda	2

Training objectives:

- To acquaint the participants with the different supply chain management operations in important horticultural crops grown in Afro-Asian countries.
- To demonstrate appropriate technologies for processing and value-addition in important horticultural crops
- To expose the participants to different technologies for waste valorization/ by-product/residue management in horticultural crops.

Training Curriculum:

- 1. Protocols used in the supply chain management of fresh horticultural crops, viz., harvesting, precooling, sorting, grading, washing and disinfection, storage and packaging.
- 2. Modified Atmosphere Packaging (MAP) of a few selected fresh horticultural crops
- 3. Dehydration of flowers,
- 4. By-product utilization and value-addition through the use of extracts from the horticultural residues.



- 5. Mechanization in PH operations
- 6. Protocol standardization for extension of shelf life of the fresh-cut vegetables
- 7. Low cost ripening system of climacteric fruits
- 8. Processing of fruits and vegetables
- 9. Preparation of fruit bars, osmotic dehydration of selected fruits, crushed tomatoes and preparation of fruit beverages.

> Training Outcome:

The FTF ITT trainees conducted training and workshops on promotion of value addition in horticultural crops to increase farmers' income in their respective countries.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 12.88 whereas the average score of post-training was 18.7. Thus, it is found that the level of knowledge of executives increased by 45.19 percent after the training programme.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.88 on a 10 point continuum indicating the overall impression on the programme was **VERY GOOD**.

> Field Visits

The executives were taken around the demonstration plots in Block-3 of ICAR-IIHR, Bengaluru wherein they were apprised about the important features of the varieties/ hybrids developed by ICAR-IIHR, Bengaluru and important characteristics of such varieties/ hybrids. The executives were also taken around the research farms of ICAR-IIHR, Bengaluru, the Agricultural Technology Information Centre (ATIC), Mushroom Research Laboratory and state-of-art Referral Food Testing Laboratory (RTL) at ICAR-IIHR, Bengaluru.



Sl.No	Name and Address	BAWP Title & Objective/s
	Afghanistan	
1.	Mr. Murtaza Aslampoor General Manager of Development Studies Ministry of Agriculture, Irrigation, and Livestock, Horticulture Directorate, vegetable, and Greenhouse Development, Jamal mina Kart-e-Sakhi, Kabul, fghanistan. Ph: 07443221999/ 0700818253 Email: murtazaaslampoor@yahoo.com,	Title: Promotion of evaporation cooling storage for small scale farmersObjective: To establish the Evaporative Cold structures for extended storage of fruits and vegetables and generate more income
2.	Mr. Fazal Rahim Ayoubi Cooperative General Manager Kandahar Department of Agriculture and Livestock, District # 5, Kandahar City, Afghanistan, Ph: 0706064725 Email: fazalrahim.agri@gmail.com,	
3.	Mr. Abdul Kabir Agha Hashmi Executive Manager Kandahar Department of Agriculture and Livestock, District # 5, Kandahar City Afghanistan Ph: 0700722909/ 0702979543 Email: abdulkabiragha7@gmail.com,	
	Botswana	
4.	Ms. Mpho Christine MogoroSakgomo Agricultural Scientific Officer Ministry of Agricultural Development and Food security, P.O.Box # 83, Tonota, Botswana, Ph: +267 71910653 Email: mmogorosakgomo@gov.bw, mpmorupisi@gmail.com	Title: Construction of zero energy cooling chamberObjective: This technology will help to extend the storage life of tomatoes especially that field temperatures will be reduced and farmers can sell quality
5.	Mr. Joel Olebile Segobaetso Agricultural Principal Scientific Officer Ministry of Agricultural Development and Food security, PO. Box. 31, Molepolole, Botswana Ph: +267 71480738, Email: jsegobaetso@gov.bw, jsegoba@yahoo.com,	produce.
	Cambodia	
6.	Mr. Montha Chey Head of Department of Agro-Industry Prek Leap National College of Agriculture Highway 6A, Sangkat Prek Leap, Khan Chrocychangva, Phnom Penh, Cambodia Tel: +855 236910595, +85512735758 Email: cheymontha@yahoo.com,	Title: Promotion of fruit processing of pineappleObjective:To help the farmers to generate more income by processing of pineapple into juice and also extend the shelf life of the fruit.
7.	Mr. Samrit Pauv Official Staff of Department of Agro-Industry Prek Leap National College of Agriculture Highway 6A, Sangkat Prek Leap, Khan Chrocychangva, Phnom Penh, Cambodia Tel: +855 236910595, +855 99267247 Email: pauvsamrit@gmail.com,	Title: Promotion of fruit processing of pineappleObjective:To help the farmers to generate more income by processing of pineapple into juice and also extend the shelf life of the fruit.

SI.No	Name and Address		BAWP Title & Objective/s
	Ghana		
8.	Ms. Esther Agyekum Senior Agricultural Officer Ministry of Food and Agriculture Directorate of Crop Services, P.O Box. M37, Accra , Ghana Ph: +233 245629758, Email: estheragyekum@yahoo.com,		Title: Safe ripening of fruits, fresh vegetable handling Objective: Improving the income of farm household through reduced post harvest losses
9.	Mr. Robert Selassie Setorwofia Assistant Agricultural Officer, Ministry of Food and Agriculture, Agribusiness Unit P.O Box. M37 Accra , Ghana Ph:+233 249 239244 Email: selassierobert@gmail.com		 Title: Introduction of agri-businesses, dehydration technology to farmers and farm institute Objective: To impart knowledge to farmesin post-harvest technology and agribusiness technology in horticulture
10.	Mr. Emmanuel Amanor Yirenkyi Assistant Agricultural Officer Ministry of food and Agriculture/ Agribusiness Unit P.O.Box # M37, Ministries, Accra, Ghana Ph: 0303965094/0242844563/0209529179 Email: kojo.amanoryirenkyi@gmail.com, agribusiness-unitmofa@googlegroups.com		
11.	Mr. Joseph Tommy Tommie Senior Agriculture Economist Ministry of Food and Agriculture MOFA/PPMED, Box M37, Accra, Ghana Ph: 0507281334/0249748287 Email: tommie2326@gmail.com	8	Title: Promotion of tomato puree preparation among the farmers Objective: Reduction of post harvest losses in tomato
12.	Ms. Elizabeth Edem Gididlo Agricultural Extension Officer, Ministry of Food and Agriculture Directorate of Agriculture Extension Services P.O.Box M37, Ministries, Accra, Ghana Ph: 0244966294/0244966294 Email: egidiglo@yahoo.ca		 Title: Safe ripening of fruits, fresh vegetable handling Objective: Improved incomes of farmers through reduced post harvest losses
	Kenya		
13.	Mr. Dominic Munywoki Principal Agricultural Officer Ministry of Agriculture, Livestock and Fisheries, State Department of Agriculture P.O.Box. 30028 - 00100 Nairobi, Kenya Ph: +254 713273393 Email: domonickitaka@yahoo.com, graceagili@gmail.com		 Title: Training on the use of low cost artificial ripening technology osmotic dehydration - on farm cold storage Objectives: Reduce risk of consuming poisonous chemicals
14.	Ms. Margaret Wanjiku Karuku Lecturer Kenya School of Agriculture Ministry of Agriculture, Livestock and Fisheries, P.O.Box. 1909-10100, Kenya Ph:+254 722888990 Email: embumission@gmail.com, kenyaschoolofagriculture@yahoo.com		 Reduce post harvest losses Improved income to the farmer and marketers

Liberia Mrs. Weedor Akoi Cegbe County Agriculture Coordinator Department of Regional Development Research & Extension, Ministry of Agriculture, Monrovia, Liberia Tel: +231 886708784 Email: weecegbe@yahoo.com, leorycegbe@ymail.com, edibope@yahoo.com Malawi Mr. Kafunda David Burton Agricultural Extension Development Officer, Salima District Office, P.O.Box.491, Salima, Malawi Tel: +265 993205903, Fax: +265 (1) 262663 Email: kafunda.alice38@gmail.com		Title: Training on basic knowledge and skills in post harvest management and value addition along the chilly pepper value chain Objective: Reduced post-harvest losse in chilly Title: Osmotic dehydration in mangoe and papaya in Malawi
County Agriculture Coordinator Department of Regional Development Research & Extension, Ministry of Agriculture, Monrovia, Liberia Tel: +231 886708784 Email: weecegbe@yahoo.com, leorycegbe@ymail.com, edibope@yahoo.com Malawi Mr. Kafunda David Burton Agricultural Extension Development Officer, Salima District Office, P.O.Box.491, Salima, Malawi Tel: +265 993205903, Fax: +265 (1) 262663		skills in post harvest management and value addition along the chilly pepper value chain Objective: Reduced post-harvest losse in chilly Title: Osmotic dehydration in mangoe and papaya in Malawi
Mr. Kafunda David Burton Agricultural Extension Development Officer, Salima District Office, P.O.Box.491, Salima, Malawi Tel: +265 993205903, Fax: +265 (1) 262663		Title: Osmotic dehydration in mangoe and papaya in Malawi
Agricultural Extension Development Officer, Salima District Office, P.O.Box.491, Salima, Malawi Tel: +265 993205903, Fax: +265 (1) 262663		and papaya in Malawi
		Objective: Reduced post harvest losse through value addition to mangoes an papaya
Ms. Nyirenda Babra Malikebu Agricultural Extension Development Officer, MVERA EPA, P.O.Box. 42, Ministry of Agriculture, Mvera, Malawi Tel: +265 0999276164, 0991743066 Email: nyirendababs@gmail.com, Inyirenda2000@yahoo.com	PASSPORTIPASS	
Ms. Tamara Tembo Agricultural Development Officer Ministry of Agriculture, Private Bag 30131, Lilongwe, Malawi Ph: +265999161065/ +265992518851 (Emergency) Email: tammzy@yahoo.com, xrismike@yahoo.co.uk		
Mongolia		
Mr. Jambal Tumurkhuyag Senior Officer, Crop Policy Implementation and Coordination Department	6	Title: Capacity building and training o post harvest technology
Government Building #9, Exktaivan Avenue, 16 A, Ulaanbaatar-210349, Mongolia Tel: 51 263408, 99007368, Email:j_tumur@	2-5	Objective: Production of good qualit of seed and planting material an enhancement in farmers' knowledge
Mozambique		
Mr. Elton Amadeus Francisco Rural Extension monitoring and evaluation officer Inhambane Directorate of Agriculture and Food security Between Eduardo Mondlane and Revolucao Avenue, Inhambane City, Mozambique		Title: Promotion of osmotic dehydratio of Mangoes Objective: The reduction of post harves losses of mango will help in increasin the income of small farmers, improv the availability of the processed mang
	Agricultural Extension Development Officer, MVERA EPA, P.O.Box. 42, Ministry of Agriculture, Mvera, Malawi Tel: +265 0999276164, 0991743066 Email: nyirendababs@gmail.com, Inyirenda2000@yahoo.com Ms. Tamara Tembo Agricultural Development Officer Ministry of Agriculture, Private Bag 30131, Lilongwe, Malawi Ph: +265999161065/ +265992518851 (Emergency) Email: tammzy@yahoo.com, xrismike@yahoo.co.uk Mongolia Mr. Jambal Tumurkhuyag Senior Officer, Crop Policy Implementation and Coordination Department Ministry of Food, Agriculture and Light Industry, Government Building #9, Exktaivan Avenue, 16 A, Ulaanbaatar-210349, Mongolia Tel: 51 263408, 99007368, Email:j_tumur@ yahoo.com, saruultuyadd@gmail.com, Mozambique Mr. Elton Amadeus Francisco Rural Extension monitoring and evaluation officer Inhambane Directorate of Agriculture and Food security Between Eduardo Mondlane and Revolucao Avenue, Inhambane City,	Agricultural Extension Development Officer, MVERA EPA, P.O.Box. 42, Ministry of Agriculture, Mvera, Malawi Tel: +265 0999276164, 0991743066 Email: nyirendababs@gmail.com, Inyirenda2000@yahoo.com Ms. Tamara Tembo Agricultural Development Officer Ministry of Agriculture, Private Bag 30131, Lilongwe, Malawi Ph: +265999161065/ +265992518851 (Emergency) Email: tammzy@yahoo.com, xrismike@yahoo.co.uk Mongolia Mr. Jambal Tumurkhuyag Senior Officer, Crop Policy Implementation and Coordination Department Ministry of Food, Agriculture and Light Industry, Government Building #9, Exktaivan Avenue, 16 A, Ulaanbaatar-210349, Mongolia Tel: 51 263408, 99007368, Email:j_tumur@ yahoo.com, saruultuyadd@gmail.com, Mozambique Mr. Elton Amadeus Francisco Rural Extension monitoring and evaluation officer Inhambane Directorate of Agriculture and Food security Between Eduardo Mondlane and Revolucao Avenue, Inhambane City, Mozambique Ph: +258 29320929/+258822834116

SI.No	Name and Address		BAWP Title & Objective/s
	Myanmar		
21.	Mr. Khaing Aye Min Assistant Staff Officer, Myanadi Horticultural Farm, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Myittha Township, Mnadale Region, Myanmar Tel: +95-9-783644151, +95-9-5300591, Fax: +9567 410067 Email: thannaingmoe.tmn@gmail.com		Title: Promotion of low cost ripenin chamber zero energy cool chamber for good quality fruits Objective: To impart knowledge abou setting up of ripening chambers an low cost evaporative cooled structure among farmers.
22.	Mr. Than Naing Moe Deputy Staff Officer Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation Office Number (43), Department of Agriculture, Nay Pyi Taw, Myanmar Ph: +95 9-780025641, +95-9-5300591 Email: thannaingmoe.tmn@gmail.com, hortioffice@gmail.com,		
	Sudan		
23.	Ms. Abeer Elamin Mohanedahamed Elhaj Engineering Agriculture Sud kh Alnil Street, Ministry of Agriculture, Almogran, Khartoum, Sudan Mob: 002466737609, 00966537473303 Email: abeeralmin1985@gmail.com,	((0; 0))	Title: Training for the staff of Ministr of Agriculture and other stakeholder on value chain and osmotic dehydratio technology. Objective: Enhanced capacity of ministr staff in dehydration of vegetables an
24.	Ms. Kautyher Altom Algzoly Alnor Engineering Agriculture Sud kh Alnil Street, Ministry of Agriculture, Almogran, Khartoum, Sudan Mob: 002498278418, 0024993986632 Email: kwseraltom@gmail.com, bitelgozouli@yahoo.com		osmotic dehydration technology fo
	Uganda		
25.	Mr. Lukurwe Ham Wilson Technical Officer-Sector Skills Councils, Skilling Uganda, Reform Task Force (RTF) Secretariat Ministry of Education and Sports Kampala, Uganda Tel: +256 772962503, +256 702264145 Email: lukurweham@gmail.com, shinecaresuganda@gmail.com		 Title: Process waste valorisation of horticultural waste Objectives: > Increased profitability > Improved environmental friendly practices
26.	Ms. Rose Lukwago Nassali Judicial Service Commission, Farmers House, Plot 6/8 Parliament Avenue, P.O.Box 7679, Kampala, Uganda Tel: +256 772673217 Email: permasec@jsc.go.ug, nassalirose60@gmail.com		

13. Entrepreneurship Development among Rural Women

- > Title of the Training Program: Entrepreneurship Development among Rural Women
- Date: 13-22 November, 2017
- > Venue: St. Augustine Training Institute, Kampala, Uganda
- > Program Director

Dr. Rahul Krishnan Thematic Anchor-Farm Livelihood Kudumbasree, Trivandrum, Kerala Mob: 8281655705 Email: <u>rahulvet231@yahoo.com</u> <u>kshreeftf@gmail.com</u>

> Participants profile: 56 executives from Uganda (18 male & 38 female)

Training objectives

- Introduce the various non –farm entrepreneurship models practiced by Kudumbashree
- Provide opportunity for cross learning among the best practices followed in Kudumbashree
- Introduce the concept of Agripreneurship among the farm women

Training Curriculum

- 1. Opportunities and Challenges for Rural women Entrepreneurship development in Uganda
- 2. Kudumbashree Community organisation
- 3. Kudumbashree and Local governance
- 4. Kudumbashree livelihood approaches non-farm
- 5. Kudumbashree Skilling approaches
- 6. Agriculture livelihood approaches
- 7. Social Development approaches
- 8. Value chain opportunities in rural entrepreneurship
- 9. Social development approaches in Kudumbashree
- 10. Gender approaches in Kudumbashree
- Training Outcome
 - The FTF ITT trainees successfully implemented the formation of Self Help Groups in Uganda on poultry management & vegetable cultivation by women farmers.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 12.88 whereas the average score of post-training was 18.7. Thus, it is found that the level of knowledge of executives increased by 45.19 percent after the training programme.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of **8.88** on a 10 point continuum indicating the overall impression on the programme was **VERY GOOD**.

Field Visit

The participants were exposed to Ssese Farm Institute, located in Western Uganda. The Institute acts as a training centre for children to familiarize the agricultural and allied services through handson- training for a period of 2 years. The visit to the institute offered a platform for the participants to have knowledge on the facilities offered by the institute, their best practices that may be adopted and the support the Government provides in developing sustainable agricultural practices.





SI. No	Name and Address	BAWP Title & Objective
1	Mr. Eweu Jackson Agriculture tutor Moroto Core Primary Teachers College (PTC), P.O.BOX 16 Moroto, Uganda Tel: 0772623702 / 0772514127 Email: jacksoneweu@gmail.com	 Title: Promoting Vegetable (Tomatoes, cabbages, Egg plants) Production among woman farmers through formation of groups Objective: Increased production in vegetable production, generation of income for the group from sale of vegetables
2	Ms. Naigaga Hellen Teaching Assistant Uganda Martyr's University Nkozi, P.O.BOX 5498, Kampala, Uganda Tel: 07794821377 Email: hnaigaga@umu.ac.ug	 Title: To mobilise and train women to form neighbour-hood saving groups in Nkozi sub county Objective: To train students on rural women entrepreneurship development
3	Ms. Nafula Inid Teacher MST Junior Academy School Entebbe Road, Kawuku, Bwerenga, Uganda Tel: 0771970983 Email: gmuteekanga@gmail.com (POC)	Title: Cabbage cultivation through formation of groups Objective: Mobilization, sensitization of members, neighbour-hood group formation, linkage to agricultural extension workers.
4	Ms. Okiria EdithChair PersonPallisa Framers AssociationC/o Uganda National Farmers FederationKampala, UgandaMob: 0752811280Email: pallisa.farmers@hotmail.com	Title: Promoting indigenous Poultry (local) among rural woman Objective: Improved nutrition status of rural woman
5	Ms. Ankunda MarionTeacherNyakasura School,Kabalore District Rwenzori RegionP.O.BOX 16, Fort portal, Kampala,UgandaTel: 0772444480Email: ankundamallion@gmail.com	 Title: Vegetable Growing (tomatoes and onions) among students, teaching and non- teaching staff Objective: Enough supply of Vegetable, Improvement on the standards of living
6	Ms. Nannozi Jane Francis Member Katiko Women's Group, Mityana, Busimbi Division, Mityana, Uganda Tel: 0782897164 Email: <u>nassamulah@gmail.com</u>	 Title: Mobilizing members, sensitizing members, forming groups for growing vegetables Objective: Working in groups, Networking and creation of awareness
7	Mr. Okello Geoffrey Lecturer National Teachers' College, Mubende P.O.BOX 158, Mubende, Uganda Tel: +256 772638892, 772535698, Email: geooke75@gmail.com	 Title: Produce marketing (Maize and Beans) Objective: High profits from the sale of their agricultural produces, identification of the potential market

Sl. No	Name and Address	BAWP Title & Objective
8	Mr. Mutabazi Damian Tutor Ministry of Education Kabale-Bukinda PTC, P.O.BOX 154 Kabale- Uganda Tel: 0775724978 Email: gmuteekanga@gmail.com (POC)	Title: Irish potato cultivation Objective: Increased production, Improved nutrition, Increased income, improved marketing
9	Mr. Musuuki Robert Trainer Twekembe Group, Bukomansimbi District Kibinge S/County, Budda Village Kampala, Uganda Tel: 0789412672	Title: Vegetable growing (tomatoes) Objective: Mobilizing and sensitizing local leaders and the community Vegetable capacity supply in the community shall have increased
10	Ms. Rosemary Naggujja Mugerwa Chief Executive Officer, The Potter New Cycle Guide Ssenge, Nansana Municipality Wakiso District P.O.NOX 881, Kampala, Uganda Tel: +256 772664469 Email: <u>ntambirose@gmail.com</u>	Title: Briquette making Objective: Encourage people to stop using charcoal and firewood
11	Ms. Tusingwire Patricia Member of ACFODE ACFODE (Action For Women Development) Bukoto, Kampala Tel: 0785345151 Email: <u>patricia.bfk@gmail.com</u>	Title: Hot pepper cultivation Objective: Export Hot Pepper to companies like KK foods, Naalya and increase income for the women
12	Ms. Namusobya Christine Executive Director Budondo United Art and Craft Association Budondo, Jinja district, Uganda Tel: 0752467666 Email: <u>chrissobya81@gmail.com</u>	 Title: Fruits and Vegetables (Banana plantation, Beans, Maize and Potatoes) Cultivation Objective: Improved nutrition, improved food security, income generation through proper farming knowledge
13	Ms. Nakalembe Dorothy Secretary Twekembe Kirangira Women's Group P.O.BOX 7, Mukono, Uganda Tel: 0772333738, 0706292207	Title: Promotion and adoption of vegetable growing (Spinach and cabbage) Objective: Introduce the program to the local leaders and sensitize them together with CDO, formation of NHG, membership, structures and functions of Kudumbashree
14	Ms. Oyella Joska Oringa Tutor Kitgum Primary Teachers' College P.O.BOX 35, Kampala, Uganda Tel: +256 777322661 Email: joskaoringa74@gmail.com	 Title: Promote vegetable growing among rural groups Objectives: > Improved diet, > Being self-reliant > Increased income, > Improved skill development, > Increased economic status

SI. No	Name and Address	BAWP Title & Objective
15	Mr. Nkayivu Leonard CCT (Tutor) Kabulasoke Core PTC Kampala, Uganda Tel: 0772830847 Email: <u>nkayileon@gmail.com</u>	 Title: Promote Vegetable growing among rural groups Objectives: Improved diet, Being self-reliant Increased income, Improved skill development,
16	Ms. Nakanwagi Bonconsil Training manager Gudie Leisure Farm P.O.BOX 27450, Kampala Uganda Tel: 0701460865, 0772460865 Email: gnbasaza@gudieleisurefarm.org	 Increased economic status
17	Ms. Jesca Saboni Orodriyo Director Leama Women Organization C/o P.O.BOX 127, Arua, Uganda Tel: + 256 772617730 Email: <u>3ebenezer@gmail.com</u>	
18	Ms. Lalam Ctaherine Odong Chair Person TII KI WII Farmers Group C/o 92.4 Luo FM, Kampala, Uganda, Tel: 0785546430 Email: lalamcatherine@gmail.com	
19	Ms. Gibutayi Florence Chair person Taabu Integrated Co-operative Society Limited, Buyaga T/ship, Buyaga Town council, Bulambuli District, P.O.BOX 2698 Mbale, Uganda Tel: + 0702494918, 0756966042 (WhatsApp) Email: <u>taabuicsl@gmail.com</u>	
20	Mr. Opejo Richard Hasambo Teacher NDEGEYA CORE PTC P.O.BOX 63, Masaka, Uganda Tel: 07782688372 Email: <u>opejorichard24@gmail.com</u>	
21	Ms. Eleanor Norah Itungu CEO EL- Toy Foods Co. Ltd., Mpondwe/ Lhubiriha Town Council Kasese District, Western Uganda Mobile No: 0705886933 Email: norahd2002@gmail.com	

SI. No	Name and Address	BAWP Title & Objective
22	Ms. Atim Winnie Assistant Administrator Eastern Agricultural Development Company (EADC), P.O.BOX 35561, Senior Quarters, Lumumba Avenue, Soroti, Uganda, Tel: +256 782455560 Mob: + 256 0705227271 Email: <u>winnieatim@gmail.com</u>	Title: Economic empowerment of Primary teachers Objective: subsidized food locally generated by and for teachers, increased saving and better standard of living
23	Mr. Nseko Timothy Teacher Iganga Secondary School Kampala, Uganda Tel: 0775268393, 0756268393 Email: <u>nsekotimothy@gmail.com</u>	 Title To organize, mobilize, sensitize, train and initiate rural woman and youth into saving for an enterprise Objective: Better income, saving culture, asset acquisition, self-employment creation, exposure and learning innovations, collaboration and technical skills, family health improvement, collective best practices, operate in organized structures, increased standardof living
24	Ms. Jackline Kyomukama Social Worker Tweyombeke Women in Development Association (TWIDA) P.O.BOX 144, Kabale, Uganda Tel: +256 772536007, Mob: 0772107585 Email: <u>omukamajackline@gmail.com</u>	Title: Title: Mobilise women for agricultural enterprises Objective: Increase family income, improve food and nutrition, increase number of women in leadership and increase confidence and self-reliance
25	Ms. Nakiranda Miriam Facilitator (trainings) Kasenge Riverford Organic Farm Kasenge, Mbalala Mukono district, Uganda Tel: +256 702648493, Mob: 0705216764 Email: <u>nakirandamiriam2020@gmail.com</u>	 Title: Formation of Neighbour Hood Groups (NHG) Objectives: > Increased yields, > Improved savings and lending schemes
26	Ms. Lubuulwa Ritah Volunteer Advocacy Coalition for Sustainable Agriculture P.O.BOX 14125, Kampala, Uganda Tel: 0703135757 Mob: 0704908245 (Whatsapp) Email: <u>ritahnakungu@gmail.com</u>	 Title: Passion fruit marketing to increase income in the Rwenzori region Objectives: > Better organisation, > Higher incomes, > Good value chain
27	Ms. Agasha Glorious Agricultural Officer Nyarwanya Tukha Tanisi Group Bushenyi Local Government P.O.BOX 01, Bushenyi, Uganda Tel: 0701140148 Email: <u>agashaglorious@yahoo.com</u>	Title: Value addition on orange flesh sweet potatoes and other food crops / cereals to make and package snacks and fortified foods Objective: Establishment of a pastry and Bakery unit to generate additional income
28	Mr. Gumisiriza Dominic Joram Tutor for agriculture Bishopstuart Core PTC, P.O.BOX 152 Mbarara Tel: 0782351008 Mob: 0701812521, 0782812521 Email: <u>dominicjoram@gmail.com</u>	Title: Vegetable and Water melon production Objective: Provision of supplements in form of greens/ vegetable to boost children nutrition and health

SI. No	Name and Address	BAWP Title & Objective
29	Ms. Nabukenya Lillian Immaculate Volunteer The Aids Support Organization (TASO) Old Mulago Complex, P.O.Box 10443, Kampala, Uganda Tel: 0752648824, Mob: 0782922133 Email: <u>lillianbuke@gmail.com</u>	 Title: Irish Potato Cultivation Objectives: Additional value on the irish potatoes Trainings to improve knowledge on marketing skills Tepresenting women internationally
30	Ms. Ay Thatcher Company Director Papali Group (U) Ltd. Plot 14B Vubyabirenge Road Ntinda, Kampala, Uganda P.O.BOX 12036 Mobile No: 0758135581 Email: <u>cathi47@gmail.com</u>	 Title: Creation of self employment through skills development trainings Objectives: Improved skills for self employment, Improved livelihood, Reduced dependency and strategic enterprise selection, Increased employment opportunities
31	Mr. Ndugga Godfrey Senior Tutor Ministry of Education (Busuubizi Core PTC) C/o Busuubizi Core PTC P.O.BOX 5 Mityana, Uganda Tel: 0772386416, Mob: 0772386416 Email: nduggatg60@gmail.com	Title: Improving Banana plantation farming by using organic manure Objective: Employment generation for women
32	Ms. Joy Mary Lwanga Managing Director Shalom Organic Farm Ltd. Greens & Fresh Co-operative Society P.O.BOX 11721, Gayaza Road Ziobwe Road Kampala, Uganda Tel: 256 0703510922, Mob: 0782952240 Email: joylwa@gmail.com	 Title: Sale of honey and peanut full packaging through Self Help Groups Objectives: Employment opportunities, Increased household income, better health and nutrition, Increased market opportunities
33	Ms. Noela V. Ojara Ogwal Operations Director Divine Organic Foods, P.O.BOX 640, Ntinda Kampala. Tel: 772664404, Mob: 0776380202 Email:ojnoela@gmail.com/	 Title: Skilling for wage improvement in value addition to locally available farm produce. Objectives: ➢ Efficient Resource Utilization ➢ Value Addition
34	Mr. Muteesasira Sam Senior Tutor Kibuli Primary Teachers' College, P.O.BOX 7071 Kampala, Uganda Tel: 070493442839 Mobile No: 0772442839 Email: <u>samutesasira@yahoo.com</u>	 Title: Training of tutors, teachers and community members in collectivism and rural women empowerment in Agriculture Objectives: > Impart savings habit among rural women > Encourage women to work in groups
35	Mr. Tugume Desteo Programmes Coordinator Better World Uganda P.O.BOX 406, Hoima, Uganda Tel: +256 772426607, Mob: 0752317447 Email: tdesteo@gmail.com	 Title: Forming women farming groups Objectives: ➢ Mobilize farm based enterprise for collective marketing ➢ Standard of living improved, ➢ Job creation for the women,

Sl. No	Name and Address	BAWP Title & Objective
36	Mr. Bidodo Benedict Manager Primary Co-operative (Nyamughasana Valley Farmers Co-operative) Musasa – Kanyatsi – Kyondo P.O.BOX 216 Kasese Kasese district Uganda, E.A Tel: 0772184651 Email: <u>bidodoben@gmail.com</u>	 Title: Cassava production through Self Help Groups Objectives: To assure food security and reduce malnutrition Generate employment for rural women and generate additional income
37	Ms. Nakidde Viola General Manager Kwagaliza Nagojje Multi-purpose Cooperative Society Nagojje Trading Centre Mukono District P.O.BOX 87, Lugazi, Uganda Tel: +256 753002046 Mob: +256 774130034, 0751719069 Email: <u>violanakidde@yahoo.co.uk</u>	 Title: Formation of Women groups and training in agriculture skills and creation of demonstration gardens Objectives: > Skills training, > Formation of neighbourhood groups, > Provide credit facilities and impart saving culture
38	Mr. Bekiita Silvestri Tutor/teacher Ministry of Education Bushenyi Core PTC, P.O.BOX 280 Bushenyi, Uganda Tel: 0752842321, 0776842321 Email: <u>bekiitasilvestri@gmail.com</u>	 Title: Rukoge Women Self-Help Group formation and establishment Objective: > Improved hygiene and sanitation due to collective construction of facilities > Increased production of salable items.
39	Ms. Nyangoma Grace Farmer Bagonzakukora Joint Farmers Group Kyabigambire S/C Hoima P.O.BOX 101, Hoima, Uganda Tel: 0782184755	Title: Formation of Self Help Groups
40	Ms. Betty Kyomugisha Tea Supplier PO Box.21, Rwamucucu in Rukiga Rukiga, Uganda Tel: 0782434932 Mob: 0755928057	 Title: Formation of model groups for Value chain management Objectives: ➤ Collective marketing, ➤ Improved post-harvest handling and record keeping,
41	Ms. Nabachwa Mary Jacqueline Teacher Mary Hill High School P.O.BOX 380, Mbarara, Uganda Tel: 0774649984 Mob: 0702320230 (WhatsApp) Email: <u>nabajacqueline@gmail.com</u>	 Title: Banana plantation through groups Objectives: Skills and knowledge of growing banana plantation Increased household income Employment opportunities and women empowerment in leadership
42	Ms. Akugizibwe Jacent Women Coordinator Caritas Hoima, P.O.BOX 34 Hoima, Uganda Tel: 0755371362 Email: <u>akugij@gmail.com</u>	Title: Production of high quality Bean seed through organic farming Objective: Strengthening of existing farmer groups and formation of new groups

Sl. No	Name and Address	BAWP Title & Objective
43	Ms. Anna Kwatampora Women Coordinator Women's Desk Caritas, Mbarara P.O.BOX 467, Mbarara, Uganda	 Title: Formation of groups for Tea seedling production Objectives: Employment opportunities for
	Mob: 0772666221 Email: <u>kwatamporaanna@gmail.com</u>	 Vinition of the second s
44	Ms. Ndyomugenyi Rosemary Women's Desk Coordinator Caritas Kabale Diocese P.O.BOX 156 Kabale, Uganda Tel: 0773244684 Email: <u>rndyomugyenyi3@gmail.com</u>	Title: Skill Development for women in saving and investment
45	Ms. Izongoza Margaret Women Coordinator Ababihamwe Women's Group Nyabikeni Ward Kabale Municipal Council Kabale, Uganda Tel: 0772562365	 Title: Formation of Self Help Groups and capacity building Objectives: Community entry at all levels Mobilization of NHG group formation
46	Mr. Ssekyundwa Tom Tutor Makaseke CTC Ministry of Education and Sports Kampala, Uganda Tel: 0772608678, Mob: 0772681427	 Title: Beans production and marketing Objectives: ➢ Saving group and enterprises in bean production and marketing , ➢ Starting of non-farm enterprises
47	Mr. Ochieng Francis Tutor Mukunju CPTC P.O.BOX 947, Tororo, Uganda Tel: 0772640056 Mob: 0776588721	 Title: Mushroom cultivation Objectives: Knowledge on Mushroom cultivation Improved gardens, Improved production and good quality of mushrooms,
48	Ms. Kaahwa Jolly Teacher Bulera Core PTC P.O.BOX 200 Hoima, Uganda Tel: 0782575342	 Title: Promoting the growing of vegetables organically Objectives: > Women employment, > Improved nutrition
49	Ms. Ayubu Anna Atwok Graduate Tutor Ministry of Education and Sports P.O.BOX 7063, Kampala, Uganda Tel: +256 6772409570, Mob: +256 0782437415 Email: annaayubu@gmail.com	 Title: Promotion of organic Cabbage cultivation through rural women groups. Objectives: Improved skills in organic vegetable production, > Improved productivity, > Increased incomes
50	Ms. Aduko Harriet Tutor Arua Core Primary Teacher's College P.O.BOX 63 Arua, Uganda Tel: 0772662014 Mob: 0783795791	 Title: Poultry project (mobilization, sensitization, project identification and training of students) Objectives: > Promote organic farming > Organic pesticide making > Value Addition

SI. No	Name and Address	BAWP Title & Objective
51	Mr. Ogwang Simon Tutor PTC Ministry of Education and sports P.O.BOX 7063, Kampala, Uganda Mob: 0774942288, 0787067383 Email: <u>simonogwang@gmail.com</u>	 Title: Vegetable growing and collective marketing (carrots, green pepper and amaranthus) Objectives: > Enterprise management, > Saving ability, > Improved standard of living and > Improved diet
52	Ms. Yagala Julian Coordinator, Women in Development DSSD Caritas Fort Portal P.O.BOX 90, Fort Portal, Kampala, Uganda Tel: 0772661137 Mob: 0701661137 Email: julianyagala@gmail.com	 Title: Brick making as an alternative activity being a demand driven project Objectives: Acquisition of knowledge and skills Increased income and self-reliance Improved saving skills, Identification of market, Improved production, Increased profits
53	Mr. SSengonzi Julius Tutor and Youth Chairman Kalungu district Kabukunge Primary Teachers' College Kanungu District Local Government Kanungu district, P.O.BOX 1276, Masaka, Uganda Tel: 0752991933 Email: julius.dayking@gmail.com	 Title: Formation of self help groups through students in the community Objectives: ➢ Implement the Bottom top approach of Kudumbashree and formation of the SHG
54	Ms. Akello Esther Tutor Soroti Core Primary Teachers' College P.O.BOX 476, Soroti, Uganda Tel: 0392080479 Mob: 0774402203, 0700777670 Email: <u>estherakello76@yahoo.com</u>	 Title: Organic farming (kitchen gardening) Objective: > Improved yield, > Market collectively, > Improve on their incomes, > Improvement on dietary practices,
55	Mr. Wejuli Hagai Tutor PTC Nyondo PTC P.O.BOX 920 Mbale, Uganda Tel: 07874011884	 Title: Entrepreneurial Farming Objective: > Improved quality of produce, > Enough market opportunities, > Good market prices, > Group farming production,
56	Ms. Nakayemba Allen Project Coordinator Caritas Kampala Plot No.1538/39, P.O.BOX 1425 Old Gaba Road Nsambya Kampala, Uganda Tel: +256 414268871 Fax: +256 41426880 Mob: +256 0789904022 Email: <u>allenkayemba@yahoo.com</u>	 Title: Poultry project in schools and the community (mobilization, sensitization and project identification) Objective: Train students and rural women on organic farming, fruit production, vegetable production, entrepreneurship skills and value chain addition

14. Linking Farmers to Market: Opportunities and Challenges

- > Title of the Training Program: Linking Farmers to Market: Opportunities and Challenges
- Date: 09 23 January, 2018
- Venue: National Institute of Agriculture Marketing (NIAM), Jaipur, Rajasthan
- Program Director

Dr. Hema Yadav Director National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan Mob: + 919829210019 Email: hyadav.niam@gov.in

Participants profile: 20 executives from 7 countries (10 male &10 female)

Country	No. of Executives
Cambodia	3
DR Congo	3
Ghana	1
Kenya	3
Liberia	4
Malawi	4
Uganda	2
Total	20

Training objectives

- To bring understanding of path ways of linking farmers to alternative markets like contract farming, e-markets, direct marketing etc.
- Inform about online marketing and application of IT Tools for marketing so as to design projects and applications for the farmers to enable them to avail these opportunities.
- Provide exposure to best marketing practices in ensuring food safety, managing supply chains and value addition.

Training Curriculum

- 1. Consumer demand and market trends
- 2. Food safety and quality and traceability
- 3. E marketing and alternative marketing system
- 4. Wholesale, Retail, and Hyper market
- 5. Aggregation models and producer organizations
- 6. Fair trade and marketing of organic produce
- 7. Integrated value chain system
- 8. Business linkages through FPO
- 9. Branding, segmentation and consumer behavior
- 10. Agri logistics and supply chain management
- 11. Warehousing and cold stores
- 12. Public Private partnership in marketing
- 13. Agri-preneurship and Innovations in marketing
- Training Outcome
 - Initiatives by the FTF participants to link the farmers directly to the markets and providing access to the Micro Credit Loans.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 9.85 whereas the average score of post-training was 13. Thus, it is found that the level of knowledge of executives increased by 31.98 percent after the training programme.



Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of **8.78** on a 10 point continuum indicating the overall impression on the programme was **VERY GOOD**.

> Field Visits

As part of the Feed the Future India Triangular Training Program on emerging trends in marketing of fruits and vegetables, a field trip was organized for the participants to visit the Muhana terminal market, Jaipur, AKSHAYA PATRA, Jaipur (Mid-Day Meal Programme), KVK Bharatpur, Warehouse, APMC & Barefoot College, Kishangarh.





Sl.No.	Name and Address	BAWP Title
	Cambodia	
1.	Mr. Thang Chhimkim Chhun Officer of Agricultural Extension Department of Agriculture, Forestry and Fisheries Road No.57, Damnak Luong Village, Vatkor Commune, Battambang City, Battambang Province, Cambodia Tel: +855 53 952 957 Email: pdabattambang@gmail.com	Sensitisation training programs on creation of Councils of Market for Agricultural Products (FPO).
2.	Ms. Porn Savet Officer of Agricultural Extension Department of Agricultural Extension, Road No.57, Damnakuluong Village, Sangat Watkor, Battambang Province, Cambodia Tel: +855 53852957, Fax: +855 53 952 957 Email: saveth.porn@yahoo.com	Enhancing livelihood of farmers by Growing Organic Vegetables - with income generating activities
3.	Mr. Un Aun Accounting and Planning Officer, Prey Veng Provincial Department of Agriculture, Forestry and Fisheries, Village-4, Sangkat Kampong Leave, Prey Veng Municipality, Prey Veng Provincial, Cambodia. Tel: 043 210372, 012259963 (R) Email: <u>ykadum@gmail.com</u>	Training's on social media for agricultural market information system
	Democratic Republic of Congo	
4.	Ms. Mutama Biwinja Valerie Head of Global Consulting Service, NEOCENTCOM Business Consulting 1525 bld du 30 Juin C/ GOMBE immeuble, VULAMBO 8 etage, Kinshasa, DR Congo Tel: +243 15127984, 243 999 378 009 Email: <u>ntabugoma@gmail.com</u>	Creating of communication platform to support FPO of cassava
5.	Ms. Sabiti Jeanne Zamuda President Women Entrepreneurs Committee of the City, 20, MONT-FLEURIE, Ngaliema, Kinshasa, DR Congo Tel: +243 993375983, 894742178 Email: jsabiti@hotmail.com,	Organization of the distribution and transportation of cassava chips
6.	Ms. Yowani Badack Francoise Gerant Administrator Establishment Yoani, 98 AV KATO C Kinshasa, DR Congo Tel: +243 899555308, 900411480 Email: <u>francoiseyowani@gmail.com</u> ,	Establishment of the vegetable cold storage for farmers vegetable produces

Sl.No.	Name and Address	BAWP Title
	Ghana	
7.	Mr. Seth Ampomah Duodu Assistant Agricultural Officer Ministry of Food and Agriculture Statistics Research and Information Directorate, P.O.Box M37, Accra, Ghana Tel: 0302664317, 0241480396 Email: sridmsu.mofa@gmail.com,	Using ICT information to linking farmers
	Kenya	
8.	Mr. Paul Kithome Mumina Senior Fisheries Officer P.OP.BOX.58187- 00200, Upperhill, Nairobi, Kenya Tel: +254 722218358, Email: palmumiki@gmail.com, jzylani@gmail.com	Formation and strengthening of fis farmers clusters in Kenya
9.	Ms. Mary Wacera Kanyi Deputy Directorate of Livestock Production P.OP.BOX.20100-31884, Nairobi, Kenya Tel: 0721379470, Email: <u>marywacera@yahoo.com</u>	Strengthening of Nakuru County Dain Farmers Federation (NACODAFF) in Keny
10.	Ms. Jacqueline Muendi Kilo Assistant Director of Agriculture Ministry of Agriculture, Livestock and Fisheries, State Department of Agriculture P.O. Box. 30028 - 00100, Nairobi Kenya Tel +254202718870, 720368148 Email: directorcrops@yahoo.com,	Development of training module to build capacity of extension staff ar farmers on formation of Farmer Produce Organisations in Kenya
	Liberia	
11.	Mr. Gbargbay Paye Konah Credit Officer, Farmer Feed the City Agriculture Organization, Old LPRC Road, Somalia, Ministry of Agriculture, 1000, Monrovia, Liberia Tel: +231 886544806, +231 776620207 Email: pgbargbay@gmail.com, archiespaye@yahoo.com,	Linking rural farmers to micro credit loar for crops
12.	Mr. Klah Julius S. Training Officer, Smallholder Agricultural Productivities Enhancement & Commercialization, P.O.Box.10-9010, Ministry of Agriculture, 1000, Monrovia, Liberia Tel: +231 886894456, +231 776377675 Email: siaffajulius@gmail.com,	Linking rural vegetable farmers to urba market (smallholders)
13.	Ms. Thomson Theresa District Agriculture Officer, Department of Regional Development Research & Extension, Ministry of Agriculture, Monrovia, Liberia, Tel: +231 886 106471, Email: <u>thompson536@yahoo.com</u>	Creating awareness for market linkage for vegetables growers mobilisation

SI.No.	Name and Address	BAWP Title
14.	Mr. Fahnbelleh Momodu Dono Technician, Sinje Town, Grand Cape Mount County, Ministry of Agriculture, P.O.Box.10-9010 1000, Monrovia, Liberia Tel: +231 886452703, +231 886644297 Email: fmomodud@yahoo.com, _	Linking rural cassava farmers to district urban market
	Malawi	
15.	Ms. Kalua Getrude Temwani Agriculture Extension Development Officer, Nkhotakota District Agriculture Office, P.O.Box.41, Nkhotakota, Malawi Tel: 265 888935151, 888856375, 999436836 Email: gekalua87@gmail.com	Linkage of markets for groundnut farmers (Seed multiplication farmers) i Malawi
16.	Ms. Mhone Victoria Bweo Acting Agribusiness Officer, Department of Agriculture Extension Services, Ministry of Agriculture, Irrigation and Water Development, Karonga District Agriculture Office, P.O.Box.320, Karonga, Malawi Tel: 265 994853776, 999617997, 888211999 Email: <u>victoriamhone@gmail.com</u>	Linking cooperative farmers to markets
17.	Mr. Watson Peter Agricultural Extension Development Officer, Lilongwe District Agriculture Office, P.O.Box.36, Lilongwe, Malawi Tel: +265 995441788, 888703989 Email: <u>perterwatson024@gmail.com</u> , <u>geokapelemera@gmail.com</u>	Linking soya farmers to markets
18.	Mr. Nyirenda Youngs Alfred Zebedia Yangazu District Agriculture Development Officer, Ministry of Agriculture, DADO, NKHATA Bay, PB 9, Chinteche, Malawi Tel: +265 999938064, 888831300 Email: yazspecial@yahoo.co.uk	Honey marketing for smallholde beekeepers
	Uganda	
19.	Ms. Jennifer Oyuru District Agricultural Officer Alebtong District Local Government P.O.BOX 316, LIRA, Uganda Tel: +256 772873699/7776912712 Email: joyuru@yahoo.com, patrickmokili0@gmail.com	Strengthening rice farmers to becom strong Farmer Producer Organizations
20.	Mr. Samuel Mugoya Fisheries Officer Alebtong District Local Government P.O.BOX 316, LIRA, Uganda Tel: +256 782576557/755023095 Email: <u>mugoyastephen2016@gmail.com</u>	Better pond management practices for fish farmers.

15. Strategies for Enhancement of Farmers Income in Dryland Agriculture

- Title of the Training Program: Strategies for Enhancement of Farmers Income in Dryland Agriculture
- Date: 16 30 January, 2018
- > Venue: ICAR-Central Research Institute of Dryland Agriculture (CRIDA), Hyderabad, Telangana



Program Director/Coordinators

Program Director	Dr. Manoranjan Kumar, Principal Scientist (Land and Water Management Engineering) ICAR-Central Research Institute of Dryland Agriculture (CRIDA), Hyderabad, Telangana Email: <u>Manoranjan.Kumar@icar.gov.in</u> , <u>manocrida75@gmail.com</u> , Mob:9676771937
Program Coordinators	 Dr. K Nagasree, Principal Scientist (Agril. Extension) ICAR-Central Research Institute of Dryland Agriculture (CRIDA), Hyderabad, Telangana E-mail : <u>k.nagasree@icar.gov.inknagasri@yahoo.com</u> Dr. R Rejani, Principal Scientist (Soil & Water Conservation Engg.) ICAR-Central Research Institute of Dryland Agriculture (CRIDA), Hyderabad, Telangana E-mail : <u>r.rejani@icar.gov.in</u>

> Participants profile: 22 executives from 10 countries (16 male & 6 female)

Country	No. of Executives
Afghanistan	3
Cambodia	2
Ghana	2
Kenya	3
Liberia	2
Malawi	3
Sudan	2
Uganda	2
Democratic Republic of Congo	1
Myanmar	2

> Training objectives

- Generating economic growth and raising incomes of various Dryland agriculture based farm enter prises
- Scaling existing, proven technologies to benefit more people living in thematic area
- Increasing resilience of vulnerable communities and household practicing dryland agriculture

Training Curriculum

- 1. Poverty reduction through water management pathways
- 2. Irrigation machinery and precision farming
- 3. Computers and electronics in management of water resources
- 4. Social issues and challenges in field scale water management
- 5. Climate change and water management strategies
- 6. IWMP (integrated watershed management program) experience for water management
- 7. Contingency planning for water resources management
- 8. Ecosystem services of various water management interventions
- 9. Agriculture, water and ecosystem interface



- 10. Plastic technologies in water resource development and management
- 11. Agromet advisories and crop insurance for sustainability of agriculture

Training Outcome

The training outcomes were seen in the creation of Rainwater harvesting structures (farm ponds, contour farming) promoted in Sudan with the help of CRIDA, Hyderabad.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 8.75 whereas the average score of post-training was 18.25. Thus, it is found that the level of knowledge of executives increased by 108.75 percent after the training programme.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.22 on a 10 point continuum indicating the overall impression on the programme was excellent.

> Field Visits

The executives were exposed to various field visits i.e IIRR (Indian Institute of Rice Research), IIMR (Indian Institute of Millets Research), Water and Land Management Training and Research Institute (WALAMTARI), CRIDA (Farm Machinery Workshop), CRIDA (Gunegal Research Farm and Watershed), National Institute of Agricultural Extension Management (MANAGE), India Meteorological Department (IMD).



Sl.No.	Name and Address	BAWP Title & Objective
	Afghanistan	
1.	Mr. Rohullah Qayoumi Rain-fed Agriculture Manager Chaharbolak General Manager of Agricultural Services Balkh Directorate of Agriculture, Irrigation and Livestock Charbolak District, Balkh Province Afghanistan Tel: 0785400350, 0776668243 Email: elham_qayoumi@yahoo.com	Title: Increasing crop yield through farm pond irrigation in Afghanistan Objective: Increasing crop yield through farm pond irrigation in Afghanistan
2.	Mr. Mohammad KabirSharifi Plant Protection Officer Directorate of Agriculture, Irrigation and Livestock (DAIL) Plant Protection Department Samangan Province, Afghanistan Tel: +93 785113731, +93 7955355708 Email: humayon.habib@gmail.com, humayo. habib@mail.gov.af	Title: Promotion of mulching in melon crop Objective: To promote and create awareness on mulching
3.	Mr. SharifullahRahimi Extension Manager Vegetable and Fruit Research Specialist Directorate of Agriculture, Irrigation and Livestock (DAIL) Sar-e-pol Province, Afghanistan Tel: +93 785941249 Email: rahimisharifullah16@yahoo.com	Title: Enhancement in farmers income through conservation furrows Objective: Enhancement in farmers income through conservation furrows
	Ghana	
4.	Mr. Emmanuel AyimbireAnaba Crops Officer, Department of Food and Agriculture Ministry of Food and Agriculture P. O. Box 4 Walewale,Northern Region, West Mamprusi, Ghana Tel: 0203717730, 0240027008 Email: anabae@yahoo.com	Title: In-situ moisture conservation using bund and furrow method Objective: Increase in crop yield using improved soil moisture retention
5.	Mr. Romeo Owusu Kankam Assistant Chief Technical Officer Konongo Asante Akim Central Ministry of Food and Agriculture, ACCRA, Ghana Tel: 0244693329, 0244643626 Email: owusuaduomi138@gmail.com	Title: Integrated farming system for maize and poultry production Objective: Increase in farmers production and double their income and welfare
	Kenya	
6.	Mr. Stanley Ngoju Humaiya Senior Assistant Director Livestock Production Ministry of Agriculture, Livestock and Fisheries, Nairobi, Kenya Tel :+254 0722260620/ +254-202718870 Email : humaiyalvsk2000@yahoo.com, ernestmbogo@gmail.com	Title: Increase in milk production by improved quality of livestock food Objective: Increase in milk production by improved quality of livestock food

Sl.No.	Name and Address	BAWP Title & Objective
7.	Mr. DishonMwawasiMkaya Senior Superintending Engineer Water Harvesting and Utilization Division Ministry of Agriculture, Livestock and Fisheries, P.O.Box 30028-00100- Nairobi Kenya, Tel: 0720848988 Email: mkdishon@gmail.com abigaelmwawasi@gmail.com	Title: Increase in framers income by using Farm ponds and greenhouse technologies. Objective: Increase in yield and income of farmers
8.	Ms. Grace WanjiruNjagi Senior Fisheries Officer, State Department for Fisheries and Blue Economy, Ministry of Agriculture, Livestock and Fisheries, P.O.Box 48511-00100 Museum Hill, Kipande Road, Nairobi, Kenya Tel: +2540-721989675, +025(0)722421224 Email: gracenjagi20@gmail.com, omolobox@ gmail.com	Title: Dissemination of technology on rainwater harvesting in Farm pond for fish farming Objective: Increase area under fish farming
	Myanmar	
9.	Mr. Kyi Myint Staff Officer Department of Agriculture Ministry of Agriculture, Livestock and Irrigation, Magway Region, Myanmar. Telephone/Mobile: +95-09-401536357 Fax No.: +95-63-69234 Email: doa.mgy.mgy@gmail.com	Title: Establishment of Vermi- composting unit and production of 15000 tons of compost Objective: To produce 15000 tons of compost
10.	Mr. Thant Sin Kyaw Staff Officer Department of Agriculture Ministry of Agriculture Livestock and Irrigation , Kayah State, Myanmar Tel: 95-261241189, Fax No.: 95-083-2221047 Email: thantsin.32@gmail.com	Title: Water management using mulching Objective: Mulching in 1000 acres for growing garlic and onions
	Malawi	
11.	Mr. Edward Daniel Mjojo Agriculture Extension Development Coordinator/ Acting AEDC Lilongwe East District Agriculture Office P/Bag36, Lilongwe, Malawi Tel: +265999572361 Email: edwarddanielmjojo1@gmail.com	Title: Implementation of various soil and water conservation techniques in Bango Objective: Implementation of various soil and water conservation techniques
12.	Ms. YatipaNangoma Agriculture Extension Development Officer NKHOTAKOTA District Irrigation Office , Box No 41, Ministry of Agriculture Lilongwe, Malawi Tel: +265881755998 Email: yatipanangoma@gmail.com	Title: Conservation Agriculture Objective: Enhancing household income by increasing yield
13.	Ms. Eliza Chinula Agriculture Extension Development Officer Ministry of Agriculture and Food Safety, Malawi Tel: +265996033375 Email: chinulaelie@gmail.com	Title: Manure making, mulching and introduction of early maturity varieties Objective: High yield and water productivity

SI.No.	Name and Address	BAWP Title & Objective
	Uganda	
14.	Mr. Emuron Joseph Agricultural Officer Department of Production and Marketing Katakwi Local District Government P.O.Box 1, Katakwi, Uganda Tel: +256 772315293, +256 782273027 Email: emuronjoseph9@gmail.com	Title: Fodder development for livestock production Objective: Enhancement in farmers income through increase in livestock and dairy production
15.	Mr. Emmanuel Ogwal Agricultural Officer Otuke District Local Government/ Production, P.O.Box 617, Lira District, Uganda, Tel: +256 772871650 Email: ogwalemmanuel22000@gmail.com	Title: Production of cactus fodder for livestock feedings Objective: Demo plot establishment and adoption by the farmers
	Democratic Republic of Congo	
18.	Ms. Ifua Basele Celestine Marie-Robert Coordinator of The Project BWETA Foundation, KINGABWA N°1403, Limete Township, Democratic Republic of Congo Tel: +243902182217, +243810627678 Email: pbsandro4@gmail.com,	Title: Implementation of various soil and water conservation techniques
	Sudan	
19.	Ms. Fatima Jumaa Tawor Halowf Agricultural Engineer, General Administration of Planning &Agriculture Economies Ministry of Agriculture Khartoum, Sudan Tel: +249918021542, Fax No.: 779957 Email: hannaalkinanee@gmail.com	Title: Awareness on climate change impact on farmers income Objective: Enhancing knowledge on impact of climate change on farmers income in red sea state
20.	Ms. Rwan Mohamed Elhassan Osman Agricultural Engineer, Ministry of Agriculture and Forestry General Administration of Planning & Agriculture Economies, Khartoum, Sudan Tel: +249123334261, +249918073153, Email: moafuso@yahoo.com	Title: Awareness on Rainwater Management Objective: Enhancement in farmers income through yield and productivity enhancement
	Liberia	
21.	Mr. Romeo Belley Kaioh Assistant Administrator Citizen Against Poverty, Ministry of Agriculture P.O.Box- 10-9010, 1000 Monrovia 10, Liberia Tel: 886763808/231777008770 Email: romiokaioh84@gmail.com	Title: Increased Cassava Production
22.	Mr. Flomo Augustine Binda Extension Technician Ministry of Agriculture P.O.Box 10-9010 1000 Monrovia 10, Liberia Tel: 0886-485-992 /0775519941 Email: flomoaugustine@yahoo.com	Title: Income enhancement through increase in yield of Maize crop

16. Value Addition and Market Linkage Mechanisms in Millets

- > Title of the Training Program: Value Addition and Market Linkage Mechanisms in Millets
- Date: 23 January 06 February, 2018
- > Venue: ICAR-Indian Institute of Millet Research (IIMR), Hyderabad, Telangana
- Program Director/Coordinator



Program Director	Dr. B. Dayakar Rao Principal Scientist & CEO, NIELAN TBI PI (NFSM_COE), & FFP; ICAR-Indian Institute of Millets Research (IIMR), Rajendranagar, Hyderabad-500 030; Telangana State, India Telephone : 040-24599331 Fax:040-24599304 Mobile:09963288838, 08096900050 Email: dayakar@millets.res.in, dayakariimr@gmail.com
Program Coordinator	Dr. Sangappa B. C. Ph.D. ARS Scientist & Nodal Officer (AC & ABC) ICAR- Indian Institute of Millets Research Rajendranagar Hyderabad-500030, Telangana, India Mobile : +91 9880045728 Email: sangappa@millets.res.in

> Participants profile: 20 executives from 8 countries (8 male &12 female)

Training objectives

- To provide insight on millets production, processing and value addition.
- To facilitate adoption of millets production technologies to improve the incomes of the millets stakeholders.
- To inculcate hands on experience on preparation of millets value added products and creation of Market linkages for producers, processors and consumers.

> Training Curriculum

- 1. Demonstration of High yielding millet cultivars for adoption in dry land areas of the world
- 2. Farming system Production of millets crops in rainfed agriculture system.
- 3. Alternative industrial uses of millets
- 4. Demonstration of primary processing viz., Cleaning, Destoning, Dehulling, Grading, sorting of millets.
- 5. Hands on training on Production of millets value added products and demonstration of sec ondary processing equipments.
- 6. Packaging, labeling, branding of Ready-to-eat and Ready-to-cook millets value added products.
- 7. Creating Farmers producer's organizations in millets for market linkages.
- 8. Development of business modules for entrepreneurship development in millets
- 9. State wise policy measures for millet promotion
- 10. Understanding domestic markets for targeting millets for exports

> Training Outcome

Promotion of value added products of millets and small cereals undertaken in Ghana & Malawi.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 15.55 whereas the average score of post-training was 19.25. Thus, it is found that the level of knowledge of executives increased by 23.79 percent after the training programme.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of **9.75** on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

> Field Visits

The executives were exposed to various field visits i.e. ICRISAT (International Crops Research Institute for the Semi-arid Tropics), CRIDA (Central Research Institute for Dryland Agriculture), Farm Machinery Workshop PJTSAU, MANAGE, NIRD & PR, ICAR-NAARM, T-hub, Nampally Exhibition.





SI.No.	Name and Address	BAWP Title
	Ghana	
1.	Mr. HuuduBampuori Abu Regional Crop Officer , Department of Agriculture, Accra, Ghana Tel: +233244027209 / Email: <u>abuhuudu@yahoo.com</u>	Title: Community seed multiplication of improved millet and sorghum varieties in the Upper West Region
2.	Mr. Mahama Dangana Assistant Director of Agriculture, Agriculturist Ministry of Food And Agriculture, BabileAgric Station, Accra, Ghana Tel: 233261777710 Email: <u>dangana.mahama@yahoo.com</u>	Title: Millets seed multiplication program and adaptive trails for available seed material
3.	Mr. Abednego Abosore District Director of Agriculture, Mion District Assembly Department of Agriculture, P.O.Box 1, Sang, Northern Region Tel: +233208546425, +233244457651 Email: <u>abednegoabosore@ymail.com</u>	Title: Sensitization of staff and farmer groups on health benefits of millets and sorghum in Minor district
	Kenya	
4.	Mr. George WarogaKamau Training Coordinator, Ministry of Agriculture Livestock & Fisheries, State Department of Livestock, Directorate of Livestock Production Kenya. Tel : +254 202330755/6, +254 725208143 Email: <u>warogakam@yahoo.com</u>	Title: Introduction of sweet sorghum as fodder crop in Embu counties of Kenya to complement Napier grassland maize in making silage.
5.	Mr. Benjamin MutooniMaringo Veterinary Farm Manager, Directorate of Veterinary Services, 00625, Private Bag, Kamgemi, Kenya Tel: 0208043441, +254727873613 Email: <u>infodvs@kilimo.go.ke</u> , <u>benmutooni2015@gmail.com</u>	Title: Forage/fodder production & management by using high biomass sorghum
6.	Mr. John MuindeMasila Senior Assistant Agriculture Officer, Ministry of Agriculture Livestock & Fisheries, State Department of Agriculture, ATDC Katumani, P.O.Box 431, Machakos(90100), Kenya. Tel: 0705764672, 0724437629 Email: <u>katumaniatdc@yahoo.com</u>	Title: Sensitization of the farmer group and youth group on millet/sorghum utilization
	Liberia	
7.	Mr. Joseph Beamah Technician, Ministry of Agriculture, P.O.Box 10-9010 1000, Monrovia 10, Liberia Tel: +231-777368888 / Email: <u>beamah2017@gmail.com</u>	Title: Sensitization of farmers and staff on millets and sorghum in Liberia

SI.No.	Name and Address	BAWP Title
	Malawi	
8.	Ms. Lucy Mchenga Food and Nutrition Officer , Ministry of Agriculture and Water Development, Extension Department , Phalombe district Agriculture Office, P.O Bodx 62, Phalombe, Malawi Tel: +265 999293305/ +265888388613 Email: <u>lucyndiwo@yahoo.com</u> ,	Title: Processing and value addition millets in Phalombe - Malawi
9.	Ms. Chikondi Solomoni Lilongwe East Agriculture Office, P/ Bag 36 Lilongwe, Malawi Tel: +265 999129902/+265886495330 Email: <u>ymchikho@yahoo.co.uk</u> , <u>chikondisolomoni1@gmail.com</u> ,	Title: Upscaling of millet production ar value addition
10.	Ms. Msiska Doris Agriculture Extension Development Coordinator, Ministry Of Agriculture, Irrigation and Water Development, Lilongwe West Agriculture Office, MPINGU EPA P.O BOX 1989, MPINGU, Malawi Tel: 0995704062/ Email: <u>doriskay28@yahoo.com</u>	Title: Irrigated millets/sorghu demonstrations in Mpingu EPA Lilongv district
11.	Ms. Sarah Mbale Agriculture Extension Development Officer Ministry of Agriculture, Irrigation and Water Development Salima District, Agricultural Office P.O Box 491, Salima Malawi Tel:+265 997173467/ +265 881987777 Email: <u>s.mbale@pwdoctor.org</u>	Title: Processing and value addition millets in Salima district
	Sudan	
12.	Ms. Sara Mustafa Ahmed Mustafa Agricultural Engineer , Ministry of Agriculture and Forestry, General Administration of Planning & Agriculture , Economies Khartoum, Sudan Tel: +249912564383 / Email: <u>saramstafa35@</u> <u>yahoo.com</u>	Title:Cooperativecorporationfproduction and marketing of horticultur productsthrough packaging in sela agricultural scheme – Khartoum State
13.	Ms. GawahirSiddig Salim Abashar Ministry of Agriculture and Forestry, General Administration of Planning & Agriculture, Economies Khartoum, Sudan Tel: +249129180493 / Email: gawhi731@gmail.com	Title:Trainings for women on valuadition of millets
	Uganda	
14.	Ms. RobinahAkiror Teacher, Kamonkoli College, P.O. Box 775, Mbale, Uganda Tel: +256 712870009 / Email: <u>akiror87@gmail.com</u>	Title: Processing and value addition millets products in Budaka district

Sl.No.	Name and Address	BAWP Title
15.	Ms. Loy KitalambwaKwikiriza Teacher, Kyemeire International Vocational Secondary School Jinja District, Uganda Tel: +256 782464903 / Email: <u>kwikirizaloy@</u> <u>gmail.com</u>	Title: Implementation of secondary processed millets at schools
	Myanmar	
16.	Mr. Naing Saw Assistant Staff Officer , Department of Agriculture Ministry of Agriculture Livestock and Irrigation Chin State, Myanmar Tel: 09-264816252, 95-09-444026419 / Fax No.: 95-67-410067 Email: <u>asawboylay@gmail.com</u>	Title : Field trials on millet yields using different methods of sowing
17.	Ms. Nan Ngu War Hlaing Deputy Staff Officer, Plant Protection Division, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation Magway Region, Myanmar Tel:+95-63-2023157, Fax No.: +95-63-2023165 Email: doa.mgy.mgy@gmail.com	
18.	Ms. Aye Aye Mon Assistant Staff Officer, Horticulture and Plant Biology Division Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Mandalay Region, Myanmar Tel:+95-09-444026419 Fax No.: +95-67-2847815 Email:doa.mdy.mdy@gmail.com	
	Mongolia	
19.	Ms. Dolgorsuren Choijoo Officer for Science and Technology Policy and Innovation Department of Policy and Planning Ministry of Food, Agriculture and Light Industry Bayanzurkh district, Ulaanbaatar 13381, Mongolia Telephone/Mobile: 976-51-260709, 976- 99067861, 976-77687861 Email: dolgorsuren@mofa.gov.mn	Title : Field trials on millet yields using different methods of sowing
20.	Ms. OyunErdene Danaajav Senior Officer for Agricultural Exchange and Marketing Department of Policy and Planning Ministry of Food, Agriculture and Light Industry Bayanzurkh district, Ulaanbaatar 13381, Mongolia Tel: 976-51-260709, 976-99903193 Email: oyunerdene@mofa.gov.mn, oogii.8080@yahoo.com Value addition in crop production sector of Mongolia and Millets Production	Title : Field trials on millet yields using different methods of sowing

17. Management of Technology and Extension for Soil Testing Based Advisory Services to Farmers

- Title of the Training Program: Management of Technology and Extension for Soil Testing based Advisory Services to Farmers
- Date: 30 January 13 February, 2018
- > Venue: ICAR-Indian Institute of Soil Sciences (IISS), Bhopal, Madhya Pradesh
- Program Director/Coordinator



Program Director	Dr. Ashok K. Patra Director, Nabibagh, Berasia Road, Bhopal – 462038, Madhya Pradesh, India. Phone: (Off.) 0755-2730946, (Mob) 9811733465, Email: director@iiss.res.in, patraak@gmail.com,
Program Coordinator	Mr. Sanjay Sreevastava Course Coordinator, Mobile: 9977655437, Email: biotite_sri@yahoo.com

Participants profile: 21 executives from 7 countries (16 male & 5 female)

Country	No. of executives
Ghana	3
Kenya	3
Liberia	1
Malawi	4
Mongolia	2
Myanmar	3
Sudan	2
Uganda	2

Training objectives

- To impart skills on new and innovative soil health management strategies for sustainable agriculture leading to conservation of natural resources in different cropping systems.
- To introduce the concept of farmers' participatory diagnosis of constraints and opportunities (PDCO) survey for soil fertility management in relation to crop production.
- To introduce the use of internet and mobiles in the dissemination of soil test based fertilizer recommendations, also the soil fertility maps and fertilizer nutrient recommendations based on these maps.

Training Curriculum

- 1. Soil, crop, and climate specific soil test based nutrient recommendation technologies.
- 2. Concept of Integrated Plant Nutrient Supply (IPNS) system and the IPNS technologies generated by the institute and their dissemination
- 3. Participatory Diagnosis of Constraints and Opportunities (PDCO) Survey.
- 4. On farm and off farm rapid compost generation technologies for the improvement of soil health.
- 5. Demonstration and hands on training on Mridaparikshak mini lab and its role in quick dissemination of soil test results to farmers.
- 6. Exposure to result and method demonstration in farmers' fields, an institute experience.
- 7. Geo-referenced soil fertility maps, their generation and use in balanced fertilizer applications.
- 8. Interpretation of soil water analysis report. Exposure to on-line soil test based fertilizer recommendation system Government soil health card scheme: An Indian experience in the dissemination and impact of soil health cards.
- 9. About 50% time shall be devoted in lecture-cum-interaction sessions, 40% time on hands on practices in laboratories and field demonstrations, 10% time for institutional visits and interaction.

Training Outcome

The training outcomes were observed in the promotion and adoption of innovative soil collection tools and soil sampling kits propagated in Kenya, Uganda and Malawi by the participants.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 20.5 whereas the average score of post-training was 24.2. Thus, it is found that the level of knowledge of executives increased by 18.05 percent after the training programme.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.67 on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visits

The participants were exposed to Divisions/Units/laboratories, Library, Museum, AKMU of the INSTITUTE and various research organizations public and private, farmer fields, such as Soya Choupal, Madhya Pradesh Department of Agriculture, ICAR-National Institute of High Security Animal Diseases, Bhopal and organic growers/farmers in Vidisha.

SI.No.	Name and Address	BAWP Title
	Afghanistan	
1.	Mr. Hamdard Asadullah Lab Technician, Afghanistan National Agriculture Science and Technology University (ANASTU), Kandahar, Afghanistan, Mobile: 078383 1318 +93700331576, Email: asadullahhamdard22@gmail.com, anastu.krdr@gmail.com	Efficient use of fertilisers and soil fertility mapping
2.	Mr. Jonbish Ghulam Farooq, Member of General Extension & Agriculture Development, Ministry of Agriculture, irrigation and Livestock (MAIL), Airport Road, Faryab Province,Afghanistan Mobile: 0093-798660556, Email: jonbishf@gmail.com, mohsaleem_usa@yahoo.com	Sensitisation training's on vermicomposting
3.	Mr. ShagiwalMujahid, Manager of Natural Resources, Patika Agriculture, Irrigation &Livestock Directorate Kabul, Afghanistan Mobile: 093-0774349955, Email: mujahidshagiwal2015@gmail.com, walid_ahmad_786@yahoo.com	Bio-waste recycle/Compost
	Ghana	
4.	Mr. Dorcoo Sampson Kwesi Assistant Agriculture Officer, Directorate of Agricultural Extension Services, Ministry of Food and Agriculture, P.O.Box M.37, Accra, Ghana, Mobile: +233-302655282, 241276229 (M) Email: fbosecretariat@gmail.com, sampsondorcoo@gmail.com	Use of LCC for Nitrogen Management in rice fields

SI.No.	Name and Address		BAWP Title
5.	Mr. Adzivor Samuel Yao District Director of Food and Agriculture, Department of Food and Agriculture, P.O.Box: 18, South Dayl District Assembly, Kpeve, Ghana, Mobile: +233-244946646, Email: sammysamgh@yahoo.com, adzotomat@yahoo.com		Assessing Leaf Nitrogen Status to determine the time of nitrogen top dressing in maize.
6.	Mr. Honu Geoffrey Kwaku Director of Agriculture, Department of Food and Agriculture, Ministry of Food and Agriculture, P.O. Box. KF 8, Koforidua - Eastern Region, Ghana-West Africa, Mobile: +233208164428, Email: radueast@gmail.com, honugeoffrey@gmail.com,		Amendments advisory services to farmers in Birim Central Municipality, Ghana
	Kenya		
7.	Mr. Omolo Bethuel Oduor Fishery Manager, State Department of Fisheries, C/o. Director General Fisheries, Museum Hill, P.O. Box 48511-00100, Nairobi, Kenya, Mobile: +254-722619909, Email: omolobox@gmail.com, samuelkenyanya@gmail.com hacrent368@gmail.com		Documentation of fish pond effluent in Kenya
8.	Ms. Bett Jenifer Wanjiku Principal Livestock Production Officer, Department of Livestock, Ministry of Agriculture, Livestock & Fisheries, P.O. Box. 1791, Nakuru, Kenya, Mobile: +254-7212225960, Email: bettjenifer@yahoo.com, njagipaul@yahoo.com, hacrent368@gmail.com	la Tra	Use of LCC to determine top dressing of maize crop in March-May season
9.	Mr. Mathias Wafula Mukhone Principal Agriculture Officer, Ministry of Agriculture, Livestock & Fisheries, P.O. Box. 30028-00100, Nairobi, Kenya, Tel: 7222680560 Mobile:+2542718871 Email: psagriculture@kilimo.go.ke		Assessment of physical parameters of soil health
	Liberia		
10.	Mr. Solobert Wilson David Extension Officer, Farmer Union Network, IFAD, Ministry of Agriculture, P.O.Box. 10-9010, 1000 Monrovia 10, Liberia, Mobile: +231-886457937, 0777057173, Email: wsolobert@yahoo.com, dsolobert@ moa.gov.lr, edibope@yaho.com		Composting Technologies

SI.No.	Name and Address		BAWP Title
11.	Mr. Banneyco Jehu Prosper Extension Officer, National Agro Inputs Dealers Association of Liberia, P.O.Box.10-9010, 1000 Ministry of Agriculture, Monrovia, Liberia Mobile: +231-886347232, Email: aidalliberia@ gmail.com, johnson4emmanuel@yahoo.com		Extension outreach and advisory services to smallholders farmers on the use of bio fertilizer
12.	Mr. Chayea Bobby Williams Area Coordinator, Ministry of Agriculture, Old LPRC Road, Somalia Drive, Gardnerville, Liberia Mobile: +231-777168197, Email: bchayea@ymail.com, starlinggarnett@yahoo.com,		Establishment of compost technology in Liberia
13.	Mr. Sirleaf Maima Diaba District Agriculture Officer, Ministry of Agriculture, P.O. Box. 10-9010, 1000 Monrovia 10, Liberia, Mobile: +231 - 886534013, Email: maimadsirleaf@yahoo.com, <u>edibope@yahoo.com</u>		Development of compost for vegetable production
	Malawi		
14.	Mr. Singo Amissi Agriculture Extension Development Officer, Nkhotakota District Agriculture Office, Agriculture Extension, Ministry of Agriculture, P.O. Box 41, Nkhotakota, Malawi, Mobile: +265-884611803, Email: <u>mphatso08@gmail.com</u>		Farmer sensitisation meetings and trainings on conservation agriculture
15.	Mrs. Linda Kamtogo Agricultural Extension Development Officer, Agricultural Extension Department, Ministry of Agriculture, P.O.Box. 259, Lilongwe, Malawi, Mobile: +265 999699963, +265 994006700, Email: lindakamtogo@yahoo.com, smulaza@malawileaf.com, gkapelemera@gmail.com		Promotion of conservation agriculture
16.	Mr. Chodzi Mphatso Prince Agricultural Extension Development Officer, Lilongwe District Agriculture Office, P/Bag 36. Lilongwe, Malawi, Mobile: +265884173049, Email:mpchodzi@yahoo.com, <u>eveschima@yahoo.com</u>		Bio-waste recycle/compost
17.	Mrs. Hawonga Tuchi Techi Programme Manager, Karonga Agriculture Development Karonga Agriculture Development Group, P.O.Box. 4, Karonga, Malawi, Tel: +265 880114515 Mobile: +265999452726, Email: tuchitechi@yahoo.com, <u>fwchilenga@yahoo.co.uk</u>	India Train	Participatory Radio Campaign (PRC) on the importance of soil health for sustainable crop productivity

2	Sl.No.	Name and Address	BAWP Title
		Myanmar	
	18.	Ms. Myo Khin Mar Deputy Staff Officer, Land Use Division (Lab), Department of Agriculture, Ministry of Agriculture Livestock and Irrigation, Bayintnaung Road, West Gyogone, Insein Township, Yangon, Myanmar Tel: + 95 15388854, Mobile: +95673410514, +959760839313, Email: landusenpt@gmail.com, kmarmyo77@gmail.com, kmmyo77@googlemail.com, zarmyint@gmail.com	Soil Test Based Fertiliser Recommendation on Rice
	19.	Mr. Khant Aung Aung Assistant Staff Officer, Department of Agriculture, Ministry of Agriculture Livestock and Irrigation, Yangon, Myanmar Tel: +067 410325 Mobile: +9567410067, Email: khantko384@gmail.com, dgdoamm@gmail.com, myintthet37@gmail.com	Use of Leaf Colour Chart for nitrogen management in rice.
		Uganda	
	20.	Mr. Amandrua Ronald Agriculture Officer, Department of Production and Marketing, P.O.Box. 1, Arua, Uganda, Mobile: +256-776709870, +256-758709870, 776 Email: ronaldamandrua@yahoo.com, amandruaronald@gmail.com <u>victortoa2005@yahoo.co.uk</u>	Increasing fertiliser use efficiency by Use of ICC and split dose urea application in upland rice (NERICA) production in Uganda
	21.	Mr. Omuron Geoffrey Soil Fertility Officer, Department of Crop and Natural Resources, Nabuin Agriculture Research and Developmental Institute, P.O. Box. 132, Moroto, Uganda, Mobile: +256-773326768, Email: gomuron@naro.go.ug, geoffreyomuron@yahoo.com, paul.okullo@gmail.com	Efficient use of fertilisers



18. Production, Processing and Marketing of Organic Vegetables

- > **Title of the Training Program**: Production, Processing and Marketing of Organic Vegetables
- Date: 06 20 February, 2018
- > Venue: ICAR- Indian Institute Vegetable Research (IIVR), Varanasi, Uttar Pradesh
- Program Director/ Coordinators



Program Director	Dr. B. Singh Director, ICAR-Indian Institute of Vegetable Research Post Bag No.1, P.O, Jakhani (Shahanshapur) Varanasi-221305, Uttar Pradesh, India. Ph: 91-542-2635247, 2635256, Fax: 91-5443-229007 Email: director.iivr@icar.gov.in, <u>directoriivr@gmail.com</u>
Program Coordinators	Dr. Neeraj Singh Principal Scientist (Agricultural Extension) Mob:9415993837,9454089614, Email: neerajatic@gmail.com, icar.iivr@gmail.com Dr. P. M. Singh Principal Scientist Tel: 0542-2635236,37,47, Fax: 05443-229007, Mob: +91 9454089614 Email: pmsiivr@gmail.com

> Participants profile: 21 executives from 11 countries (12 male & 9 female)

Country	No. of Executives
Afghanistan	3
Ghana	3
Kenya	3
Liberia	4
Malawi	4
Myanmar	2
Uganda	2

Training objectives:

- Skill development of participants in post-harvest management and processing of organic vegetables for nutritional security.
- Equip the participants in identification of vegetables pests and their integrated management.
- Certification of organic produce and their marketing for entrepreneurship development.

Training Curriculum:

- 1. Global scenario of organic vegetable production: Current status and future strategies.
- 2. Selection of improved varieties/planting materials
- 3. Nursery management in vegetable crops
- 4. Organic production technology for Solanaceous crop, Cole crop, Root crop, Bulb crop, Peas and Beans, Okra, Cucurbits, Leafy vegetables and Rare vegetables
- 5. Weed Management, Water Management, and Integrated Plant Nutrient Management for θ organic vegetables production
- 6. Vegetable based cropping system for organic farming
- 7. Pre & Post harvest management of organic vegetables produce

- 8. Processing and value addition of organic vegetables produce
- 9. Disease and insect-pest management in organically grown vegetable crops
- 10. Seed Production and Management of organic vegetable crops
- 11. Nutritional and medicinal value of organic vegetables
- 12. Certification of organic produce θ Marketing, export of organic vegetables

Training Outcome:

The training outcomes were practising of good practices on organic vegetable farming promoted in partner countries through participatory radio campaigns.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 10.1 whereas the average score of post-training was 17.71. Thus, it is found that the level of knowledge of executives increased by 75.35 percent after the training programme.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 0-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.57 on a 10 point continuum indicating the overall impression on the programme was excellent.

Field Visits

Apart from different practical sessions and visit to ICAR-IIVR Research lab and field, study visits for the participants were also organized for BHU, Varanasi and Surbhi Soodh Sansthan, Mirzapur for gaining hands-on learning experiences on organic farming.





Sl.No.	Name and Address		BAWP Title & Objective
	Afghanistan		
1.	Mr. Zaryal Khalilullah, Regional Marketing and Business Development Officer, Directorate of Agriculture, Irrigation & Livestock (DAIL), District#10, Opposite to UNAMA, Kandahar, Afghanistan, Mobile: +93- 706 001 932, Email: khalilzerial@gmail.com,	EVE 110	Title: Use of integrated farming system to assure sustainable food security Objective: Increase in net return due to decrease in cost of cultivation.
2.	Ms. Azita Salimshahi Pashtun Zarghun Saffron Co. Market Promotion Officer, Hashimi Street, Ninth District, Province: Herat, Afghanistan, Mob: +93- 793 673 441, Email: azitasalimshahi@yahoo.com, maliki_2008@ymail.com		Title: Introducing organic vegetables production in kitchen garden for women Objective: Development of organic kitchen garden for 20 women
3.	Mr. Qais Totakhil Foreign Relation Officer, Afghanistan National University of Agriculture Science and Technology (ANASTU) Near Airport Dand District, Kandahar, Afghanistan, Mob: +93-771 200 768 Email: qaistotakhel52@gmail.com,		Title: Introducing organic vegetable farming in ANSTUObjective: Preparation of organic farm, produce organic seeds and biofertilizers
4.	Mr. Mirwais Khpalwaak, Fruit and Vegetable Manager, Helmand Lashkerghah belan Research Farm, Directorate of Agriculture, Irrigation and Livestock, Helmand, Afghanistan, Mobile: +93- 703077816 Email: mirwais.khpalwaak@gmail.com, shir.nickzad@gmail.com		Title:Developingsmallorganicvegetables production farmObjective:Developorganicfarmbyapplyingallagriculturepracticesandorganic farmingprocedures
5.	Mr. Muhammad Hanif, Agriculture Affair Section Head, Department of Agriculture, Irrigation and Live Stock Urozgan Trenkot Afghanistan, Mobile:0093 -747264424 ,0093-774646564, Email: hanif.afghan_07@yahoo.com, drrokhan.shinwary@gmail.com,		Title: Farm demonstrations and trainings Objective: Public awareness program about production, process and marketing of organic vegetables
	Botswana		
6.	Mrs. Munisola Rebecca Kahundu, Sub District Horticulture Officer, Ministry of Agriculture, Department of Crop Production, P.O. Box. 188, Maun, Botswana, Mobile: +267-6860230, 74208982, Email: beckymunisola@gmail.com, munisola@ gov.bw, bjgalekgorwe@gov.bw		Title: Production of vegetables through organic farming system in Botswana Objective: Organise training for farmers and officers on production & process of organic farming, demonstrations.
	Democratic Republic of Congo		
7.	Mr. Jean Baptiste Bushiri Waliuzi, Manager Baraka Welcome Enterprise, 09 AV. LUMUMBA VILLE DE KINDU, Democratic Republic of Congo, Mobile: +243 815 129 160, Email:jeannekiono@gmail.com,		 Title: Sensitisation, planning, check work & report Objective: Organise training and meetings, add more farmers in organic farming and ~70% increase in production

Sl.No.	Name and Address	BAWP Title & Objective
	Ghana	
8.	Mrs. Kyere Yeboah Vivian, Technical Engineer, Ministry of Food and Agriculture, Adadekotopon Municipal Assembly, P.O.Box. 395, Accra, Ghana , Mobile: +233-0244712096, Email: abenayeboahwaa@yahoo.com	Title: Production of organic vegetables Objective: Sensitise extension officers and farmers through trainings and increase in income and organic crop yield.
9.	Mr. Boakye Augustine, Director of Crops, Ministry of Food and Agriculture, P.O. Box. 33, Kpone, Greater Accra Region, Ghana, Mobile: +233-0249929966, Email: augustineboakye77@yahoo.com, etarmah@yahoo.co.uk	Title: Use of integrated farming approach for sustainable food security Objective: Sensitisation to farmers and Agricultural Extension Agents followed by training on integrated crop management and promote organically produced commodities
	Kenya	
10.	Mrs. Igecha Anne Njeri, Chief Agriculture Officer, Kenya School of Agriculture, P.O. Box. 1909-10100, Nyeri, Kenya, Mobile: +254-0729850506, Email: kenyaschoolofagriculture@yahoo.com, tembu.09.mauheti@gmail.com	Title: Vegetable production under organic farming system Objective: Sensitisation of extension agents and farmers followed by training on organic farming
	Liberia	
11.	Ms. Jao Emma Baby, Research Associate, Central Agricultural Research Institute (CARI), Ministry of Agriculture, Liberia, Mobile: +231-8887139014, Email: jaoemma72@yhaoo.com, walter_ wiles@yahoo.com,	Title: Marketing of vegetables Objective: Sensitise farmers and extension agents about market and reduce cost of cultivation
	Malawi	
12.	Mr. Nyirenda Watson Kaunga, Agricultural Extension Development Officer, Salima district Agriculture Office, Ministry of Agriculture, Irrigation & Water Development, P.O. Box. 491, Salima,Malawi, Mobile: +265-999635370, Email: watnyirenda@gamil.com	Title: Promotion of organic vegetable farming Objective: Conduct sensitisation meeting with farmers group and other stakeholders from public & private sector.
13.	Mr. Kadeka Thembani, Agriculture Extension Development Officer, Lilongwe District Agricultural Officer, P. O. Box. 36, Lilongwe, Malawi, Mobile: +265-995413686/881948515, Email: thembakadeka@gmail.com, <u>eveschima@yahoo.com</u>	Title: Reduced inorganic inputs and increase use of organic inputs in vegetables in Chitekwere Extension Planning Area Objective: Increase in number of farmers using organic inputs, increase in yield and income.
	Mongolia	
14.	Ms. Sereenen Jargalsaikhan, Officer of the State Fund, Department of Policy and Planning, Finance Division, Ministry of Food, Agriculture and Light Industry, Government Building 9/A, Enkhtaivan Avenue 16 A, Ulaanbaatar - 13381, Mongolia, Mobile- +97651262376, Email: jargalsaikhan@mofa.gov.mn	 Title: Developing organic farming and formation of farmers group Objective: Increase in knowledge of farmers, entities & organization people and organic product certification

SI.No.	Name and Address	BAWP Title & Objective
	Myanmar	
15.	Mr. Moe Tin, Deputy Staff Officer, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Mandalay Region, Myanmar, Mobile: +96-67-410147, Email: tinmoe.horti@gmail.com,	Title: Developing organic farming standard & certification for better price Objective: Certification committee formation and Organic farming standard finalization
16.	Mr. Win San, Assistant Staff Officer, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Mandalay Region, Myanmar, Mobile: +96-09-799171076, Email: doa.mdy.mdy@gmail.com, dgdoamm@gmail.com	Title: Promotion of organic vegetable farmingObjective:IncreaseIncreaseinknowledge, production and income through organic farming
17.	Mr. Aung Thet Zaw, Deputy Assistant Staff Officer, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Mandalay Region, Myanmar, Mobile: +96-67-410147, Email: Thetzawaung898@gmail.com	
	Sudan	
18.	Ms. Lubna Mohammed Sidahmed Mohammed, Agriculture Engineer, General Directory of Horticulture Production, Ministry of Agriculture and Forestry, Khartoum, Sudan, Mobile: 0124471144-0965518045, Email: lubnasida16@gmail.com	Title: Production of organic vegetables as model farm Objective: 50% increase in income and yield from organic farm
19.	Ms. Manal Ismael Mohammed Ahmed, Agriculture Engineer, Ministry of Agriculture, Forestry, General Administration of Horticulture Production, Khartoum, Sudan, Mobile: 0915017517-122782996, Email: monaismail050@gmail.com, bitelgozouli@gamil.com	Title: Minimizing pesticides use in vegetables Objective: Reduce indiscriminate use of pesticides in vegetables Increase in income and yield by 70%
	Uganda	
20.	Mrs. Ayingabire Beatrice, Agriculture Officer, C/o. Production Department, Kisoro District Local Government, P.O. Box. 123, Kisoro, Uganda, Mobile: +256-0782404874, 772698160, Email: bayingabire@gmail.com, basazash@yahoo.co.uk	Title: Promoting organic vegetables Objective: Increase in organic vegetable production
21.	Mrs. Alum Dorcas, Principal Agriculture Officer, Lira District Local Government, P.O. Box. 49, Lira, Uganda, Mobile: +256-780451494, Email: akello.dorcus@yahoo.com, okellothomas2@yahoo.com	Title: Improving vegetable production by using organic inputs Objective: Reduce indiscriminate use of pesticides in vegetables ~40% increase in use of organic inputs.

19. Agricultural Credit for Sustainable Livelihoods

- Title of the Training Program: Agricultural Credit for Sustainable Livelihoods
- Date: 06 20 February, 2018
- > Venue: Bankers' Institute of Rural Development (BIRD), Lucknow, Uttar Pradesh
- Program Director / Coordinator



Program Director	Dr. D.V. Deshpande Director, Bankers' Institute of Rural Development Sector-H, LDA Colony, Kanpur Road, Lucknow – 226 012, Uttar Pradesh Tel: + 91-522-2421954, Fax: +91-522-2421047 Email: bird@nabard.org
Program Coordinator	Dr. K. C. Sharma Academic In Charge Bankers' Institute of Rural Development (BIRD), Lucknow, Uttar Pradesh Mob: + 919532096025 Email:sharmakailash1958@gmail.com ; rs.reddy@nabard.org

Participants profile: 20 executives from 9 countries (14 male & 6 female)

Country	No. of Executives
Afghanistan	3
Cambodia	1
DR Congo	2
Ghana	1
Кепуа	3
Liberia	4
Malawi	2
Sudan	2
Uganda	2

> Training objectives:

- Skill development of participants in post-harvest management and processing of organic vegetables for nutritional security.
- Equip the participants in identification of vegetables pests and their integrated management.
- Certification of organic produce and their marketing for entrepreneurship development.

Training Curriculum:

- 1. Overall perspective about the agriculture, banking, agricultural credit situation in India
- 2. Credit planning, co-ordination and monitoring mechanisms
- 3. SHGs, JLGs and FPOs
- 4. Concept of Sustainable Agricultural Livelihoods and role of credit in inclusive development/growth
- 5. Indian rural financial system like Reserve Bank of India (RBI), National Bank of Agriculture and Rural Development (NABARD) and Rural Financial Institutions (RFIs)
- 6. Credit planning process, implementation and its effective monitoring
- 7. Challenges and way out in Agriculture Credit in India

Training Outcome:

The training outcomes were the initiatives taken by the FTF participants to provide farmers with the access to Micro Credit Loans in their respetive functional areas.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 8.35 whereas the average score of post-training was 18.1. Thus, it is found that the level of knowledge of executives increased by 116.77 percent after the training programme.

> Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of **9.70** on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visits

The executives were exposed to various field level institutions and situations in the area of agricultural credit like NABARD Regional Office in Lucknow, the Head office of Aryavart Gramin Bank and projects in rural areas of Barabanki district in Uttar Pradesh.

SI.No.	Name and Address		BAWP Title
	Afghanistan		
1.	Mr. Mohammad ZakerAmiri Cereal Crops Manager Directorate of Agriculture, Irrigation and Livestock, Parakh, Panjshir Province, Afghanistan Mobile: +93704709196, 747406252 Email: <u>zaker.amiry1@gmail.com</u> ,		Establishing SHGs for farmers
2.	Mr. Abdul Bari Ghafarzai Natural Resource &Irrigation Manager Provincial Directorate of Paktika Directorate of Agriculture, Irrigation and Livestock, Paktika, Afghanistan Mobile: +93-774314375, +93 -700650067 Email:abdulbari.ghafarzaia@gmail.com,		Establishing farmers association for irrigation
3.	Mr. Qasim Mohammadi Provincial Extension Manager / Saffron Extension Specialist, Directorate of Agriculture, Irrigation and Livestock, Aqcha Port Old Road, Across to Carpet Market, Next to Directorate of Information and Culture, Sheberghan City, Jawzjan, Afghanistan, Mobile: +93 780 803 082, Email:qasim.mohammadi2010@gmail.com	?	Training farmers about SHGs and new technologies such as making organic fertilizers.
	Cambodia		
4.	Mr. Morm Sophany Agricultural Extension Officer, Provincial Department of Agriculture, Forestry & Fisheries, Phumwat Village, PailinComune, Pailin Town & Province, Ulaanbaatar, Cambodia, Tel: +855 055956008, +855 16669906, Email: <u>sophanymorm@gmail.com</u> ,		To establish help each other Association (HEOA)
	Democratic Republic of Congo		
5.	Ms. NdikuDuini Adeline Manager AND Trading, 56B, COL MPIA JOLI PARC.C/, Ngaliema, Kinshasa, Democratic Republic of Congo Tel: +243 0816251931, Email: <u>adelinendiku@gmail.com</u> ,		Awareness trainings to SHGs and farmers groups
6.	Mr. Yobila Banzenza Thomas Executive Secretary, Peasant Force of Central Kongo, Fopako, Avenue BosiloN°14, Kinkanda Safari Matadi, Kongo Central, DR Congo Telephone/Mobile: +234 082 11 46 238, Email: fopakomouvementpaysan@yahoo.com		Support for the development of rural finance agricultural producers member of FOPAKPO

SI.No.	Name and Address	BAWP Title
	Ghana	
7.	Mr. Adama Charles Ayueboro Agricultural Economist Policy, Planning and Budget Directorate Ministry of Food andAgriculture, PO.BOX M37, Accra, Ghana Tel: +233267878193, Email: <u>ayueboro@yahoo.com</u>	Awareness creation for small hode savings and credit advancement fo Agricultural Development.
	Кепуа	
8.	Ms. Omolo Elizabeth Assistant Director of Veterinary Services Directorate of Veterinary Services, State Department of Veterinary Services P.O.Box.19349, Nairobi, Kenya Tel: +254 722895138/+254 722659170 Email: infodvs@kilimo.go.ke,	Sensitization of livestock farmers
9.	Ms. Ungadi Susan Wairimu Agriculture Director General State Department of Fisheries and Blue Economy, Ministry of Agriculture, Livestock and Fisheries, P.O.BOX 916-00618, Nairobi, Kenya, Tel: +254 722287208 Email: <u>susanimende@yahoo.com</u> ,	Empowering fish farmers to organiz fishing communities
10.	Mr. Korir Dixon Kiptonui Principal Agricultural Officer, State Department of Agriculture, Fertilizers Unit, Ministry of Agriculture, Livestock and Fisheries, Kilimo House, Cathedral Road, P.O.Box. 30028,, Nairobi, 00100, Kenya Tel: + 254 202718870, Email: <u>dixonkorir@gmail.com</u> ,	Sensitization of ministry principals o the Indian experience
	Liberia	
11.	Mr. King Samuel T. Technician, Citizen Union for Zero Hunger, Charles Valley, Lower Margibi County, Monrovia, Liberia Tel: +231 777349051 (Supervisor) Email: <u>samueltking51@gmail.com</u> ,	Production of hot pepper.
12.	Mr. Suah Joseph F Trainer, Ministry of Agriculture, Old LPRC Road, Somalia Drive, Monrovia, Liberia Tel: +231 886385133, 776432860 Email: josephsuah1980@gmail.com ,	Sweet potatoes production for run women empowerment
13.	Mr. Yanquoi Harry Research Associate Central Agricultural Research Institute (CARI) Monrovia, Liberia Tel: +231 886690274 Email: <u>vanquoiharris@yahoo.com</u> ,	Organic farming (Women Empowermen Project)

Sl.No.	Name and Address	BAWP Title
14.	Ms. Johnson Kebeh Bright Area Coordinator (Bong County) Department of Technical Services, Ministry of Agriculture, Gbarnga City, Bong County, Monrovia, Liberia Tel/Mobile: +231 777 433558, +231-886456838 Email: kebehbright@yahoo.com	Creation of Self-Help Groups (SHGs) for sustainable livelihoods
	Malawi	
15.	Mr. Kaombe Sannie James Farm Business Management Officer, Nkhotakota District Agriculture Office, P.O.Box.41, Ministry of Agriculture, Irrigation and Water Management, Nkhotakota, Malawi, Tel: +265 999363693 Email: <u>sanniejak@yahoo.co.uk</u>	Creation of Self-Help Groups (SHGs) for sustainable livelihoods in Malawi
16.	Ms. Themuka Matrida Agricultural Extension Development Officer, Lilongwe West Agriculture Office, Ministry of Agriculture, Irrigation and Water Development, MPINGU EPA, Box.1989MPINGU, Lilongwe, Malawi Tel: +265 995606161, 0888789888 Email: matiethemuka@ymail.com,	
	Sudan	
17.	Mr. Babikar Ahmed Mohammed Taha Agriculture Engineer, Ministry of Agriculture & Forestry, Khartoum, Sudan, Tel: +249920998614, 249912295701 Email: <u>pae-moaf@gmail.com</u> ,	Empowerment of SHG Womens for Sustainable Food Production.
18.	Ms. Hazer Burie Mohammad Ahmed Marketing Officer, Department of Agriculture, Ministry of Agriculture, Khartoum, Sudan Tel: +249 83798843, 910742539 Email: <u>hajerburaie2000@gmail.com</u> ,	Organic farming and manure preparation by SHGs
	Uganda	
19.	Mr. Mutema Mathias Mulumba Curriculum Specialist Agriculture National Agriculture Development Centre Ministry of Education and Sports, P.O.BOX 7002, Kampala, Uganda Tel: +256 393 112008, 752658335 Email: admin@ncdc.go.ug	Strategies for Self-Help Groups
20.	Mr. Christopher Enima Principal Fisheries Officer Department of Production and Marketing, Arua District Local Government, P.O.Box. 1, Arua, Uganda, Tel: +256 772614836 Email: <u>chrisenima@yahoo.com</u>	Sensitize Academicians on updating agriculture syllabus for students

20. Income Generating Enterprises in Plantation Sector

- > Title of the Training Program: Income Generating Enterprises in Plantation Sector
- Date: 13 27 February, 2018
- > Venue: ICAR Central Plantation Crops Research Institute (CPCRI), Kasaragod, Kerala
- Program Director/Coordinators



Program Director	Dr. P. Chowdappa Director ICAR-Central Plantation Crops Research Institute Kasaragod-671124, Kerala Mobile No: 09446535932 Office: 04994232333 Fax : 04994-232322 Email:directorcpcri@gmail.com, director.cpcri@icar.gov.in,
Program Coordinators	Dr. K. MuralidharanPrincipal Scientist,Mob: + 91 9446169526Email: kmurali.cpcri@gmail.comDr. C. Thamban,Principal ScientistEmail: c.thamban@gmail.comDr. S. JayasekharSenior ScientistPh: 04994 232894Mobile: 9961991692

> Participants profile: 21 executives from 7 countries (15 male & 6 female)

Country	No. of executives
Cambodia	2
Ghana	4
Kenya	3
Liberia	4
Malawi	2
Sudan	2
Uganda	4

> Training objectives

- To familiarize successful technology driven innovations in plantation crops production system
- To impart skills on post harvest processing and value addition
- To introduce the concepts of Intellectual Property Management and commercialization

Training Curriculum

- 1 Food processing
- 2 Organic and other inputs for farming
- 3 Production of planting material
- 4 Mechanization
- Training Outcome
 - The training outcomes were the promotion of intercropping of plantation crop with tuber crops in Kenya, Liberia, Malawi.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 4.76 whereas the average score of post-training was 13.16. Thus, it is found that the level of knowledge of executives increased by 176.47 percent after the training programme.

> Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.38 on a 10 point continuum indicating the overall impression on the programme was excellent.

> Field VisitS



SI.No.	Name and Address	BAWP
	Cambodia	
1.	Mr. Kuong Reathda, Government Official, General Directorate of Agriculture,#54B/49F, Street 395-656, SangkatTeoukLaak 3, Khan ToulKok, Phnom Penh, Cambodia, Mobile: +85523883427, Email: reathdakuong@gmail.com	Legal Issues related to seed policy in Cambodia
2.	Mr. Lay Pisey, Government Official, General Directorate of Agriculture, #54B/49F, Street 395-656, SangkatTeoukLaak 3, Khan ToulKok, Phnom Penh, Cambodia, Mobile: +8556177999, Email: piseylay7@gmail.com	Farmer Participatory Hybrid Corn Seed (BNT-5666) Production
	Ghana	
3.	Mr. Gyan David, Field Officer, Directorate of Crop Services, Ministry of Food and Agriculture, WenchiAgric Station, P.O.Box 100, Wenchi-B/A, Ghana, Mobile: +233-200594920, Email: davidgyan2010@gmail.com	Training of private nursery operators on raising of grafted cashew Seedling
4.	Mr. Archer Samuel, Assistant Agriculture Officer, Project Coordination Unit, Ministry of Food and Agriculture, P.O.Box M37, Accra, Ghana, Mobile: +233-303968851, Email: pcumofa@gmail.com, samarcher217@ gmail.com, tommie2326@gmail.com	Sharing of information on innovative agricultural technologies and practices
5.	Mr. Amenu Loverage Kofi, Agriculture Extension Agent, Ministry of Food and Agriculture, P.O.Box. 4, Nkwanta. Volta Region, Ghana, Mobile: 0248758853, 0204500803, Email: amenuloveragekofi@yahoo.com, dezibome@yahoo.com	Training of AEA's on harvesting and post harvest handling of cashew nuts
6.	Mr. Tettey Jerome Komla, Assistant Development Planning Officer, Agribusiness Unit, Ministry of Food and Agriculture, P.O.Box. M37, Ministries, Accra, Ghana, Mobile: 0303965094, Email: jerometettey@yahoo.com, clssc85@yahoo.com,	Develop investment opportunities of plantation crops (oil palm, plantain, coconut)
	Kenya	
7.	Mr.Mwangi Simon Ngugi, Principal Agriculture Officer, Ministry of Agriculture, Livestock & Fisheries, P.O.Box 30028-00100, Nairobi, Kenya, Mobile: +254-0720718870, Email: snguginjeru@yahoo.com, tembu.09.makheti@gmail.com	Capacity building for the small scale tea farmers in Kangari, Muranga County in Kenya.

SI.No.	Name and Address	BAWP
8.	Mr. Ombachi Atika, Horticulture Specialist Drought Resiliance& Sustainable Livelihood programme (DRSLP), State Department of Agriculture, P.O.Box. 30028-00100, Nairobi, Kenya, Mobile: +254729649058, Email: vjaombachi5@yahoo.co.uk	Leadership and Farmer Producer Groups' Training
9.	Mr. Mohammed Juma Mutungei, Principal Agricultural Officer, State Department of Agriculture, Ministry of Agriculture, P.O. Box. 30028, Nairobi, Kenya. Mobile: 020-718870/9, 0722676794. Email: kibo62@yahoo.com, sallymothama@gmail.com,	Mobilization of the Kiambu county coffee farmers into a farmers' company
	Liberia	
10.	Mr. Nyahn Paul Gakpoe, Extension Officer, Farmer Union Network, IFAD, Ministry of Agriculture, P.O.Box. 10-9010, 1000 Monrovia 10, Liberia, Mobile: +231-778036200, Email: paulnyahn@gmail.com	Coconut intercropping with tuber crops for enhancing total productivity and profitability
11.	Mr. Kamara Mohammed Laye, Procurement Officer, Ministry of Agriculture, Old LPRC Road, Somalia Drive, Liberia, Mobile: 231- 886-511509, 777511509, Email: mohammedlayeekamara360@gmail. com, edibope@yahoo.com	Popularizing intercropping and value addition in the Coconut production sector in Liberia
12.	Ms. Sherman Natina Najay, Technician, Ministry of Agriculture, P.O.Box. 10-9010, 1000 Monrovia 10, Liberia, Mobile: +231-886238/776332792, Email: natinaweah1966@gmail.com, edibope@yahoo.com	Adding value to cocoa
13.	Mrs. Soclo Femina Mamie, Area Coordinator(Cape Mount County), Ministry of Agriculture, Department of Technical Services, Old LPRC Road, Somalia Drive, Gardnersville, Liberia Mobile: +231-770 484405 / 886 484405, Email: feminasoclo@gmail.com, edibope@yahoo.com	Enhance the production of cassava
	Malawi	
14.	Mr. Gandigandiphiri Osward, Women Programmer Officer, Ministry of Agriculture, Irrigation & Water Development, Salima District Agriculture Office, P.O. Box 491, Salima, Malawi, Mobile: +265-999041458, Email: <u>oswagandi@yahoo.co.uk</u>	Enhancing Cassava Value Addition

SI.No.	Name and Address	BAWP
15.	Mrs. Nkhono Panji, Agriculture Gender Roles Extension Support Services Officers, Kasungu district agriculture officer, , P.O. Box 17, Kasungu, Malawi, Mobile: +265888743730, Email: <u>mkandawirepanji@γahoo.com</u>	Women Empowerment through diversification of household enterprises
	Sudan	
16.	Mr. Mohammed Farah Hussein Farah, Ministry of Agriculture and Forest – General Administration of Planning and Agri- Economics, Mobile: +249123334261, Email: farah313mbir@yahoo.com, <u>pae.moaf@gmail.com</u>	Facilitate the formation of farmer organization in Wheat production
17.	Ms. Sumia Ibrahim Elamin Agbash Agriculture Economist Ministry of Agriculture and Forest – General Administration of Planning and Agri-Economics, Khartoum, Aljaamh Street, Sudan Mobile: +249912959432, Email: sumiaabash@yahoo.com,	Capacity building of marketing staff in value chain analysis
	Uganda	
18.	Mrs. Ilemut Christine, Agriculture Officer, Amuria District Local Government, P.O.Box. 4, Amuria, Uganda, Mobile: +256-782039249, 702039249, Email: ictinamo@gmail.com, ppcheli@yahoo.co.uk, pcheli004@gmail.com	Establishment of cassava mini sett multiplication nursery
19.	Mr. Olupot Justin, Agriculture Officer, Manafwa District Local Government, Manfwa, Uganda, Mobile: +256772946959, Email: olupotjustin@yahoo.com,	Formation of farmer clusters and transform them into strong farmer producer society for coffee
20.	Mr. Milya Douglas, Agriculture Officer, Kayunga District Local Government,P.O. Box: 18000, Kayunga, Uganda, Mobile: +256704904290, Email: milyadouglas@gmail.com, annbulya@yahoo.com	Farmer participatory production of quality coffee planting material
21.	Mrs. Nabachwa Mary Jacqueline, Education officer, Mary High School/Agriculture Department, P.O. 380, Mbarara, Uganda. Mobile: 0774649984, 0782186418, Email:nabajacqueline@gmail.com, hm@maryhillug.net, gmuteekanga@gmail.com	Promoting vermicomposting technology

21. Critical Production and Processing Technologies in Rice

- > Title of the Training Program: Critical Production and Processing Technologies in Rice
- > Date: 20 February 06 March, 2018
- > Venue: ICAR- Indian Institute of Rice Research (IIRR), Hyderabad, Telangana
- > Program Director/Coordinators



Program Director	Dr. P. Muthuraman PS (Agril. Extension) & Head Transfer of Technology and Training Section ICAR-Indian Institute of Rice Research (IIRR), Hyderabad, Telangana Mob: + 919441882490 Email: mpm63@rediffmail.com, headtttiirr@gmail.com
Program Coordinators	Dr. Amtul Waris Dr. P Jayakumar Dr. Shaik N Meera Dr. P Lakshmi Prasanna Dr. B Nirmala Dr. S Arun Kumar

> Participants profile: 20 executives from 10 countries (12 male & 8 female)

Country	No. of executives
Afghanistan	6
Democratic Republic of Congo	2
Ghana	2
Liberia	2
Myanmar	3
Sudan	2
Uganda	3

Training objectives:

- To familiarize successful technology driven innovations in plantation crops production system
- To impart skills on post-harvest processing and value addition
- To introduce the concepts of Intellectual Property Management and commercialization

Training curriculum:

- 1. Genesis and diversity of rice crop
- 2. Varieties suitable to different ecologies
- 3. Breeding techniques & hybrid rice production for food security
- 4. Good management practices in rice
- 5. Water and weed management in rice production
- 6. Integrated nutrient, pest and disease management in rice
- 7. Integrated farming system as an effective approach for higher income
- 8. Approaches to rice improvement through biotechnology
- 9. Transgenic rice
- 10. Authenticity and food safety issues in rice export
- 11. Par-boiling and drying industry in paddy
- 12. Value addition and marketing issues
- 13. Digital extension in rice
- 14. Gender issues in rice

Training Outcome:

The training outcome were popularization and practising the direct seeded sowing of rice in areas with less water availability for irrigation and IPM practices for major pests of rice in partner countries.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 5.7 whereas the average score of post-training was 15. Thus, it is found that the level of knowledge of executives was increase by 163.16 percent after the training programme.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.07 on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visits



Learning by doing



SI.No.	Name and Address	BAWP Title
	Afghanistan	
1.	Mr. Enayatullah Rustaqi Cereal Crops Manager Takhar Agriculture Department Directorate of Agriculture, Irrigation and Livestock, Takhar, Afghanistan Cell No. +93-700 707 525, +93-780000745 Email: <u>enayat_rustaqi@yahoo.com</u>	Title: Soil testing
2.	Mr. Fawad Khan Ahmadzai Senior Rice Extension Officer Paddy Rice Development Specialist Ministry of Agriculture, Irrigation and Livestock (MAIL), Kabul, Afghanistan Tel: +93- 706 319 521, +93- 799215858 Email: fawad.ahmadzi@yahoo.com	Title: Basmati rice production
3.	Mr. Hayatullah Nazari Provincial Extension Manager Takhar Agriculture Irrigation and Livestock, Directorate of Agriculture, Irrigation and Livestock Kunduz, Afghanistan Tel: +93- 700 742 013, +93-0707172087 Email: h.700742013@gmail.com, msaalimsaaie@yahoo.com	Title: Identification of pest and diseases in rice
4.	Mr. Shamsuddin Baher Technical Manager Motahid Sharq Agriculture Services Company Laghman, Afghanistan Tel: +93-700 242 417 Email:mutahidsharqcompany@gmail.com	Title: Rice technologies for smallholder farmers
5.	Mr.Tawakal Safi Provincial Extension Officer Asadabd PAIL, Kunar, Afghanistan Tel: 93 779054243 Email: tawakal.safi11@gmail.com, safinemat@gmail.com	
6.	Mr. Zalmay Bayat Rice Research Improvement Specialist Ministry of Agriculture, Irrigation and Livestock (MAIL) Karte Sakhi Jamal Mena, District 3 Kabul Afghanistan Tel: 93 772011854, Email: zalmai.bayat1@gmail.com	Title: Post harvest management
	Democratic Republic of Congo	
7.	Ms. Djenny Balyh'amwabo Rugamika charge de relation publique (public relations charge), syfeab ,Democratic Republic of Congo Tel: +243850503351, +243818141784 Email:gilbertngaba@gmail.com, rugamikadjenny@gmail.com	Title: Promotion of rice production Technologies among smallholder farmers

Sl.No.	Name and Address	BAWP Title
8.	Ms. Elysee kabangie Mvubi Chef de Bureau Ministere de l'agriculture croisement Boulevard du 30 juin, Avenue Batetela Kinshasa/Gombe Democratic Republic of Congo Tel: +243 998263760 Email: sgagrirde@gmail. com, elysee.mvumbi@yahoo.fr	Title: Awareness on latest rice production technologies
	Ghana	
9.	Mr. Justine Lieber Municipal Agricultural Engineer Ministry of Food and Agriculture/ Agricultural Engineering Services Directorate Post Box No 29, Ejura-Ashanti, Ghana Tel: 0209276029, 0548407894 Email: justineliebet76@gmail.com	Title: Water and weed management
10.	Mr. Peter Yaw Gasu Works superintendent Ministry of Food and Agriculture, Agricultural Engineering Services Directorate P. O Box M 82, Accra, Ghana Tel: 233-302-777789/ 233-243840095 Email: aesdmofa@hotmail.com, petergasu.9@ gmail.com	Title: introduce the small scale mechanization, small scale rice mill
	Liberia	
11.	Ms. Madusu Gabrietta Kromah County Coordinator(montserrado county) Ministry of Agriculture Department of technical services old lprc road, Somalia Drive, Gardnersville, Liberia Tel: +231-776 819126 / 886 626217 Email: <u>mkromah2013@gmail.com</u> <u>edibope@yahoo.com</u>	Title: Integrated soil health management
12.	Ms. Linda Kpanai Sumo Area Coordinator Ministry of Agriculture department of Technical Services, Old lprc road, Somalia drive, Gardnersville, Liberia Tel: +231 777583181 / 886583181 Email: <u>linda.sumo2016@gmail.com,edibope@</u> yahoo.com	Title: Low land rice production
	Myanmar	
13.	Ms. Tin Tin Kyu Deputy Staff Officer Agriculture Extension Department of Agriculture Ministry of Agriculture, Livestock and Irrigation Kyautdga Township, Bago Region, Myanmar Tel: +95-09-250707560, +95-54- 2860010 Fax No.: +95-54- 2860010 Email: doa.bgo.bgo@gmail.com	Title: Seed production

SI.No.	Name and Address	BAWP Title
14.	Mr. Kyaw Swar Htun Assistant Staff Officer Department of Agriculture, Ministry of Agriculture Livestock and Irrigation Ayeyarwady Region, Myanmar Tel: 09-264816252 Fax No.: 95-67-410067 Email: <u>kyawswartun9998@gmail.com</u>	Title: System of rice intensification
15.	Mr. Nan Myo Aung Assistant Staff Officer Department of Agriculture, Ministry of Agriculture Livestock and Irrigation Nay Pyi Taw, Myanmar Tel: +95-67-410581 , Fax No.: +95-67-410581 Email: nanmyoaung.yau2013@gmail.com, kyawswartun9998@gmail.com	
	Sudan	
16.	Ms. Omaima Merkni Eltahir Agricultural Engineer Federal Ministry of Agriculture and Forestry, Khartoum Sudan Tel: 249183773013 Email: marowi2013@yahoo.com, omaimalocal@gmail.com	Title: Promotion of rice production Technologies
17.	Mr. Yasir Hussain Mohamed Elamin Monitoring and evaluation Officer Ministry of Agriculture and Foresty Khartoum, Sudan, Tel: 249183766765 Email: wheject@gmail.com, kwirs2011@hotmail.com	
	Uganda	
18.	Miss. Natalie Furah NASECO 1996 Ltd, Sales and Marketing Department PO Box 24137, Kampala, Uganda Tel: 256754618007 Email: nasecoseed@yahoo.com, nathalieddie@gmail.com	Title: Popularize the rice seed production technologies among the rice farmers
19.	Miss. Stellaha Mbatudde Project Coordinator NASECO 1996 Ltd PO Box 24137, Kampala , Uganda Tel: 256754618007 Email: nasecoseed@yahoo.com, smbatudde1@hotmail.co.uk	Title: Production and processing technologies in rice sector
20.	Mr. Zacchaeus Mukasa Agricultural officer Kayunga District Local Government BBAALE sub county Headquarters , Kayunga District P.O.Box No 18000, Kayunga , Uganda Email: <u>Zackzenith@yahoo.com</u> , Tel: +256776261998	Title: Management of rice blast disease

22. Plant Biosecurity and Food Safety

- > Title of the Training Program: Plant Biosecurity and Food Safety
- Date: 3 17 March, 2018
- > Venue: National Institute of Plant Health Management (NIPHM), Hyderabad, Telangana





Program Directors	Dr. Cherukuri Sreenivasa Rao(Director-Pesticide Management)National Institute of Plant Health Management (NIPHM)Rajendranagar, Hyderabad - 500 030Contact: 040-24010106,(Fax): 040-24015346 , 040-24015932Email: dirpmniphm-ap@nic.inDr. J. Alice R. P. Sujeetha(Director-Plant Bio Security)Contact: 040-24018788,(Fax): 040-24015346Email: dirpgpniphm-ap@nic.in
Program Coordinators	Dr. Girish AG Assistant Director (P.D) Dr. Nirmali Saikia Assistant Director (PM & RA)

> **Participants profile**: 23 executives from 10 countries (15 male & 8 female)

Country	No. of executives
Afghanistan	3
Botswana	1
Democratic Republic of Congo	2
Ghana	3
Kenya	3
Liberia	2
Malawi	2
Myanmar	2
Sudan	2
Uganda	3

Training objectives

- To impart knowledge on International Regulatory Framework and SPS agreement
- To impart skills on pest risk analysis and phytosanitary treatments
- To impart knowledge on food safety regulations
- To impart skills on pesticide management, pesticide residue analysis and risk mitigations.
- To impart knowledge and skills on integrated plant health management concepts and practices based on agro ecosystem analysis and ecological engineering.

> Training Curriculum

- 1. International and national regulatory frame work
- 2. SPS agreement vis-à-vis plant and food safety
- 3. Impact of introduced pests and potential looming plant pest threats of world
- 4. Pest risk analysis and pest surveillance protocols
- 5. Phytosanitary treatments & importance of stored grain pests in International trade

- 6. Food safety concepts & regulations
- 7. Quality control of pesticides
- 8. Pesticide residues in foods vis-à-vis international food trade
- 9. Residue analysis of raw agricultural commodities and challenges in residue monitoring
- 10. Risk analysis and fixation of maximum residue limits
- 11. Integrated plant health management technologies for food and plant safety
- 12. Agro ecosystem analysis and ecological engineering concepts for sustainable food production

> Training Outcome:

 Implementation of integrated plant health management concepts and practices based on agro ecosystem analysis and ecological engineering in partner countries.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 11.30, whereas the average score of post-training was 17.76. Thus, it was found that the level of knowledge of executives was increased by 56.37 percent after the training programme.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. Executives rated the overall training program with a score of 9.63 on 10-point continuum i.e. **EXCELLENT**.

Field Visits

The executives were exposed to various field and Institutional visits viz. National Institute of Agricultural Extension Management (MANAGE), International Crops Research Institute for the Semi-arid Tropics (ICRISAT), Rural Technology Park (RTP) of National Institute of Rural Development & Panchayati Raj (NIRD-PR), Indian Institute of Oilseeds Research (IIOR), National Bureau for Plant Genetic Resources (NBPGR), Kisan Call Centre (Farmers Call Centre) of PJTS Agricultural University and Pomegranate Packing Facility at M/s. Sam Agritech.



SI.No.	Name and Address		BAWP Title & Objective
	Afghanistan		
1.	Mr. Samiullah Nasrat Agriculture Extension Manager Directorate of Agriculture, Irrigation and Livestock, Khost, Afghanistan Tel: 0799531261/0774054591/93- 70 677 227 3 Email: snasrat_0093@yahoo.com		Title: Responsible use of pesticides in vegetable and fruit production Objective: Adopt the use of bio pesticides, IPM and GAPs as their main pest management strategies reduce pesticide residue levels
2.	Mr. Basir Ahmad Tabib Plant protection Manager Directorate of Agriculture, Irrigation and Livestock, Herat Afghanistan Tel: +93-785 383 607 Email: basir_tabib@yahoo.com		Title: Fruit fly lure preparation and trapping Objective: Adopt the low cost simple technique of preparation of fruit fly lure and locally available traps to reduce male fruit fly population and increase
3.	Mr. Bismillah Zahid Plant Protection Manager Directorate of Agriculture, Irrigation and Livestock, Helmand, Afghanistan Tel: +93- 703951950 Email: bismllah.zahid@gmail.com		fruit production and fruit quality
	Botswana		
4.	Mr. Kabo Kapaletswe Agricultural Scientific Officer/Plant Protection Officer Ministry of Agricultural Development and Food Security /Crop Protection Private Bag 32, Kanye, Gaborone, Botswana Tel: +267 544 0346/ +26771849164 Email: kkepaletswe@gov.bw, kpltswek@gmail.com		Title: Suppression of fruit fly populations using low cost pheromone traps in Ngwaketse central sub district, Kanye Objective: Mass production of low cost traps at district level
	Democratic Republic of Congo		
5.	Ms. Marie Mwilabwe Mwinziya Marguerite General Administrator PERCEE SARL 329, Kajama Avenue Q/ Bhaishara C/Dilala Kolwezi Lualaba, Democratic Republic of Congo Tel: 243 82 4443414 Email: percee.ziya@gmail.com		Title: Training for integrity biodiversity and food safety into business strategies Objective: Bringing farmers to food sufficiency, food safety and export
6.	Mr. Tshianz-A-Kangasa Michel General Administrator New A.G. TEC Sarl 217, Avenue Butembo , Q, Mutoshi C/Manika Ville De Kolwezi, Democratic Republic of Congo Tel: 243997026404, 243811851000 Email: newagtec2@gmail.com , newagtecsprl@yahoo.f		Title: Inappropriate research and analysis equipments Objective: Bringing knowledge onfood safety to farmers, growers

SI.No.	Name and Address		BAWP Title & Objective
	Ghana		
7.	Mr. Adi Okutu Assistant Agriculture Officer Ministry of Food and Agriculture, Plant Protection & Regulatory Services Directorate Pokuase-Accra, Ghana Tel: 0275713378, 0275 713 378 Email: addiofficial001@gmail.com	Contraction of the second seco	Title: Responsible use of pesticides Objective: Sensitize small holder farmers on the effects of irresponsible pesticide use on the crops
8.	Mr. George Prah Deputy Director Ministry of Food and Agriculture- Directorate of Crop Services Accra, Ghana Tel: 0244897314, Email: gpdirector@yahoo.com		
9.	Mr. Copperfield Kwami Banini Deputy Director Ministry of Food and Agriculture, Plant Protection & Regulatory Services Directorate Pokuase-Accra, Ghana Tel: 0243108140 Email: copperbanini@yahoo.com		
	Кепуа		
10.	Ms. Juliet Mutindi Mulei Laboratory Technologist Kenya Plant Health Inspectorate Service/ Analytical Chemistry Laboratory, Nairobi, Kenya Tel: +254 720 315893, +254729787542 Email: jmulei@kephis.org , omwaniki@kephis.org		Title: Method for removal of pesticide residues in fruits and vegetables Objective: Introduce good Agriculture practices and vermicomposting to reduce pesticide residues in fruits and vegetables
11.	Mr. Maurice Ouma Onyango Principal Fisheries Officer Ministry of Agriculture, Livestock and Fisheries, State Department of Fisheries and the Blue Economy, Nairobi, Kenya Tel: +254 727 776 900 Email: mauriceouma8845@gmail.com		Title: Field and household practices for reduction of pesticide Residues in foods Objective: Adoption of simple methods of reducing pesticide residues from fruits and vegetables.
12.	Mr. Peter Kibue Ng'ang'a Chief Veterinary Officer/ Senior Lecturer Ministry of Agriculture, Livestock and Fisheries, State Department of Livestock / Training Division, Nairobi, Kenya Tel: +254715367882, +254722807985 Email: ahitikabete@gmail.com		Title: Vertebrate pest control Objective: Awareness on vertebrate pests and their control, decreased rodent population, saving on production costs, decreased zoonotic disease – leptospirosis, decreased use of pesticides
	Liberia		
13.	Ms. Bernice Oretha Kartoe Technician Republic of Liberia Ministry of Agriculture P.O.Box 10-9010 1000, Monrovia 10, Liberia Tel: +231 886882549, +231770117525 Email: bkartoe2013@gmail.com		Title: Low productivity in yield of fresh fruits and vegetables Objective: Awareness about the trapping technique and reduction of fruit fly

SI.No.	Name and Address	BAWP Title & Objective
14.	Mr. Julius Koko Kossigba Technician KAVTC Klay Bomi COUNTY, Monrovia, Liberia Tel: 231778220750 Email: wdickson1980@gmail.com	Title: Vertebrate pest control Objective: Awareness on integrated pest management technique
	Malawi	
15.	Mr. Elia Kazinga Agriculture Extension Development coordinator(AEDC), Ministry of Agriculture / Extension SA DAO, BOX 491 , SALIMA, Malawi Tel: +251(0)888573173, 991033488, 994482283, Email: kazingaelia@gmail.com	Title: Pest surveillance
16	Ms. Chikoma Miriam Madalisto Agriculture Extension Development Officer, Agriculture Extension Services, Department of Agricultural Extension Services, P.O.Box.30145, Lilongwe-3, Malawi Tel: +265 999398880, 885836401, +265 999226261 / 884221605(Supervisor) Email: chikomirie@yahoo.co.uk ezidana@ gmail.com (Supervisor)	Title: Pest surveillance
	Myanmar	
17	Ms. Wine Nandar Kyaw Junior Research Assistant Plant Pathology Research Section, Department of Agricultural Research (DAR) D-40, Cherry Myaing Street, Department of Research, Yezin, Nay Pyi Taw, Myanmar Tel: +95-67-416531,+959797679259 Email: dgdar.moai@gmail.com , waingnandarkyaw@gmail.com	Title: Effect of biocontrol agent, trichoderma harzianum on rice root nematode (Hirschmanniella oryzae) Objective: Effective control measure using biocontrol agent, trichoderma harzianum can be observed and applied against rice root nematode
18	Ms. Win Win Khaing Junior Research Assistant Plant Pathology Research Section, Department of Agricultural Research (DAR) D-21, Staff Housing, University of Veterinary, Yezin, Nay Pyi Taw, Myanmar Tel: +95-67-416531, +95943132713, +959420740818 Emai:dgdar.moai@gmail.com, winwinkhaingyau@gmail.com	Title: Effect of biocontrol agent, trichoderma harzianum on rice root nematode (Hirschmanniella oryzae) Objective: Effective control measure using biocontrol agent, trichoderma harzianum can be observed and applied against rice root nematode
	Sudan	
19	Ms. Eman Ali Sawi Quality Control Officer Ministry of Agriculture and Forestry Quality Control and Export Development Administration Algamaa Street, Sudan Tel: +249183774688, +249123821656 Email: moafscqu@yahoo.com , emansawi12@gmail.com	 Title: Organic farming for sustainable agriculture Objectives: Reduce the effects of using chemica fertilizers and pesticides on plant and environment Increase the value and quality c agriculture products of produc organic crops Increase production and productivit

SI.No.	Name and Address	BAWP Title & Objective
20	Mr. Khalil Mohamedelmahdi Suliman Quality Control Officer Ministry of Agriculture and Forestry Quality Control and Export Development Administration Algamaa Street, Sudan Tel: +249183774688, +249912433812, +249123433812 Email: khalilo707@gmail.com , moafsqcu@yahoo.com	 Title: Compliance to WTO Measures according to SPS Objectives: Increase awareness about international market requirements. Applying (GAP) in agriculture. Strengthen food safety standards.
	Uganda	
21	Mr. Francis Okumu Sande Assistant Agricultural Officer P.O.Box 124, Busitema Sub County, Busia District, Uganda Tel: +256 787760336, +256 784956580 Email: sandeokumu@gmail.com	Title: Fruit fly lure preparation and trapping Objective: Adopt the low cost simple technology of preparation of fruit fly lure and locally available traps to reduce male fruit fly population and increase
22	Ms. Gertrude Badaru District Agricultural Officer Arua District Local Government P.O.Box 1, Arua, Uganda Tel: 0256 772636778, +256 77653387 Email: victortoa2005@yahoo.co.uk , gertrude_ bad@yahoo.com	fruit production and fruit quality
23	Mr. Benedict Ssekyanzi Principal Agricultural Officer Kiboga District Local Government, Production Department, P.O Box No 1, Kiboga , Uganda Tel:+256772697883, +256782245570 Email: ssekyanzibenedict@gmail.com	 Title: Capacity building of Sub County Extension Workers in pest and disease surveillance Objectives: Reduction in use of pesticides Food safety Reduction in pest and disease outbreaks Reduction in human exposure to pesticides Decrease in costs of production

23. Management of Dairy Cooperatives

- > Title of the Training Program: Management of Dairy Cooperatives
- Date: 10-24 April, 2018
- Venue: ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana, India
- Program Director

Dr. Gopal Sankhala
Principal Scientist
ICAR-National Dairy Research Institute (NDRI),
Karnal, Haryana
Mob: + 91 9416952786
Email: gssitaram@gmail.com

> Participants profile: 22 executives from 6 countries (18 male & 4 female)

Country	No. of Executives
Kenya	6
Liberia	3
Malawi	4
Mozambique	1
Myanmar	3
Uganda	5

Training objectives:

- To acquaint the participants with knowledge in principles, planning and technical approach for establishing viable dairy farms, processing of milk
- To develop the marketing network and Development of value chain in milk production, processing and marketing
- To minimize the marketing channels with emphasis on dairy cooperatives.

Training Curriculum:

- 1. Dairy Industry: Opportunities & Challenges
- 2. Utilization and Management of dairy farm waste
- 3. Quick tests for checking adulteration in dairy products
- 4. Chemical Quality analysis of milk & Milk Products
- 5. Integrated Farming System Model
- 6. Extension services delivery mechanisms of dairy cooperatives
- 7. Waste water reused for livestock based farming system followed by visit to fodder Farm
- 8. Breeding policies and programmes for improvement of Cattle and Buffalo
- 9. Microbial Biosensor, Food Safety and Quality Assurance
- 10. Developments in Value Added and fortified dairy Products followed by visit to BPD Unit
- 11. Climate smart practices for livestock production and reducing greenhouse emissions followed by visit to climate Resilient Centre

Training Outcome:

The training outcomes were capacity building on improved animal health practices and dairy cooperative management strategies undertaken by participants in their respective countries.

Change in Knowledge of the participants

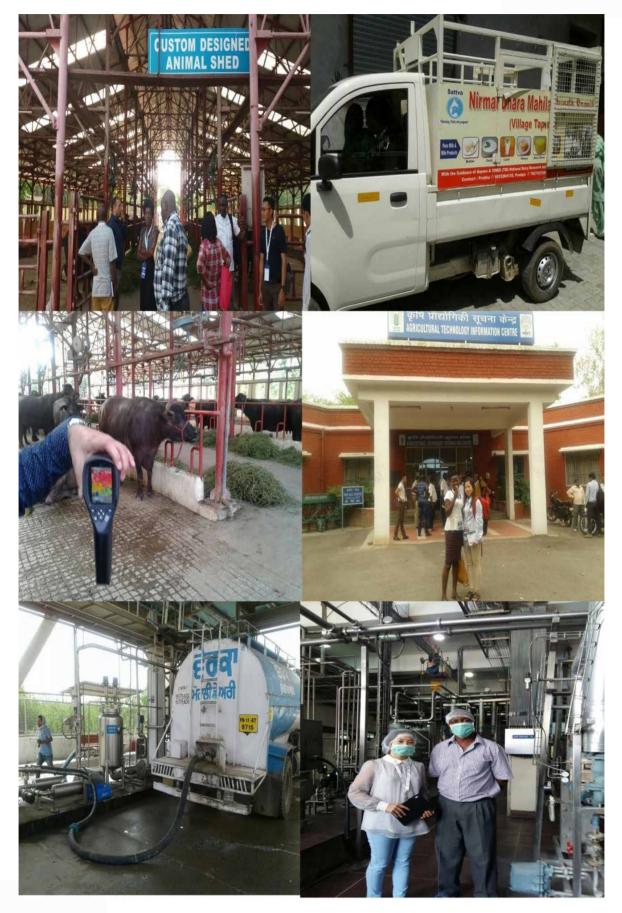
The average score of executives in the pre-training test was 46.5 (64.58%) whereas the average score of posttraining was 63.05 (87.56%). Thus, it is found that the level of knowledge of executives was increase by 22.99 percent after the training programme



> Evaluation

The executives expressed their satisfaction level by rating the program on an average score of 9.44 on a 10-point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visits



Back At Work Plans ≻

SI.No.	Name and Address	BAWP Title & Objective
	Kenya	
1.	Mr. Gachugia Johnson Mwangi Assistant Director of Veterinary Sciences, State Department of Livestock, Directorate of Veterinary Sciences, Ministry of Agriculture, Livestock & Fisheries, AHITI Ndomba, P.O.Box-32-10300,Kerugoya, Kenya Tel: +020 2096540, +254 702096724, Fax: 060-644035 Email:gachugiajohnson@gmail.com, ahitindomba@gmail.com, ancentkithuka@yahoo.com	Title: Improvement of dairy breeds Objective: Improved dairy/ crossbreed.
2.	Mr. Kisienya Caleb Muhatia Principal Livestock Production Officer, State Department of Livestock, Ministry of Agriculture, Livestock & Fisheries, 34188-00100, Nairobi, Kenya Tel: 0722453307,0721523921, WhatsApp.+254722453307 Email: kisienyac@yahoo.com pmedivision@yahoo.co. ukmarywacera@yahoo.com,	Title: Promote production of dairy products for improved market access. Objective: Additional income from marketing of dairy products
3.	Mr. Gachukia Michael Muhungi Principal Livestock Production Officer, State Department of Livestock, Ministry of Agriculture, Livestock & Fisheries, Directorate of Livestock Production, P.O.Box. 34188, Nairobi, Kenya Tel: +254 20 2330755/6, +254 722864748, +254774365096 (WhatsApp), 254 733816348(Supervisor), Email: dlplivestock@gmail.com, gachukiam@gmail.com, roseatonya@gmail.com, okoreclopas@gmail.com(Supervisor),	 Title: Formation of milk marketing group. Objectives: > Increased use of A.I. for dairy cow improvement. > Improved awareness on benefits of cattle breeding. > mproved access to markets through various dairy products other than raw milk.
4.	Mr. Richard John Njagi Chief Livestock Health Assistant / Deputy Farm Manager, State Department of Livestock, Directorate of Veterinary Services, Ministry of Agriculture, Livestock and Fisheries, P.O - Kabeta-00625, Kangemi, Kenya Tel: +254 722 589635, 020-8043441, Email: infodvs@kilimo.go.ke, richardnjagi006@yahoo.com	 Title: Basic testing of milk on delivery (Rapid Test) Objectives: > Quality milk delivery and minimize cases of spoilt milk if not eradication. > This will automatically improve pay. > They embark on value addition from quality milk.
5.	Ms. Mbacho Alice Murugi Senior Assistant Director of Livestock Production, State Department of Livestock, Ministry of Agriculture and Irrigation, P.O.Box.34188-00100, Nairobi, Kenya Tel: +254 202542298 , +254 202542299, Email: a.murugi@yahoo.com, sangalbinruto@ yahoo.com, marywacera@yahoo.com,	 Title: Provision of breeding animal cattle goats and sheep to farmers from government farms are low-train officer-incharge. Objectives: Proper selection and feeding will result to high producing animals which will be given to farmers to improve their animals. > Increase fodder production and conservation.

Sl.No.	Name and Address	BAWP Title & Objective
6.	Mr. Ombiro Robin Okerosi Farm Manager, A.H.I.T.I College Farm, P.O.Box.1, Ministry of Agriculture, Livestock and Fisheries, Nyahururu, 20300, Kenya Tel: +254722687192 , +254 729672150, +254 725585822 (supervisor) Email: robinombiro@gmail.com, adhimabuga@ gmail.com,	Title: Control/ elimination of mil adulteration in Yala Cooperative Society Objective: Market expansion from processed products.
	Liberia	
7.	Mr. Kamara Abu Sumaila Soil & Water Quality Technician, Technical Service Department, Ministry of Agriculture, Monrovia, Republic of Liberia Tel: +231 775781283, 886653371, Email: abu101kamara@gmail.com, hnyanguan2015@yahoo.com,	 Title: Strengthen extension deliver mechanisms of small- scale farmer through awareness & sensitizatior animal nutrition, animal care and diseas prevention. Objectives: > To enhance farmers potentials > To enable farmers to take ownership
8.	Mr. Keah Jecob Zaza Field Technician, Citizens against Poverty P.O.Box.10-9010, Ministry of Agriculture, 1000 Monrovia, Liberia Tel: +231 770365364, 886324891, 231 0880511126, 0775060863 (Supervisor) Email: jkeah1981@gmail.com, dsuah85@gmail. com (Supervisor)	Title: Dairy farming cooperation
	Malawi	
9.	Mr. Mapundi Michael Asimenyemwene Animal Health & Livestock Development Officer, Karonga District Agriculture Office, P.O.Box.320, Department of Animal Health & Livestock Development, Ministry of Agriculture, Irrigation and Water Development, Karonga, Malawi Tel: +265 999768518,993778714, +265884263591 (WhatsApp), 265 999317216 Email: mapundimichael@gmail.com, mkisi.raphael@gmail.com	Title: Good feeding regimes for increase milk production. Objective: Increase in milk production
10.	Mr. NkhataRhoman Dillon Assistant Veterinary Officer, Department of Animal Health & Livestock , Ministry of Agriculture, SA, DAO, Box.No.491, Salima, Malawi Tel: +265 999308515 , Email: nkhatarho@gmail.com, mphatso08@gmail.com,	 Title: Animal (livestock) breedin (Artificial Insemination) Objectives: > All dairy farmers in the group. > To use A.I. breeding system. > To source semen from A.I. centre. > To improve dairy program (mill production)

SI.No.	Name and Address	BAWP Title & Objective
11.	Ms. Chamayere Elizabeth Ireen Agriculture Extension Development Officer, Lilongwe East Agriculture, District Agriculture Office, Chitekwere EPA, P.O.Box,77, Nkhoma Lilongwe, Malawi Tel: +265 991234026, +265 999 201333 Email: moseselizah@gmail.com,	 Title: Establishment of a Dairy Cooperative Objectives: A well established cooperative. Well established markets. Value addition to our dairy.
12.	Ms. Mhone Mazganga Suzanna Principal Livestock Development Officer, Department of Animal Health and Livestock Development, P.O.Box.2096, Lilongwe, Malawi Tel: +265999938623, +265999457130, +265 888853457, +265 5991277492 (Supervisor) Fax: +265 1751349, +265999457130 Email: mazgangainhico@yahoo.com, albert_mhone@yahoo.com, juliuschulu09@gmail.com,	 Title: Linkage up the livestock department and Bunda College of Agriculture to relevant personnel at NDRI and NBAGR to start collaboration. Objectives: ➤ To sensitize the policy maker's veterinary staff and university on the need to increase milk consumption. ➤ To sensitize on the need to have commodity based utilizations and introduction and pricing based on milk components.
	Mozambique	
13.	Mr. Mabunda Pinto Jorge Agronomist/Extension Officer, District Service of Economics Activities, Massingir, Gaza, Mozambique Tel: +258 20033385, +258 865222926, +258 876627353, +258 865222926 (WhatsApp) Email: sdaemassingir@gmail.com	 Title: Establishment of self-help group and training to farmers for Self-help group and dairy cooperatives Objective: Good management of complete Value chain, intensive or closed system of production and integrated system production.
	Myanmar	
14.	Dr. Win Chit San Deputy Veterinary Officer Office No.36, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation Nay Pyi Taw, Myanmar Tel: +95 673408457, 95-9-401635893, Fax: +95 673408342, +959401635893 (WhatsApp) Email: ir.lbvd@gmail.com, drchit3345@gmail.com,	Title: Training to small-scale farmers on self-help group and dairy cooperatives.
15.	Dr. Lynn Nang Ni Ni Deputy Veterinary Officer Office No.36, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation Nay Pyi Taw, Myanmar Tel: +95 67 3408385, +95-9- 974907111, Fax: +95 673408342, +959974907111 (WhatsApp)	Title: Caring in artificial insemination and extension services Objective: More milk production by artificial intelligence

Sl.No.	Name and Address	BAWP Title & Objective
16.	Dr. Aung Thant Zin Deputy Township Veterinary Officer Office No.36, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation, YazaThingaba Road, OattayaThiri Township, Nay Pyi Taw, Myanmar Tel: +95 67-408044, +95-9974303074, Fax: +95 673408342, +959974303074 (WhatsApp) Email: ir.lbvd@gmail.com, thantzinaung22493@gmail.com,	Title: Improving for breeding of dairy cattle and decreasing disease of milch animals.
	Uganda	
17.	Mr. Caku Benjamin Animal Husbandry Officer, Arua District Local Government, Department of Production & Marketing, P.O.Box.1, Arua, Uganda Tel: +256 772636778, +256 775502304 Email: benjamincaku@yahoo.com, victortoa2005@yahoo.co.uk,	 Title: To establish functional dairy farmers association. Objectives: ➢ Formation of Functional dairy farmers association/union ➢ Value addition and marketing
18.	Mr. Nayebare Fred Managing Director, Kirindimura Farm Limited, Kadagama Sub County, P.O.Box.10, Lyantonde, Uganda Tel: + 256 772 412 146, +256 752585431 Email: nayebaref@yahoo.com, masterlinkassociates@gmail.com,	Title: Popularising dairy technologies
19.	Ms. Nabulime Loy Animal Production Officer Mayuge Town Council, P.O.Box.1317, Mayuge District Local Government, Department of Production and Marketing, Mayuge, Uganda Tel: +256 750827755(WhatsApp), 779844413, +256 779223610, Email: Inabulime173@gmail.com, oumacontantine@yahoo.com,	Title: Creating Self-Help Groups Objectives: To have the women empowered with knowledge of dairy production, milk value addition, collective marketing of milk and milk products.
20.	Mr. Basulira Yake District Veterinary Officer, Ntungamo District Local Government, Ministry of Education and Sports, P.O.Box.1, Ntungamo, Uganda Tel: 256 772465302,+256702465302 (WhatsApp), 246 772886842 (Supervisor) Email: yakekgb@gmail.com, amugabe1@gmail. com(Supervisor)	 Title: Milk cooperative model establishment, value addition to dairy products and proper testing for adulterated milk. ObjectiveS: > Proper testing of milk for adulteration. > Improved cooperation, marketing and value addition to milk collected.
21.	Mr. Itiakorit Julius Assistant Animal Husbandry Officer, Ngora District Local Government, P.O.Box.31, Ministry of Education and Sports, Ngora, Uganda Tel: +256 772935817, +256 787742528, +256 706649531, +256 77935817 Email: ngoralg@gmail.com	 Title: Sensitization of milk producers and handlers on mil quality enhancement so as to improve its self life and fetch better market price. ObjectiveS: > Improvement in hygiene of milk equipment and persons handling milk. > Increased use of recommended milk handling equipment like cans. > General improvement on milk quality.

24. Entrepreneurship Development in Food Processing

- > Title of the Training Program: Entrepreneurship Development in Food Processing
- Date: 17 April 01 May, 2018
- > Venue: Indian Institute of Food Processing Technology (IIFPT), Thanjavur, Tamil Nadu, India
- Program Director/Coordinators



Program Director	Dr. C. Anandharamakrishnan The Director Indian Institute of Food Processing Technology Ministry of Food Processing Industries, Govt. of India, Pudukkottai Road, Thanjavur - 613 005, Tamil Nadu. Contact No. : +91 4362 228155 Fax : +91 4362 227971 Email: director@iifpt.edu.in
Program Coordinators	Dr. N. Venkatachalapathy Associate Professor and Head Indian Institute of Food Processing Technology (IIFPT), Thanjavur, Tamil Nadu Mob: + 919750968403 Email: venkat@iifpt.edu.in, <u>venkat.iicpt@gov.in</u> Dr. Sunil C.K Assistant Professor Indian Institute of Food Processing Technology (IIFPT), Thanjavur, Tamil Nadu Email: <u>sunil.ck@iifpt.edu.in</u> , <u>sunilck.iicpt@gov.in</u> ,

> Participants profile: 20 executives from 6 countries (12 male & 8 female)

Country	No. of Executives
Kenya	5
Liberia	1
Malawi	4
Mozambique	3
Myanmar	2
Uganda	5

Training objectives

- To identify emerging issues that could change or enhance the food business in the technology and the environment
- To leverage them in identifying emerging opportunities for growth in both domestic and international markets

To transfer the knowledge and learnings on Food Safety and Standards IPR and Management in Food Value Addition in Food Processing

To teach the advanced techniques in Food Packaging and Labelling, Food Quality analysis and Quality control Government Regulations/Guidelines for Food Sector.

Training Curriculum

- 1. Overview on food processing sector and food business in context to global scenario
- 2. Food business Environment & Policy
- 3. Financial Management & Financing for Food Industries
- 4. Advances in Food Processing technologies
- 5. Supply and Cold Chain Management



- 6. Food Safety and Standards
- 7. IPR and Management in Food Value Addition in Food Processing
- 8. Food Packaging and Labeling
- 9. Food Quality analysis and Quality control
- 10. Government Regulations/Guidelines for Food Sector
- 11. Visit to Food processing industries

> Training Outcome

The training outcomes were promotion of value addition technologies in Banana, Mango, Soybean and other agricultural crops in the partner countries.

> Change in Knowledge of the participants

The average score of executives in the pre-training test as 4.3/10 whereas the average score of post-training was 7.17/10. Thus, level of knowledge of executives increased by 29 per cent after the training program.

Evaluation

Executives rated the overall training program with a score of 9.3 on 10-point scale. The training was perceived as **EXCELLENT.**

Field Visits

The participants were taken to Nagapattinam to visit the Tamil Nadu fisheries university, Dr.MGR Fishery College and Research institute, local fresh water fishery pond, and the cashew nut processing plant.



SI.No.	Name and Address	BAWP Title
	Кепуа	
1.	Ms. Wanjohi Cathryn Wanjiru Deputy Director of Veterinary Sciences State Department of Livestock, Directorate of Veterinary Sciences, Ministry of Agriculture, Livestock and Fisheries, Private Bag-00625, Nairobi, Kenya, Tel: +254 2080 43441 Email: <u>infodvs@kilimo.go.ke</u>	Sensitisation of stakeholders on use of waste products in meat processing
2.	Mr. Nyikiti Gordon Ochieng Senior Lecturer, Kenya School of Agriculture, P.O.Box.1909-10100, Nyri, Kenya Tel: +254 722 448701, 725256662 Email: jikazeb@yahoo.com, kenyaschoolofagriculture@yahoo.com,	Training to farmers, youth groups in fruit processing and value addition technologies - Banana Value Chair
3.	Mr. Wanjohi Bernard Kiregi Agriculture Information & Communication Specialist, Small Scale and Value Addition Project (SIVAP), State Department of Agricultur e,P.O.Box-30028-00100, Ministry of Agriculture, Nairobi, Kenya, Tel: +254 721 229 731 Email: bkiregiwanjohi@gmail.com	Value addition of mangoes
4.	Ms. Wasike Cynthia Naliaka Self Employed Buruburu Phase 5 Extension, P.O.Box.73816-00200, Nairobi, Kenya Tel: +254 704021230, +254 725009766 (Supervisor) Email: <u>cynthia.wasike@gmail.com</u>	Training farmers groups in fruit and vegetable processing (Banana, Tomato & Mango value chair)
5.	Ms. Thome Alice Mumbi Chief Agricultural Officer, Kenya School of Agriculture, Ministry of Agriculture, Livestock and Fisheries, P.O.Box.7940-01000, Thika, Kenya Tel: 0722565091, Email: <u>ksasongambele@gmail.</u>	Processing and value addition of fruits and vegetables (Tomato, Mango & Bananas)
	Liberia	
6.	Mr. Varney Emmis Fallah Soil and Water Quality Technician, Technical Service Department, Ministry of Agriculture, Monrovia, Liberia Tel: +231 886543039, 778089249 Email: <u>varneyemmisf@gmail.com</u>	Building of smallholder farmers capacity by training through extension
	Malawi	
7.	Ms. Mwase Ethel Agricultural Development Extension Coordinator, Ministry of Agriculture, Food Security, Nkhotakota District Agriculture Office, P.O.Box.41, Nkhotakota, Malawi Tel: 265 999253110, 999654306 Email: nayejethel@yahoo.com,	Rice processing (cleaning, processing and polishing)

Sl.No.	Name and Address	BAWP Title
8.	Mr. Chuma Madalisto Program Manager, Kasungu Agricultural Development Division, Department of Agricultural Extension Services, Ministry of Agriculture, Irrigation and Water Development, P.O.Box.28, Kasungu, Malawi Tel: +265 999 925 661, 0991668033, Email: <u>madalitso.chuma@yahoo.com</u> ,	Milk processing from soya beans
9.	Mr. MakokaYamikani Francis Agriculture Extension Development Officer, Lilongwe District Agriculture Office, Ministry of Agriculture, Irrigation and Water Development, Private bag 36, Lilongwe, Malawi Tel: + (265) 888 212 081, + (265) 888 369 657 (Supervisor), Email: yothess@yahoo.co.uk	Orange fleshed sweet potato processing
10.	Ms. Kumwembe Annie Principal, Zomba RTC,Private Bag.No.287, Ministry of Agriculture, Zomba, Malawi Tel: 0888 169 688, 0999938625 Email: <u>anniekumwembe@yahoo.com</u> <u>kumwembeannie@gmail.com</u>	Soya bean processing
	Mozambique	
11.	Ms. Chilaule Catia Pery Technical Superior Agro-pecuaria N1,AV.25 de Setembro 2780, 10 Andar Directorate of Agriculture of Maputo City, ExtensaoAgraria, Maputo, Mozambique Tel: +258 21314859, +258 828911700, Fax: +258 21323435 Email: davidchilaule@gmail.com, sergiovalentim@gmail.com	Processing of lettuce
12.	Mr. Chicuate Noe Carlos Francisco Extensionist, Directorate of Agriculture and Food Safety of Maputo City 25 September Avenue, No.21314859/60 Maputo City, Mozambique Tel: +258 21323435, +258823106859 Fax: +25821430102 Email: <u>chicuatenoe@hotmail.com</u> , <u>lucialuz_2007@yahoo.com.br</u> ,	Production of broiler chicken
13.	Mr. Banze Lourenco Fernando Extensionist, Directorate of Agriculture and Food Safety of Maputo City 25 September Avenue, No.21314859/60 Maputo City, Mozambique Tel: +258 258844506022, +258823106859 Fax: +25821430102 Email: <u>Ibanze07@gmail.com</u> , <u>lucialuz_2007@</u> yahoo.com.br,	Processing of cabbage

SI.No.	Name and Address	BAWP Title
	Myanmar	
14.	Mr. San Hitalar Deputy Veterinary Officer Office No.36, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation, Nay Pyi Taw, Myanmar Tel: +9567 3048385, Fax: +9567 3408342 Email:hitalarsanvet2009@gmail.com, stat.ibvd@gmail.com,	Extension service for milk processin knowledge to farmers and villagers
15.	Ms. Su Sandi Deputy Veterinary Officer Office No.36, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation, Nay Pyi Taw, Myanmar Tel: +9567 3048198, Fax: +9567 3408342 Email: ir.lbvd@gmail.com,	
	Uganda	
16.	Ms. Ateng Santa Managing Partner, JJ Enterprises Limited, APAC Civil Society House, Market Street, Kampala, Uganda Tel: 0777155563 / 0775364050, 0783084639 Email: santaateng@gmail.com, oyugionono@gmail.com,	Sensitisation of rural women an youth farmers groups for sustainabl development initiatives in processing
17.	Mr. Bilungi Dennis Senior Fisheries Officer, Production and Marketing Department, Kisoro District Local Government,P.O.Box.123, KISORO, Uganda, Tel: +256 775344614, Email: <u>dennisfishkisoro@yahoo.com</u>	Integrated fish and mushroom valu addition project
18.	Mr. Muwandi John District Fisheries Officer, Buyende District Local Government P.O.Box.87, Kamuli, Uganda Tel: 0332280488, +256 752715979/776615979, 759698958 (Spouse), 256701229449 Email: <u>buyendedistrict@gmail.com</u>	Improving Mukene fish handling processing, packaging and valu addition.
19.	Mr. Nuwasiima Saverino Animal Husbandry Officer, Production Department, Mitooma District Local Government, P.O.Box.98, Bushenyi, Uganda Tel: +256 776 880 441, +256 772 369 862 Email: <u>n.saverino@yahoo.com</u>	Utilisation of Banana peelings in to animal feeds (training to farmers)
20.	Mr. Otunga Anthony Senior Fisheries Officer, Department of Production and Marketing, Amolatar District Local Government,Namasale Road, P.O.Box.3, Amolatar, Uganda Tel: +256 754 327 369, +256 772688650 Email: amolatar.dpmo@gmail.com, outungafish@gmail.com,	Improvement of hygiene in capture fis handling

25. Modern Poultry Management

- > Title of the Training Program: Modern Poultry Management
- Date: 01 15 May, 2018
- > Venue: ICAR Directorate of Poultry Research (DPR), Hyderabad, Telangana, India
- Program Director/ Coordinators



Program Director	Dr. R.N. Chatterjee Director Directorate of Poultry Research, Rajendranagar, Hyderabad-500 030, Telangana, India Ph : +91-40-24015651, 24017000 Email:rnch65@gmail.com , <u>pdpoult@nic.in</u>
Program Coordinators	Dr. U. Rajkumar Principal Scientist ICAR-Directorate of Poultry Research (DPR), Rajendranagar, Hyderabad, Telangana Mob: + 919849561708, Email: <u>ullengala@yahoo.com</u> Dr. L. Leslie Leo Prince Principal Scientist (Genetics & Breeding) ICAR-Directorate of Poultry Research (DPR), Rajendranagar, Hyderabad, Telangana Ph : 40-24015651/24017000 Email: leslie.prince@icar.gov.in, drlleslie@gmail.com Dr. M. Shanmugam Senior Scientist (Physiology) ICAR-Directorate of Poultry Research (DPR), Rajendranagar, Hyderabad, Telangana Ph : 40-24015651/24017000 Email: Shanmugam.Murugesan@icar.gov.in,

> Participants profile: 29 executives from 8 countries (16 male & 13 female)

Country	No. of Executives
Botswana	1
Кепуа	6
Liberia	4
Malawi	3
Mongolia	6
Mozambique	1
Myanmar	3
Uganda	5

> Training objectives

- To impart knowledge in modern poultry management.
- To create impact on poultry farmers through trained executives in their respective countries

Training Curriculum

The focus areas of the training were nutrition, farm and hatchery management, poultry diseases and their prevention, chicken reproduction, rural poultry, processing of chicken meat and poultry production in India and the world.

Training Outcome

The training outcomes were that the participants are training officials & farmers regarding critical part of brooding and vaccination in the poultry business.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 11.79, whereas the average score of post-training was 18.52. The level of knowledge of executives was found to be increased by 26.9% after the training program.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.76 on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visits

The executives were taken on field visits to various organizations i.e. SH Protein Food Pvt ltd (Srinivasa Hatcheries), ICAR-NRC (National Research Centre on Meat), P.V. Narasimha Rao Telangana Veterinary University (Poultry and Dairy Farm), ICAR-IIMR (Indian Institute of Millet Research), ICAR-IIRR (Indian Institute of Rice Research), Tribal Village (Bhovoji Thanda), Suguna Feed Plant, MANAGE and places of cultural and historical importance.



SI.No.	Name and Address	BAWP Title & Objective
	Botswana	
1.	Ms. Kegomoditswe Bula Senior Scientific Officer Department of Animal Production Ministry of Agricultural Development and Food Security P.O.Box 1429, Palapye Botswana Tel: 0267 4924741/ 002674920075, 0267 73104385/ 0267 72751576 Email: kbula@gov.bwjoelbula@gmail.com	 Title: Implementing artificial insemination on poultry to improve fertility and increase productivity of indigenous poultry Objectives: Increase in poultry productivity Increase in fertility Improved local breeds Adoption of artificial insemination technique
	Kenya	
2.	Ms. Mary Adhiambo Ochieng Ondieki Chief Veterinary Officer Directorate Of Veterinary Services, Ministry of Agriculture, Livestock and Fisheries, P.O.Box.34188, Nairobi, Kenya Tel: 020-8043441, +254723440400 Email: infodvs@kilimo.go.ke, <u>abhimabuga@</u> gmail.com	 Title: Skilled veterinary extension services for an improved productivity in rural poultry in Kenya. Objectives: Improved management of backyard poultry for egg and meat production. Good disease prevention and control by implementing vaccination programs correctly. Improved household nutrition. Improved rural household income.
3.	Mr. James Charo Samaki Veterinary Farms Manager Directorate of Veterinary Services Private Bag Kabaete Code 00625, Ministry of Agriculture, Livestock and Fisheries, Kangemi, Kenya Tel: 020 8043441, +0254 724937687 Email: infodvs@kilimo.go.ke, jamescharoo@ yahoo.com	 Title: Sensitize and follow up of all veterinary farm managers to embrace modern poultry management skills Objectives: > Reduce poultry mortality > More farmers take up backyard poultry > Improved nutritional levels and economic levels
4.	Mr. Ronald Kipkogei Kimitei Senior Livestock Production Officer Dairy Training Institute, State Department of Livestock, Ministry of Agriculture Livestock and Fisheries, Naivasha, Kenya Tel: +254 50 50481, +254 724641560 Email: dtinaivasha@yahoo com, ronaldkimitei@gmail.com	 Title: Development of competency based curriculum training poultry management courses at 3 levels i.e. short course (1-2weeks), certificate (3months-1 year) and diploma (2 years) levels. Objective: Draft curricula for training at Levels III, IV and V in poultry management
5.	Mr. Charles Mwaniki Ngonyoku Lecturer Animal Health & Industry Training Institute, State Department of Livestock Ministry of Agriculture Livestock and Fisheries, Nyahururu, Kenya Tel: +254721325453, Email: <u>charlesngonyoku09@yahoo.com</u> ,	 Title: Breed improvement in local/ indigenous poultry Objectives: Students training in modern poultry management Members of Mandaraka water SHG training on breeding cock selection and other aspects of modern poultry management.

SI.No.	Name and Address		BAWP Title & Objective
6.	Mr. Elijah Munyao Munguti Senior Veterinary Officer Directorate of Veterinary Services Ministry of Agriculture, Livestock & Fisheries, 32 - 10300, Kerugoya, Kenya Tel: +254723438288, +254729893864 Email: <u>ahitindomba@gmail.com</u> ,		 Title: Training of veterinary service providers on poultry farm management and biosecurity Objective: Extension officers trained on modern poultry management and biosecurity and disease, control and prevention.
7.	Mr. Evans Mukhichi Makokha Senior Assistant Director Livestock Production State Department of Livestock, Ministry of Agriculture and Irrigation PO Box 34188 00100 Nairobi, Kenya Tel: +254725828249, 774187295 Email: <u>evansmakokha69@gmail.com</u>		 Title: Trainings on Poultry Farm Management Objectives: Increase in supply of quality chicken Increase in productivity of indigenous chicken Increase incomes of rural farmers
	Liberia		
8.	Ms. Yeanua Angela Kehleay Community Training Officer Ministry of Agriculture Old LPRC Road, Somalia Drive, Liberia Tel: +231880445262 Emai:yeanua89@yahoo.com	CHEKINE	Title: The Establishment of backyard poultry farming Objectives: Increase in yield and income
9.	Mr.James K Dorbor Technician Ministry of Agriculture P.O.Box 10-9010 1000 Monrovia 10, Liberia Tel: +231-700966854 Email: <u>pwuo@moa.gov.lr</u>		 Title: The housing of poultry birds Objectives: ➢ Protection of chicken (Birds) from sun, extreme variation of temperature, rain, wind, predators etc. ➢ Reduction in mortality rate. ➢ Increase in profitability in poultry production. ➢ Best the poultry sector in the country.
10.	Mr. George Konah Matiah District Agriculture Officer Ministry of Agriculture Old LPRC Road, Somalia Drive Liberia. Tel: +231777451032/886838320 Email: georgematiah2014@gmail.com		 Title: Modern poultry management in Liberia with rural farmer involvement Objectives: Establish four potential poultry farmers groups in four clans of sanniqellie, Mahn district Nimba County, Liberia. Availability of locally improved poultry sites will be established Establishment of poultry farmers association, local poultry farmers in the groups will be trained in modern poultry management locally.
11.	Mr. Samuel Fromayan Extension Officer Ministry of Agriculture Republic of Liberia Old LRPC Road Gardnersville, Somalia Drive Liberia Tel: 231886315468 Email: <u>samwoah53015@gmail.com</u>		 Title: Table egg production Objectives: ➢ Food security ➢ Knowledge on poultry production ➢ Improved management practices for layer production.

SI.No.	Name and Address	BAWP Title & Objective
	Malawi	
12.	Mr. Matembo Zebron Nyasulu Assistant Veterinary Officer Ministry of Agriculture, Irrigation and Water Development, Department of Animal Health and Livestock Development. P. O. Box 320, Karonga District, Malawi Tel: +265999317216, 888244725, 999703747 Email: matembonyasulu@gmail.com	Title: Disease control in rural poultry Objectives: > Increase in chicken population > Improved nutrition > Increase in income > Increase manure production > Reduced Newcastle disease related deaths in Chickens.
13.	Mr. Aubrey Bongozo Mugala Agriculture Extension Development Officer Lilongwe East Agriculture , District Agriculture Office, P/Bag 36, Lilongwe, Malawi Tel: +265999142518 Email: <u>aubleymugala@gmail.com</u>	Title: Quails Production Objectives: Yield increase, meat and mean products available Nutritional levels reduced
14.	Ms. Nyandule Ivy Agriculture Extension Development Officer, Chiradzulu District Agriculture Office Ministry of Agriculture, Irrigation and Water Development,P.O.Box.28, Chiradzulu, Malawi Tel: +265 888595658, +265 888705857 Email: ivynyandule@gmail.com, isaacsembaphiri@gmail.com	Title:Chicken production, backyar chicken production.Objectives: > Nutritional status of small holder farmers will be improved. > Increased uptake in chicken meat and meat products.
	Mongolia	
15.	Ms. Tsoodol Serchmaa Serologist, State Central Veterinary Laboratory, Government Building #9, Enkhtaivan Avenue 16/A, 210349, Ulaanbaatar-17024, Mongolia Tel: +976 99141498, Email: <u>serchmaa@scvl.gov.mn</u>	Title:ContributetoimprovementofproductionofMongolianfarmintthrough training of farmersObjectives:>Objectives:>Increasetheproductionofindustry>Reduces theproblem ofenvironment
16.	Ms. Tsogvoo Oyundelger Food Microbiologist, Department of Food Hygiene and Drug Residue Testing Laboratory, State Central Veterinary Laboratory, Ministry of Food, Mongolian Agriculture and Light Industry, Zaisan, P.O.Box.53/03, 11 th Horoo, Khan-Uul District, Ulaanbaatar, Mongolia Tel: +976 70111050, Fax: +976 70111050 Email: <u>vetlabnet@scvl.gov.mn</u> ,	pollution, by converting poultr waste into bio-gas
17.	Ms. Munkhtuya Demberelsuren Senior Officer Production and organization of Intensified Livestock Farming Khangarid Palace Baga Toiruu-15160, Chingeltei District, Ulaanbaatar, Mongolia Tel: +976 70140424, (Supervisor) +976 11330559 & +976 99112079 Email: <u>d.munkhtuya_mn@yahoo.com</u>	Title:Contribute to improvement of production of Mongolian farmin through training of farmersObjectives: > Increase the production of fee industry > Reduces the problem of environment pollution, by converting poultr waste into bio-gas

SI.No.	Name and Address	BAWP Title & Objective
18.	Ms. Erdenejargal Oyunsoyombo State Examiner of Veterinary Inspection Inspection of Capital Inspection Office Department of Agriculture and Food Security, Municipal Administration, Building III, J. Sambuu's Street, 4 th Khoroo, Chingeltei District, Ulaanbaatar-15170, Mongolia Tel: +976 77775000, +976 88017078 soyomboo_0401@yahoo.com,	 Title: Contribute to improvement of production of Mongolian farming through training of farmers Objectives: Increase the production of feed industry Reduces the problem of environment pollution, by converting poultry waste into bio-gas
19.	Mr. Khairkhan Khanddorj Nomgon Ecological Officer, Ministry of Food, Agriculture and Light Industry, KhalkhGol Zone for National Creation and Establishment, TEDS Budilding, Chinggis Avenue, 3 rd Khoroo, Khan-Uul District, Ulaanbaatar-17070, Mongolia, Tel: +976 83141455, +976 99859274 Email: <u>khanddorj@khalkhgol.mofa.gov.mn</u> ,	 Title: Contribute to improvement of production of Mongolian farming through training of farmers Objectives: Increase the production of feed industry Reduces the problem of environment pollution, by converting poultry
20.	Mr. Balgan Munkh Erdene Legal Specialist HERD Protection fund, Ministry of Food, Agriculture and Light Industry, Bayanzurkh District, Peace Avenue 16A, Government Building No.9, Suite 203, Ulaanbaatar-210349, Mongolia, Tel: +976 11453233, +976 99188908 Email: <u>munch_0301@yahoo.com</u> ,	waste into bio-gas
	Mozambique	
21.	Ms. Margarida Dique Mussimbite Extension Officer, Maputo city, 25 de setembro Av, n0 2780 Mozambique. Tel: +25821314859, +258825657977 Email: <u>margaridadique@yahoo.com.br</u>	 Title: Short course trainings to sensitize farmers, on the need to commercialize backyard chicken production Objective: Embracing the concept of commercial backyard poultry farmers in Groups of poultry keepers
	Myanmar	
22.	Ms. Mo Zin Myint Deputy Veterinary Officer Livestock breeding and veterinary Department C-130/2 No. (1) Copper Mine, Monywa Township, Sagaing Region, Myanmar Tel: +95965408342 Email: <u>naypyitawlbvd@gmail.com</u>	Title: Artificial Insemination in native chickens Objective: To promote backyard poultry chicken
23.	Ms. Wai Wai Aung Min Deputy Veterinary Officer Livestock breeding and Veterinary Department, Aung Chan Thar Quarter, Indaw Township, Myanmar Tel: 95673408342 Email: <u>ir.lbvd@gmail.com</u>	 Title: Disease control of village chickens. Objectives: ➢ Increased knowledge of diseases and how to prevent disease ➢ Decreased mortality rate
24.	Ms. Phyo Htet Kyaw Demonstrator Department of Animal Science, University of Veterinary, Yezin, ZayarThiri Township Nay Pyi Taw, Myanmar Tel: 95 67416529, +95 9420769053, Email: phyohtetlay4@gmail.com	Title: Artificial insemination of poultry

Sl.No.	Name and Address		BAWP Title & Objective
	Uganda		
25.	Ms. Nellie Florence Okullo Program Officer Linkages Northern Uganda Regional Office Shine Cares Uganda, Oyam District, Uganda Tel: +256 0392900302, +256 776626708 Email: <u>caooyam@gmail.com</u> , <u>nelflo10@gmail.com</u>		 Title: Agripreneurship among trainees institutions of higher learning in mode poultry management : (A two day mul Stakeholder workshop) Objectives: Linking and partnering the training institutions with MANAGE and the training opportunities available Encouragement of extension research and innovation among the agricultural professionals Establishment of agri clinics and developmental projects in mode poultry development
26.	Mr. Patrick Lukooya Manager Demonstration Mixed Farm Agrario Mixed Model Demonstration Farm BuwamaMpigi District, Uganda Tel: +256775568022, +256704992786, +256777134786 Email: <u>lukooyap@gmail.com</u>		 Title: Improvement of commercial feed Objectives: ➢ Increasing yield and profits. ➢ Reducing on capital input for for house profits
27.	Mr. James Katamba Bugeza Livestock Health Research Officer National Agriculture Research Organization (NARO) PO Box 96, Tororo , Uganda Tel: 256754998498, +2567725235516 Email: jbugeza@yahoo.com, <u>bugezaj@yahoo.</u> <u>com,mugerwaswidiq@gmail.com(Supervisor)</u>		 Title: Improving hatchability the Institute hatchery - Hatche management. Objective: Improved skills in hatchery operation & management Improved hatchability. Improved revenue-NTP
28.	Mr. ChrismasDismasBaterana Senior Veterinary Officer Rukungiri Veterinary Department P. O. Box 1, Rukungiri Uganda Tel: +256 772667117 Email: <u>xbateranac@yahoo.com</u>		Title: Low productivity of layer birds ar broilers eggs. Objective: High production in terms eggs.
29.	Mr. Emmanuel Hasahya Veterinary Officer Busia District Local Government, P O Box 124, Busia , Uganda Tel: +256781526764 Email: <u>ehasahya@gmail.com</u>	A second	 Title: Improving survival of chicks be local charcoal stove as source of heat Objective: > Immense survival of chicks > More meat & eggs production > High income for women, PWD's are elderly youth.

26. Entrepreneurship Development Among Rural Women

- > **Title of the Training Program**: Entrepreneurship Development Among Rural Women
- Date: 9-23 May, 2018
- > Venue: Kudumbashree Mission, Thiruvananthapuram, Kerala, India
- Program Director

Dr. Rahul Krishnan Thematic Anchor-Farm Livelihood Kudumbasree, Trivandrum, Kerala Mob: 8281655705 Email: <u>rahulvet231@yahoo.com</u>, <u>kshreeftf@gmail.com</u>,

Participants profile: 23 executives from 5 countries (3 male & 20 female)

Country	No. of Executives
Kenya	8
Liberia	4
Malawi	4
Mongolia	2
Uganda	5

Training objectives

- To introduce the significance of a strong community institution mechanism to provide a conducive atmosphere that promotes women entrepreneurship
- To Introduce the various non –farm entrepreneurship models practiced by Kudumbashree to provide knowledge on various opportunities that can be explored in the host country
- To Introduce the concept of entrepreneurship among the women
- To Provide information on the significance of collective effort in entrepreneurship and entrepreneurship for collective bargaining, value addition and marketing

Training Curriculum

- 1. Scale and scope of entrepreneurship among rural women
- 2. Significance of collective effort for bargaining, value addition & marketing
- 3. Opportunity and challenges in developing the collectives and marketing
- 4. Introduction of best practices and its adoption barriers
- 5. Agriculture value chain and best technological practices available in India
- 6. Live interaction with Kudumbashree entrepreneurs for tracking the real field work
- 7. Support environment required for entre/agri-preneurs Plan for tracking progress

> Training Outcome

 RONGO youth entrepreneurship project started by two Kenyan participants (Ms. Maurice Ouma & Ms. Grace Kimaru). They conduct regular trainings and field visits to promote entrepreneurship among the youth.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 19 whereas the average score of post-training was 26 and thus, it was found that the level of knowledge of executives was increased by 37 percent post the training programme.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.6 on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visits





The participants were taken on field visits focusing on agriculture and off farm enterprises which included café kudumbashree, micro enterprises, nutrimix etc. They have been exposed to marketing interventions and livelihood approaches of kudumbashree through field visits of paddy collectives at Pathanamthitta, Thirumadhuram, Ksheera sagaram, and Joint liability groups. They got a chance to visit one of the NHG, BRC and experience BUDS and SNEHITA, which are Kudumbashree's Social empowerment initiatives.





SI.No.	Name and Address	BAWP Title & Objective
	Kenya	
1.	Ms. Apondi Monica Jackline Atieno Country Director of Livestock Production County Department of Livestock Production, P.O.Box.479, Ministry of Agriculture, Livestock and Fisheries, SunaMigori, Kenya Tel: +254 0733711207 Email: jacklineatieno@yahoo.com	 Title: Awareness creation on saving culture. Objectives: Awareness creation in every meeting about Kudumbashree Identified livelihood activities like Café shop, Tailoring, Backyard Poultry
2.	Ms. Otwombe Emmy Adisah Assistant Director of Agriculture, State Department of Agriculture, Ministry of Agriculture, Livestock and Fisheries, P.O.Box. 30028, Nairobi, Kenya Tel: +254 20719013, 721843001, Email: <u>emmy.wanjohi@gmail.com</u> , <u>achiengaruwa@gmail.com</u>	 Title: Build capacity of women in record for effective and efficient project management Objectives: > Increased production and volume of high quality honey produced > Processed and branded honey, > Marketed at good price to generate expected income, > Sustainable group activities
3.	Mrs. Mwarabu Ruth Lewo Chief Fisheries Officer, Fisheries Department, P.O.Box. 135-20177, Ministry of Agriculture, Livestock and Fisheries, Naivasha, Kenya Tel: +254 721409498, +254 722 619909, WhatsApp: +254 721409498 Email: <u>rmlewo@gmail.com</u>	 Title: Community sensitisation on microenterprise opportunities among the Fishermen community of Lake Navasha Objectives: Knowledge transfer on formulation of SHG/ NHG Formation of SHG (s) Participants will be empowered with information on micro- finance activities Micro- enterprise venture identified
4.	Ms. Agili Grace Auma Deputy Director of Agriculture, Directorate of Agriculture, Ministry of Agriculture and Irrigation,P.O.Box.30028-00100, Nairobi, Kenya Tel: +254 202718870, Email: graceagili@gmail.com	 Title: Demonstrating income generating activities especially in the rural areas using the Indian best practices on their modes of operation Objectives: ➤ The Ministry targets to establish and support 1,000 Small and Medium Enterprises (SMEs) in next 5 years. ➤ The SMEs are to be involved in agribusiness, agro processing and value addition. ➤ A small team comprising administrators and technical staff to be constituted to monitor this regularly on daily/ weekly basis
5.	Ms. Mariene Leah Wanja Self-employed, Chania Garden, Thika, P.O.Box. 3854-01002, Thika, Kenya Tel: +254 721281112, Email: <u>lewama2003@gmail.com</u>	Title: Training women groups on proper record keeping Objective: Improved livelihoods

SI.No.	Name and Address	BAWP Title & Objective	
6.	Mrs. Ngethe Esther Wangari Deputy Director Veterinary Services/Principal Animal Health and Industry Training Institute, Directorate of Veterinary Services, P.O.Box.1-20300, Nyahururu, Kenya Tel: +254 701821444, Email: nyahururuahiti@gmail.com	 Title: Formation of good samaritan widows group Objectives: > Introduce savings through thrift, > Micro enterprise identification, > Economic empowerment 	
7.	Ms. Muchai Lynette Gakii Program Assistant Market Information System Eastern Africa Grain Council, Mbaazi Avenue, Off Kingara Road, P.O.Box.218-00606, Nairobi, Kenya Tel: +254 712005747, 710607313, 733444035, +254 722352310, Fax: +254 203745841 Email: gakiilyn@gmail.com	 Title: Formation of micro enterprise canteen unit selling traditional porridge Objectives: Promotion of consumption of traditional porridge Preservation of endangered cultural practices 	
8.	Ms. Kirimi Lydia Ncabira Chief Agricultural Officer, Wamugu Agricultural Training Centre (WATC), P.O.Box.5069-10100, Directorate of Agriculture, Ministry of Agriculture, Nyeri, Kenya, Tel: +254 723715006, Email: ncabiralydia@gmail.com	 Title: To organize, mobilize, form and sensitize a women group in undertaking a micro enterprise. Objective: Improved livelihoods 	
	Liberia		
9.	Ms. Kalayi Rebecca Sia Agriculture Technician, Non Input Dealer Association of Liberia Ministry of Agriculture, P.O.Box.10-9010 1000, Monrovia, Liberia Tel: +231 886579681,770192259, Email: aidalliberia@gmail.com	 Title: Developing the mindset of vulnerable women and girls through agriculture practices to eradicate poverty with in their family and community Objectives: > Increased self-employment women and girls > Access & affordable food by women > Increased entrepreneurship among rural women. 	
10.	Ms. Flomo Marie Harris Technician, Gross Roots Women Agricultural Multipurpose Ministry of Agriculture, P.O.Box.10-9010 1000, Monrovia, Liberia Tel: + 231 886822619, + 231 886896470 Email: grassrootwomenogric@gmail.com,	 Title: Developing the mindset of vulnerable women and girls through agriculture practices to eradicate poverty with in their family and community Objectives: > Increased self-employment women 	
11.	Ms. Wuo Benetta Nohn Extension Officer, Ministry of Agriculture, P.O.Box.10-9010 1000, Monrovia, Liberia Tel: +231 776180899,886545786 Email: pwuo@moa.gov.lr, edibope@yahoo. com, selkauwiles@yahoo.com,	 and girls > Access & affordable food by women > Increased entrepreneurship among rural women. 	
12.	Ms. Karyar Yorlor Extension Officer, Extension Department, Ministry of Agriculture, Monrovia, Liberia, Tel: +231 776881290 Email: humanitycareliberia@gmail.com, edibope@yahoo.com		

SI.No.	Name and Address	BAWP Title & Objective
	Malawi	
13.	Mr. Wanda GrenoPalacido Martin Principal Women's Program Officer, Salima Agriculture Department Division, Private Bag-1, Department of Agricultural Extension Services, Ministry of Agriculture, Irrigation and Water Development, Salima, Malawi Tel: +265 884824764 Email: grenomp@yahoo.co.uk	Title: Formation of Micro enterprise groups for women Objectives: > Increase access to farm inputs > Increase income generation
14.	Ms. Zambezi Diana Mayamiko Crop Production Officer, Neno District Agriculture, P.O.Box.No.55, Ministry of Agriculture, Neno, Malawi Tel: +265 999 298 124, 888 174 124, Email: <u>dmzambezi@γahoo.com</u>	Title: Formation of micro enterprise groups for women Objective: > Increase access to farm inputs Increase income generation
15.	Ms. Chayeralreen Greshan Agriculture Extension Development Officer, Lilongwe District Agriculture Office, Mitundu Extension Planning Area, Ministry of Agriculture, Irrigation and Water Development, Private Bag-36, Lilongwe, Malawi Tel: + 265 888 212 081 Email: <u>yothess@yahoo.co.uk</u>	
16.	Ms. Kalipinde Zione Agriculture Extension Development Officer, Thyolo District Agriculture Office, Ministry of Agriculture and Irrigation Development, P.O.Box.22, Thyolo, Malawi Tel: +265 888519304, Email: kalipindezione@gmail.com, enockchiwale@gmail.com,	Title: Formation of micro enterprise groups for womenObjective: > Increase access to farm inputs Increase income generation
	Mongolia	
17.	Ms. Gantumur Narantsetseg Senior Officer Incharge Human Rights and Gender Equality Administration and Management, Department of Ministry of Food, Agriculture & Light Industry, Government Building IX-A, Peace Avenue 16A, Bayanzurkh District, Ulaanbaatar, Mongolia, Tel: +976-51-262532, Email: g_naraa04@yahoo.com	Title: Organic farming – green house Objectives: > Availability of vegetables for Improved food nutrition > Increase cooperation of women in the group > Improve food security /usage organic food/
18.	Ms. Dorjgochoo Ariunbayar Senior Officer State Administration and Management Department, Ministry of Food, Agriculture & Light Industry, Government Building IX-A, Peace Avenue 16A, Bayanzurkh District, Ulaanbaatar, Mongolia, Tel: +976-51-262559, Email: ariunbayar@mofa.gov.mn,	► Increase the income

SI.No.	Name and Address	BAWP Title & Objective
	Uganda	
19.	Ms. Nankya Betty Executive Director, Kajwejwete Foundation, Galiraya Road, Kyerima Village, Kayunga District, P.O.Box.33378, Kampala, Uganda Tel: +256 772505169, Email: <u>kajwejwetefoundation@gmail.com</u>	Title: Skill development the hope for gi child & Women empowermentObjectives:Value addition on their products (2 women trained),Better sustainable financial suppor through skill development
20.	Mr. Kansiime Zachary Programme Officer Skills Development & Entrepreneurship Uganda Entrepreneurship Program, Ministry of Gender, Labour & Social Development, Simbamanyo Building, Plot.2, George Street, P.O.Box. 7136, Kampala, Uganda Tel: +256 789816194, Office +256414699219, Mob +256789816194, WhatsApp: +256704945108 Email: zkansiime@yahoo.com,	Title: Reforming of women group structures in Uganda Objectives: Improved record Keeping of WG's Support more micro enterprises Skilled women groups in valuaddition
21.	Ms. Naggujja Rosemary Chief Executive Officer, New Cycle Guide Limited, Wakiso, P.O.Box.881, Kampala, Uganda Tel: +256 772664469, Email: ntambirose@gmail.com, <u>newcycleguide@gmail.com</u> ,	 Title: Women empowerment throug credit and thrift Objectives: > Support women groups to register C.B.O's with the district > Teach good systems for saving an taking loans > Proper record keeping an transparency, good accountin systems, introduction of gender sel learning
22.	Ms. Gwokyalya Christine Women Councilor, Kampala Capital City Authority (KCCA) P.O.Box.7010, Ministry of Education and Sports, Kampala, Uganda Tel: +256 775528812, +256 701528812, +256 772448240 (Mr. George Muteekanga) Email: <u>gwokyalyachristine1@gmail.com</u> ,	Title: Women group making of fireles Cooker & Oven Objective: Improve skills to make improve cookers Better record keeping.
23.	Ms. Nankya Agnes Project Women Coordinator Our Children and Future Project, P.O.Box.70, Masaka, Uganda Tel: +256 705880986, WhatsApp: +256776885638 Email: <u>agnesnankya9@gmail.com</u> , <u>emmagomth@gmail.com</u>	Title: Economic & social empowermer for girls and women in Uganda Objective: Agricultural trainings for hom gardeners, Skills building trainings (craft cookery), Improved farming methods and model farm

27. Value Addition in Spices

- Title of the Training Program: Value Addition in Spices \geq
- \triangleright Date: 15 - 29, May 2018

Program Director

Venue: ICAR-Indian Institute of Spices Research (IISR), Calicut, Kerala, India

Director

Marikunnu P.O.,

Program Director / Coordinators



Program Coordinators	Dr. Rajeev P
	Principal Scientist and Manager
	ICAR-Indian Institute of Spices Research (IISR), Calicut, Kerala
	Mob: + 919400052051
	Email:rajeev@spices.res.in , rajeev.P@icar.gov.in,
	Dr. John Zachariah
	Principal Scientist
	(Mobile: 9446071410 Email: zaciohnti@gmail.com)

 \geq Participants profile: 22 executives from 5 countries (10 male & 12 female)

Country	No. of Executives
Кепуа	6
Liberia	3
Malawi	5
Myanmar	3
Uganda	5

Training objectives:

- ••• Introduce the significance of a strong community institution mechanism to provide a conducive atmosphere that promotes women entrepreneurship
- * Introduce the various non –farm entrepreneurship models practiced by Kudumbashree to provide knowledge on various opportunities that can be explored in the host country
- $\mathbf{\dot{v}}$ Introduce the concept of entrepreneurship among the women
- * Provide information on the significance of collective effort in entrepreneurship and entrepreneurship for collective bargaining, value addition and marketing

Training Curriculum

- 1. Harvest and post-harvest processing and value addition of spices
- Marketing, trade and value chain development 2.
- 3. Hands on training and demonstration of value added products from ginger, curry powder production from spices
- 4. Spices as functional food, international quality standards in spices, packaging and storage of spices and products, mechanization etc

Training Outcome

* Promotion of large scale production of turmeric, ginger, cinnamon, garlic, annatto, pepper and lemon was taken up by the participants in their areas.



> Change in Knowledge of the participants

The average score of executives in the pretraining test was 12.09 whereas the average score of post-training was 19.09 and thus, it was found that the level of knowledge of executives was increased by 28 percent post the training programme.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.22 on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visits: The programme included visits to institutions such as Central Food Technological Research Institute (CFTRI), Mysuru, and spice industries such as Kancor Ingredients Limited, Angamaly; Panda Foods (India) Pvt. Ltd., Wayanad etc.



SI.No.	Name and Address	BAWP Title & Objective
	Kenya	
1.	Mrs. Kibisu Lynette Wanjiku Principal Agricultural Officer, Ministry of Agriculture, Fisheries and Livestock, P.O.Box. 66730-00800, Nairobi, Kenya Tel: +254 733850354, Email: agrinfodata@gmail.com, jmmogere@gmail.com, shikukibisu@yahoo.co.uk,	 Title: Value addition of locally grown ginger and turmeric Objective: Identifying spice growers with reference to ginger and turmeric where any new grower can visit for learning purposes.
2.	Mrs. Chirchir Grace Jepleting Deputy Director of Agriculture, Agribusiness and Value Addition, State Department of Agriculture, Ministry of Agriculture, Livestock and Fisheries, P.O.Box.30028-00100, Nairobi, Kenya Tel: +254 0202718870, +254 723789250 Email: gjchirchir@kilimo.go.ke, gjchirchir@gmail.com,	 Title: Develop policy to promote value addition in Spices in Kenyan consultation with various departments Objective: To promote value addition in spices in Kenya
3.	Mr. Kamau Eliud Mathu Assistant Director/ Head of State Corporations Unit, P.O.Box.00100, Ministry of Agriculture, Livestock and Fisheries, Nairobi, Kenya Tel: +254 27188719, +254 721741116, 721635347, 725789742 Email: elmathu@yahoo.com, ndiiraben@gmail. com, johnmmwaniki@yahoo.com,	Title: Assessment of the status of spice production and value addition in Kenya and guidance on policy towards up- scaling of production and value addition of spices.
4.	Mr. Wambugu John Mutahi Senior Assistant Agricultural Officer, Wambugu Agricultural Training Centre P.O.Box.5069-10100, Directorate of Agriculture, Nyere, Kenya, Tel: +254 721873324, +254 722918407, +254722698352 Email: jikazeb@yahoo.com, johnmutahi244@ gmail.com, wambugufarmatc@gmail.com	Title: Training programme for promotion of utilisation of spices with emphasis on ginger Objective: Promotion of utilisation of spices with emphasis on ginger
5.	Ms. Karigu Mary Wanjiku Field Officer, Women Farmers Association of Kenya (WOFaAK), Jonathan Estate Suite 81, P.O.Box-5910-00200, Nairobi, Kenya Tel: +254 78923709, +254 727 118 599, +254 725009765 Email: wofaakenya@gmail.com, ishikomary@ yahoo.com, dgatwiri@gmail.com,	Title: Capacity building of rural women groups on value addition in spices. Objective: Capacity building of rural women groups on value addition in spices
6.	Ms. Gitonga Hannah Wairimu Chief Agriculture Officer, Kenya School of Agriculture, Ministry of Agriculture, P.O.Box.79409100, Thika, Nairobi, Kenya Tel: +254 722566091, +254722892297, +254 722448701, Email: ksasongambele@yahoo. com, gitongaw@yahoo.com	 Title: Training of stakeholders on value addition of ginger and garlic Objective: Help establish whether spices are available to consumers and in which form they are consumed (raw or processed)

SI.No.	Name and Address		BAWP Title & Objective
	Liberia		
7.	Ms. Collins Sophia Technician, Agriculture Food Processing Unit, Ministry of Agriculture, P.O.Box.10-9010, 1000, Monrovia, Liberia Tel: +231 886431713, 888533445 Email: sophiacollins1999@gmail.com, zephanielc@gmail.com,	Title: proces	Training schedule on ginger sing
8.	Mr. Zokungay Mehn Extension Officer, Central Agriculture Research Institute (CARI), Ministry of Agriculture, Monrovia, Liberia Tel: +231 886979681, 886456868 Email:zmehn2020@gmail.com edibope@yahoo.com, seklauwiles@yahoo.com,	Title: Finform	Baseline assessment through key er's
9.	Ms. Togba Henreietta Budu Trainer, Flying Horse Women Group, Ministry of Agriculture, Old LPRC Road, Somalia Drive, Monrovia, Liberia Tel: +231 77554261, 777550590, 886554942, 886879800 Email: henriettatogba1973@gmail.com, seklauwiles@yahoo.com, mulbahtogba@gmail.com,	Object chilli Gamgle	Sensitisation programme for sing chilli production ive: Programme for increasing production in two districts of ota for income generation for ed farmers
	Malawi		
10.	Mr. Mambo Geoffrey Kasinja Agricultural Extension Development Officer, Ministry of Agriculture, Food Security, Nkhotakota District Agriculture Office, P.O.Box.41, Nkhotakota, Malawi Tel: +265 888909113, 999392230 Email: mphastso08@gmail.com, mgomezulura@gmail.com		Training programme for ginger tion and value addition
11.	Mr. Chautsi Precious William Brace District Agriculture Development Officer, Mchinji District Agriculture Office, P.O.Box.7, Mchinji, Malawi Tel: + 265 999389886, Email: pchautsi@gmail.com, mwakiwelford@outlook.com,	Manager and a second second and a second	Production of chilli, ginger, paprika ction and value addition
12.	Ms. Kachigunda Prisca Tinenenji Agriculture Extension Development Officer Department of Agricultural Extension Services, Ministry of Agriculture, P.O. Box 30145, Capital City, Lilongwe 3, Malawi Telephone/Mobile: +265 999 936 205, +265 884 173 502/ +265 995 282 049 Fax No.: + 265 1 750 384 Email:pkachigunda@yahoo.co.uk	Title: product Malaw	Training on advocating the ction and processing of spices in i

SI.No.	Name and Address	BAWP Title & Objective
13.	Mr. Namonde Steve Ronald Farm and Resource Centre Manager/AEDO Zombo Residential Training Centre (ZRTC) Zomba District Agricultural Office, Ministry of Agriculture, Department of Agriculture Extension Lilongwe, Malawi Tel: +265 888 668 185, +265 881308888, +265 888 169 688 Email: stevenamonde@yahoo.com, anniekumwembe@yahoo.com,	 Title: Introduction of spice production demonstration gardening with an interest in ginger and Turmeric agronomic practices and primary processing Objectives: Demonstrating good agronomic practices and primary processing in the production of Ginger and Turmeric spices. To strengthen linkage between research and extension services To facilitate development of agribusiness opportunities To promote adaptation to climate related challenges
14.	Ms. MvulaSmang Aliso Priscillar Agricultural Extension Development Officer, Ministry of Agriculture, Irrigation and Water Development, Mpingu, EPA, P.O.Box.1989 Lilongwe, Malawi Tel: +265 999 458 092, +265 999 526 166, Email: smvula2007@yahoo.co.uk, noellalimbani@gmail.com	 Title: Production and value addition of three spices popular in the region ginger, turmeric and tamarind Objective: To conduct a bench mark survey on cultivation and use of these spices
	Myanmar	
15.	Ms.Htun Zar Gyi Deputy Staff Officer State Office, Taungyi Township, Shan State Nay PyiTha, Myanmar Telephone/Mobile: +95-81-2125744, +95- 9-402555390, +95-67-410578,Fax No.:+95- 81-2121057 Email:doasshan2@gmail.com , zargyitun07@gmail.com	Title: Training for processing of ginger squash to women self-help groups (SHGs)
16.	Ms. Sein Dee Assistant Staff Officer Department of Agriculture Township Office, Kyaing Tong Township, Shan State, Nay PyiTha, Myanmar Telephone/Mobile: +95-84-22880,:+95-9- 420764809, Fax No.:+95-84-22466 Email: myintzawhtwe0@gmail.com	Title: Training for processing of candied ginger to women self-help groups (SHGs)
17.	Ms. San Moh Moh Deputy Assistant Staff Officer Department of Agriculture, Office No (43), Department of Agriculture, Nay Pyi Taw, Myanmar Telephone/Mobile: +95-67-410383, +95-67-410007 Fax No.:+95-67-410067 Email:mohmohsanlay3@gmail.com, dgdoamm@gmail.com	Title: Training for processing of chillies to women self-help groups (SHGs)



SI.No.	Name and Address	BAWP Title & Objective
	Uganda	
18.	Mr. Francis Ogulli Director of Education and Sports Ministry of education and sports +256 454436517, 782013007 Email: us@adn.busitema.ac.ug, francis_ogulli@yahoo.com	Title: Capacity building training officials and students on Value chain approach to spice production processing and marketingObjective: Value chain approach to spice production processing and marketing
19.	Ms. Luzinda Lucy Nusula Education Officer, Our Lady of Good Counsel, SSS, Gayaza, P.O.Box.19142, Kampala, Uganda Tel: +256 789341911, +256754485522 Email: aaugustineiisa@yahoo.co.uk,	Title: Promotion of value added products from ginger
20.	Mr. lisa Augustine Agricultural Officer, Kumi District Local Government, Ministry of Education and Sports, Kampala, Uganda Tel: +256 772830166, Email: aaugustineiisa@yahoo.co.uk, valdodeke@yahoo.com,	Title: Processing of turmeric powder and packaging
21.	Mr. Gyagenda Alex Agricultural Office, District Agricultural Office, Kigandalo Sub County, Mayuge District Local Government, Mayuge, Uganda Tel: +256 702151262, +256 703873717 (Supervisor) Email: gyagendaalex@yahoo.com, kpeteri2004@gmail.com (Supervisor)	Title: Training and awareness programmes on prospects and cultivation of spices to Farmers
22.	Ms. Nabawanuka Crusum Agriculture Officer, Bugiri Municipal Council, Production and Marketing Department, Ministry of Education and Sports, P.O.Box.77, Bugiri, Uganda Tel: +256 777794006 Email: bugirimunicipal@gmail.com	Title: Training farmers in value addition of ginger



28. Modern Storage Technologies in Agriculture

- > Title of the Training Program: Modern Storage Technologies in Agriculture
- Date: 11 25 June, 2018
- Venue: ICAR Central Institute of Post-Harvest Engineering & Technology (CIPHET), Ludhiana, Punjab, India



Program Director / Coordinators

Program Director	The Director ICAR - Central Institute of Post-Harvest Engineering & Technology, Ludhiana-141004, Punjab, Off. Phone: 0161-2313101, Fax: 0161-2308670, Email: <u>ciphetludhiana1989@gmail.com</u>
Program Coordinators	Dr. V. EyarkaiNambi Scientist (AS&PE) CIPHET, Ludhiana. Mob: +91 9465667772 (Punjab), +91 99522 4(Tamil Nadu), Email: eyarkainambi@gmail.com Dr. R. K. Vishwakarma Head (Acting), Horticultural Crop Processing Division & In-charge ICAR - Central Institute of Post-Harvest Engineering & Technology (CIPHET), Ludhiana, Punjab, Mob: +91 9463100973, Email: rkguptaciphet@gmail.com

Participants profile: 21 executives from 7 countries (16 male & 5 female)

Country	No. of Executives
Cambodia	1
Kenya	5
Liberia	3
Malawi	3
Mozambique	1
Myanmar	3
Uganda	5

> Training objectives

- To introduce and to acquaint the participants with knowledge in the concept of different storage techniques/systems available for major food grains and horticultural produce storage in developing countries and design, construction and management of low-cost evaporative cooled storage structures for perishables.
- The program also aims at sensitizing the participants about insect control, fumigation and other quality control of stored grain ecosystems, demonstrate the bulk storage systems with effective handling of food grains, Controlled Atmosphere (CA) storage & modified atmosphere storage for horticultural produce.

Training Curriculum

- 1. Concepts of stored grain ecosystems,
- 2. Quality and insect control in the stored grains,
- 3. Different type of fumigation methods/systems & fumigation standards,
- 4. Plant quarantine operations
- 5. Physiology of horticultural produce
- 6. Design and operational aspects of evaporative cooled storage, cold storage, modern 4 methods like storage, delayed ripening processes and multi-commodity cold storage systems.
- 7. Concept of cold chain and its management

> Training Outcome

The training outcomes were seen as the promotion of safe fumigation in warehouses and effective grain storage techniques among farmers.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 10.1 whereas the average score of post-training was 17 and thus, it was found that the level of knowledge of executives was increased by 68.32 percent post the training programme.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.68 on a 10 point continuum indicating the overall impression on the programme was **VERY GOOD**.

Sl.No.	Name and Address	BAWP Title
	Cambodia	
1.	Mr. Yem Moeurn Government Official, General Directorate of Agriculture, Ministry of Agriculture, Forestry and Fisheries, #54B/49F, Street 395-656, SangkatTeoukLaak 3, Khan ToulKok, Phnom Penh, Cambodia, Mobile: +85523883427, Email:moeurn.gda@gmail.com	Title: Post-harvest handling and storage aspects (rice and maize) bag Storage
	Kenya	
2.	Mr. Makau John Kamau Senior Veterinary Officer, State Department of Livestock, AhitiNyahururu, P.O. Box. 1-20300, Ministry of Agriculture and Livestock, Nyahururu, Kenya, Mobile: +254-701821444, Email: nyahururuahiti@gmail.com	Title: Hermetic storage - super bags
3.	Mr. Kenyanya Samuel Mauti Director of Fisheries, State Department of Fisheries and Blue Economy, Ministry of Agriculture, Livestock & Fisheries, P.O.Box 58187-00200, Museum Hill, Nairobi, Kenya, Mobile: +254-715802985, Email: lucy.ayugi@gmail.com	Title: Improvement of fish preservation by local fishermen of lake Victoria, Ogal fish landing site Objective: Capacity building of the fisherman through their respective Beech Management Units.
4.	Mr. Njuguna Richard Maina Superintending Engineer, Agricultural Engineering Services, Ministry of Agricultures, Livestock & Fisheries, P.O.Box. 17-80500, Lamu, Kenya, Mobile: +254-721636905, Email: rmnjuguna2004@gmail.com	Title: Post-harvest management of cashewnut Objective: Less loss of cashew nut and more income to farmers
5.	Mr. Simiyulssac Wangetti Superintending Engineer-Agriculture, Ministry of Agriculture and Irrigation, P.O.Box.30028-00100, Nairobi, Kenya Tel: +254 718870/9, 724877491 Email: wangettesi@gmail.com, engineeringmoa@yahoo.com,	 Title: Development of a position paper on "Enhancement of food security in Kenya efficient and effective maize storage and marketing" Objective: Efficient storage and marketing structures for rice and wheat.
6.	Mr. Wairangu Ephraim Maina Assistant Director Fisheries, State Department of Fisheries and Blue Economy, Kenya Fisheries' Services, Ministry of Agriculture, Livestock & Fisheries, P.O.Box 58187 - 00200, Museum Hill, Nairobi, Kenya, Mobile: +254-202161803, Email: emwairangu@gmail.com	Title: Use of solar energy in fish farming Objective: Improve the adoption of post- harvest technologies in fisheries sub- sector.
	Liberia	
7.	Mr. Dologbay Terry Nendehyee Extension Officer, Ministry of Agriculture, P.O.Box. 10-9010, 1000 Monrovia 10, Liberia, Mobile: +231-886523750, Email: terrydologbay@gmail.com,	Title: Post-harvest handling and storage aspects (rice and maize) Bag Storage Objective: Farmers awareness post- harvest management.

SI.N	lo. Name and Address	BAWP Title
8	 Ms. Miller Yassa Kebawu Technician Department of Technical Services Ministry of Agriculture, P.O.Box. 10-9010, 1000, Monrovia 10, Liberia, Mobile: +231-777280258, Email: ykmiller2017@gmail.com 	 Title: Sensitisation training on modern storage technologies to farmers and other segments of the agricultural workforce. Objective: Minimise the loses or grains during processing and increase in production of grains
9	 Mr. Weah Victor County Coordinator Farmers for Sustainable Agriculture Development of Liberia (FASADEL), LOFA County, Ministry of Agriculture, Monrovia, Liberia, Tel: +231886936220, Email: victorweah98@gmail.com 	Title: Sensitisation training on "Modern Storage Technologies - Bags Storage Management" to farmers and cooperative groups in Lofa County Objective: Minimise the loses or grains during processing and increase in production of grains
	Malawi	
10	 Mrs. Kokota Jane Crop Protection Officer, Kasungu District Agriculture Officer, Ministry of Agriculture, Irrigation & Fisheries, Kasungu, Malawi, Mobile: +256-888869607, Email: janekokota@yahoo.com 	Title: Post-harvest handling process in maize grain - sensitising plastic bags storage technologies Objective: Minimising grain loss in both quality and quantity resulting to more income per farm household and food security to the whole country.
11	Mr. Phiri Matiya Haward Crops Development Officer, Ministry of Agriculture, Irrigation & Fisheries, SA DAO, P.O. Box. 491, Salima, Malawi, Mobile: +265-995580643, Email: hmatiya@yahoo.com mphatso08@gmail.com	Title: Post-harvest handling process in maize and sorghum grains - sensitising on bulk storage technologies Objective: Knowledge gap in proper handling and storage of maize and sorghum by farmers and field staff
12	 Mrs. Edna Nyirongo Agriculture Extension Development Officer, Lilongwe East District Agriculture Office, P.Bag - 36, Ministry of Agriculture, Lilongwe, Malawi, Mobile: +265993633580, +265999357527, Email: nyirongoedna@gmail.com, chiukepomk@gmail.com 	Title: Post-harvest handling process of food grains Objective: Popularise the modern storage technologies in food grains among the farmers
	Mozambique	
13	 Mr. Chavela Francisco Extension Supervisor, District of Matola Economic Activities - Ministry of Agriculture, Rus dos eculiptos, Tsalala -Matola, q- 165, Parcela - 709, Mozambique, Tel: +258824887800, +2588482830686, Email: franciscochavela@gmail.com 	Title: Modern storage technologies in Cashewnut storageObjective: Modern storage technologies in Cashewnut storage and value addition
	Myanmar	
14	 Ms. Khaing Mar Thinn Deputy Staff Officer, Plant Protection Division, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Mgway Region, Myanmar, Mobile:+95 632023157, Email:kmth86@gmail.com 	Title: Training of modern storage technologies for rice Objective: Training to farmers and stakeholders about post-harvest loses and modern storage technologies for rice

SI.No.	Name and Address	BAWP Title
15.	Mr. Soe Kyaw Oo Assistant Staff Officer, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Sagaing Region, Myanmar, Mobile: +9567410007, Email: soekyawooyau@gmail.com	Title: Extension to the farmers to use fumigation techniques
16.	Mr. Aung Phyo Paing Assistant Staff Officer, Plant Protection Division, Department of Agriculture, Ministry of Agricultural, Livestock and Irrigation, Ayeyarwadi Region, Myanmar Mobile: 95-970309662, Email:soekyawooyau@gmail.com dgdoa.mm@gmail.com	Title: Extension to the farmers to use fumigation techniques
	Uganda	
17.	Mr. Abaasa Innocent Stephen Principal, Ssese Farm Institute, Ministry Education Science Technology and Sports, P.O.Box. 5, Kalangala, Uganda, Mobile: +256-392964762, Email: ssesefarminstitute@gmail.com, abaasainnocent@gmail.com	Title: Yogurt processing Objective: Establishment of yogurt processing unit at Ssese Agricultural Institute
18.	Mr. Ssebukyu Edward Kubanja Assistant Commissioner Private Schools and Institution, Ministry of Education and Sports, P.O.Box 7063, Kampala, Uganda, Mobile: +256-772449673, Email:essebukyu@yahoo.com	Title: Parent/Guardian led feeding in primary schools in UgandaObjective: To sensitise the schools and community regarding mid day meal
19.	Mr. Semwanga Richard Agriculture Officer, Office of Agriculture Officer, Lwabiyata Sub County,Production Department, Nakasongola District Local Government, P.O.Box.1, Nakasongola, Uganda Tel: +256 783135684 Email: serich2@yahoo.com,	Title:Adoptionoffumigationtechnologies.Objective:Stakeholdersempowermentonfumigationtechnologiesofmaizegrainforincreasedshelflifeandqualitymaintenance
20.	Mr. Bugembe Richard Program Coordinator, CARITAS, P.O.Box.14125, Mengo, Kampala, Uganda Tel: +265 772657206, +256772358150 Email: bugembe.richard@gmail.com	Title: Bulking and marketing of 40 MT of processed coffee (FAQ) from 6 farmers primary cooperative societies in Mpigi district in Uganda
21.	Ms. Nyakaisiki Juliet Agriculture Officer, Kyenjojo District Local Government, Production and Marketing Department, Ministry of Education and Sports, P.O.Box. 1002, Kyenjojo, Uganda Tel: +256776841007, +256772844610, Email: nyakasjulie88@gmail.com,	 Title: Collective bulking and marketing of maize grain through farmer groups and rural producer organisations Objective: Minimise the Post-harvest loses in Main grain in the stores due to storage insects and pests

29. Value Chain and Innovations in Agriculture Marketing

- > Title of the Training Program: Value Chain and Innovations in Agriculture Marketing
- Date : 1 15 October, 2018
- > Venue: CCS National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan, India
- Program Director / Coordinator



Program Director	Dr. Hema Yadav Director National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan Mob: + 919829210019, Email: <u>hyadav.niam@gov.in</u>
Program Coordinator	Mr. Sathyendra Kumar Assistant Professor National Institute of Agricultural Marketing (NIAM), Jaipur, Rajasthan

Participants profile: 30 executives from 7 countries (26 male&4 female)

Country	No. of Executives
Myanmar	10
Mongolia	2
Nepal	6
Kenya	5
Malawi	4
Mozambique	1
Uganda	2

Training objectives

- To build capacity of officers, executives and managers in the area of emerging market trends, opportunities in value chain and how markets can be effective to maximize value realization.
- To bring understanding of path ways of linking farmers to alternative markets like contract farming, e-markets, direct marketing etc.
- To bring awareness about the opportunities and challenges in food safety and requirements for getting linked with profitable value chains.
- To inform about online marketing and application of IT Tools for marketing so as to design projects and applications for the farmers to enable them to avail these opportunities.
- To bring understanding of market information and marketing decision.
- Provide exposure to best marketing practices in ensuring food safety, managing supply chains and value addition.
 - To bring information about ways to have access finance, credit and risk management in marketing.

Training Curriculum

*

- 1. Value chain approach for economic empowerment.
- 2. Market innovation and market driven production the new paradigms
- 3. The need for business plan preparation in commercial agriculture.
- 4. Integrated farming for better value proposition
- 5. Emerging trends in Horticulture value chains
- 6. Emerging Trends in Marketing of Super Food
- 7. Business linkages through FPO
- 8. Agri logistics for value chain integration
- 9. Value chain Financing
- 10. Agri Incubation
- 11. Agri-preneurship and Innovations in marketing
- 12. Policy Innovations

Training Outcome

The training outcomes were promotion of Agripreneurship and formation of FPOs among farmers in Nepal, Uganda, Kenya.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 13.86 whereas the average score of post-training was 15.15 and thus, it was found that the level of knowledge of executives was increased by 9.31 percent post the training programme.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.46 on a 10 point continuum indicating the overall impression on the programme was **GOOD**.

> Field Visits

The trainees were exposed to field visits of practical importance. They visited the Muhana Agriculture Produce Market Committee (APMC), Barefoot Collage and the Rajasthan Olive Cultivation Limited.

Back At Work Plans

SI.No	Name & Address	BAWP Title
	Myanmar	
1.	Mr. Htun Htun Board of Director, Shwe Taung Thu Co., Limited, No.95, Sein Pann Ni St, Ywama Quarters, Ywama Township, Shan State, Myanmar Tel: 959400031998, 959448036906 Email: htoonhtoon.tt@gmail.com,	Title: Farmers producer organization for coffee
2.	Mr. Win Phyo Thu Procurement Director SNACKS Mandalay Co. Ltd., No.355, 81 Street, Between 30 Street and 29 Street, Mandalay, Myanmar Tel: 09400162288, 09400162299, 095406776 Email: phyo2win@snacksmandale.com, inquiry@snacksmandalay.com,	Title: Promote farmers organization to get quality produces
3.	Mr. Wan Sai Sia Chief Executive Officer Sein Lan Wai Co. Ltd., Taunggyi, Myanmar Tel: 959777101795, 959257262622, Email: saisiawan@gmail.com	Title: Integrated farming and linking producers to market
4.	Mr. Zaw Hein Htet Senior Executive SME Department, Suite No.12-09/10 (Level-12), Junction City Tower, Corner of Bogyoke Aung San Road, 27 th Street, Pabedan Township,Yangon, Myanmar Tel: 9775264289, 95192003345, Email: heinhtetzaw@abank.com.mm,	Title: Models of linkage between banks and self-help groups
5.	Mr. Aye Win Zaw Chief Director Officer and Founder, Myanmar Soy Public Co. Ltd, Nay Pyi Taw, Myanmar Telephone/Mobile: +95777101795, Email: winzawaye29@gmail.com, ladychit844@gmail.com	Title: Soya-bean diversification

SI.No	Name & Address	BAWP Title
6.	Mr. Kyaw Linn Oo Field Officer SPSH & Associates Co. Ltd., 6-H, Shwe Sabae Housing, Bayintnaung Road, Kamayut Tsp, Yangon, Myanmar Tel: 950943183706, Email: kyawlinnoo1418@gmail.com,	Title: Ginger farmers group organization in Myanmar
7.	Mr. Satt Paing Owner & Founder Ye Oo Oil Mill, No.E-6-C), Industrial Zone-I, Mandalay, Myanmar Tel: 09-5044280 Email: drpaingsatt@gmail.com,	Title: Increasing farmers' income from backyard farming
8.	Ms. Phyu Hlaing Hsu Assistant Researcher Livestock Breeding and Veterinary Department, Office Building No.36, Ministry of Agriculture, Livestock and Irrigation, Nay Pyi Taw, Myanmar Tel: 095 673408198, 095 9420712877 Email: ir.lbvd@gmail.com	Title: Increasing farmers' income from backyard farming
9.	Mr. Zaw Thant Assistant Researcher Livestock Breeding and Veterinary Department, Office Building No.36, Ministry of Agriculture, Livestock and Irrigation, Nay Pyi Taw, Myanmar Tel: 095 673408198, +95 9978418893 Email: ir.lbvd@gmail.com, thanttzaw125@gmail.com,	Title: Veterinary services on doubling farmers' income (Paddy fish integrated farming system)
10.	Mr. Hein Aung Zaw Deputy Veterinary Officer, Office Building No.36, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation, Nay Pyi Taw, Myanmar Tel: 095673408198, +95 9457465659 Fax: +95 7135149, Email: ir.lbvd@gmail.com, aungzaw9344@gmail.com	Title: Doubling farmers' income by linking to multiple markets
	Mongolia	
11.	Mr. Byanmabsuren Munkhtuvshin Officer of International Cooperation Division, International Cooperation Division State Administration and Management Department, Ministry of Food, Agriculture and Light Industry of Mongolia, Government Building 9/A, Peace Avenue 16 A, Ulaanbaatar-19981, Mongolia Tel: +97651261908, +97699079319 Email: munkhtuvshin@mofa.gov.mn, munkhtuvshin@yahoo.com,	Title: Value chain integration of dairy product

SI.No	Name & Address	BAWP Title
12.	Mr. Ivirai Khanymkhan Khurmaan Director National Agricultural Extension Centre, Administration and Cooperation Division, #403, Building 60/1, Chilgiltei District, Ulaanbaatar, Mongolia Tel: 097670118087, Fax: 00976-7011-8087 Email: ikhanimkhan@yahoo.com,	 Title: Increasing of livestock/dairy/farmers income through improving market access of livestock/dairy/products
	Nepal	
13.	Mr. K.C. Bishal Chief Executive Officer Buddha Grameen Multipurpose Cooperative Limited, Latikoili, Surkhet, Karnali Province, Nepal Tel: +97783534025, Fax: +977 83 524025, Mob: +977 9858051323, +977 9858051355 (Supervisor) Email: bishalk48@gmail.com, bishal@bgmcl. com, pasang@bgmcl.com	Title: Distribution and pilot product of chia seed in Karuali province, Nepal
14.	Mr. Pant Abiral Senior Business Opportunities Manager Feed the Future Nepal Knowledge-based Integrated Sustainable Agriculture in Nepal (KISAN) II Project Department- Business and Market Systems, Madan Marg-13, Nepalgunj, Banke, Nepal Telephone/ +97781522439/524725 / Mobile: +977 9808266454 Email: abiral.pant@winrock.org, Kanchan. Gurung@winrock.org	Title: Capacity building of agri- entrepreneurs on value Chain development
15.	Mr. Gupta Ganesh Kumar Managing Director Marutinandan Agro Industries Pvt. Ltd. Banganga-11, Dauwapar, Kapilvastu, Nepal Telephone/Mobile: +9779857021634/ 9857051220 Email: agrahariganesh018@gmail.com	Title: Group formation for production of medium fine rice, packaging and distributing quality of paraboiling rice
16.	Mr. Chand Ganesh Bahadur Managing Director Udayadev Multipurpose Cooperative Ltd., Bhimdatt Nagarpalika -18, Mahendranagar, Kanchanpur, Nepal Mob: 9858721395,+97799524194 Email: ganeshchand98@gmail.com	Title: Strengthening farmers through training and buyer-seller meet
17.	Mr. Basanta Baral General Manager Development Voyage Pvt. Ltd., House No. 123, Laxmi Tole, Pokham - 15, Kaski, Nepal Tele/Mobile: 97761430853/977 9856033853 , Email :poudelparu279@gmail.com	Title: ICT integration piloting in cooperatives from Kaski and Palpa district

SI.No	Name & Address		BAWP Title
18.	Mr. Pradip Paudel Program Development Manager Shreenagar Agricenters 1357, Thirbam Sadak, Tangal, Kathmandu, Nepal-3672 Mob: +977-9741007853, 9841263036 Email: pradip2000@gmail.com , adhkaru@gmail.com		Title: Integration in maize value chain from seed to feed
	Кепуа		
19.	Mr. Ndegwa Benjamin Chege Deputy Director of Livestock Production, Ministry of Agriculture, Livestock, Fisheries and Irrigation, P.O.Box30028-00100, Nairobi, Kenya Tel: +254 722893782, +254722891899 Email: ndegwasamuel2013@gmail.com	1	Title: Improving raw banana prices in Chuka, Thoraka Nithi community by strengthening market structure and market access
20.	Mr. Kungu James Kuria Program Officer Eastern Africa Grain Council, 218-00606, Nairobi, Kenya Tel: +254 729417408, Email: jkuria@eagc.org, kuriahjames@yahoo.com,	No.	Title: Reviving maize milling at grains produce and marketing cooperative
21.	Mr. Hagai Ongecha Oyaro Community Field Liaison Officer Breinscope Consultant Limited 114-40601, Bondo Kenya Tel: +254 722343985 Email: hagaioyaro@gmail.com	3	Title: Training youth on agri- entrepreneurship start-up
22.	Mr. Albert Maina Mwangi Principal Fisheries Officer State Department for Fisheries 17103-00100, Nairobi, Kenya Tel: +254 722658470, 727203090 Email: albmwangi@yahoo.com,		Title: To organize fish markets and traders in Narobi country into effective and efficient fish marketing organization.
23.	Ms. Ouma Jedidah Atieno Director (Operations) Jwelet Enterprises, P.O.Box.171-40301, Ministry of Agriculture, Livestock, Fisheries and Irrigation, Kendu Bay, Kenya Tel: +254 720352997, 722 958 594 Email: jnyongayo@yahoo.com,		Title: Linking markets to farmers
	Malawi		
24.	Ms. Mkhupela Mercy Enterprise Development Officer Farmers Forum for Trade and Social Justice Amina House, Off Murray Chiramula Road, P.Bag.144, Lilongwe-3, Malawi Tel: +265 0999897788, Email: mercymkhupela@gmail.com,		Title : Agri skills development (Training for young people in Malawi)

il.No	Name & Address	BAWP Title
25.	Mr. Zidna Excello Nemone Agriculture Radio Programmes Officer Agricultural Communication Branch Department of Agriculture Extension Service, P.O.Box 30145, Lilongwe, Malawi Tel: +265 999226261, +265 888393982 Email: ezidana@gmail.com,	Title: A radio campaign : (ULIMI WALERO)
26.	Mr. Uka Patrick Mphatso Director of Business Development Commercial Agriculture Support Service (CASS) Box. 11301, Kanengo, Lilongwe, Malawi Tel: +265 999953595, Email: patrickuka@gmail.com,	Title: Nurturing social enterprise models in Agri-business start up farmer organization
27.	Mr. Mackenzie Tikondane Extension Worker World Vision International, Dowa Offices, P.Bag.10, Mponela, Malawi Tel: +265 998724212/+265 881774862 Email: pm24306@gmail.comtikondane_ mackenzie@wvi.org,	Title: Train farmers (women) on value chain and innovations in groundnuts marketing
	Mozambique	
28.	Mr. Muangula Narciso Gabriel Guastavo Planning of Agricultural activities, Maputo City of Agriculture and Food Security Maputo, Mozambique Tel: +258 823841362, +258 840355558, 21314859, 823106859, Email: lucialuz_2007@yahoo.com.br,	Title: Agricultural marketing chain for horticultural (vegetables) crops
	Uganda	
29.	Ms. Nalweyiso Amina Agricultural Engineer, Kalangala District Local Government District Production and Marketing, P.O.Box.2, Kalangala, Uganda Tel: +256 781630863, +256 704531969 Email: aminasemakula@gmail.com, Supervisor: +256 772319018, muwangakugumikiriza@yahoo.com,	Title: Agro machinery database development
30.	Mr. Owani Simon Olok Lead Aquaculture Expert Owan Mwan Aquaculture Limited (OMAL) Plot No.71, Lewza Sabbugabo, Makindy Town Council, P.O.Box.27573, Kampala, Uganda Tel: +256 772697629, +256 392902996 Email: simoolok@yahoo.com,	Title: Formation of FPOs – smallholder fish farmers.

30. Entrepreneurship Development among Rural Women

- > **Title of the Training Program**: Entrepreneurship Development among Rural Women
- Date: 06-20 November, 2018
- Venue: Kudumbashree Mission, Thiruvananthapuram, Kerala, India
- Program Director

Dr. Rahul Krishnan Thematic Anchor-Farm Livelihood Kudumbasree, Trivandrum, Kerala, Mob: 8281655705 Email: <u>rahulvet231@yahoo.com, kshreeftf@gmail.com</u>,

> Participants profile: 26 executives from 8 countries (6 male & 20 female)

Country	No. of Executives
Cambodia	5
Kenya	2
Liberia	2
Malawi	2
Mongolia	1
Myanmar	7
Nepal	5
Uganda	2

Training objectives

- To build capacity of officers, executives and managers in the area of emerging market trends, opportunities in value chain and how markets can be effective to maximize value realization.
- To bring understanding of path ways of linking farmers to alternative markets like contract farming, e-markets, direct marketing etc.
- To bring awareness about the opportunities and challenges in food safety and requirements for getting linked with profitable value chains.
- To inform about online marketing and application of IT Tools for marketing so as to design projects and applications for the farmers to enable them to avail these opportunities.
- To bring understanding of market information and marketing decision.
- Provide exposure to best marketing practices in ensuring food safety, managing supply chains and value addition.
- To bring information about ways to have access finance, credit and risk management in marketing.

> Training Curriculum

- 1. Scale and scope of entrepreneurship among rural women
- 2. Significance of collective effort for bargaining, value addition & marketing
- 3. Opportunity and challenges in developing the collectives and marketing
- 4. Introduction of best practices and its adoption barriers
- 5. Agriculture value chain and best technological practices available in India
- 6. Live interaction with Kudumbashree entrepreneurs for tracking the real field work
- 7. Support environment required for entre/agri-preneurs
- 8. Plan for tracking progress
- > Training Outcome
 - The participants were popularizing the Indian innovations on linking the small dairy farmers to market in Kenya and Uganda.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 15.5 whereas the average score of post-training was 17.91 and thus, it was found that the level of knowledge of executives was increased by 19 percent post the training programme.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.96 on a 10 point continuum indicating the overall impression on the programme was **VERY GOOD**.



SI.No	Name & Address	BAWP Title
	Cambodia	
1.	Ms. SotheavyMeas Deputy Director Department of Planning and Statistics, #200, Preah Norodom Blvd, TonieBassac, Khan Chamkamon, Phnom Pehn, Cambodia Tel: +855 12975519, Fax: +855 23720527 Email: sotheavymeas@gmail.com, sreyvuthy. maff@gmail.com,	Title:Improvement of local crop and vegetables for women
2.	Ms. Sokha Lo Deputy Director Department of International Cooperation #200, Preah Norodom Blvd, SangkatTonleBasak, Khan Chamkarmon, Phnom Pehn, Cambodia Tel:+855 92549697, Fax: + 85523217322 Email: sokhalo75@yahoo.com.au, sreyvuthy. maff@gmail.com,	Title: Sensitisation programs in agriculture development
3.	Ms. Danina Nareth Chief Administration and Human Resource Official Department of Personnel and Human Resource Development, #200, Preah Norodom Blvd, TonleBassac, KhenChamkamon, Phnom Penh, Cambodia Tel: +85512999228, Fax: +855 23217320 Email: narethdanina@yahoo.com, sreyvuthy. maff@gmail.com,	Title: Sensitization programs to fisheries and agriculture farmers
4.	Ms. Phearun Soun Technical Official, Department of Planning and Statistics #200, Preah Norodom Blvd, TonleBassac, KhenChamkamon, Phnom Penh, Cambodia Tel: +855 967094707, Fax: +855 23720527 Email: sphearun16@gmail.com,	
5.	Mr. Yuthin Heng Technical Officer Department of Planning and Statistics, #200, Preah Norodom Blvd, TonleBassac, Khan Chamkamon, Phnom Pehn, Cambodia Tel: +8556789336, Fax: +855 23720527 Email: hengyuthin@yahoo.com,	Title: Sensitisation programs - price of farmer product decreasing during harvesting season
	Kenya	
6.	Mrs. Mwangi Ruth Njoki Senior Assistant Director of Agriculture, State Department of Crops Development, Ministry of Agriculture, Livestock and Fisheries, P.O.Box. 30028, 00100, Nairobi, Kenya Tel: +254 2718870, Mob: +254 722337107, Email: mwangir2012@gmail.com,	Title: Sensitization programs for rural women

SI.No	Name & Address		BAWP Title
7.	Ms. Ngunjiri Caroline Kabura Entrepreneur / Farmer Mere Horticultural Growers, P.O.Box.275 (10102), Kiganjo, Nyeri, Kenya Tel: +256 0717284198, Email: carolinekaburann@yahoo.com,		Title: Sensitisation of rural women's to establish micro Enterprises
	Liberia		
8.	Ms. Deborah Junius Williams Training Coordinator Ministry of Agriculture, P.O.Box.10-90100, 1000, Monrovia, Liberia Tel: +231886553197, +231770469847 Email: dbrawilliams@gmail.com,		Title: Introduction of joint entrepreneurship
9.	Ms. Woods Keturah K.T Gender Officer Planning Department,Ministry of Agriculture, Libsuco Compound, Gardnersville, Somalia Drive, Liberia Tel: +231770032136 Email: keturahwoods@yahoo.com,		Title: Sensitisation skill training programs to women farmers
	Malawi		
10.	Ms. Malizani Phadress Development Worker NICO Life Company, P.O.Box.304021, Lilongwe, Malawi Tel: +265 881222248, 997640088 Email: lphadress@gmail.com,	(018) (018)	Title: Women empowerment training's
11.	Mr. Kutengule Lawrence Agricultural Extension Development Officer, Ministry of Agriculture Irrigation and Water Development, Lilongwe West DAO, P.Bag.36, Lilongwe, Malawi Tel: +265882668489, +265 999800645 Email: Ikutengule@gmail.com, bonkautale22@ gmail.com		Title: Improving market access of soyabean amongst rural women
	Mongolia		
12.	Ms. Otgonbaatar Badam khand Officer, Ministry of Food Agriculture and Light Industry/ SME and Cooperative Policy Implementation and Coordination, Department, Government Building, 9, Enkhtaivan Avenue, Bayanzurkh District, Ulaanbaatar, Mongolia Tel: +97651262913, 97699088109 Fax: 976-51-263237 Email: badmaa5@yahoo.com, mofa@mofa.gov.mn		Title: To create or identify brand product from each province



Sl.No	Name & Address	BAWP Title
	Myanmar	
13.	Ms. Hlyan Zin Htoo Field Officer IFDC Myanmar, Fertilizer Sector Improvement Project (FSI+) No.22, Baw Ga Street, 9 Mile/Ward 5, Mayangone Township, Yangon, Myanmar Tel: +959448934763, +959797858434, Fax: 959 01662496, Email: zinhtoo.agri@gmail.com,	Title : To increase income and yield, develop capacity building the relationships between women empowerment from agricultural sector
14.	Ms. Thandar Win Maung Monitoring and Evaluation Specialist International Fertilizer Development Centre (IFDC), No.21 B, Bawga Street, Mayangone Township, 9 Mile,Yangon, Myanmar Tel: 0959 5943045748, Fax: 095901662496 Email: thandarwinmaungmyanmar@gmail.com,	Title: To increase income and livelihood, to strengthen collective action and to improve self-confident, to be independent housewives business women group
15.	Ms. Aung Su Su Managing Director, YwanganAmayan Co. Ltd., (64), Ba Htoo Road, Zay Dan Quarter, Ywangan, South Shan State, Myanmar Tel: 959428369062, Email: susuaungynn@gmail.com,	Title: Knowledge sharing, awareness, farmer group formation
16.	Ms. Aung Win Lei Lei Board of Director ShweTaung Thu Co. Ltd., No.95, Sein Pann Ni Street, Ywangan Quarter, Ywangan Southern Shah State, Myanmar Tel: 959450475277, 959781848531 Email:winleileiaung.yscg@gmail.com	Title: Coffee farmers producer groups
17.	Ms. Cho Yin Yin Assistant Director, Department of Rural Development, Monywa Township, SI Thu Street, Nandawon Ward, Monywa Town, Sagaing Region, Myanmar Tel: +957126216, +95261242439, Fax: +95 71 26203 Email: maykyinuuhtike@gmail.com,	Title: To increase income and livelihood of rural women
18.	Ms. Khin El El Assistant Director, Department of Rural Development, Loikaw Township, Nadi Street, Nan Bowan Ward, Kayah State, Myanmar Mob: +959973400855, Telefax: +95832223127 Email: drdloikaw@gmail.com,	Title: Establishment of micro enterprises by rural women
19.	Ms. Htwe Ngu War Assistant Director, Department of Rural Development, Taungoo Township, No.1 WARD, Beside Yangon- Mandalay Highway Road, Taungoo Township, Bago Region, Myanmar Tel: +959258587202, Fax: +95 5426172 Email: nguwar.h@gmail.com,	Title: Development of rural production business.

SI.No	Name & Address		BAWP Title
	Nepal		
20.	Ms. Poudel Bhattarai Bindu Project Coordinator Federation of Women Entrepreneurs Association, of Nepal (FWEAN) MID Baneshwor, Kathmandu, Nepal Tel: 977014486775, 977-014495512 Email: bindupoudel.fwean@gmail.com, fwean. info@gmail.com,		Title: To produce vermicompost waste, management product and focus on organic farming for the Socio-economic empowerment of rural women
21.	Mr. Paudel Prakash Chief Executive Officer Palung Multipurpose Cooperative Society Limited, Thaha Municipality, 04, Makwanpur, Nepal Tel: 9845064047, 057400005, 9855030006 Email: pacospalung@gmail.com, info@pacos.com.np,		Title: Enhancing rural entrepreneurship through development of Micro Enterprise Consultants
22.	Mr. ThapaPrakhyat Jung Senior Business Opportunities Manager Feed The Future Nepal Knowledge Based Integrated, Sustainable Agriculture in Nepal (KISAN)-II Project, Kalika Marg, SANEPA-2, Lalitpur, Nepal, Tel: 9779851176026, 977014374159, Email: prakhyat.thapa@winrock	0	Title: Enhancing rural entrepreneurship through development of Micro Enterprise Consultants
23.	Mr. Amrit Prasad Lal Karn Junior Technician, Ministry of Land Management, Agriculture and Cooperatives, State No. 2, Government of Nepal, Janakpurdham, Dhanusha, Province No.2, Nepal Tel: +9779844026153, Fax: 041522350 Email: amritlalkarna40@gmail.com,	C B B B B B B B B B B B B B B B B B B B	Title: Sensitization programs to women farmers
24.	Ms. Nhemaphuki Sunita Chief Executive Officer R & D Innovative Solution Pvt. Ltd., 141 Everest Marg, New Baneshwor, Kathmandu, Nepal, Tel: +97714785756, 4785842,WhatsApp: +977-9851140610 Email: sunita.nhemaphuki@gmail.com		Title : Formation of female farmers group for development of entire agriculture value chain
	Uganda		
25.	Mr. Kyokuhaire Thomas Rukyalekere Programme Manager Action on Disability and Development (ADD) International Plot 32, Kanjokya Street, Kampala, Uganda Tel: +256772463426, +256200907582 (o), Email: info@add-uganda.org, tkyokuhaire@gmail.com,		Title: Orientation training programs to farmers and local officials
26.	Ms. Kukundakwe Mildred Agriculture Officer, Rukungiri District Local Government, P.O.Box.1, Rukungiri, Uganda Tel: +256772687937 Email: kukundakwemildred@yahoo.com,		Title: Forming a self help group for banana farmers and introducing the concept

31. Plant Health Management, Bio-Security and Quarantine

- > Title: Plant Health Management, Bio-security and Quarantine
- > Date: 27 November 11 December, 2018
- Venue: National Institute of Plant Health Management (NIPHM), Hyderabad, Telangana
- Program Director / Coordinator



Program Director	Dr. Cherukuri Sreenivasa Rao (Director-Pesticide Management) Contact: 040-24010106, (Fax): 040-24015346 , 040-24015932 Email: <u>dirpmniphm-ap@nic.in ;</u> Email: <u>dirphmniphm-ap@nic.in</u>
Program Coordinator	Dr. J. Alice R. P. Sujeetha (Director-Plant Bio Security) Contact: 040-24018788, (Fax): 040-24015346, Email: <u>dirpqpniphm-ap@nic.in</u>

Participants profile: 20 executives from 10 countries (13 male & 7 female)

Country	No. of Executives
Afghanistan	5
Kenya	1
Liberia	1
Malawi	2
Mongolia	3
Mozambique	1
Myanmar	3
Sri Lanka	2
Tanzania	1
Uganda	1

Training objectives

- To impart knowledge on international regulatory framework and SPS agreement
- To impart skills on pest risk analysis and phytosanitary treatments
- To impart knowledge on food safety regulations
- To impart skills on pesticide management, pesticide residue analysis and risk mitigations.
- To impart knowledge and skills on integrated plant health management concepts and practices based on agro ecosystem analysis and ecological engineering.

Training Curriculum

- 1. International and National regulatory frame work
- 2. SPS Agreement vis-à-vis Plant and Food Safety
- 3. Impact of introduced pests and potential looming plant pest threats of world
- 4. Pest Risk Analysis and Pest Surveillance Protocols
- 5. Phytosanitary Treatments & Importance of stored grain pests in International trade
- 6. Food Safety Concepts & Regulations
- 7. Quality control of Pesticides
- 8. Pesticide Residues in foods vis-à-vis International Food Trade
- 9. Residue analysis of Raw Agricultural Commodities and challenges in residue monitoring
- 10. Risk analysis and fixation of Maximum Residue Limits
- 11. Integrated Plant Health Management Technologies for Food and Plant Safety
- 12. Agro Ecosystem Analysis and Ecological Engineering concepts for sustainable food production

Training Outcome

The training outcome were seen in the effective control of fall army worm using IPM strategies in partner countries.

> Change in Knowledge of the participants

A pre- test was organized with the objective to check the existing knowledge of the participants so that it can help in establishing a benchmark for conducting technical sessions. Out of the maximum score of 25, the average score of the group in pre-test was 10.8 while in the post-test the group scored average of 15.45. The increase in the knowledge level of the participants was 43.06 percent.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 9.63 on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visits

The executives were exposed to various field and Institutional visits viz., National Institute of Agricultural Extension Management (MANAGE), International Crops Research Institute for the Semi-arid Tropics (ICRISAT), Rural Technology Park (RTP) of National Institute of Rural Development & Panchayati Raj (NIRD-PR), Indian Institute of Oilseeds Research (IIOR), National Bureau for Plant Genetic Resources (NBPGR), Kisan Call Centre (Farmers Call Centre) of PJTS Agricultural University and the Pomegranate Packing Facility at M/s. Sam Agritech.

Sl.No	Name & Address	BAWP Title & Objective
	Afghanistan	
1.	Mr. Fazil Mohammad Fahim Central Zone Pest Manager, Plant Protection and Quarantine Department, TaheMaskan, Badambagh, Kabul, Afghanistan Tel: 0093-700259618, 0093708971121 Email: fahim_fazil@yahoo.com,	Title: Manufacturing of vermi compost and vermi wash and organizing farmers trainings Objective: To create awareness on use of vermi compost
2.	Mr. Ghorbandi Habib Rahman Mycology Specialist Plant Protection and Quarantine Department, Ministry of Agriculture, Irrigation and Livestock (MAIL), TaheMaskan, Badambagh, Kabul, Afghanistan Tel: 0093700259618, 0777021620, Email: ghorbandi.habib@gmail.com,	Title: Using of new technology to detect the pesticides in the plant system Objective: To diagnose pesticide residues in plants and reduce the use of pesticides
3.	Mr. Mashwani Sadiqullah Senior Irrigated Pest Management Specialist, National Horticulture and Livestock Project, Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mina, Kat-e-Sakhi, Kabul, Afghanistan, Tel: 0093787866441, Email: sadiquaf@gmail.com,	Title: Bio Control of Codling Moth CydiaPomonella Objective: Demonstrate and popularize the management practices of Codling Moth among the farmers
4.	Mr. Hamidi Shah Mahmood National Plant Quarantine Specialist, Agrochemicals and Plant Quarantine Networks, Afghanistan Agricultural Inputs Project (AAIP), Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mina, District#3, University Road, Kabul, Afghanistan Tel: 0093 794731300, 0093 731700101, Email: shahhamidi@yahoo.com, Mahmood. hamidi@mail.gov.af,	 Title: Awareness of quarantine technical staff on phytosanitary treatments Objectives: To aware the quarantine staff on the treatments. To produce safe agricultural produces for export porpuse. To avoid introduction of exotic pest. To detect and diagnose quarantine pest.

SI.No	Name & Address	BAWP Title & Objective
5.	Mr. Hakimilhsanullah Regional Integrated Pest Management National Horticulture and Livestock Project (NHLP), Animal Diagnosis Lab, Rokhan Mena Torkham, Jalalabad Main Road, Nangarhar, Afghanistan Tel: 0093783137897, 0093788864609 Email: ihhaseen@gmail.com,	Title: Aphids: IPM based management of aphids on peach oracheds at Jalalabad Afghanistan Objective: To reduce the usage of pesticides for the management of pest in the targeted area of Afghanistan.
	Kenya	
6.	Ms. KaaruJosphine Nyokabi Assistant Director, Diocese of Embu Caritas, P.O.Box.884-60100, Embu, Kenya Tel: +254 722458511, Email: josphinenyokabi@yahoo.com,	Title: Fall army worm surveillance and management in Embu County- Kenya Objective: Surveillance and management of fall army worm
	Liberia	
7.	Mr. Fahnbulleh Augustus B.G Director Plant and Animal Quarantine, Technical Service, Ministry of Agriculture, P.O.Box. 10-90100, 1000, Monrovia, Liberia Tel: +231 886439982, +231 777439982 Email: augustusfahnbulleh@ymail.com,	Title: Public awareness on plant and animal quarantine service measures in relationship with the national laws and international conventions Objective: To improve the systems through partnership and government policy supports.
	Malawi	
8.	Mr. Ngamba Moses Fwilachalo Agriculture Extension Development Officer Department of Agriculture Extension Services Ministry of Agriculture, Irrigation and Water Development Chitipa District Agriculture Office, P.O.Box.12, Chitipa, Lilongwe-3, Malawi Tel: +265 882464848, Email: rumzykayz@gmail. com, marumbonyirongo@yahoo.com,	Title: Survey and surveillance for fall army worm and management Objective: To reduce the infestation of FAW to the targeted group
9.	Ms. Kaitano Cathberity Rose Agriculture Extension Development Officer Thyolo District Agriculture Office, P.O.Box-22, Ministry of Agriculture, Irrigation and Water Development, Thyolo, Malawi Tel: +265 999684282 Email: cathynaphiyo@gmail.com,	Title: Monitoring and surveillance for Fall Army Warm (FAW) and management Objective: To monitor, surveillance and management for FAW
	Myanmar	
10.	Ms. Nay Nay Oo Research Assistant Plant Pathology Research Station, Department of Agricultural Research Yezin, Naypyitaw, Myanmar Tel: +95 9797711897, 95 87416531 Fax: +95 67416635 Email: naynayoo456@gmail.com, dgdar.moai@gmail.com, Supervisor: +9567416537, nnyin86@gmail.om	Title: Use of biofertilizer mycorrhiza on pulses in Nay Pyi Taw Objective: To reduce the usage of chemical pesticides

SI.No	Name & Address		BAWP Title & Objective
11.	Ms. Chan Yan Win Junior Research Assistant Rice Research Station, Department of Agricultural Research, Yezin, Naypyitaw, Myanmar Tel: +95 448540467, Fax: +9567416535, Email: chanchan675@gmail.com, dgdar.moai@gmail.com		Title: Storage pests in rice, rice research section, Yezin , Nat Pyi Taw Objective: To identify different storage pests and their incidence
12.	Mr. Thein Zaw Oo Senior Research Assistant Rice Research Station, Department of Agricultural Research, Yezin, Naypyitaw, Myanmar Tel: +95 9403711528, +95 67416531 Fax: +9567416535 Email: theinzawoo.dar@gmail.com,		Title: Survey and surveillance for Rhizoctonia Solani
	Mongolia		
13.	Ms. Lkhagvaa Nyamsukh Quality Manager The State Quality Control Laboratory for Veterinary Drugs, 12 th Khoroo, Khan-UulDistrict, The Ministry of Food, Agriculture and Light Industry, Ulaanbaatar, Mongolia, Tel: +976-9601-2552 Email: Inyamsukh@yahoo.com, meesbul73@gmail.com,		Title: Making of traps of various designs sanitation, ultra sonic device
14.	Mr. Munkhmargad Ganbold Crop Production M&E Officer, Department of Monitoring and Evaluation and Internal Audit, The Ministry of Food, Agriculture and Light Industry, Government Building 9, Peace Avenue 16-A, Bayanzurkh District, Ulaanbaatar, Mongolia Tel: +976 51263237 Email: g.margad@yahoo.com,	(- +) (- +)	Title: Usage of azotobacter in wheat crop
15.	Mr. Tumenjargal Otgonjargal Senior Officer of the Financing Division Department of Monitoring and Evaluation and Internal Audit, The Ministry of Food, Agriculture and Light Industry, Government Building 9, Peace Avenue 16-A, Bayanzurkh District, Ulaanbaatar, Mongolia Tel: +976 99091798, +976 51 261754, Email: otgonjargal@mofa.gov.mn		Title: Identification of pest species and their distribution in a crop field Objective: Identification of pest species and their distribution in a crop field
	Mozambique		
16.	Mr. Enoque Paulo Simone Agricultural Extension Monitoring and Evaluation Officer Inhambane Directorate of Agriculture and Food Security, Inhambane City, Between Eduardo Mondlane and Revolucao Avenue, Mozambique Tel: +258821033377, +258841033377 Email: paulosenoque@gmail.com		Title: Monitor and combat the fruit fly Objective : To train extensionists and producers in control of fruit fly

SI.No	Name & Address	BAWP Title & Objective
	Sri Lanka	
17.	Ms. Welliveriya Liyanagalresha Anuradhana Harischandra Research Assistant, National Plant Quarantine Service, Plant Quarantine Station, Department of Agriculture, Canada Friendship Road, Katunayake, Sri Lanka Tel: +94718258191, +94 112252058, +94713044144 Email: chandikapriyankara@gmail.com, wartwa@gmail.com	Title: Survey & surveillance for fruit fly & management to Sri Lanka Objective: Survey & surveillance for fruit fly
18.	Ms. Dissanayake Sagarika Sujeewani Sithara Agriculture Instructor, National Plant Quarantine Service, Plant Quarantine Station, Department of Agriculture, Katunayake, Sri Lanka Tel: 0718013305, 011-2263954 Fax: 0314879534, 011-2253709 Email: indika.d@sirioltd.org, npqs@doa.gov.lk,	Title: Prevention of inversive pests enter to the country Objective: Prevention of inversive pests enter to the country.
	Tanzania	
19.	Mr. Aloyce Kasmir Senior Agricultural Tutor Ministry of Agriculture Training Institute, Ukiriguru, P.O.Box 1434 MWANZA, Tanzania Tel: +255 754430983, 0717 491574 Email: kasmaloyce@yahoo.com, mati- ukiriguru@kilimo.go.tz,	Title: To improve livelihood of maize farmers by reducing production cost caused by the pest control using simple alternatives Objective: To improve livelihood of maize farmers by redusing production cost caused by the pest control using simple alternatives
	Uganda	
20.	Mr. Iragaba Herbert Agricultural Officer Production Department, Nakaseke District Local Government, Ministry of Education & Sports, P.O. Box. 451, Luweero, Uganda, Tel: 0773245151 Email: iragabaherbert10@gmail.com	Title: Technologies and equipment to trap and manage fruit fly infestation in orange and mango orchards Objective: To reduce fruit loss due to fruit flies by 60% in the first 12 months through trainings and trapping in 5 selected villages.

32. Modern Dairy Technology, Management and Cooperatives

- > Title of the Training Program: Modern Dairy Technology, Management and Cooperatives
- Date: 5 19 February, 2019
- Venue: ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana, India
- Program Director

Dr. Gopal Sankhala Principal Scientist ICAR-National Dairy Research Institute (NDRI), Karnal, Haryana Mob: + 91 9416952786, Email: gssitaram@gmail.com

> Participants profile: 29 executives from 14 countries (23 male & 6 female)

Country	No. of Executives		
Afghanistan	5		
Cambodia	3		
Myanmar	3		
Malawi	4		
Liberia	1		
Kenya	5		
Tanzania	5		
Uganda	3		

Training objectives

- ✤ Acquaint the participants with knowledge in principles,
- Planning and technical approach for establishing viable dairy farms,
- Processing of milk and development of marketing network and
- Development of value chain in milk production, processing and marketing

Training Curriculum

- 1. Dairy Industry: Opportunities & Challenges
- 2. Utilization and Management of dairy farm waste
- 3. Integrated Farming System Model
- 4. Quick tests for checking adulteration in dairy products
- 5. Chemical Quality analysis of milk & Milk Products
- 6. Probiotic milk products and health benefits
- 7. Extension services delivery mechanisms of dairy cooperatives
- 8. Breeding policies and programmes for improvement of Cattle and Buffalo
- 9. Waste water reused for livestock based farming system followed by visit to fodder Farm
- 10. Balanced feeding and role of bypass fat and protein for dairy animal
- 11. Dairy animal Feed technology: current status and future challenge
- 12. Transition management of dairy animals to maintain high productivity
- Training Outcome
 - The training outcome was promotion of group marketing of milk by the farmers through formation of cooperatives in their countries.

Change in Knowledge of the participants

A pre- test was organized with the objective to check the existing knowledge of the participants so that it can help in establishing a benchmark for conducting technical sessions. Out of the maximum score of 25, the average score of the group in pre-test was 13.55 while in the post-test the group scored average of 16.69. The increase in the knowledge level of the participants was 23.17 percent.



> Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 1-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.55 on a 10 point continuum indicating the overall impression on the programme was excellent.

Field Visits

The executives were exposed to various field visits i.e. Verka Plant (Mohali) which is successful dairy cooperative of Punjab, progressive dairy cooperative farms in Karnal and Kurukshetra Districts, dairy based Self-Help Groups of Women(Taprana and ApritpurKalan), Nanu Dairy farm, etc. to interact with the experts in specific areas and exposed them with live examples and success stories.



SI.No.	Name & Address	BAWP Title& Objective
	Afghanistan	
1.	Mr. Zaki Aziz Ahmad General Manager Directorate of Livestock Ministry of Agriculture, Irrigation and Livestock (MAIL) Darul-Anam Road, Sanatorium Street, Kabul, Afghanistan Tel: 0093744272262, 0093-799332332, 0093-788223696 Email: azizzaki67@yahoo.com, tawheed.n@gmail.com	Capacity building for farmers and private sector in Afghanistan
2.	Mr. Serat Mohammad Baidar Regional Poultry Officer National Horticulture and Livestock Project (NHLP), Ministry of Agriculture, Irrigation and Livestock (MAIL) Central Region Badam Bagh, Kabul, Afghanistan Tel: 0093-786915090, 0093700915090, 930775545554 Email: seratbaidar@gmail.com, baidar_serat@yahoo.com nhlp.mail@gmail.com	Capacity building for farmers and private sector in Afghanistan
3.	Mr. Saeedi Najibullah Provisional Private Sector Development Officer, Directorate of Agriculture, Irrigation and Livestock (DAIL) West Part of Mazar-i-Sharif City, Distri No.4 th , Karte Zerahat, Infront of Kefayat Hotel, Balkh Province, Afghanistan Tel: +93 799606076, +93788302496, +93788275817 Email: najib.saeedy@gmail.com, habibdellah@gmail.com	To generate income for rural women milk producers in Balkh Province, Afghanistan.
4.	Mr. Nemat Khalid Khan General Manager Khatiz Dairy Union, Opp: Khurma Bagh, Farm Ada, Jalalabad, Afghanistan Tel: +93 789812006, +93 786000334, +93781656873 Email: omartalash2010@gmail.com, khan.khdu@gmail.com, <u>khatizdairy@gmail.com</u>	Sensitizaiton programs on modern dairy technologies
5.	Mr. Faqiri Ateequllah Dairy Officer Livestock Directorate Kabul Dirullaman Road, General Directorate of Livestock and Animal Health, Kabul, Afghanistan Tel: +93 798231962, +93 788223696 Email: atiq.faqiri233@gmail.com, tawheed.n@gmail.com	Increase of milk productivity of Sabzak village in Logar province.

SI.No.	Name & Address	 BAWP Title& Objective
	Cambodia	
6.	Mr. Seng Seysak Official Incharge Agricultural Cooperative Promotion Office Provisional Department of Agriculture Forestry and Fisheries , Tbouing Khmum Province Compound, N Road-73, Nikum Leu Village, Srolorb Commune, Tbouingkhmum, Cambodia Tel: +855 12517347, +855 977581952 Email: sengseysak@gmail.com	Training on technical support to cooperatives
7.	Mr. Him Pirun Official Incharge, Agricultural Extension Office Provisional Department of Agriculture Forestry and Fisheries Tbouing Khmum Province Compound, N Road- 73, Nikum Leu Village, Srolorb Commune, Tbouingkhmum, Cambodia Tel: +855 98773760, +855 977581952, +855 77996639 Email: <u>hpirun1@gmail.com</u> , <u>sunsarathkcm@gmail.com</u>	Trainings on green fodder for cattles
8.	Mr. En Net Official International Cooperation Division #200, Preah Norodan Blnd, Sangkat stoeng, Basac, Khan Chack Kaman, Phenom Phen, Cambodia, Tel: +855 962225487, 17717201 Email: <u>ennet2014@gmail.comhsamedi@gmail.com</u>	Training's on capacity building
	Myanmar	
9.	Ms. Ei Moh Moh Hmwe Deputy Veterinary Officer, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation, Yinmabin Township, Sagaing Region, Myanmar Tel: +95 99542748885, Email: eimoh4444@gmail.com, yinmabintsplbvd.0503005@gmail.com	Sensitizaiton programs on modern dairy technologies
10.	Ms. Moe Pwint Phyu Assistant Researcher, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation, Nay Pyi Taw, Myanmar Tel: +95 9968649911, 95673408198 Fax: +957135149 Email: moepwint11894@gmail.com, <u>dr.myintnaing1996@gmail.com</u>	To implement knowledge gain acquired to improve dairy industry
11.	Ms. Thin Yadanar Soe Deputy Veterinary Officer, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation Nay Pyi Taw, Myanmar Tel: +95400547897, +95673408198 Fax: +95 67 3408342 Email: <u>thinyatanarsoe.vet@gmail.com</u>	Sensitization Programs on modern dairy technologies

SI.No.	Name & Address	BAWP Title& Objective
	Кепуа	
12.	Ms. Shaba Roseline Atamba Senior Principal Lecturer Bukura Agricultural College, Department of Agriculture and Animal Sciences, Ministry of Agriculture, P.O.Box No.23-50105, Bukura, Kenya Tel: +254 714045912 Email: <u>rose.ambani@gmail.com</u> , <u>rambani@</u> <u>bukuracollege.ac.ke</u>	Trainings of feeds and feeding
13.	Ms. Kilonzo Elizabeth Mbinya Chief Livestock Health Assistant Ministry of Agriculture, Livestock, Fisheries and Irrigation, 29040-00625, Kangemi, Kenya Tel: 0721470476, 0725525822 Email: elizabethkilonzo76@gmail.com, adhimabuga@gmail.com	Trainings on management of foot & mouth disease
14.	Mr. Nganga Benson Mburu Animal Health/ Artificial Insemination Technician NGAPIA Cooperative, P.O.Box.15615 Nakuru, Kenya Tel: +254 702151131, +254 722268520 Email: mburubenson10@gmail.com	Extension services to the farmers
15.	Mr. Gaithuma Partick Ndungu Farmer/Entrepreneur/Cooperative Member OL 'KALOU Dairy Limited 603-20303, OL 'KALOU Nairobi, Kenya Tel: +254 722312934, Supervisor: +254 726736126, Email: patrick.gaithuma@yahoo.com, mugomichael65@gmail.com	Sensitization programs on modern dai technologies
16.	Mr. Mukuna Stephen Waititu Principal Livestock Production Officer State Department of Livestock Production, P.O.Box.144, Molo, Kenya Tel: +254 723 441480, Email: swmukuna@gmail.com, Supervisor: +254 722 360244, <u>simonokore@</u> yahoo.com	Formulating an on farm balanced ratio to feed during the transition period.
	Liberia	
17.	Mr. Wilson Samuel Talawaly Field Technician Farmers Empowerment & Educational Development of Liberia (FEED), Ministry of Agriculture, Pipeline Road, Paynesville, Liberia Tel: +231 0886579682, +231 0770089249 Email: nyangbehw@gmail.com,	Introduction of the of "dairy farming" in Liberia

SI.No.	Name & Address		BAWP Title& Objective
	Malawi		
18.	Ms. Nthiliro Lissa Munga Agriculture Extension Officer Ministry of Agriculture and Irrigation Chitekwere EPA, P.O.Box.77 Lilongwe, Malawi Tel: +265 999014459, +265 992746493 Email: nthilirolissa@gmail.com,		To establish dairy cooperatives at home, and to revamp the oud one's
19.	Mr. Tembo Charles Agriculture Extension Development Officer (AEDO), Ministry of Agriculture and Extension Department Dedza DAO, P.O.Box.49 Dedza, Malawi Tel: 0888711927, 0998097955, 0997036344 Email: charlesstembo@gmail.com, joshua.mphanda@yahoo.com		To do needs assessment and then create awareness on why there are producing low milk and how they can have assured markets of the dairy products.
20.	Mr. Govati Charles Michael Platform Manger & Coordinator Commercial Agriculture Support Services (CASS) C/o. Agricultural Resources Limited, P.O.Box.31301, Lilongwe-3, Malawi Tel: +265 995610288, +265 88149000 (WhatsApp) Email: cmgovati@gmail.com, casstwg@gmail.com		Sensitization Programs on modern dairy technologies
21.	Mr. Chimombo Masautso Joseph Lecturer, Lilongwe University of Agriculture and Natural Resources, Extension Department, LUANAR, Bunda College Campus, P.O.Box.219, Lilongwe, Malawi Tel: +265 995727020, +265 01277289 Email: mchimombo@luanar.ac.mw, headextension@bunda.luanar.mw		Reducing Incidences of mastitis disease in dairy animals through strict adherence to hygiene
	Tanzania		
22.	Mr. Yussuf Abdullah Masauni Livestock Officer, Department of Livestock Development, Ministry of Agriculture, Natural Resources, Livestock and Fisheries, P.O.Box.159, Maruhubi, Zanzibar, Tanzania Tel: 255 777488801, 255 24 2230987 Fax: 255 24 2234650 Email: <u>masauni06@yahoo.co.uk, ps @</u> <u>kilimozns.co.tz,</u>		To implement knowledge gain acquired to improve dairy industry
23.	Mr. Mwachapite Japhet Maiko Principal Livestock Tutor Ministry of Agriculture Training Institute (MATI) MATI Uyole, P.O.Box. 2292, Mbeya, Tanzania Tel: +255 768422025, +255 733 5140 015 Email: jmwachapite@yahoo.com, <u>mati-uyole@kilimo.go.tz</u>		Inferior breeding bulls

SI.No.	Name & Address	BAWP Title& Objective
24.	Mr. Miyuguyu Fabian Elias Agricultural Tutor, Ministry of Agriculture Training P.O.Box. 127, Bukoba, Kagera, Tanzania Tel: +255 755682797, +255 765020583, Email: fmiyuguyu@yahoo.com, mati-maruku@kilimo.go.tz, luhembe@gmail.com	Fodder conservation at Maruku,Bukoba- Kagera Tanzania
25.	Mr. Luhagi Sanifu Moses Tutor College of Agriculture and Natural Resources (CANRE) Canre Animal Health and Production P.O.Box.6896, Dar Es Salam, Tanzania Tel: +255 754274393, +255 754274392 Email: mosessanifu76@gmail.com, info@canre.ac.tz,	To increase milk production and productivity of local and frisian crossbreeds
26.	Mr. Sarakikya Maximilian Elisamia Deputy Principal Kaole Wazazi College of Agriculture P.O.Box.99, Bagamoyo, Tanzania Tel: +255 714919019, +255655548761, +255 716231777 Email: ma.esa68@yahoo.com, principal@kaolecollege.ac.tz, sinansimba@yahoo.com	Training's on Increasing of quality milk and ghee among the cattle keeping community in Buliisa District
	Uganda	
27.	Mr. Magala Joseph Animal Husbandry Officer Production and Marketing Department Buliisa District Local Government Kampala, Uganda Tel: +256 784747187, +256 785069242 Email: magalajoseph37@gmail.com, <u>kaahwaagric@gmail.com</u>	Sensitization Programs on modern dairy technologies
28.	Mr. Kasule Timothy Veterinary Officer Luweero District Local Government Production and Marketing Department, Ministry of Education & Sports, Kampala, Uganda Tel: +256 782230095, +256 772628970 Email: <u>timka2025@gmail.com</u> <u>kiddamk@yahoo.com</u>	To increase farmers' productivity through cooperation and quality To strengthen
29.	Mr. Mugura Samuel Lukurwe Managing Director Abamwe Dairy and Crop Farmers Association Nyakashashara Sub County, Kiruhura District, Uganda Tel: +256 772748550 Email: masterlinkassociates@gmail.com	Promote farmers to start small business enterprises

33. Seed Production, Processing and Commercialization



- > Title of the Training Program: Seed Production, Processing and Commercialization
- Date: 12 26 February, 2018
- > Venue: National Seed Research & Training Institute (NSRTC), Varanasi, Uttar Pradesh, India
- Program Director

Dr. Arvind Nath Singh Director National Seed Research & Training Centre (NSRTC) G.T. Road, Collectry Farm, Varanasi-221106, Uttar Pradesh, Tel: 0542-2370222, Email: <u>dir-nsrtc-up@nic.in</u>

Participants profile: 31 executives from 14 countries (22 male & 9 female)

Country	No. of Executives
Afghanistan	5
Cambodia	5
Mongolia	1
Myanmar	3
Malawi	2
Kenya	5
Liberia	2
Tanzania	6
Uganda	2

Training objectives

- Build capacity of officers, executives and managers in the area of quality seed production.
- Understanding the post-harvest, handling and management of seeds.
- Understanding the importance of seed testing.
- Awareness about the opportunities and challenges in seed certification and Quality control.
- Understanding of market information and marketing decision
- Exposure to best marketing practices and seed supply chains

Training Curriculum

- 1. Seed production
- 2. Processing
- 3. Testing
- 4. Certification
- 5. Quality control and
- 6. Marketing

Training Outcome

Trainees are creating awareness among the farmers in their countries regarding various methods and techniques of quality production and commercialization of seed production.

> Change in Knowledge of the participants

A pre-test was organized with the objective to check the existing knowledge of the participants so that it can help in establishing a benchmark for conducting technical sessions. Out of the maximum score of 25, the average score of the group in pre-test was 13.23 while in the post-test the group scored average of 15.97. The increase in the knowledge level of the participants was 20.71 percent.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 0-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.3 on a 10 point continuum indicating the overall impression on the programme was **VERY GOOD**.

Sl. No.	Name & Address		BAWP Title
	Afghanistan		
1.	Mr. Zubin Zabihullah Agricultural Affairs Section Head Directorate of Agriculture, Irrigation and Livestock (DAIL) Ministry of Agriculture, Irrigation and Livestock (MAIL), Balkh Province, Afghanistan Tel: 0093 799085867 Email: <u>zzubine@yahoo.com</u> ,		Create more trade unions and association among the farmers
2.	Mr. Afzal Khalid Field Inspection Section Incharge Seed Certification Directorate, Ministry of Agriculture, Irrigation and Livestock (MAIL), Badam Bagh, Kabul, Afghanistan Tel: +93 787204742, +93 749148066 Email: <u>khalidafzal34@gmail.com</u> ,		Introduction of Seed certification system in Afghanistan
3.	Mr. Hamid Samsor Field Technician, ACARDA, Zone#03, Near to Arab Wafa Furniture, Directorate of Agriculture, Irrigation and Livestock (DAIL) Kabul, Afghanistan Tel: 0093 783295353 Email: hemmat.hamidi@gmail.com, noorngr@ hotmail.com,	145	Training for staff, working on rules and regulations
4.	Mr. Nazeergul Adeeb Field Inspector Manager of Central Zone Seed Certification Directorate of Central Zone, Ministry of Agriculture, Irrigation and Livestock (MAIL), Badam Bagh, Kabul, Afghanistan Tel: 0093 787624090, 0093 7616114630 Email: nazeerguladeeb@gmail.com, ramzya.salezada@gmail.com Supervisor: 0093 786269826, nang.mahboob@gmail.com,		Implementation of seed certifications companies
5.	Mr. Shahab Shahabuddin Seed Certification Sub Director Transition Project, Landell Mills Limited, Seed Certification Directorate, Ministry of Agriculture, Irrigation and Livestock (MAIL), Badam Bagh, Kabul, Afghanistan Tel: 0093 700218214 Email: shahab111_2006@yahoo.com,		Seed marketing in Afghanistan
	Cambodia		
6.	Mr. Bunphoun Phath Official Provisional Department of Agriculture Forestry and Fisheries Tbouing Khmum Province Compound, N Road-73, Nikum Leu Village, Srolorb Commune, Tbouingkhmum, Cambodia Tel: +855 977742366, +855 767742366, 977581952 Email: phath.bunphoun@gmail.com		Seed quality and agriculture education

SI. No.	Name & Address	BAWP Title
7.	Mr. But Sambath Official Department of International Cooperation, Ministry of Agriculture, Forestry and Fisheries, #200, Preah Norodan Blnd, Sangkat Tonle, Basac, Khan Chack Kaman, Phenom Phen, Cambodia Tel: +855 11900955, +855 23726126 Email: sambathbut99@gmail.com, info@maff.gov.kh	Establishment of seed production, processing plant
8.	Mr. Sim Thy Deputy Director of Agriculture Provisional Department of Agriculture, Forestry and Fisheries, Tbouing Khmum Province Compound, N Road-73, Nikum Leu Village, Srolorb Commune, Tbouingkhmum, Cambodia Tel: + 855 12700311, +855 977581982 Email: simthy98@gmail.com,	Extension and seed production training for farmers
9.	Mr. Choup Rith Official Incharge Agricultural Extension Office, Provisional Department of Agriculture, Forestry and Fisheries, Tbouing Khmum Province Compound, N Road-73, Nikum Leu Village, Srolorb Commune, Tbouingkhmum, Cambodia Tel: + 855 92372007, 741253 Email: <u>rithchoup@yahoo.com</u> ,	Extension and seed production training for farmers
10.	Mr. Kim Sothea Officer Department of International Cooperation, Ministry of Agriculture, Forestry and Fisheries, #200, Preah Norodan Blnd, Sangkat Tonle, Basac, Khan Chack Kaman, Phenom Phen, Cambodia Tel: +855 89297921, 69611398, +855 23726126 Fax: +855 23217320 Email: sotheakim33@gmail.com, kimsothea@yahoo.com,	Extension services in implementation of seed production for farmers
	Mongolia	
11.	Mr. Samand Chimed Ochir Specialist at Planning and Execution, Crop Production Support Fund, Ministry of Food, Agriculture and Light Industry, Khan uul District, 3-R, Khoroo, Office Building of Crop Production Support Fund, Ulaanbaatar, Mongolia Tel: +976 77238888, +976 91914524, 0099999413 Email: chimedteds@gmail.com, centerteds@gmail.com,	Production of wheat seeds in Mongolia

il. No.	Name & Address	BAWP Title
	Myanmar	
12.	Mr. Myo Tun Assistant Staff Officer Tartapaw Farm, Maubin Township, Department of Agriculture, Ministry of Irrigation, Livestock Ayeyarwaddy, Myanmar Tel: +958 780220527, Email: myotun2003. nov@gmail.com,	Improvement of seed systems in Myanmar through proper production certification and processing
13.	Ms. Aye Sandee Thant Deputy Assistant Staff Officer Seed Division, Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation, Nay Pyi Taw, Myanmar Tel: + 95 67410493, 95 9420730371 Fax: +95 67 410385 Email: ayesandythant91@gmail.com, dgdoamm@gmail.com,	Farmers awareness in seed selection
14.	Ms. Kyi Kyi Oo Deputy Assistant Staff Officer Thyaung Chaung Seed Farm, Pathein Township, Ayeyarwaddy Division, Myanmar Tel: +95 67410493, Mob: 9794529181 Fax: +95 67 410385, Email: <u>kkyiooagri@gmail.com</u>	To produce rice foundation seed and registered seed for modern seed farm village
	Malawi	
15.	Ms. Mmangisa Karen Agriculture Extension Development Officer Dedza District Agriculture Office, P.O.Box.49, Ministry of Agriculture and Water Development, Extension Department, Lilongwe, Malawi Tel: +265 995649226, 0888366177, 0999218315 Email: karenmma39@gmail.com, dedzadao@gmail.com,	To facilitate the formation of law at village level on the emphasis of the us of pure seed
16.	Ms. Jalasi Bridget Manager Emman Investments T/A Ndindi, Ngwena Village, Chipoka, Salima, Malawi Telephone/Mobile: +265 888 222 407, +265 999745407, 265 888506440 Email: bridgetjalasi@gmail.com, gmalindi@gmail.com,	Awareness meetings and demonstrations on seed production
	Kenya	
17.	Mr. Kiplosgei Leonard Kiptum Production Manager Basic Seed Kenya Seed Company Limited P.O.Box. 553-30200, Kitale, Kenya Tel: 0722273677, 0726141856, 254(054) 31909-14 Fax: 254-303815	To improve basic seed quality at production and processing

SI. No.	Name & Address	BAWP Title
18.	Mr. Ewambari Allan Njoroge Research Officer Agricultural Development Corporation (ADC) ADC Head Office, Development House, Mol Avenue, P.O.Box. 47101-00100, Nairobi, Kenya Tel: +254 713697229, 020-2250695/ 185, 020- 3315746, Fax: 02022435965 Email: allanynjoroge@gmail.com, <u>adc.</u> mdsoffice@gmail.com	Increase yields of seed per unit area through adoption of bio priming and nano particle technology
19.	Ms. Ndunda Lucy Nyawira Director, Livelihood Improvement & Counseling, Transforming Agricultural & Industrial Development Oasis, P.O.Box.53-20115, Egerton Centre, Nairobi, Kenya Tel: +254 722338752, +254 725206734, Email: innadunda@yahoo.com, tragridoasis@gmail.com,	Seed processing and marketing
20.	Mr. Muthii Thomas Kariuki Chief Seed Production Officer Simlaw Seed Company, P.O.Box. 40042, 00100 Kijabe Street - Near Globe Cinema Round about, Nairobi, Kenya Tel: 0723604236. 0722200545 Email: kariukimuthii@hotmail.com, ngugi@simlaw.co.ke	Promote use of certified common bean seed & bio priming among small scale farmer
21.	Mr. Ondiek Evanson Ochiang Project Coordinator Livero Consortium Project, Box. 1-40118, Katito, Kenya Tel: +254 724557271, +254 720987870 Email: evansondiek@yahoo.com, liveroprojecct@gmail.com	To create more awareness to farmers about the post harvesting on seeds
	Liberia	
22.	Ms. Mends-Cole Morleeta Teta Seed Specialist, Crop Resource Division Ministry of Agriculture, Somalia Drive, Gardnersville, Liberia Tel: +231 886855075, +231 775820472 Email: treasure10103@gmail.com, ptetteh@moa.gov.lr,	Technical Training's in quality seed production and processing
23.	Mr. Barber Enoch Kapakola Farm Supervisor Farmers Empowerment & Education Development of Liberia (FEED) Pipeline Road, Paynesville, Liberia Tel: +231 7764177446, 886525874, +231 886543039, Email: barberenoch@gmail.com, zephanielc@gmail.com,	Sensitization programs to farmers
	Tanzania	
24.	Ms. Haule Valentina John Head of Kibondemzungu Seed Farm Department of Agriculture, P.O.Box.159, Zanzibar, Tanzania Tel: +255 242230985, +255 242230985	Sensitization training's to train farmer to use improved seed

5 <mark>1. No.</mark>	Name & Address	BAWP Title
25.	Mr. Bakari Ramadhani Huseni Agricultural Tutor II Ministry of Agriculture Training Institute (MATI) Ministry of Agriculture, P.O.Box. 1434, Ukiriguru, Mwanza, Tanzania Tel: +255 787106099, +255 754430983 Email: rbakari54@yahoo.com, <u>ukiriguru@</u> <u>kilimo.go.tz</u> ,	Train farmers on the importance of using quality seeds in agriculture
26.	Ms. Makoi Lilian EWald Joseph Program Advisor Mtandao wa Vikundi vya Wakulima Tanzania (MVIWATA), Manyara, 446, Babati, Tanzania Tel: +255 654724262, +255 752838338 Email: lilbrancy@gmail.com, martinmalagila@gmail.com	Improving the public and private partnership in seed industry
27.	Mr. Pallangyo Elibariki Japhet Agricultural Tutor Horticultural Research and Training Institute P.O.Box.1253, Ministry of Agriculture, Arusha, Tanzania Tel: +255 754322589 Email: <u>bariki22000@yahoo.com</u> , <u>elibariki.pallangyo@kilimo.go.tz,</u>	Train seeds producers
28.	Ms. Abebe Sharifa Adajo Managing Director Jambe Agro Co. Ltd., Jambe Farm, Kwamgwe Road, 24 KM from Michungwani, Kwamgwe Ward, Handeni, Tanga, Tanzania Tel: +255 715300413, +255 718473627 Email: jambeagro@gmail.com,	Techniques in hybrid seed production
29.	Mr. Soloka Bakari Ramadhan Quality Declared Seed Producer Kiduka Pembejeo, P.O.Box.43, Chemba, Konda, Dodoma, Tanzania Tel: +255 756400093, 784820993 Email: <u>kidukasabu@yahoo.com</u> ,	To educate the people how increase yield per unity area (acres).
	Uganda	
30.	Mr. Okello Martin Senior Agricultural Officer Kumi District Local Government Department of Production and Marketing, P.O.Box. 44, Kumi, Uganda Tel: +256 782140276, 256 752140276, 256 776630012 Email: okellomartino80@gmail.com, kdlg@gmail.com,	Limited small scale farmers' involvemen in commercial quality seed production in Kumi District
31.	Mr. Chepkwurui Vincent Agricultural Officer Kween District Local Government Kaproron Sub Country Kween District, Uganda Tel: +256 770560643, Email: chepkwuruivincent@gmail.com, yeshonelson@yahoo.com,	Sensitization and training's to farmers

34. ICT Applications in Agricultural Extension Management (Farmers Call Centre)

- Title of the Training Program: ICT Applications in Agricultural Extension Management (Farmers Call Centre)
- Date: 11- 25 March, 2019
- Venue: National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India
- Program Directors

Program Directors	Dr. Saravanan Raj Director (Agril.Extn.) National Institute of Agricultural Extension Management (MANAGE), Hyderabad-500030, Telangana Tel: 040-24594538, Email: maha.shirur@manage.gov.in
	Dr. Mahantesh Shirur Deputy Director (Agril.Extn.) National Institute of Agricultural Extension Management (MANAGE), Hyderabad-500030, Telangana Tel: 040-24594538, Email: maha.shirur@manage.gov.in

> Participants profile: 34 executives from 14 countries (30 male & 4 female)

Country	No. of Executives
Afghanistan	19
Cambodia	1
Myanmar	2
Nepal	4
Sri Lanka	3
Kenya	1
Malawi	1
Tanzania	3

Training objectives

- To introduce the Concept of Information and communication technologies (ICT's) and its role in Agriculture and rural development
- To study the advanced ICT' tools in Agriculture and allied sectors
- To know the impact of ICT's for farmer's welfare
- To analyze the case studies on ICT's and their implication in developing countries
- To introduce and understand the concept of FCC (Farmer call center) Module

- 1. Agricultural Extension and NeGP-A National e-Agricultural Initiatives in India -Farmers' Portal and mKisan
- 2. National e-Agricultural Initiatives in India Kisan (Farmers) Call Center (KCC) and Extension Reforms through ICT Initiatives
- 3. National e-Agricultural Initiatives in India Marketing Information Systems and
- 4. Reforms: AGMARKNET, eNAM and Private Initiatives
- 5. Agricultural Knowledge Management: Climate Change Knowledge Advisory
- 6. AGROPEADIA, MOOCs and MIS
- 7. Access to Agricultural Information / Knowledge-Social Media in Agricultureand Opening Access to Agricultural Knowledge Resources.



Training Outcome:

- Trainees from Afghanistan have started Kisan Call Centre in their country.
- Trainees are creating awareness among the farming communities in their countries on various aspects of ICT application and usage of social media in Agriculture.

Change in Knowledge of the participants

A pre- test was organized with the objective to check the existing knowledge of the participants so that it can help in establishing a benchmark for conducting technical sessions. Out of the maximum score of 25, the average score of the group in pre-test was 12.7 while in the post-test the group scored average of 17.06. The increase in the knowledge level of the participants was 34.33 percent.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 0-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.37 on a 10 point continuum indicating the overall impression on the programme was **VERY GOOD**.

> Field Visits

The executives visited the Kisan Call Centre to understand the functioning of the system.





Sl.No.	Name and Address	BAWP Title
	Afghanistan	
1.	Mr. Elhamuddin Boura Farmer Call Centre Officer Farmers Call Centre General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-700603921 Email: <u>elhamboural009@gmail.com</u> ,	Developing a farmer call centre Software system
2.	Mr. Imran Mohmmadi Farmer Call Centre Officer Farmer Call Centre, General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-787114728 Email: <u>imranmohammadi444@gmail.com</u> ,	Development of Farmers Call Centre (FCC) data base
3.	Mr. Atal Niazi Farmers Call Centre Operator Farmer Call Centre, General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093- 202922292, Mob: 0093 792137514 Email: <u>atal.niazi@mail.gov.af</u> ,	Development of Farmers Call Centre (FCC) data base
4.	Mr. Mullakhail Mohammad Idrees Farmers Call Centre Operator Farmer Call Centre, General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Mob: 0093-787335299 Email: <u>idrees278@gmail.com</u>	Developing Afghanistan agricultural knowledge web page
5.	Mr. Karimullah Raoufi Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-700755545 Email: <u>karim.raoufi@gmail.com</u> ,	Sensitisation training to farmers on ICT tools
6.	Mr. Zwanmal Karimi Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-798784705 Email: <u>zwanmal.karimi@gmail.com</u>	Create whats app group for saffron producer farmers

SI.No.	Name and Address		BAWP Title
7.	Mr. Abdul Hadi Afghan Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-773333513 Email: <u>abdulhadi.afghani@gov.af</u> ,	Contraction of the second seco	Create whats app group for saffron producer farmers
8.	Mr. Mohibullah Raza Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-780104894 Email: <u>mohibullah.raza@gov.af</u> ,		Creation of new ICT applications
9.	Ms. Osmani Murwarid Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093 0202922299 Mob: 0093 0788292335 Email: morward.osmani@mail.gov.af,		Content development for farmers engagement in social media
10.	Ms. Langar Bibi Hamida Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093 202922299, Mob: 0093-0787373127 Email: hamida.langar@mail.gov.af,		Use of facebook for agriculture
11.	Mr. Latifi Mohammad Omer Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-782613141 Email: <u>omer.latifi@mail.gov.af</u> ,		ICT applications in agriculture
12.	Mr. Fahim Mohammadi Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093 202922299, Mob: 0093785274717, Email: famil.mohammadi@mail.gov.af		Making Farmers Call Centre (FCC) boc
13.	Mr. Najiullah Koshan Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093 0202922299, Mob: 0093-794441642 Email: najiullahkoshan@gmail.com,		Awareness on ICT applications

SI.No.	Name and Address	BAWP Title
14.	Mr. Mohammad Asim Bahrami Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093 0202922299, Mob: 0093-700804020 Email: <u>bahrami.asim@gmail.com</u> ,	New ICT technologies in marketing e NAM
15.	Mr. Fitrat Noorullah ICT Service General Manager General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-202292001, 0093-744995222 Email: noor.fitrat@mail.gov.af,	Backup and recovery strategy of a transaction processing system
16.	Mr. Abdul Hasib Habib IT Director General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-799886664, 0093 202502242 Email: <u>hasib.habib@mail.gov.af</u> ,	Use of Plantix Best Agriculture app technologies in agriculture
17.	Mr. Nasim Khogiani Farmers Call Centre Operator General Directorate of Extension and Agriculture Development Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan, Tel: 0093-786387694 Email: <u>nasim.maiwand@mail.gov.af</u> ,	ICT Technologies in agriculture
18.	Mr. Noor Ahmad Ahmadzai IT Officer Directorate of IT Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, Kabul, Afghanistan Tel: 0093-788558408 Email: <u>noor.ahmadzai@mail.gov.af</u> ,	Redundancy link for our farmers call centre.
19	Mr. Jan Mohammad Jahed ICT Consultant Ministry of Agriculture, Irrigation and Livestock (MAIL), Jamal Mena, District#3, Kabul, Afghanistan, Tel: 0093-770461343 Email: jan.mohammad@mail.gov.af,	Automatic greenhouse monitoring system
	Cambodia	
20.	Mr. Long Puthdano Vice Chief Officer Information and Communication Technology Office, #200, Preah Norodan Blnd, Sangkat Tonle, Basac, Khan Chack Kaman, Phenom Phen, Cambodia Tel: +855 86345832, 02321135 Email: <u>puthdano.long@gmail.com</u> ,	Awareness of people/farmers using ICT application

SI.No.	Name and Address		BAWP Title
	Myanmar		
21.	Mr. Zaw Moe Lwin Deputy Staff Officer Office No.43, Rice Division, Department of Agriculture, MOALI, Myanmar Tel: +959673410070, Fax: +959673410386 Email: <u>zawmoelwin76@gmail.com</u> ,		ICTs tools among small scale farmers in agricultural extension sector
22.	Mr. Paing Oo Zaw Assistant Staff Officer Office No.43, Land Used Division, Department of Agriculture, MOALI, Myanmar Telefax: +95 673410514 Email: <u>pyingoozaw.88@gmail.com,</u>	-	Awareness of fertilizer application technology among farmers
	Nepal		
23.	Mr. Bikash Dangol Technical Director Pathway Technologies & Service Pvt. Ltd., Thapathali, Kathmandu, Nepal Tel: +977 4101544 Email: <u>bikash@pathway.com.np,</u>		Private extension service providers of KISAN-II project
24.	Mr. Rabindra Das Patel Regional Director Centre for Environmental and Agricultural Policy, Research, Extension and Development (CEAPRED), Nepal (USAID/KISAN II Project) Nepalgung, Banke, Nepal Tel: 00977-81-522439, 9858023584 Email: rdp567@gmail.com,		Enhance the current KISAN app
25.	Mr. Rajan Man Bajracharya Co-Founder Geo KRISHI Initiative Pathway Technologies & Service Pvt. Ltd., Thapathali, Kathmandu, Nepal Tel: 00977-14101544, 14273998 Email: rajan.man@gmail.com,		Prototyping knowledge base management on livestock to strengthe KISAN Call Centre (KCC) agents
26.	Mr. Surya Prasad Paudel Senior Livestock Development Officer Agriculture information and Training Centre, Ministry of Agriculture, Livestock Development, Harihar Bawan, Lalitpur, Nepal Tel: 0977-9841242893, 097715522248 Email: paudelsurya@yahoo.com,		Knowledge base management for livestock extension to strengthen KISAI Call Centre (KCC)
	Sri Lanka		
27.	Mr. Wagasin Kankanamge Indika Kumara GAP Farmer Indika Agro Farm, Tangalle, Pattiyapola West, Netolpitiya, Tangalle, Sri Lanka Tel: 0094715216827, Fax: 0094112863593 Supervisor: <u>sisirae5@gmail.com</u> , Mob: 0094714397965		From social media buildup farmer groups

SI.No.	Name and Address		BAWP Title
28.	Mr. Hewawasam Gamaga Lasitha Raveendra Dayananda Owner H&D Agro Farm 317, Jayanthimw, Padukka, Sri Lanka Tel: 0094112831020, Fax: 0094112863593 Email: <u>hndagro@gmail.com,</u>		Formation of social media groups, usage of mobile app
29.	Mr. Halambage Dilraj Krishan De Silva Siriwardhana Deputy Director of Agriculture (Extension) Department of Agriculture, Gabada Weediya, Hakmana Road, Southern Province, Sri Lanka Tel: +94 0717933990, Fax: +94 0412220110 Email: dilrajsiriwardhana@gmail.com,		ICT based tools among farmers and officers in agriculture sector
	Tanzania		
30.	Ms. Migodela Edith Getrude Pascal Fisheries Resource Protection Ministry of Livestock and Fisheries P.O.Box.226, Mwanza, Tanzania Tel: +255-767888879, 028-2503314 Fax: 028-2502588 Email: gpmigodela@rocketmail.com,		Improvement of fisheries management data base and e-government electronic payment systems
31.	Mr. Ali Mundhir Abdallah Assistance Chief Extension Officer Department of Agriculture Mwanakwerekwe, Zanzibar, Tanzania Tel: +255 773299807, +255 777431398 Email: mundhirkomitole91@gmail.com, oallymamp@yahoo.com		Aware on the use of organic techniques to produce good and health organic products
32.	Mr. Gadiye Zakaria Ibrahim Agriculture Technician Ministry of Agriculture, P.O.Box.2182, Dodoma, Tanzania Tel: +255 768386043, +255 02622321407, Email: zachariagadiye@yahoo.com, ps@kilimo.go.tz,	MANENT SECRETAR BY OF AGRICULTUR	Use of radio and television in extension services
	Kenya		
33.	Mr. Ndeka William Omunandi Principal Agricultural Officer Ministry of Agriculture, Livestock, Fisheries and Irrigation, 30028 00100, Nairobi, Kenya Tel: +254 722212235 Email: ndekawilliam@yahoo.com, agriculture.secretary@gmail.com,		To bring lessons learnt to policy makers and assist one SHG to star using ICT in extension
	Malawi		
34.	Ms. Mahata Cynthia Gertrude Agricultural Communication Officer Department of Agricultural Extension Services DAES, P.O.Box.30145, Lilongwe, Malawi Tel: +265 1788738/ 265888524598 Email: mahatacynthia00@gmail.com, <u>virginia@</u> sunbirdmalawi.com,		Social media platforms for agricultural development

35. Agri-business and Management

- > Title of the Training Program: Agri-business and Management
- Date :18 June 2 July, 2019
- Venue: National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India



Program Director / Coordinators

Program Director	Dr. K.C Gummagolmath Director (M&E) National Institute of Agricultural Extension Management (MANAGE), Hyderabad-500030, Telangana Tel: 9666000724 Email: <u>kcgum@manage.gov.in</u>
Program Coordinators	Dr. Mahantesh ShirurDeputy Director (Agril.Extn.)National Institute of Agricultural Extension Management(MANAGE), Hyderabad-500030, TelanganaTel: 040-24594538Email: maha.shirur@manage.gov.inDr. B. Venkat RaoProject ManagerNational Institute of Agricultural Extension Management(MANAGE), Hyderabad-500030, TelanganaDr. B. Venkat RaoProject ManagerNational Institute of Agricultural Extension Management(MANAGE), Hyderabad-500030, TelanganaMobile no. 04024594553, Mob: 9848308114Email: bvrao@manage.gov.in

> Participants profile: 26 executives from 7 countries (12 male & 14 female)

Country	No. of Executives
Cambodia	2
Mongolia	6
Sri Lanka	6
Nepal	4
Malawi	3
Uganda	4
Tanzania	1

Training objectives

- To develop adequate conceptual base in different subject areas of agribusiness
- To provide adequate knowledge, suitable skills and right attitude for managerial decision-making in the Agribusiness sector

- 1. Agri-input Marketing,
- 2. Agri Export Managementand International Trade, Procurement
- 3. Management, Supply Chain Management,
- 4. RuralAdvertising and Communication,
- 5. CommodityFutures,
- 6. Trading and Options,
- 7. ParticipatoryExtension Management,
- 8. Quantitative Aids for Agribusiness,
- 9. Food Retailing,
- 10. Agri-Finance and Banking



Training Outcome

The practice and implementation of various agriculture and business concepts necessary for a successful career in Agribusiness are taken up by the participants in their respective countries.

Change in Knowledge:

A pre- test was organized with the objective to check the existing knowledge of the participants so that it can help in establishing a benchmark for conducting technical sessions. Out of the maximum score of 25, the average score of the group in pre-test was 16.62 while in the post-test the group scored average of 17.36. The increase in the knowledge level of the participants was 4.45 percent.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 0-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.65 on a 10 point continuum indicating the overall impression on the programme was **VERY GOOD**.

SI. No.	Name and Address	BAWP Title & Objective
	Cambodia	
1.	Ms. Ath Sophat Vice Head Department of Extension and Rural Development Prek Leap National College of Agriculture Highway 6, Sangkat Prek Leap, Khan Chhroy Changvar, Phnom Penh, Cambodia Tel: +85592692929 Email: ath.sophat68@gmail.com, pnca.info@gmail.com	Title: Developing teaching material in local languages for studentsObjective: Update teaching courses: Agricultural Marketing and Rural Development
2.	Mr. Loeung Phally Head Department Basic Science and Environment Prek Leap National College of Agriculture Highway 6, Sangkat Prek Leap, Khan Chhroy Changvar, Phnom Penh, Cambodia Tel: +855 12909121 Email: loeung.phally@gmail.com, pnca-info@gmail.com	Title: Develop course outline and teaching materials Objective: Develop course outline and teaching materials
	Mongolia	
3.	Ms. Songuuli Sodnompil Senior Officer of the Evaluation, Monitoring and Internal Auditing Department The Ministry of Food, Agriculture and Light Industry, Baanzurkh District, Peace Avenue 9-A Building, Ulaanbaatar City, Mongolia Tel: +976 51 266147 Email: songuuli@mofa.gov.mn,	Title: Effective cooperation of project implementing bodies and selection of focus group
4.	Ms. Gongor Odgerel Senior Officer Department of Food and Agriculture of Darkhan-Uul Province The 16th Bag, Aged Association Building, Darkhan, Mongolia Tel: +979 99019711 Email: odgerel79@gmail.com,	Title: Small and Medium Enterprises support and business planObjective: To support manufacturing of final product of the export-oriented, import-substitutive and competitive products

SI. No.	Name and Address		BAWP Title & Objective
5.	Mr. Khosbayar Lkhagvasuren Vegetables Fruits Green House Specialist/ Agronomist The Department of Food and Agriculture Selenge Province, Mongolia Tel: 976 80608060, Fax: 97670363500 Email: agromongolia976@gmail.com,		Title: Improvement of potato and vegetables production in Selenge, Mongolia Objective: Improve quality of potato and vegetables produced at our province selenge, Mongolia
6.	Mr. Tsoodol Munkhtsooj Head of Administration Department Crop production supporting fund, Ministry of Food, Agriculture and Light Industry, Crop Production Supporting Fund Building, Workers Street, 3rd Khoroo, Khan-Uul District, Ulaanbaatar-17070, Mongolia Tel: 976-91119003 Email: ts_tsooj@yahoo.com,	E	Title: Role of aggregation in farming Objective: Encouraging farmers to affregate for empowerment on a business perspective
7.	Ms. Dorjdan Tugsjargal Tugsuu Head Administration and Extension Department of Food and Agriculture, 2nd District of Erdenebulgan, Arkhangal, Mongolia Tel: 976-99151661 (WhatsApp), Telefax: 976-7033889 Email: tugsu_d@yahoo.com, ar_mofa@yahoo.com	6	Title: Improvement of potato and vegetables production in Selenge, Mongolia Objective: Research on the livestock sector and turning the research into practice
8.	Ms. Damjin Battsetseg Food Extension Specialist National Agricultual Extension Centre 4th Floor, 60/1 building, 6th Khoroo, Chingeltei District, Ulaanbaatar, Mongolia Tel: 976-89060472, 976-70118087 Email: d.battsetsegg@gmail.com, info@naec.gov.mn,		Title: Promotion of acceptable practices among the dairy farmers Objective: Developing guidelines of GAP in dairy farming and organizing training for farmers about 300 in selected area
	Sri Lanka		
9.	Ms. Ajitha Manikrama District Director of Agriculture (Matale), Department of Agriculture, District Secretariat, Matale, Sri Lanka Tel: +946 62227955, Mob: +94662224793, +94712989146 (WhatsApp), Fax: +94662227955, Email: agrimataleds@gmail.com,		Title: Declying of vegetable price during the harvesting season Objective : To form vegetable growing farmers as a farmer producer organization in two divisional secretary areas in Matale districts
10.	Ms. Liyadde Gedara Chamini Pushpamala Kumari Somadasa Assistant Commissioner (Ampara), Department of Agrarian Development Ararian Development District Office Ampara, Sri Lanka Tel: +063-2224382, Fax: 063-2223198 Email: chaminisomadasa@gmail.com, acadampara@gmail.com,		Title: Maximizing market access to women farmersObjective: Capturing new market and to get higher price for their production

SI. No.	Name and Address	BAWP Title & Objective
11.	Mr. Dasanayake Dissanayake Mudiyanselage Hemantha Assistant Director, National Fertilizer Secretariat, District Secretariat, Puttalam, Sri Lanka Telefax: +094 032 2266322, Fax: 094 011 2887409, Mob: 094 0776681466 Email: dmhdissanayake70@gmail.com, agridriput@gmail.com	Title: Retaining youth in agriculture
12.	Mr. Jayadeva Indrajith Wijenayake Assistant Director, National Fertilizer Secretariat District Secretariat, Hambantota, Sri Lanka Tel: 094 047 3628890, Fax: 094 047 56504 Mob: 094 0718050854 Email: jwijenayaka@yahoo.com	Title: Excess fertiliser usage in the field crop at Hambntita district in Sri LankaObjective: Control the unwanted fertilizer usage in the field crop in the village level
13.	Ms. Ambepitiya Dilupa Nilushi Assistant Director Monitoring and Evaluation Ministry of Agriculture, 288, Sri Jayawardenepura, Mawata, Rajagiriya, Sri Lanka Tel: +94714419953, Fax: +94 112863695 Email: dambepitiya@yahoo.com,	Title: Establish minimum support prices (MSP) for farm produceObjective: To introduce minimum support pricing system to farm produce to mitigate price risk
14.	Ms. N.D.T. Priyadarshani Jayasinghe Development Officer Ministry of Agriculture, Livestock Development, Irrigation and Fisheries and Aquatic Resource Development Ministry of Agriculture, 288, Sri Jayawardenepura, Mawata, Rajagiriya, Sri Lanka, Tel: +94 0112096280 Mob: +94 717187764 (WhatsApp) Email: tharangaprij@gmail.com,	Title: Training on Post Harvest Management (PHM)Objective: Minimizing the post harvest loss percentage keeping under 20% from total production in the selected area
	Nepal	
15.	Mr. Madan Raj Bhatta Chief Executive Officer (CEO) Head Office, Srijanshil Saving and Credit Cooperative, Shuklaphnata Municipality, Word No.10, Jhalari, Kanchanpur, Nepal Tel: 00977- 9858750165, Fax: 00977-540066 Email: bhattamadan83@gmail.com,	 Title: Promoting Agri Mechanization through Agro Micro Credit Scheme Objectives: Provide agro micro credit Ioan to farmers through cooperative society. Providing large equipments to farmers through cooperatives by taking same as collateral.
16.	Mr. Vinod Kumar Barai Cluster Business Manager, Kailali Feed the Future, USAID's KISAN II Project Winrock International (USAID/ KISAN II project), Sanepa Lalitpur, Nepal Tel: +977 9848434631, Email: vinod.barai@winrock.org,	 Title: Promote improved production technologies among small holding farmers for market oriented commercial agribusiness Objectives: Organize small holders into group for motivation to apply market led production plan collectively. Provide technical training to the farmers on improved production and prost-harvest technologies. Establish mutual trusted linkage between producers and market actors; ensure backward and forward linkage of the producers

SI.	No.	Name and Address	BAWP Title & Objective
1	7.	Mr. Santosh Raj Paudel Sr. Agricultural Economist Officer Department of Agriculture Centre for Crop Development and Agro-Biodiversity Conservation Shree Mahal, Lalitpur, Nepal Mobile No. 9855053218 Email: srajpaudel@gmail.com, susantpaudel@yahoo.com	Title: Raising income of smallholder neglected and underutilised spices (NUS) crop farmers prioritized NUS crop includes (by default organic product) Objective: To assure markets by linking private sector and NUS crop producing farmers and facilitate to establish institutions of value chain actors
1	8.	Mr. Salik Ram Poudel Agriculture Extension Officer Department of Agriculture, Hariharbhavan, Lalitpur, Nepal Tel: +977 9857080690, +977 5521356 Email: salikpdl@gmail.com, i nfo@doanepal.gov.np	Title: Raising awareness about Nepal GAP among province level authorities and practitioners. Objective: To help department in raising awareness among provincial authorities to identify basic premises and potential benefits of GAP and raise public awareness of GAP among farmers.
		Malawi	
1	9.	Ms. Khomba Cynthia Florence Agriculture Extension Development Officer Ministry of Agriculture, Lilongwe Add, Department of Agriculture Extension Services, P.O.Box.30134, Lilongwe, Malawi Tel: +265 999868401 (WhatsApp), Email: naweyacynthia@gmail.com,	Title: Pest and Diseases Management
2	0.	Ms. Whayo Gama Rahaby Rarah Extension Worker Ministry of Agricultre, Salima District Agriculture Office, P.O.Box.491, Salima, Malawi Tel: +265 888107342 (WhatsApp), +265 999107342, +265 999498252 Email: rarahwhayophiri@gmail.com	 Title: Promotion of agribusiness among farmers Objectives: ➤ To revamp already existing Liganga Milk Bulking Group (LMBG) to be self reliant ➤ To create linkage between my farmers and value chain actors,To provide GAP to my farmers
2	1.	Mr. Magugu Maxon Kamwachoka Agribusiness Manager NBS Bank PLC Agribusiness Division, P.O.Box.829, Lilongwe, Malawi Tel: +265 0999378373 (WhatsApp), 995186524 Email: maxon.magugu@nbs.mw,	 Title: Access to credit for agripreneurs in Malawi Objectives: ➤ To analyze and understand Malawi's various agriculture value chains in order to identify the gaps that require financial intervention. ➤ To review and develop credit policy for the bank for various agriculture value chain in order to create tailor made solutions.
		Uganda	
2	2.	Ms. Kemirembe Monica Program Officer Master Link Associates, Kisoro Municipality, Kampala, Uganda Tel: +256 393113010 Mob: +256 784922574 (WhatsApp) Email: kmonic57@gmail.com,	Title: Pests and crop diseases control management Objective: To form small farmer groups and give them trainings on some of the good agricultural practices

SI. No.	Name and Address	BAWP Title & Objective
23.	Ms. Ninsiima Sarah Livelihood Officer Shine Cares Uganda Bushenyi Branch Kampala, Uganda Tel: +256 702266516, Mob: +256 773238460 Email: minsiimas@gmail.com	Title: Maximising market acess Objective: Farmer group training on marketing fundermentals
24. 25.	Mr. Mutehimbwa Chrispin Kakuba Executive Director Sensitise Uganda Plot 106, Kisaasi-Kyanja Road, Kampala, Uganda Tel: +256 775663980, +256 393287029 Mob: +256 704503410 Email: chrispin1989@gmail.com, sensitiseuganda@gmail.com Mr. Kilama Alfred District Agricultural Officer/ Sr. Agril. Officer	 Title: Improving access to agricultural credit or finance Objectives: > To improve young farmers' access to cheap agricultural loans. > To promote farmer youth cooperatives Title: Improving access to agricultural credit or finance
	Nwoya District Local Government P.O.Box.1033, Gulu, Uganda Tel: +256 777360683, 256 772480351 Email: kilamaalfred@gmail.com, iasaba02@gmail.com Tanzania	
26.	Ms. Islam Ramla Mohamed	Title: Access to finance/credit
	Assistance Agro Business Planning Research and Policy P.O.Box.159, Zanzibar City, Zanzibar Tel: +255 2233320 Fax: +024 22385142 Mob: +255 712700300 Email: dalaamudy@yahoo.com. ps@kilimo.go.t	Objective: To improve access to agricultural finance by encouraging them to do small monthly savings where they can borrow and builds themselves

36. Agribusiness: Start-up to Scaleup

- > Title of the Training Program: Agribusiness: Start-up to Scaleup
- Date: 10-24 July, 2019
- Venue: National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India



Program Director / Program Coordinators

Program Director	Dr. Saravanan Raj Director (Agril.Extn.) National Institute of Agricultural Extension Management (MANAGE), Hyderabad-500030, Telangana Tel: 040-24594538 Email: maha.shirur@manage.gov.in
Program Coordinators	Dr. Mahantesh ShirurDeputy Director (Agril.Extn.)National Institute of Agricultural Extension Management(MANAGE),Hyderabad-500030, TelanganaTel: 040-24594538Email: maha.shirur@manage.gov.inDr. Sagar DeshmukhAssistant ProfessorMANAGE Incubation CentreNational Institute of Agricultural Extension Management(MANAGE), Rajendranagar, Hyderabad -500030Mob: 7997253355, Email: sag.deshmukh@manage.gov.in

> Participants profile: 26 executives from 7 countries (17 male & 9female)

Country	No. of Executives
Sri Lanka	10
Nepal	7
Mongolia	2
Liberia	1
Malawi	3
Tanzania	1
Uganda	2

> Training objectives

- To orient the participants about the present status of Agribusiness in India
- To orient the participants about entrepreneurial initiatives in agribusiness in India
- To make participants aware about "Startups" and "Startup Ecosystem"
- Experiential learning about innovative Agri-tech startups in India
- Understanding the journey of the entrepreneurs and their business ventures
- ✤ To understand process of technology innovation and commercialization
- To understand process of strengthening the startups through better Business modelling, planning, Strategizing, Marketing and IPR for scaling up

- 1. Module development on agribusiness: startup to scale up
- 2. Ecosystem creation for agribusiness startups
- 3. Technology commercialization
- 4. IPR issues



Training Outcome

The training outcome were to discover the agribusiness potential is the respective partner countries and expand the scope of a start-up among the farmers.

Change in Knowledge of the participants

A pre- test was organized with the objective to check the existing knowledge of the participants so that it can help in establishing a benchmark for conducting technical sessions. Out of the maximum score of 25, the average score of the group in pre-test was 11.85 while in the post-test the group scored average of 14.54. The increase in the knowledge level of the participants was 22.70 percent.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 0-to-10. The executives expressed their satisfaction level by rating the program on an average score of 8.11 on a 10 point continuum indicating the overall impression on the programme was good.

Field Visits

During the program, executives visited Rural Technology Park (RTP) at National Institute of Rural Development and Panchayat Raj (-NIRD), T-Hub, IIIT, Hyderabad, Indian Institute of Millets Research (IIMR), Hyderabad, Centre for Entrepreneurship Development (CED), ALEAP Industrial Park (CED-ALEAP). Agribusiness and Innovation Platform, International Crops Research Institute for the Semi-Arid Tropics (AIP-ICRISAT), T-Hub at ICRISAT, Centre hosted at Centre for Cellular and Molecular Biology (CCMB) and Lesparanza Unit.





Sl. No.	Name and Address	BAWP Title
	Sri Lanka	
1.	Mr. S. M. Nagahawatta District Director of Agriculture, Ministry of Agriculture, 288, Srijayavardanapura Mawata, Rajagiriya, Colombo, Sri Lanka Mob: +947 73588740 Tel: +94 112369311, +947 19791660, Email: <u>s_manjula_n@yahoo.com</u> ,	Traditional bee honey extract
2.	Mr. Somawansa Senarath Yapagedon Asanga Assistant Commissioner, Department of Agrarian Development, O/o. Deputy Commissioner, Department of Agrarian Development, 42, Sri Marcusfernando Mawata, Colombo-07, Sri Lanka Mob: +94 710846386, Tel: +94 272222183, +94 702567223 (WhatsApp) Email: asangasomawansa@yahoo.com, dadkurunegala@gmail.com,	Traditional bee honey extract
3.	Mr. Dissanayake Mudiyanselage Edirisingha Bandara Dissanayake Assistant Director Ministry of Agriculture, 288, Srijayavardanapura Mawata, Rajagiriya, Sri Lanka Mob: 077-4409021 Telefax: +94 11 28887447 Email: <u>ntsadbdl@gmail.com</u> , <u>nfsquality@gmail.com</u> ,	Awareness programs on organic green gram cultivation in Sri Lanka
4.	Mr. Anawala Gedara Arunatilaka Assistant Director Ministry of Agriculture, 288, Srijayavardanapura Mawata, Rajagiriya, Sri Lanka Telefax: +94 11 28887447 Mob: + 94718075454 Email: <u>arunatilaka496@gmail.com</u> , <u>nfsquality@gmail.com</u>	Monitoring program in fertiliser producing company and farmers
5.	Mr. Pushpa Nuwan Colambage Director, Janatha Govi Samagama Company, St. Thomas Junction, Weliwada Road, Bandarawela, Sri Lanka Tel: +94 572231042, +94 763608983 WhatsApp: +94 714371115 Email: <u>colambagelanka@gmail.com</u> ,	Attracting Youth in Agriculture
6.	Ms. Kumuduka Gayathri Ambawattha Public Management Assistant Procurement Section, Ministry of Agriculture, No.288, Sri Jayawardhanapura, Rajagiriya, Sri Lanka Mob: +94 0766260660, Telefax: 011-2887406 Email: gayathri.a6@gmail.com,	Adding value to the Sri Lankan cashew nuts

il. No.	Name and Address	BAWP Title
7.	Ms. Merenchi Kankanamge Wajira Udayanganie Public Management Assistant Ministry of Agriculture, No.288, Sri Jayawardhanapura, Rajagiriya, Sri Lanka Tel: Telefax: 011-2887406, Mob: +94 0714419166 (WhatsApp) Email: wajirau@gmail.com,	Mobile app for farmers
8.	Ms. Kanchani Jayasinghe Development Officer Ministry of Agriculture, No.288, Sri Jayewardhanapura Mawatha, Rajagiriya, Sri Lanka Mob: +94 718332361 Telefax: 011 2887401 Email: kmahathanthila@gmail.com,	To reduce over usage of fertiliser up to 70% and Increase crop productivity
9.	Mr. Mahawala Gamage Premalal Ranasinghe Development Officer Ministry of Agriculture, No.288, Sri Jayewardhanapura Mawatha, Rajagiriya, Sri Lanka Tel: +94 112887406 Mob: 0094 715787231 Email: pranasinghe344@gmail.com,	Decrease Post harvest losses
10.	Ms. Subasinghe Arachchilage Gayani Sandaseeli Development Officer Ministry of Agriculture No.288, Sri Jayewardhana Road, Rajagiriya, Sri Lanka Mob: +94 0775009171 Telefax: +94 112887406 Email: gayanisandaseeli@gmail.com,	Disseminate knowledge on technology, markets and credit access
	Nepal	
11.	Mr. Moti Prasad Lamichhane Livestock Development Officer Ministry of Agriculture and Livestock Development, Kathmandu, Nepal Mob: +977 9846039162 Telefax: +977 014211950 Email: <u>lamichhanemoti45@gmail.com</u>	To promote commercialization of dairy cattle farm
12.	Mr. Navaraj Acharya Cluster Business Manager (CBM) Enterprise Development, Micro Finance, CEAPRED, Nepal (USAID/Kisan II Project) Sanepa-2, P.O.Box. 8975, Lalitpur, Nepal Mob: +977 9841517945 Tel: 977-01-5543861, 01-5184242 Email: navaraj.acharya@ceapred.org.np, <u>navarajacharya@hotmail.com</u> ,	To improve the productivity of vegetable in Surkhet district of Nepal

l. No.	Name and Address		BAWP Title
13.	Mr. Rahul Gupta Senior Manager Shanti Khadya Udhyog Ward No.3, Gulariya Municipality, Bardiya, Nepal, Mob: +977 9866534834 Email: rahul2610gupta@gmail.com, info.sgi2610@gmail.com,	6	Awareness among farmers to adopt modern techologies
14.	Mr. Ram Sharan Bhandari Secretary Bindhavshini Bachat Tatha Rin Sahakai Sansta Ltd., Banepa-7, Kavrepalnchok, Nepal Tel: +977 9851216965 Mob: +977 9849284451 (WhatsApp) Email: <u>ramsharanbhandari2070@gmail.com</u> , secretary@biscol.org.np,		Increase income of farmers by agribusiness
15.	Mr. Ram Prasad Pudasaini Chairman Shree Jagaruk Krishi Sahakari Sanstha Limited, Shivapuri Rural Municipality-8, Thapapati, Nuwakot, Nepal Mob: 9751029814, 9851109814 Email: pudasainiram@gmail.com, jagarukkrishisahakari@gmail.com,		To improve skill and knowledge on technology use among members
16.	Mr. Ashok Sapkota Member Aatmanirvor Bahuudeshiya Cooperative Ltd., Panchkhal-10, Kavrepalanchok, Nepal Mob: +977-9851082508, Email: sapashok57@gmail.com, <u>aatmanirbhar.</u> <u>coop@gmail.com</u> ,		To improve skill and knowledge on technology use among members
17.	Ms. Shrijana Timilsina Agriculture Economist Ministry of Agriculture and Livestock Development, Singha Durbar, Kathmandu, Nepal Mob: +977 9851183824 Email: shrijanatimilsina@gmail.com, shrijana. timilsina@nepal.gov.np		Crop pest and disease management
	Liberia		
18.	Mr. Frank Friday Merriam Field Technical Farmers Empowerment & Educational Development of Liberia (FEED) Pipeline Road, Paynesville City, Liberia Mob: +231 775171144, Tel: +231 777195344 Email: <u>vvonnemerriam@gmail.com</u> ,		Low value addition & commercialisation of cassava in Liberia
	Malawi		
19.	Ms. Margaret Bwanali Manager (Self-employment) Emmanuel Poultry Farm, P.O.Box.30918, Lilongwe, Malawi Mob: +265 999497376 (WhatsApp) Tel: +265 880585456 Email: maggiebwanali81@gmail.com,		Marketing strategies on poultry among small holder farmers in Malawi

SI. No.	Name and Address	BAWP Title
20.	Mr. Kennedy Mphatso Msodoka Agriculture Extension Development Officer Nkhotakota District Agriculture Office, P.O.Box.41, Nkhotakota, Malawi Mob:- +265 999330437 (WhatsApp) Tel: +265 880585456 Email: <u>kennedymsodoka@gmail.com,</u> <u>abuhmhlanga@gmail.com,</u>	Promote Integrated Farming Systems (IFS) among farmers
21.	Mr. Staphord Banda Agriculture Extension Development Officer Ministry of Agriculture, Kasungu District Agriculture Office Box. No.17, Kasungu, Malawi Tel: +265 999921271, Mob: +265 993363326 Email: staphordbanda1985@gmail.com,	To improve the soil fertility for better results in Lisasadzi EPA, Kasungu, Malawi
	Mongolia	
22.	Mr. Khayankhyarvaa Enkhsuren Senior Officer Department of Information and Technology Mongolian Commodity Exchange 2 nd Floor, Peace Avenue, 18A-1, Bayanzurkh District, Mongolia Mob: +976 88098600, Telefax: +976 70108779 Email: enkhsuren@mce.mn,	Online ordeing platform for vegetables
23.	Ms. Badamtsatsral Baasanjav Teacher University of Agriculture, School of Agro economics, Central Building 152, Zaisan, MULS, Ulaanbaatar, Mongolia Tel: +976 99879547, +976 7777243 Mob: +976 99879547 (WhatsApp), Fax: 75107777243 Email: badamtsatsral@muls.edu.mn,	To provide pesticide users and importers with pesticide application, storage, and other pesticide related knowledge
	Tanzania	
24.	Ms. Khatib Mwantanga Buda Planning Officer Department of Agriculture, Mbweni, Zanzibar Tel: +255 679611961 Mob: +255 777434874 Email: fadhilakhatib1@gmail.com,	Increase the production of tomatoes
	Uganda	
25.	Mr. Ssebaduka Micheal Mboowa Monitoring & Evaluation Officer CBS-PEWOSA, Bulange, Mengo Kampala, Uganda Tel: +256 773938909,Mob: +256 703565952 Email: <u>micheal_mboowa@yahoo.com</u> ,	Promote Integrated Farming System (IFS) among the farmers
26.	Ms. Nakiwala Irene Sales and Marketing Executive SIAS Book Trust, Nabunya Road, Lubaga, Kampala, Uganda , Mob: +256 703634493 Tel: +256 776953101, +256 704488678 Email: ronishmuelo@gmail.com, siasbooktrust@gmail.com,	To boost the people of Kassanda district with modern methods of technology

37. Climate Smart Agriculture







- > Title of the Training Program: Climate Smart Agriculture
- Date: 20 August 3 September, 2019
- Venue: ICAR-Central Research Institute for Dryland Agriculture (CRIDA), Water and Land Management Training and Research Institute (WALAMTARI) and National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India

Program Director / Coordinators

Program Directors	 Dr. Maddi Vanaja Principal Scientist (Plant Physiology) Central Research Institute for Dryland Agriculture Santoshnagar, Hyderabad-500 059 Ph 91 40 24530161 Ext. 275, Mob: 9247349409, E-mail: M.Vanaja@icar.gov.in Dr. Mahantesh Shirur Deputy Director (Agril.Extn.) National Institute of Agricultural Extension Management (MANAGE), Hyderabad-500030, Telangana, Tel: 040-24594538,
	Email: maha.shirur@manage.gov.in
Program Coordinator	 Dr. S.K. Bal Principal Scientist CRIDA, Hyderabad Dr. K. Nagasree Principal Scientist (Agril. Extension) CRIDA, Hyderabad Dr. B. Narsimhulu Sr. Scientist (Soil & Water Conservation Engineeing) and OIC, GRF CRIDA, Hyderabad Dr. B. Krishna Rao Director (Agri. & Res.) Water and Land Management Training and Research Institute Himayathsagar, Rajendranagar, Hyderabad - 500030. Phone No: 040-24006201, Mob: 9574715074, Email: darwalamtari@gmail.com

> Participants profile: 27 executives from 7 countries (12 male & 15 female)

Country	No. of Executives
Afghanistan	2
Botswana	1
Cambodia	2
Kenya	1
Liberia	1
Malawi	2
Mozambique	2
Myanmar	1
Nepal	5
Sri Lanka	6
Tanzania	2
Uganda	2



> Training objectives

To address human and institutional capacity gaps in Agriculture and allied sectors to achieve food and nutritional security.

Training Curriculum

- 1. Agro-climatological applications,
- 2. Real-time contingency plans,
- 3. On-field soil and water management measures,
- 4. Efficient crops and cropping systems,
- 5. Water harvesting measures,
- 6. Farmers' practices and Indian success stories etc. for practicing Climate Smart Agriculture.

Training Outcomes

The major outcomes were the awareness, promotion, dissemination and adoption of Climate Smart Agricultural practices by the participants in their respective countries.

Change in Knowledge of the participants

The average score of executives in the pre-training test was 14.78 whereas the average score of post-training was 16.52. Thus, it is found that the level of knowledge of executives was increase by 11.77 percent after the training programme.

Evaluation

Feedback of executives was collected on all technical and practical sessions taken by resources persons on a scale of 0-to-10 ('0' being the poor and '10' being the excellent). The executives expressed their satisfaction level by rating the program on an average score of **9.03** on a 10 point continuum indicating the overall impression about the programme was **EXCELLENT**.

> Field Visits

During the training program executives visited IFS & ITK, Ameerpet village, Maheshwaram Mandal, R.R. Dist. Government of Telangana initiatives; Govindapur Watershed, Vikarabad; KVK Adopted village- Gaddamallaihguda, Yacharam Mandal of Telangana State; CRIDA research farm at Hayathnagar and ICRISAT, Hyderabad.



Water Harvesting Check Dam

Integrated Farming System



Sl. No.	Name and Address	BAWP Title
	Afghanistan	
1.	Mr. Mohammad Rahman Arghandiwal Director Directorate of Agriculture, Irrigation and Livestock Samangan Province, Kabul, Afghanistan Mob: 0093 799241341 Email: rahman.arghandiwal@gmail.com,	Promotion of Watershed and water conservation practices
2.	Mr. Abdul Mannan Matin Provisional Director of Agriculture, Irrigation and Livestock, Ministry of Agriculture, Irrigation and Livestock (MAIL),Bagh-e-Now, DAIL Office, Farah Province, Afghanistan, Mob: 0093 799590438 Email: manan_matin@yahoo.com,	Drip Irrigation and water harvesting
	Botswana	
3.	Ms. Gabaoitse Tiroyaone Agricultural Scientific Officer-I Department of Crop Production, Ministry of Agriculture, Food & Security Department, P.O.Box.12, Gaborone, Botswana Tel: +267 3689000, Fax: +267 3907057 Mob: +267 73687334, Email:btramaphoi@gmail.com,	Water management technologies in conservation agriculture by dry land farmers in Botswana
	Cambodia	
4.	Ms. Yoem Malen Officer Planning and accounting office, Department of Agriculture, Forestry and Fisheries, SK.Boeng Kok, Kh.Kampong Cham, Ct. Kampong Cham, Cambodia Tel: +855 42211004/007, Mob: +855 78859707 Email: malen1yim@gmail.com,	Knowledge on adaptation to climate change and crop diversification in kompong siem district , kampong cham province
5.	Ms. Suon Kanika Vice Chief of Planning and Statistic Office General Directorate of Agriculture (MAFF) #54B/49F, Street 395-656, Sangkat Toeuk Laak3, Khan Toul Kok, Phnom Pehn, Cambodia Tel: +855 23883427 Mob: +855 17552993/+855 7583440 Email: kanikasuon@ymail.com,	Awareness on Climate Smart Agriculture among the farmers and agriculture professionals
	Sri Lanka	
6.	Ms. Sarojani Prathapasinghe Development Officer Ministry of Agriculture, Rural Economic Affairs, Livestock Department, Irrigation and Fisheries and Aquatic Resources Development,288, Sri Jayewardenepura Mawatha, Rajagiriya, Sri Lanka, Tel: +94112872097, Fax: 011-2869698 Mob: 0717699365 (WhatsApp) Email: sarojaniprathapasinghe@yahoo.com,	To implement customer hiring centres to provide farm machinery to farmer organisations and small holder farmers

SI. No.	Name and Address	BAWP Title
7.	Mr. Chandana Kodippili Assistant Director (Operation), Agricultural & Agrarian Insurance Board 117, Subadrarama Road, Gangodawila, Nugegoda, Sri Lanka Tel: 0094 115384000, Fax: 0094 112863593 Mob: 0094 71 3486263 Email: chandanakodippili@yahoo.com,	To promote the agricultural insurance policies
8.	Mr. E.M. Neel Bandara Ekanayake Assistant Director (Insurance), Agricultural & Agrarian Insurance Board 117, Subadrarama Road, Gangodawila, Nugegoda, Sri Lanka Mob: 0094 713486433, Tel: 0094 115384000, Fax: 0094 1128127571 Email: n.ekanayake01@gmail.com,	To develop Climate Smart Integrated Crop Insurance System in Sri Lanka
9.	Ms. S. Dilrukshi Rambukpitiya Development Officer Ministry of Agriculture, Livestock Development, Irrigation and Fisheries and Aquatic Resources Development, 288, Sri Jayewardenepura Mawatha, Rajagiriya, Sri Lanka Mob: 0094 779621878, Tel: 0094112869698, Fax: 0094 112863593 Email: vetmartdilu@gmail.com,	Promotion of Climate Smart Agricultural Practices for water conservation
10.	Ms. Nugaliyadda Ayodhya Harshapriya Ravini Development Officer, Ministry of Agriculture, Rural Economic Affairs, Livestock Department, Irrigation and Fisheries and Aquatic Resources Development, 288, Sri Jayewardenepura Mawatha, Rajagiriya, Sri Lanka Mob: 094 776330341, Tel: 094 2869553, 0942872097, Fax: 094 112878674 Email: ayodhyahr@yahoo.com,	In Situ moisture conservation by using polymers during dry season in dry zone of Sri Lanka
11.	Mr. Janak Dilantha Daluwatta Development Officer (Grade-2) Ministry of Agriculture, National Fertilizer Secretariat No.288, Sri Jayewardenepura Mawatha, Rajagiriya, Sri Lanka Mob: 094 0716913171, Tel: 0112869698 Email: dalunfs@gmail.com,	Development of Integrated Pest Management Mobile App
	Nepal	
12.	Mr. Rajendra Bahadur Singh Manager Samjhauta Bahuddesiya Sahakari Sanstha Limited, Belauri Municipality, Ward No.10, Kanchanpur, Nepal Mob: 009779806464243 Tel: 00977099580319 Email: singhrb220@gmail.com,	Awareness Training's on Seed fertilizer technology

Sl. No.	Name and Address	BAWP Title
13.	Mr. Purusottam Prasad Gupta Cluster Business Manager/ KISAN II CEAPRED/Agriculture, Madan Marg-13, Nepalgunj, Nepal Tel: 977-9804711662 Mob: 977 9868551818 Email: purusottamgupta.in@gmail.com,	Promotion of Climate Smart Agricultura Practices for water conservation
14.	Mr. Uttam Dhakal Senior Planning and Milestone Manger Winrock International, KISAN II Project, Kalika Marg, Senepa, Lalitpur, Nepal Mob: +91 9620742716(India) Tel: 977 5541961, 5544962 Email: dhakaluttam@gmail.com, udhakal@winrock.org,	Drip Irrigation for Horticultural Crops
15.	Mr. Binod Kunwar Plant Protection Officer Agriculture Extension (GON) Ministry of Agriculture and Livestock Development, Kathmandu, Nepal Mob: +977 9847303393 Tel: 977 014331629, 14211935 Email: redcrag.bk@gmail.com, binod. kunwar1@nepal.gov.np,	Establishment of Custom Hiring centres
16.	Mr. Malla Suvash Proprietor Kesan Kheti Pasal, Hetauda 10, Buspark, Makwanpur, Nepal Mob: +977 9845298041 Tel: +977 57-524417 Email: kisankhetipasal@gmail.com,	To provide quality inputs to retail network and farmers
	Kenya	
17.	Mr. Amariati Wycliffe Linyerera Principal Agricultural Officer Agriculture Crops Development, Ministry of Agriculture, Livestock, Fisheries and Irrigation, P.O.Box. 30028-00100 Nairobi, Kenya Mob: +254 0721915804 Tel: +254 202723734 Email: wycliffeamariati@gmail.com, info@ kilimo.go.ke,	Promotion of Climate Smart Agricultura Practices for water conservation
	Malawi	
18.	Ms. Kapesi Mercy Agriculture Extension Development Officer Agriculture Extension. Ministry of Agriculture, Irrigation and Water Development Katelela Epa, Salima District, P.O.Box.1, Salima, Malawi Mob: +265 999301498, Tel: +265 263213 Email: mercykapesi19@gmail.com,	Dissemination of knowledge among farmers at katelera east section on good soil and water management technologies

SI. No.	Name and Address	BAWP Title
19.	Mr. Mathews Roberts Mwangonde Technical Officer Department of Animal Health and Livestock Development Department Ministry of Agriculture, Mzuzu Add, Box.8, Mzuzu, Malawi Tel: +265 312223, Mob: +265 999133872 Email: mwangondem@gmail.com,	Disseminatio of knowledge on use of cow dung, urine and vaccinations of chickens among the dairy farmers in Mzuzuz city
	Myanmar	
20.	Mr. Kyaw Thet Oo Deputy Staff Officer Department of Agriculture, Building No.43, Landuse Division (Head Office), Ministry of Agriculture, Livestock and Irrigation, Naypyi Taw, Myanmar Mob: 95 9 971586205, Telefax: 95673 410384 Email: kokyawthetoo13579@gmail.com,	Demonstration of CSA technologies
	Mozambique	
21.	Mr. Edson Rafael Manso Planning, Monitoring and Evaluation Officer Agrarian Extension, Department of Agriculture and Food Security of Manica- Provincial Department of Agrarian Extension of Manica Street Pigivide, Number 678, Chimoio City, Manica Province, Mozambique Tel: +258 05122075 Mob: +258 822548307 Email: khankondo@yahoo.com.br,	Technology diffusion to reduce production costs and soil improvement in the province of Manica
22.	Ms. Judite Jose Natal Agricultural Extension Technician – Rural Extensionist District Service of Economic Activities of Mabalane District of Mabalane, Gaza Province, Mozambique Mob: +285 866498183 Email: judyjuniornatal@gmail.com, delciojuliao@gmail.com,	Soil Management Strategies in the Limpopo river
	Tanzania	
23.	Mr. Khamis Maulid Mohamed Plant Pathologist Ministry of Agriculture, Natural Resources, Livestock and Fisheries, Maruhubi, Zanzibar, Tanzania Mob +255 717904399 Tel: +255 2230985, Fax: +255 242234650 Email: chichi.mau05@gmail.com, kilimo@ zanlink.com,	Promotion of water conservation techniques for Zanzibar farmers

SI. No	. Name and Address	BAWP Title
24.	Ms. Miza Suleiman Khamis Deputy Chief Programme Ministry of Agriculture, Natural Resources, Livestock and Fisheries, Department of Forestry and Non-Renewable Natural Resources, P.O.Box.159, Maruhubi, Zanzibar Tanzania Tel: +255 242230985 Mob: +255 777332223, Fax: + Fax: +255 242234650 Email: mizakhamis@gmail.com,	Mainstreaming Gender in Climate change and Natural resources Management
	Uganda	
25.	Ms. Nansamba Alice Regional Coffee Technical Officer Uganda Coffee Development Authority Coffee House, Plot.35, Jinja Road, Kampala, Uganda Mob: +256772853488, Tel: +256 312260470 Email: alice.nansamba@ugandacoffee.go.ug,	Popularization of water conservation practices in coffee and banana growing areas
26.	Mr. Katongole Emmanuel Agricultural Officer Production Department, Nakasongola District Local Government, P.O.Box.1, Nakasongola, Uganda Mob: +256 773471866 Tel: +256 777525652 Email: emmaukatongole@gmail.com,	Promotion of locally made repellents in the management of the termites in orchard fields of Nakasongola district Uganda
	Liberia	
27.	Ms. Massaquoi Laurenor S. Environmental Officer Quavantine Department, Ministry of Agriculture, P.O.Box.10-90100, 1000, Monrovia-10, Liberia Tel: +231 770-6178723 E-mail: lawrencemassaquoi1@gmail.com	Water and soil management through CSA



38. Integrated Technology for Production, Processing and Value addition in Tuber Crops

- Title of the Training Program: Integrated Technology for Production, Processing and Value addition in Tuber Crops
- Date: 16-30 September, 2019
- > Venue: ICAR-Central Tuber Crops Research Institute (CTCRI), Thiruvananthapuram, Kerala, India



Dr. V. Ravi Principal Scientist (Plant Physiology) Head, Division of Crop Production ICAR-Central Tuber Crops Research Institute, Trivandrum-695 017, Kerala, India Mob: 9447587141 Email: veluravi03@yahoo.co.in

Participants profile: 29 executives from 10 countries (17 male & 12 female)

Country	No. of Executives
Afghanistan	1
Botswana	1
Cambodia	1
Sri Lanka	7
Nepal	1
Kenya	4
Liberia	1
Malawi	4
Mozambique	3
Myanmar	2
Uganda	4

Training objectives

- To introduce production system-specific technological advances of tropical tuber crops
- To build capacities of participants on cultivating tuber crops in a profitable and sustainable way using improved technologies
- To sensitize the participants on diversified applications of tropical tuber crops to improve economic security of farmers
- To equip participants to identify and use potential value added tuber crops technologies to develop sustainable business

- 1. Agro-ecosystem
- 2. Specific tuber crops technologies
- 3. Management of genetic resources of tuber crops
- 4. Best agronomic practices for tropical tuber crops
- 5. Recent advances in soil fertility and Plant nutrient management of tropical tuber crops
- 6. Site-specific nutrient management (SSNM) for tropical tuber crops
- 7. Precision farming in tuber crops
- 8. Integrated farming system of tropical tuber crops
- 9. Post-harvest physiological deterioration
- 10. Storage techniques in tuber crops
- Training Outcome
 - The participants practised the various methods and techniques of integrating roots and tubers for sustainable livelihoods under the scenario of global climate change.

> Change in Knowledge of the participants

The average score of executives in the pre-training test was 9.69 whereas the average score of post-training was 15.66. Thus, it is found that the level of knowledge of executives was increase by 61.61 percent after the training programme.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 0-to-10 ('0' being the poor and '10' being the excellent). The executives expressed their satisfaction level by rating the program on an average score of **9.4** on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT**.

Field Visits

During the training program executives visited M/S Tierra Foods, KINFRA Park, Elamanoor, Adoor, Sangamaithri; Pallichal – A Farmers Producer Organization, College of Agriculture, Vellayani, Thiruvananthapuram ; Kovalam ; Model Tuber Crops farm – Farmer's interaction and group discussion - Chandavizha, Kataikonam and places of cultural and historical importance in Thiruvananthapuram and Kanyakumari.





SI. No.	Name and Country	BAWP Title
	Afghanistan	
1.	Mr. Tasal Abdullah Director of Agriculture, Irrigation and Livestock, Ministry of Agriculture, Irrigation and Livestock (MAIL) Pul-E-Alam Logar Province, Afghanistan Mob:+93787822040, +93792501414 Email: abdullahtasal@gmail.com,	Food Safety Management System(FSMS) through PRP Approach
	Botswana	
2.	Ms. Matshidiso Masopa Agricultural Scientific Officer Ministry of Agriculture, Department of Crop Production Private Bag. 0091, Baborone, Botswana Mob: 09267 75410172, Fax: 09267 3928768 Email: masopamatshidiso@gmail.com, mtmasopa@gov.bw,	Reduction of Post-Harvest losses of Sweet Potato using Pit Clump Technology among Small Scale Farmers in Central District of Botswana
	Cambodia	
3.	Ms. Srun Khema Head, Post-harvest and Marketing Office, Department of Rice Crop, #54B/45F, Street-395-656, Sangkat Toeuk Laak3, Khan Tuo Kok, Phenom Penh Cambodia Tel: +855 23883427, Mob: +855 17337338 Email: srunkhema@gmail.com,	Technology for Production, Processing and Value addition in Tuber Cassava Crop in Cambodia
	Kenya	
4.	Ms. Heyi Evelyne Avagala Principal Agricultural Officer Ministry of Agriculture, Livestock, Fisheries and Irrigation, P.O.Box.30028-00100 Nairobi, Kenya Tel: +254 720335398 Email: evelyneheyi@gmail.com,	Value addition to white ginger
5.	Mr. Odongo Paul Ayiemba Research Scientist Kenya Agricultural and Livestock Research 820-20200, Kericho, Kenya Tel: +254 722209915, +254 05220598, Mob: +254 725862492 Email: paulayiemba@gmail.com, director.tri@kalro.org,	Increase cassava production by use of green manure among small scale farmer in Gwassi East location, Homabay county
6.	Mr. Munyua Lazarus Mburugu Senior Agricultural Officer Ministry of Agriculture, Livestock, Fisheries and Irrigation, P.O.Box.30028-00100 Nairobi, Kenya, Tel: +254 720593254 Email: mburugul@yahoo.com, lazarusimunyua@gmail.com,	Development of bankable business plans for small scale Agro processing tuber crops enterprises in Kenya

SI. N	o. Name and Country	BAWP Title
7.	Ms. Kihara Naomi Wangeci Chief Agricultural Officer State Department for Crops Development P.O.Box.30028-00100, Nairobi, Kenya Tel: +254 2718870 Mob: 0722942457 Email: wangeshara@yahoo.com,	Technology for Production, Processing and Value addition in Cassava Crop in Cambodia
	Liberia	
8.	Ms. Johnson Tellewo Melvina Extension Officer Ministry of Agriculture, Old L.P.R.C Road, Gardnerville, Somalia Drive, Liberia Tel: + 231 881461516 Email: tellewo27@gmail.com, rogunti@moa.gov.lr,	Technology for Production, Processing and Value addition in Cassava Crop
	Malawi	
9.	Mr. Beya Christopher Leonard Farm Manager Mchilika Horticultural Farm Kakhogwa Village, Ta M'Duwa, Machinji, Malawi Tel: +265 999962554 Email: christopherbeya@gmail.com, chilikafarm@gmail.com,	Production of Quality Tuber crops Planting Materials at Mchilika Farm in Mchinji district, Malawi
10.	Mr. Mwendo Phiri Essau Executive Member Malawi Forum for Agricultural Advisory Services P.O.Box.30081, Lilongwe-3, Malawi Tel: +265 999832156 / +265 884613748, Mob: +265 993275591 Email: essaumwendo19@gmail.com,	Establishment of market system for quality tuber seed planting materials in central region of Malawi
11.	Mr. Thole PhatiswayoAgricultural Officer (Legumes)Mzimba North District AgricultureDevelopment Office,Ministry of Agriculture Irrigation and WaterDevelopmentP.O.Box.8, Mzuzu, MalawiTel: +265 888512762,Mob: +265 999158772Email: phhatti@yahoo.com,	Enhancement of effective seed system and disease control mechanism for Cassava Mosaic Disease (CMD) to cassava crop in Mzimba North in Malawi
12.	Mr. Chikafa Jethro Fraser Esau Crops Production Officer Ministry of Agriculture, Irrigation and Water Development Department of Crops Development, Dowa West RDP, P.O. Box 131, Mponela, Malawi Tel: 0888377285 / 0888950261 / 0999111004 WhatsApp number: 0888950261 / 0888377285 Email: jethro.chikafa@gmail.com,	Minimize the loss of Cassava tubers during harvesting amongst cassava farmers in Dowa district Malawi

sl. No.	Name and Country	BAWP Title
	Mozambique	
13.	Ms. Badru Anilda Eugenia DPASA-Extension Provincial Director of Agriculture and Food Security (DPASA)-SDAE Zambegia, Mozambique Mob: 825359280 Email: anildabadru@gmail.com,	Increase in the production of Tuber crops
14.	Mr. Siueia Junior Matias Agronomist Maputo Municipality Council Praca Da Independencia, CP 251, Maputo, Mozambique Tel: +258 849051416, +258 824024846 Email: siueia.junior@gmail.com,	Evaluation of soil fertility in cassava production
15.	Ms. Aurelio Zitha Neuza Rosa Agricultural Extension Technician-Rural Extensionist District Service of Economics Activities of Chigubo District of Chigubo, Gaza Province, Mozambique Tel: 828417550/822966080/861353657, Mob: 874257760 Email: neuzarosazitha94@gmail.com,	Improve production of cassava in Chigubo - Gaza
	Myanmar	
16.	Ms. Aye Thiri Myo Deputy Staff Officer, Department of Agriculture, Office No. 43, Nay Pyi Taw, Myanmar Mob: +95 9699550690 Email: ayethirimyo.moa@gmail.com,	Post-harvest and Value addition of Tuber crops in Myanmar
17.	Ms. Thu Zar Myint Assistant Staff Officer, Department of Agriculture, Post-Harvest Technology Training Centre, Office No. 43, Nay Pyi Taw, Myanmar Mobile: +95 9442119385 Email: myintthuzar018@gmail.com,	Good Manufacturing Practices(GMP) for food safety
	Nepal	
18.	Mr. Hari Prasad Gurung Senior Horticulture Development Officer Tuber Vegetable Development Centre Ministry of Agriculture and Livestock Development, Govt. of Nepal, Sindhuli, Nepal Mob: 056 591705, 9841235537	Improved agronomic practices to increase the productivity in greater yam

SI. No.	Name and Country	BAWP Title
	Sri Lanka	
19.	Ms. Garumuni Dilrukshi Nadeeshani Menike Research Officer National Institute of Post-harvest Management, Jayanthi Mawatha, Anuradhapura, Sri Lanka Mob: +94 712888936, Fax: +94 252223983 Email: dilrukshiwijerathne@gmail.com,	Increase of land use efficiency in paddy cultivating areas in dry zone of Sri Lanka due to climate change
20.	Mr. Tellambura Hettige Kasun Dhanusha Research Officer National Institute of Post-harvest Management, Jayanthi Mawatha, Anuradhapura, Sri Lanka Mob: +94 711421533 Fax: +94 252223983 Email: kasun.hettige@gmail.com,	Income generating activities for Tuber crop farmers
21.	Mr. Dasanayake Mudiyanselage Athula Kumara Dasanayake Extension Assistant National Institute of Post-harvest Management, Research and Development Centre, Jayanthi Mawatha, Anuradhapura, Sri Lanka Mob: +94 253230000 Fax: +94 252220149 Email: mahindah@yahoo.com, mahindaniphm@gmail.com,	Introduce a novel harvesting tool for cassava harvesting in cassava in the northwestern province of Sri Lanka
22.	Mr. Adikari Mudiyanselage Gamagedara Champika Priyantha Kumara Technical Officer National Institute of Post-harvest Management, Research and Development Centre, Jayanthi Mawatha, Anuradhapura, Sri Lanka Tel: +94 253230021, Mob: +94 718006722 Fax; +94 2223983 Email: champikapriyantha506@gmail.com,	To mitigate the hardy texture of cassava chips using a simple method
23.	Mr. Tissera Hettiarachchige Pradeep Edward Milroy Assistant Director Ministry of Agriculture, Rural Economic Affairs, Irrigation and Fisheries and Aquatic Resources Development No.288, Sri Jayewardenepura Mawatha, Rajagiriya, Sri Lanka Tel: 034-2247066 / 0718616150 Email: milroytissera@rocketmail. com,pmeagri@gmail.com,	To introduce Cassava resistant variety to Cassava Mosaic Disease
24.	Ms. Hettiarachchi Dona Sudarshani Rupika Assistant Director Agricultural and Agrarian Insurance Board No.117, Subhaddrarama Road, Gangodawila, Nugegoda, Colombo, Sri Lanka Mob: 0094 715338491 Email: sushi.hetti@yahoo.com,	To promote the insurance scheme for cassava and Sweet potato farmers

Sl. No.	Name and Country		BAWP Title
25.	Mr. Kiriella Gedara Anuruddha Mangala Agricultural Research and Production Assistant Department of Agrarian Development Agrarian Service Centre, Paragammana, Kegalle, Sri Lanka Mob: +94 764633065, Tel: 0352226001/0714460096 Email: mangalakiriella@gmail.com,		To introduce mini-sett technology as quality planting materials for cassava farmers
	Uganda		
26.	Mr. Ngabirano Caleb Agricultural Instructor Rukungiri Agricultural College, P.O.Box.111, Rukungiri, Uganda Tel: +256 703474841 Mob: +256 776153800 Email: calebnga@gmail.com,		Reducing bulkiness of cassava planting material and eliminating the poor sett cutting technique
27.	Mr. Orishaba Alex Agricultural Officer Kabale District Local Government, Production and Marketing Department, P.O.Box,5, Kabale, Uganda Tel: +256 48622335, Mob: +256 785300345 Email: alexorishaba935@gmail.com, caokdig@ yahoo.com,		Reducing vitamin A deficiency among children of below 5years and above, breast feeding mother's and pregnant women through introduction and promotion of orange fleshed sweet potatoes cultivation and consumption through primary schools
28.	Mr. Oswang Samuel Baker Senior Science Officer Ministry of Science, Technology and Innovation Rumee Building, Plot19, Lumumba Avenue, P.O.Box. 7466, Kampala, Uganda Tel: +256 783261068 Mob: +256 751742007 Email: osbbaker@gmail.com, samuel.ogwang@ mosti.go.ug,		Promoting use of good Cassava quality planting material and value addition to increase income of small holder farmers in Kole district in Uganda
29.	Ms. Akankunda Loydah Agricultural Officer Kabale District Local Government, Production and Marketing Department P.O.Box,5, Kabale, Uganda Tel: +256759839357, Mob: +256 774002387 Email: loydahakankunda@gmail.com, caokdlg@yahoo.com,	1	Train farmers on positive selection of planting materials and set up rapid multiplication centers for Orange Fleshed sweet potato vines

39. Agroforestry: Policy, Practice and Impact

- > Title of the Training Program: Agroforestry: Policy, Practice and Impact
- Date: 10 24 October, 2019
- Venue: World Agroforestry Centre (ICRAF), New Delhi, Central Agroforestry Research Institute (CAFRI) at Jhansi, Uttar Pradesh, Forest College and Research Institute (FCRI), Mettupalayam, Tamil Nadu.



Program Director / Coordiator

Program Director	Dr. Javed Rizvi Director South Asia Program, World Agroforestry Center (ICRAF) New Delhi-India Phone: + 91-11-25847886, Email: J.Rizvi@cgiar.org
Program Coordinator	Dr. Shiv Kumar Dhyani Senior Agroforestry Specialist 1st Floor, C Block, NASC Complex, DPS Marg, Pusa Campus, New Delhi- 110 012 T: +91-11-25847885/86, Email: s.dhyani@cgiar.org

Participants profile: 26 executives from 10 countries (15 male &11 female)

Country	No. of Executives	Country	No. of Executives
Bangladesh	2	Botswana	1
Cambodia	1	Kenya	1
Nepal	7	Malawi	2
Sri Lanka	5	Tanzania	1
Myanmar	4	Uganda	2

Training objective

To enhance the awareness and strengthen the capacity of middle level policy makers who directly provide leadership role in implementation of agro-forestry projects/ programs in their respective countries.

Training Curriculum

- 1. Agroforestry: Research and Development, and Policies
- 2. Agroforestry Practice for Livelihood, Nutritional and Environmental Security, and Impact
- 3. Agroforestry: Commercial & Value Chain Aspects
- 4. Case Studies and Field Visits
- 5. A Glimpse of History and Culture of India

Training Outcome

The expected outcome of the training program was to ensure the participants execute the learning of the training programs like the agro-forestry policy, agro-forestry through industrial linkages and business aspects in their respective countries.

Change in Knowledge of the participants:

The average score of executives in the pre-training test was 19 whereas the average score of post-training was 21. Thus, it is found that the level of knowledge of executives was increase by 10.53 percent after the training programme.

Evaluation

Feedback of Executives was collected on all technical and practical sessions taken by resources persons on a scale of 0-to-10 ('0' being the poor and '10' being the excellent). The executives expressed their satisfaction level by rating the program on an average score of **9.3** on a 10 point continuum indicating the overall impression on the programme was **EXCELLENT.**

Field Visit: The participants were exposed to water harvesting system at a project site in Jhansi with Scientists from ICAR-CAFRI, the timber farms and industries at the FCRI, Mettupalyam, Tamilnadu.





SI.No	Name & Address	BAWP Title& Objective
	Bangladesh	
1.	Dr. Moni Zakiah Rahman Senior Scientific Officer Technology Transfer and Monitoring Unit, Bangladesh Agricultural Research Council (BARC), New Airport Road, Farmgate, Dhaka-1215, Bangladesh Tel: +880258157492, Mob: +8801212634352, WhatsApp: 1712634352, Fax: +88 029128061 Email: zrmoni@yahoo.com,	Title: Promote fruit based AF model in hilly region Objective: To increase production as well as nutrient demand
2.	Dr. Noor Shaila Sarmin Associate Professor and Head Department of Agroforestry and Environment Bangabanhu Sheikh Mujibur Rahman Agricultural University, Gazipur-1706, Bangladesh Tel: +029205310-14 (Extn. 2002) Mobile: +88 01816923427, Fax: +88 02 9205333 Email: noorshaila01@gmail.com,	 Title: Inter cropping of Tomato with Aonla based Agro-forestry system in Bangladesh Objective: To promote fruit based AF model in hilly region. Ensure nutritional security as well as soil erosion.
	Botswana	
3.	Mr. Olatotse Matswerere Midro Technical Officer Ministry of Agricultural Development and Food Security, Crop Production P.O.Box.83, Tonota, Botswana Mob: 0026772159050 Email: molatotse@gov.bw,	 Title: Promote Agroforestry in the unutilized community projects in the Village/district. Objective: Re-igniting the benefits of Agroforestry benefits to the community
	Cambodia	
4.	Mr. Sarun Nhem Vice Chief of Vegetable Crops Horticulture and Subsidiary Crops of General Directorate Ministry of Agriculture, Forestry and Fisheries (MAFF), #45B/49F, St.395-656, Sankat Toeuk Laak3, Khan Tuol Kork, Phenom Penh, Cambodia, Tel: +855 12757937 Email: sarunard@gmail.com,	Title: Integration of vegetable crops production in Agro-forestry Objective: Vegetables crops production under fruit tree-based system.
	Myanmar	
5.	Ms. Hlaing Mi Mi Staff Officer Office No.23, Department of Agriculture, Nay Pyi Taw, Myanmar Tel: + 959-455871724, Fax: 095-067-3410146 Email: hlaing.mm3@gmail.com, moalidoair3@gmail.com,	Title: Farmer awareness program in dry zone, Myanmar Objective: To increase incomes of farmers in study area.
6.	Dr. Htay Htay Oo Associate Professor Department of Agronomy, Yezin Agricultural University, Yezin, Nay Pyi Taw, Myanmar Tel: +95 673 416512, Mob: +95 9448547918 Email: htay.agro96@gmail.com,	Title: Formulation of curriculum of agro- forestry for climate change Objective: To share knowledge about AF system to the students who will solve the problems facing in agricultural sector

SI.No	Name & Address	BAWP Title& Objective
7.	Dr. Soe Soe Win Associate Professor, Department of Agricultural Economics, Yezin Agricultural University, Yezin, Nay Pyi Taw, Myanmar Mobile: +95 9261786240 Email: ssoewin@gmail.com,	 Title: Value Chain Development for Coffee Industry in Myanmar Objective: to identy the value chain processing of coffee industry in the selected regions and to upgrade the livelihoods and developement of producers based on coffee crop diversities in the selected areas.
8.	Ms. Aye Aye Soe Staff Officer, Department of Agriculture, Office No. 43, Nay Pyi Taw, Myanmar Mobile: +95 9797599231 Email: ayesoeaye307@gmail.com,	Title: Establishment of Agro-forestry system in Chin State Objective: To encourage Agroforestry system instead of shifting cultivation practice.
	Malawi	
9.	Mr. Pangani Wyson Chadzala Agricultural Extension Development Officer Ministry of Agriculture, P.O.Box.41, Nkhotakota, Malawi Mob: +265 888396221 Email: wysonpangani@gmail.com,	Title: Value Chain Development for Coffee Industry in Myanmar Objective: To provide high profitable potential for coffee/orange
10.	Ms. Mtaza Violet Program Officer, Civil Society Agriculture Network P.O.Box.203, Lilongwe, Malawi Mob: +265 99188834 Email: mtazaviolet@gmail.com	Title: Improve livestock production in Kasungu district Objective: To intercrop maize with acaicia species
	Tanzania	
11.	Mr. Saad Salum Bakari Forest Officer Jambiani-Muyuni Forest Reserve, Department of Forestry and Non Renewable Natural Resources, Ministry of Agriculture, Natural Resources, Livestock and Fisheries, P.O.Box.3526, Zanzibar, Tanzania Mob: +255 772904055 Email: salumasseid@gmail.com,	Title: Tree improvement Objective: Established seed stands and clones
	Kenya	
12.	Mr. Tonju Samwel Cheruiyot Research Technician Kenya Agricultural and Livestock Research Organization, The Tea Research Institute (TRI), P.O.Box.820-20200, Nairobi, Kenya Mob: +254 729139445 Email: samtonui357@gmail.com,	Title: Starting up of a high technology Tree nursery

Sl.No	Name & Address	BAWP Title& Objective
	Uganda	
13.	Ms. Natumanya Monica Field Extension Officer, Mbarara Zonal Agricultural Research and Development Institute, P.O.Box.389, Mbarara, Uganda Mob: +256 703780444 Email: mnatumanya13@gmail.com,	Title: Awareness and knowledge on Agroforestry practices in southern agroecological zone
14.	Mr. Gawaya Geroge Afforestation Officer Uganda Prison Services P.O.Box.7182, Kampala, Uganda Mob: +256 077821774 Email: gawayag@yahoo.com,	Title: Inadequate production of Biofue in Uganda PrisonsObjective:To increase bio fuel seedling production by 75% by end of 2020/21 financial year.
	Nepal	
15.	Dr. Bhattarai Pradeep Chandra Senior Livestock Development Officer, Ministry of Agriculture and Livestock Development (MoALD) Govt. of Nepal, Sighadurbar, Kathmandu, Nepal Tel: +977 14211697, Fax: 97714211935	Title: Concern authorities are not sufficiently aware of key issues and demands of stakeholders across value chain to implementation of AF Policy, Nepal Objective: Identify key issues that a
	Email: pcbhattarai23@yahoo.com, pcbh234@gmail.com,	to be addressed while designing pol implementation action plan in terms of leg institutional and program/project back up
16.	Ms. Tara Sharma Horticulture Development Officer, National Fruit Development Center, Kirtipur, Kathmandu, Nepal Tel: 977 014331619 Email: ncfd.gov.np@gmail.com,	Title: Improvement of Mandarian base Agri-horti-Pasture system in Mid-hills of Nepal.Objective: To motivate Mandarian farmers to adopt Agri-horti-pasture system in mid hills of Nepal.
17.	Mr. Prenil KC Senior Scientist, Nepal Agricultural Research Council (NARC), Pasture and Fodder Division, Khumaltar, Lalitpur, Nepal Mob: 977-01-4499599, 977-9843234000 Tel: 977-01-5523038, Telefax: 977-01-5542903 Email: prenilkc9@gmail.com,	Title: Development of silvopastoral bas agroforestry strategies in the mid h regions of Nepal to enhance milk and me production from livestock enterprisesObjective: Germplasm maintenance and production of quality planting materia of both tree fodders and forages at on- station (nursery)
18.	Ms. Prativa Manandhar Under Secretary, Ministry of Forests and Environment Sighadarbar, Kathmandu, Nepal Mob: 977-9841403813 Tel: 977-01-4211703, Fax: 977-01-4211868 Email: prativamanandhar@hotmail.com,	Title: Promotion of agrisilviculture in community forest users group of Kavrepalanchok district.Objective: Capacity development of community forest users group in agrisilviculture practice
19.	Ms. Chetana Khanal Research Officer, Department of Plant Resources Ministry of Forests and Environment, Kathmandu, Nepal, Tel: 977-9841624186 Email: chetanakhanal@gmail.com,	Title: Adaption of Bel Based Agroforestry to Enhanced Economic Status and Ensure Nutritional Security.Objective: To sustain and strengthen to Bel based enterprise and to enhanced

SI.No	Name & Address		BAWP Title& Objective
20.	Ms. Bimala Lama Assistant Research Officer, Forest Research and Training Centre Babar Mahal, Kathmandu, Nepal Mob: 977 9845704267 Tel: 977 14220482 Email: bimalalama386@gmail.com,		Title: Adoption of miniclonal technology in nurseries of Forests Research and Training Center. Objective: To develop capacity of nursery staffs of Forest Research and Training Center
21.	Mr. Murari Raj Joshi Associate Professor, Kathmandu Forestry College, P.O.Box.1276, Koteshwor, Kathmandu, Nepal. Tel: 977 9841911230 Email: murarirajjoshi@yahoo.com,	R	Title: Makenia weed problems in community forests and degraded lands Objective: Removed weeds and plant fodder and forage species through community mobilization
	Sri Lanka		
22.	Mr. Abdul Lateef Mohammed Zuhry Deputy Conservator for Forests (Research) Forest Research Centre, Forest Department Kumbalpola, Boyagane, Sri Lanka Mob: +947 18660608 Tel: +94372238807, Fax: +94372238770 Email: zuhry8@hotmail.com,	0	Title: Lack of protocol for mass propagation of teak clones through micro cuttings Objective: Establishment of protocol for mass production of teak clones in Sri Lanka
23.	Eng. Sinhalage Prabhath Malinda Jayathilaka Civil Engineer, EIC Office, H.A.O. & M. Division, Mahaweli Authority of Sri Lanka, Division of Major Dams & Reservoir Operation, Bowatenna, Naula, Sri Lanka Tel: +9436 2247190, Mob: +94718201230 Email:prb.ml.jay@hotmail.com,		Title: Improving Accuracy of V-notch flow measurement, Kalawewa Dam, Sri Lanka Objective: Automation V-notch flow data. Precise Seepage Analysis
24.	Mr. Bamunsighe Archchighe Jayantha Priyal Research Officer Ministry of Mahaweli Development and Environment, 416/C/1, Sobadaam Pryasa Battramulla, Sri Lanka Mob: 0094 773433156 Email: priyalj2006@yahoo.com,		Title: Awareness Training Programmes on Agro-forestry for stakeholder agencies
25.	Mr. Mansoor Abdul Rasheed Agrarian Development Officer Department of Agrarian Development No.42, Sir Marcus Fernando Mawatha, Colombo-07, Sri Lanka Mob: 094 713503105, Tel: 094652258328 Email: rasheedmma@gmail.com,		Title: Productivity improvement through AF among High land other field crop (OFC) cultivation
26.	Mr. B.A. Jayananda Director (Land Use Planning) Land Use Policy Planning Department, No.31, Pathiba Rd., Narahenpita, Colombo -05, Sri Lanka, Mob: 0094 714242120 Tel: 094-112753356 Email: dd_lup_jayananda@yahoo.com		Title: To rehabilitate degraded agriculture lands

40. Integrated Management Strategies for Major Crop Pests & Diseases in Developing Countries (With special focus on Fall Army Worm)







- Title of the Training Program: Integrated Management Strategies for Major Crop Pests & Diseases in Developing Countries (With special focus on Fall Army Worm)
- > Date: 19 November 03 December, 2019
- > Venue: National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India
- Program Director/Coordinators

Program Director	Dr. Mahantesh Shirur Deputy Director (Agril.Extn.) National Institute of Agricultural Extension Management (MANAGE), Hyderabad-500030, Telangana Tel: 040-24594538, Email: maha.shirur@manage.gov.in
Program Coordinators	Dr. J.C.SekharPrincipal Scientist & I/cWinter Nursery Centre, ICAR- IIMRRajendranagar, Hyderabad-500 030Phone: 040 29701340 (O), Fax :040 24018457Mobile:+91-9908600340, E mail:javajics@gmail.comProf. Dr. G. Ravi,Director (Plant Health Management)National Institute of Plant Health Management (NIPHM)Department of Agriculture, Cooperation and Farmers WelfareGovt. of India, Ministry of Agriculture & Farmers WelfareRajendranagar, Hyderabad - 500 030Email: dirphmniphm-ap@nic.in, Ph. No.(O): 040-24015932

> Participants profile: 26 executives from 11 countries (17 male & 9 female)

Country	No. of Executives
Bangladesh	6
Botswana	1
Cambodia	2
Kenya	1
Lao PDR	1
Malawi	2
Mozambique	1
Myanmar	2
Nepal	4
Sri Lanka	3
Uganda	3



Training objectives

- To understand the overview of Plant Health Management Techniques and Approaches and status of Fall Army Worm
- To sensitize the executives on Insect pests of Maize and Their Management
- To demonstrate skills on Agro-techniques for FAW Management
- To impart knowledge and skills on Integrated Plant Health Management Concepts and Practices based on Agro Ecosystem Analysis and Ecological Engineering.
- To impart knowledge on Insect Ecology and Integrated Pest Management to Control Fall Army Worm

Training Curriculum

- 1. Biology, symptomotology, identification and scouting for Fall Army Worm
- 2. Strategies for management of FAW
- 3. Protocols for mass rearing and screening techniques of FAW
- 4. Biological, Semi-chemicals and other eco-friendly approaches in the management of Fall Armyworm
- 5. Management of FAW in millets
- 6. Mass production of Parasitoids
- 7. Mass production of Entomopathogenic Fungi (EPF) and NPV
- 8. Agro-Ecosystem Analysis (AESA) based Plant Health Management
- 9. Ecological Engineering for Pest Management
- 10. Use of Vermicompost for sustainable agriculture
- 11. Importance of plant bio-security and plant quarantine
- 12. Fruit fly trap and lure preparation
- 13. Pest Risk Analysis-Asian and African scenario
- 14. Detection and diagnosis of plant pathogens and Seed Health Testing

> Training Outcome

The training outcomes were anticipated in the view of practising and implementing the Agro Forestry initiatives and programs at village/county level in their respective countries.

> Change in Knowledge of the participants

It was observed that the average score of the pre-test was 10.7 while that of the post test was 17 out of 25 marks indicating a change of 58.99 percent increase in the knowledge level of the participants.

Evaluation

The participants were asked to rate the technical session on a linear rating scale of 10. The overall impression of the training program from the participant's perspective was 8.74 indicating higher level of satisfaction by the participants.

Field Visits

The executives were exposed to various field and institutional visits apart from WNC-IIMR and NIPHM. They are the International Crops Research Institute for Semi Arid Tropics (ICRISAT), International Maize and Wheat Improvement Center (CIMMYT), Corteva Agrisciences, Hyderabad and the Nutri-cereals Conclave, flagship event of the Indian Institute of Millets Research (IIMR), Hyderabad.



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SI. No.	Name and Address	BAWP Title& Objective
	Bangladesh	
1.	Mr. Md. Islam Rezaul Deputy Director Plant Protection Wing, Room No.303, Rear Building, Department of Agricultural Extension (DAE), Khamarbari, Dhaka-1215, Bangladesh, Tel: 01711488176 Email: <u>rezaulislam63@yahoo.com</u> ,	Title:Infestation of Fall Army Worm in Maize. Objective: 1) Buildup awareness among the Extension people & farmers about FAW. 2)Buildup proper monitoring system
2.	Mr. Anjan Kumar Barua Deputy Director (Coordinator) Department of Agricultural Extension (DAE) Room No.417, Middle Building, Field Services Wing, Department of Agricultural Extension, Khamarbari, Farmgate,Dhaka, Bangladesh, Mob: +880 1716341539 Email: anjan_iais@yahoo.com,	&managenent strategy to control FAW.
3.	Mr. Md. Mizanur Rahman Deputy Director (Monitoring) Department of Agricultural Extension (DAE) Room No.417, Middle Building, Field Services Wing, Department of Agricultural Extension, Khamarbari, Farmgate, Dhaka-1215, Bangladesh Mob: +01767465667, Tel: 0716852186 Email: <u>mizanurodp@yahoo.com</u>	
4.	Ms. MST Sarmin Akter Agricultural Officer Department of Agricultural Extension, Upazila Agriculture Office Sherpur, Bogura, Bangladesh Tel: 07121146383, Fax: +880502977098 Email: uao.sherpurbogra@gmail.com,	
5.	Mrs. Zakia Begum Deputy Director (Surveillance & Forecasting), Room No.311, Rear Building, 2nd Floor, Plant Protection Wing, Department of Agricultural Extension, Khamarbari-1215, Dhaka, Bangladesh, Mob: +880 1740593148, Tel: +880 255028436, Email: zakianatp@yahoo.com,	
6.	Ms. Tahmina Khatun Additional Deputy Director, Department of Agricultural Extension, Room No 307, 2 nd Floor, Plant Protection Wing, Khamarbari, Dhaka, Bangladesh Mob: +8801715 014537, Email: tahminanata2014@gmail.com,	 Title:Infestation of Fall Army Worm in Maize. Objective: Buildup awareness among the Extension people & farmers about FAW. Buildup proper monitoring system &managenent strategy to control FAW.
	Botswana	
7.	Ms. Jeffrey Sithembiso Pricillah Agricultural Scientific Officer-II Crop Production, Ministry of Agricultural Development and Food Security, P.O.Box.300, Mahalapye, Mob: 00267 71811215, Tel: 00267-4710257, Fax: 00267 4710675 Email: sjeffrey71@yahoo.com,	Title: High dependency on chemical pesticides to control FAW Objective: Reduce high dependency on chemical pesticides increased

SI. No.	Name and Address	BAWP Title& Objective
	Cambodia	
8.	Mr. Monirith Ouch Official General Directorate of Rubber, MAFF National Road No.6A, Phum Bakkheng, Sangkat Prek Leap, Khan Chroy Changva, Phnompenh, Cambodia Mob: 855 77223241, 855-236722590 Email: ouch.monirith7@gmail.com,	Title:TransfersTechnologyAbouNutrientmanagementandAgroEcosystem managementObjective:ToCompare the cost anObjective:ToCompare the cost anbenefit on Rubber sector and increasingincome for rubber farmer
9.	Mr. Kou Phally Deputy Director, Department of Rubber Development General Directorate of Rubber, Ministry of Agriculture, Forestry and Fisheries National Road No.6A, Phum Bakkheng, Sangkat Prek Leap, Khan Chroy Changva, Phnompenh, Cambodia, Mob: +855 12523433 Email: <u>kou_phally@yahoo.com</u> ,	Title: Improvement of agro ecosystem on rubber plantationObjective: To improve and promote Agro Ecosystem Analysis capacity of government officials and smallholder rubber farmers, To bring back biodiversity losses to rubber plantation
	Kenya	
10.	Mr. Njuguna Peter Kamau Research Technologist Kenya Agricultural & Livestock Research Organization, P.O.Box.820-20200, Kericho, Kenya Mob: +254 705794146, Tel: +254 2206-20200 Email: <u>penjugka@yahoo.com</u> ,	Title: Unexploited avenues in permanagement Objective: To promote the function approach of IPM
	Lao PDR	
11.	Ms. Soysouvanh Pheophanh Technical/Entomologist Department of Agriculture and Forestry, Lane Xang Avenue, Patuxay Square, P.O.Box.811, Vientiane,Lao PDR Mob: +856 2029495625, Tel: +856 21412350 Email: pheophanhs@gmail.com	Title: FAW Infestations in Lao PDR Objective: Capacity building throug dissemination of relevant IPI information to farmers and provinci staffs
	Malawi	
12.	Mr. Nyasulu Amon Dominic National Coordinator National Climate Smart Agriculture Youth Network (CSAYN), P.O.Box.607, Lilongwe, Malawi Mob: +265 999621845 Email: <u>dominicnyasulu@yahoo.com</u> ,	Title: Build capacity of youth leaders an also raise awareness for preparednes management against Maize FAWObjective:Capacity building throug dissemination of relevant IPM information to farmers and provincial staffs
13.	Ms. Chatama Beauty Towela Crops Officer Ministry of Agriculture, Irrigation and Water Development, Blantyre Agriculture District Office, B/Bag.32,Blantyre, Malawi Mob: +265 999917707, Tel: +265 884112222 Email: beauchatama01@gmail.com,	Title: To reduce the use of chemic fertilizers and replace with the biofertlizers

SI. No.	. Name and Address		BAWP Title& Objective	
	Mozambique			
14.	Mr. Joaquim Boneze Nhampoca Jaime Agrarian Extensionist Provincial Directorate of Agriculture & Food Security, Macossa District Economic Activities Services/ Agrarian Extension Section, Manica Province, Macossa District Next to Central Market, Mozambique Mob: +258 848643864, Tel: +258 867771614 Email: <u>nhampoface@gmail.com</u> ,		Title: Capacity building for FAW management	
	Myanmar			
15.	Mr. Htet Wai Lin Assistant Staff Officer Department of Agriculture (DOA) Plant Protection Division, Ayeyarwady Region, Ministry of Agriculture, Livestock and Irrigation, Naypyitaw, Myanmar, Mob: +95 9797185660 Email: <u>htetwailin2012@gmail.com</u> ,		Title: IPM based solution for the management of FAW Objective: Capacity building of IPM package for major crops. IPM based solution for the management of FAW	
16.	Mr. Kyaw Thet Junior Research Assistant Kyauktada Research Farm, Madaya Township, Department of Agricultural Research (DAR) Yezin, Myanmar Mob: +95 9797493778, Tel: +95 67416531 Email: <u>kyawthet026@gmail.com</u> ,		Title: Performance of rice affected by using neem coated urea (NCU) Objective: To investigate the effect of yield on using NCU in rice	
	Nepal			
17.	Mr. Pramod Gautam Agriculture Productivity and Marketing Manager, Kisan-II, Kalika Marg, Sanepa-2, P.O.Box.8975, EPC No.1888, Lalitpur, Nepal Mob: +977 9851141205 Email: gprpramod@gmail.com, pramod		Title: Awareness and Management of FAW to Maize farmers in ZOI II of KISAN II Project in Nepal Objective: Trainings ,Demonstrations and interaction meeting, Conduct training for traners for Extension worker including Government.	
18.	Mr. Rupak Baniya Proprietor Unique Agro Centre and Rupak Vet Pharma Kapilvastu Municipality, Ward No.1, Gaudhi Chowck, State-5, Kapilvastu District, Nepal Mob: +9801171688, Tel: +977 9867903215 Email: <u>rupakvet@gmail.com</u> ,		Title: Promotion of VermiCompost Objective: Training of farmers on verm compost	
19.	Mr. Prabhakar Gupta Focal Person Shashi Agro Vet Centre, Nepalgunj-1, Nepal Mob: +977 9818043681, Tel: +977 81520735 Email: <u>shashiagrovetcentre@yahoo.com</u> , <u>krishiveterinarycentre@yahoo.com</u> ,		Title: Establish manufacturing unit fo making lure and trap at reasonable price	

Sl. No.	Name and Address	BAWP Title& Objective
20.	Mr. Rajendra Sahu Teli Senior Technical Assistance Manager Winrock International, USAID/Kisan II Project Madan Marg, Ward No.13, Nepalgunj, Sub- Metropolitan City, Banke, Nepal Mob: +977 9842828273, Tel: +977 81-522439 Email: <u>rajendra.shahu@winrock.org</u> ,	Title: Awareness and Management of FAW to Maize Farmer's in ZOI KISAN In Project in Nepal.
	Sri Lanka	
21.	Mr. Ariyanratne Batupituya Athukorlage Nimal Janaka Zonal Officer, Hadabima Authority of Sri Lanka, No.09, Gannoruwa, Peradeniya Sri Lanka, Mob: 0711052870, Tel: 071-4474346 Email: janakaariyaratna@gmail.com,	Title: Improve soil nutrition
22.	Ms. Hewa Gajaman Kankanamge Amarakanthi Kularathna Agriculture Monitoring Officer Ministry of Agriculture, No.288, Sri jayawardenapura Mawatha, Rajagiriya, Sri Lanka Mob: +947599772802 Tel: +94115491120 Email: <u>kularathnahgka67@gmail.com</u> ,	Title: To engage more than 10% of farmers for GAP certifications
23.	Mr. Kularathna Wickramasooriya Arachilage Rajeewa Assistant Director Agricultural and Agrarian Insurance Board Thambuthtegama, Sri Lanka Mob: +94713485465 Fax: +94112812573 Email: <u>kularathner@yahoo.com</u> ,	Title: Adoption of IPM technologies b farmers Objective: To reduce pesticides usage and promote more IPM programms
	Uganda	
24.	Ms. Gega Pamellah Birungi Agricultural Officer Rubanda District Local Government P.O.Box.781, Kabale, Uganda Mob: +256 772978524 Email: geigapam@gmail.com,	Title: Train and sensitize farmers on th use of farmer field schoolsObjective: To train and sensitize farmer on the use of farmer field schools.
25.	Ms. Nabiyina Zaituni Kabuye Trade fair Coordinator CBS-PEWOSA, P.O.Box.12760, Kampala, Uganda Mob: +256 772656120 Email: <u>znabiyinakabuye@yahoo.com</u> ,	Title: Capacity building and strengthening on IPM in the project area of Mpigi and Wakiso districts.Objective:Capacity building and strengthening through dissemination of technical information to the Local leaded project field staff and farmers about the IPM in the project area of Mpigi and Wakiso districts.
26.	Mr. Nzamuhiki Justus Agricultural Officer Production and Marketing Department, Rubanda District Local Government, P.O.Box.781, Kabale, Uganda Mob: +256 779146158, Tel: +256 706903625 Email: nzamuhikijustus@gmail.com,	Title: To create awareness about FAV occurrence and its impact on maize an sorghum farming

41. Agricultural Policy Formulation, Review and Analysis





- > Title of the Training Program: Agricultural Policy Formulation, Review and Analysis
- Date: 21 January 4 February 2020
- > Venue: National Institute of Agricultural Extension Management (MANAGE), Hyderabad, Telangana, India
- Program Director / Coordinator

Program Director	Dr. Mahantesh Shirur Deputy Director (Agril.Extn.) National Institute of Agricultural Extension Manage- ment (MANAGE), Hyderabad-500030, Telangana Tel: 040-24594538 Email: <u>maha.shirur@manage.gov.in</u>	
Program Coordinator	Dr Vinayak Nikam Scientist (SS), ICAR-National Institute of Agricultural Economics and Policy Research (NIAP) D.P.S.Marg, Pusa, New Delhi –110012, India Mob: 9013455917, 8401601065 Email: VR.Nikam@icar.gov.in	

> Participants profile: 26 executives from 9 countries (21 male & 5 female)

Country	No. of Executives
Bangladesh	2
Kenya	2
Liberia	1
Malawi	1
Mozambique	1
Nepal	14
Sri Lanka	2
Tanzania	2
Uganda	1

Training objectives

- To acquaint the participants with the major policies and program of agriculture in India
- Capacity development of public organizations (Crops and Livestock)
- Philosophical and practical dimensions behind public policy formulation, implementation and analysis

Training Curriculum

SI.No	Themes	Sessions	
1	Basics of Policy, Program Planning and Welfare State		
2	Policies on governance, innovations in agriculture	National Agricultural Policy, Food Security Act, Policy formulation and implementation for Climate Smart Agriculture in India, Policy concerns for the application of ICT in Indian agriculture, Policy impetus for collective farming approaches, CRIDA-KVK, KCC and NIPHM.	

SI.No	Themes	Sessions
3	Production and Resource oriented policies in Indian agriculture and impact	Livestock Policy, Policy measures for ZBNF in India, e-governance.
4	Policies and mechanisms of social security agricultural research, education and extension	India's policy measures for Agricultural Insurance: issues, challenges, Policies of Food and Nutritional Security and Public Distribution System, Program and support for Agriculture Risk Management of Farmers and Policy implications for MNREGA, Nutrihub-IIMR.
5	Policies on marketing and post- harvest technology in India	Doubling Farmers Income, Market related policies and implications, e-NAM, Start-ups, Theory of Change approach to the policy evaluation and analysis, APMC.
6	Policy evaluation and impact assessment	Qualitative and Quantitative evolution methods for policy analysis

> Training Outcome

The training outcomes are the participants are expected to execute the leanings during the training, share the practical experiences and implement the actions at the policy level in agriculture sector in their respective countries.

Change in Knowledge of the participants

It was observed that the average score of the pre-test was 12.03 while the post test was 15.86 out of 25 marks indicating a change of 31.84 percent increase in the knowledge level of the participants.

Evaluation

The participants were asked to rate the technical session on a linear rating scale of 10. The overall impression of the training program from the participant's perspective was 9.4 indicating higher level of satisfaction by the participants.

> Field Visit

The participants were exposed to various places and organizations of practical importance to the training. The participants visited Agricultural Produce Market Committee (APMC), Malakpet, Central Research Institute for Dryland Agriculture (CRIDA) - Krishi Vigyan Kendra (KVK), Kisan Call Centre (KCC), Nutri Hub, Indian Institute of Millets Research (IIMR) and National Institute of Plant Health Management (NIPHM).



Sl. No.	Name and Address		BAWP Title& Objective
	Sri Lanka		
1.	Ms. Ushanthi Niranjala Gunarathna De Zoysa Development Officer Ministry of Agriculture, Rural Economic Affair, Irrigation, Fisheries and Aquatic Resources Development, No.126, Sri Jayawardanapura Mawatha, Rajagiriya, Sri Lanka Mob: +94 713184078, Telefax: +0112872093, Email: gunarathnaushanthi@gmail.com,		Title: Establishment of customer hiring centers in farmer organizations to provide farm machineries to small holder farmers Objective: Establishment of customer hiring centers in farmer organizations to provide farm machineries to small
2.	Ms. Prasanga Nirmani Wijayasiri Development Officer Ministry of Agriculture No.288, Sri Jayawardanapura Mawatha, Rajagiriya, Sri Lanka Mob: +94 778425950, Tel: +94 112872093 Email: <u>nirmani1031@gmail.com</u> ,		holder farmers
	Bangladesh		
3.	Mr. Mohammad Kamruzzaman Tito Senior Manager (Operations) Pran-RFL Group Pran-RFL Centre, 105, Middle Baddha, Dhaka-1207, Bangladesh Mob: 01704140360, 01704132828 Email: <u>kztito.irfan@gmail.com</u>	R	Title: Increase Agro-based Industries in Rural Area
4.	Mr. Md. Anwar Ali Sarker Staff Correspondent, Rajshahi The Daily Star, 64-65, Kazi Nazrul Islam Avenue, Dhaka-1215, Bangladesh Mob: +880 1713181504, Tel: +88029144330 Email: <u>anwar.dstar@gmail.com</u> , <u>anwar.ali@thedailystart.net</u> ,		Title: Popularizing farm mechanisation for harvest and ICT in agriculture Objective: Training the stakeholders for farm mechanisation for harvest and ICT in agriculture.
	Nepal		
5.	Mr. Keshab Khanal Senior Agricultural Extension Officer Agriculture Extension, Ministry of Land Management, Agriculture & Cooperatives Hetauda, Bagamati Province, Nepal Tel: +977 9843152113, Tel: 977057525945 Email: <u>keshabkhanal15@gmail.com</u> , <u>molmac3p@gmail.com</u> ,		Title: Promotion of Farm mechanization and collective farming
6.	Mr. Nand Lal Verma Senior Livestock Development Officer National Farmers Commission, Nepal Hariharbhawan, Lalitpur, Nepal Mob: 9841191811, Tel: +977 014211665 Email: <u>dr.vermanl@gmail.com</u> , <u>nfcnepal2017@gmail.com</u> ,		Objective: To enhance Balanced Ecosystem existence with respect to productivity
7.	Mr. Bhanubhakta Bhattarai Senior Agriculture Economist Directorate of Agriculture Development Gandaki Province, Pokhara, Nepal Mob: +977 9848020978, Tel: +061520273/061520263 Email: <u>bhanupoagri@gmail.com</u> ,		Title: Prepare concept paper for increasing the volume of organic production

SI. No.	Name and Address		BAWP Title& Objective
8.	Mr. Resham Raj Gyawali Senior Livestock Development Officer Ministry of Agriculture and Livestock Development Singha Durbar, Kathmandu Mob: +977 9841814039 Tel: +977 14211808, Fax: 014211535		Title: Analyzing gaps in implementation of National Dairy Development Policy on quality concern Objective: Analyzing gaps on the implementation of National Dairy Development Policy (2064
9.	Email: <u>reshamg91@gmail.com</u> , Mr. Bhim Nath Sharma Senior Agriculture Economist (9 th Level Officer), Directorate of Agriculture Development, Agriculture Extension Planning, Monitoring and Evaluation, Province-5, Nepal Mob: + 977 9847023081, Tel: 977-071-420040 Email: <u>bhimnath5@gmail.com</u> ,		 B.S.) with reference to quality concerns. Title: Inititate auction method to sell farmers'produce Objective: Provide reasonable price for them of their agriculture produces
10.	Mr. Shankar Prasad Sah (10 th Level Officer), Agriculture Knowledge Centre, Ministry of Agriculture, Govt. of Nepal, Province No.2, Janakpurdham, Dhanusha, Nepal Mob: +977 9854027739/ 9851236698 (WhatsApp) Email: <u>sah.sprasad@gmail.com</u> ,	68	Title: Awareness on soil health and ZBNF to increase the farm income
11.	Mr. Badri Prasad Dahal Senior Agriculture Economist Ministry of Agriculture and Livestock Development, Kathmandu, Nepal Mob: +977 9841668027 Tel: 977 14211905 Email: <u>dahalbas@yahoo.com</u> ,	Rel	Title: To reduce cost of cultivation among rice farmers of Nepal
12.	Mr. Pashupati Pokhrel Senior Agriculture Development Officer Ministry of Land Management, Agriculture & Cooperatives Province No.1, Biratnagar, Nepal Mob: +977 9841382300, 9852070302Tel: +077021470172 Email: <u>mrpashupati@yahoo.</u> <u>com,molmacbiratnagar@gmail.com</u> ,		 Title: Information sharing on Indian agriculture policies/program implication in Nepal province Objective: To acquaint policy makers and extension personnel regarding the Indian agriculture policies implication on Nepal's province one agriculture production and marketing.
13.	Dr. Chitra Bahadur Rokaya Senior Agriculture Economist, Directorate of Agriculture Development Birendranagar, Surkhet-Karnali Province, Nepal Mob: +977 9858053125, Tel: +083-520305, Email: <u>chitrarokaya@gmail.com</u> , <u>doadsurkhet@gmail.com</u> ,		 Title: Promotion and Standardization of Organic Farming at Karnali Province, Nepal Objective: To promote and standardize organic farming for income enhancement of farmers in Karnali Province.
14.	Mr. Chandra Dhakal Senior Livestock Development Officer, Department of Livestock Services Ministry of Agriculture and Livestock Development, Hariharbhawan, Lalitpur, Nepal Mob:+977 9851110704 Tel: +977 015522056, Fax: +977 015542915 Email: <u>cdhakal2000@gmail.com</u> ,		Title: Development of a comprehensive livestock development policy: analysis and feedback incorporation Objective: Analysis of existing livestock related policies and draft of livestock development policy is analysed reviewing with Indian livestock policy document.

SI. No.	Name and Address	BAWP Title& Objective
15.	Mr. Sirish Pun Senior Agriculture Economist, Ministry of Agriculture and Livestock Development, Singhburbar, Kathmandu, Nepal Mob: +977 9847030013, Tel: 977 014211665 Email: <u>sirishpun075@gmail.com</u> ,	Title: Market Promotion of organic vegetable through collective farming and legal framework approach Objective: To advocate for the need of the policy/legal framework and prepare the draft concept notes on: 1. PGS organic certification and 2. Producer company
16.	Dr. Mahendra Prasad Khanal Senior Policy and Program Advisor Knowledge-based Integrated Sustainable Agriculture in Nepal (KISAN-II) Project, Winrock International, Sanepa, Lalitpur, Nepal Mob: +977 9851205297, Tel: +977 15541961 Email: <u>khanal.mp@gmail.com</u> ,	 Title: Conduct study to identify gaps and develop a private sector engagement guidelines Objective: Support in conducting study to identify gaps and develop a private sector engagement guidelines
17.	Mr. Gokul Prashad Bohara Senior Agriculture Extension Officer Ministry of Land Management, Agriculture and Cooperatives, Dhangadi, Kailali, Sudurpaschim Province, Nepal Mob: +977 9858750665, Tel: +977 091417225 Email: gokulbohara@gmail.com	Title: To distribute soil health cards to the farmers of Sudurpaschim province, Nepal
18.	Ms. Jasmina Rawal Livestock Development Officer Ministry of agriculture and Livestock Development Singh Durbar, Kathmandu, Nepal Mob: +977 9845471202, Tel: +977 014211808, Fax: 977 01-4211535 Email: jasminarawal@gmail.com,	Title: Identification of Implementation gaps of Live Animal Transport Standard
	Kenya	
19.	Mr. Seth Ooko Onyango Assistant Director Livestock Production, Ministry of Agriculture, Livestock & Fisheries, P.O.Box.66290-00800,Westlands, Nairobi, Kenya Mob: +254 722281123, Tel: + 202513131, Email: <u>sethooko@yahoo.com</u> ,	Title: Review the monitoring and evaluation framework for Tsetse and Trypanosomiasis eradication activities under the devolved government system in Kenya
20.	Mr. Anthony Mutua Munyao Principal Livestock Production Officer State Department for Livestock, Directorate of Livestock Production, Hill Plaza, 7 th Floor, Off Ngong Road, P.O.Box.34188-00100, Nairobi, Kenya Mob: +254 702553115, Tel: 0722724713 Email: <u>antomunyao@yahoo.com</u> ,	Title: Minimize loss of livestock deaths and sustain livelihoods during emergencies (e.g. droughts and floods)
	Liberia	
21.	Mr. Jerry J. Carr District Agriculture Officer (DAO) Action Against Hunger Liberia Lawalazu Road, Voinjama City, Voinjama District, Lofa County, Republic of Liberia Mob: +231 8864042731, 776417446 Email: jerryjcarr@gmail.com,	Title: Policy on cassava value addition to improve economic values and access to markets. Objective: To lobby for policy formulation that promotes value addition of cassava through processing into various high quality end-use products

SI. No.	Name and Address	BAWP Title& Objective
	Malawi	
22.	Mr. Goliati George Zagwazatha CASS Youth Coordinator Commercial Agriculture Support Services (CASS), C/o. Agricultural Resource Limited, Plot No.29/120, Kenengo,P.O.Box.31321 Lilongwe-3, Malawi Mob: +265 993733353, Tel: +265 995610288 Email: <u>georgegoliati@ymail.com</u> , <u>casstwg@gmail.com</u> ,	 Title: Transforming agricultural marketing in Malawi through agri-social entrepreneurship Objective: To map out the supply base, supply estimates and marketing channels that can supply at least 10000 tons of each of the first 5 major grain/ legume crops and 2 tons per month for 6 months of each first 5 major horticultural crops, and collect buyer information for the suppliers, that can start proposing buying contracts by February, 2020.
	Mozambique	
23.	Mr. Nelson Issufo Mussa Agricultural Technician Avenue September 25 th , Directorate of Agriculture and Food Security, Maputo, Mozambique Mob: +258 840153624, Tel: +258 826864180 Email: <u>mussanelson@gmail.com</u> ,	Title: Mobilize farmers to form Farmer Groups and construction of agro- processing centersObjective: Increase the efficiency in production and standard of living of the farm family.
	Tanzania	
24.	Mr. Mwinjuma Mahmoud Sareva Economist Ministry of Agriculture P.O.Box.2182, Dadoma, Tanzania Mob: +255 692918400, Tel: +255 0262321407 Email: <u>msareva@gmail.com</u> , <u>mwinjuma.</u> <u>sareva@kilimo.go.tz</u> ,	Title: Comprehensive guideline for delivery of agricultural extension service in Tanzania.
25.	Ms. Karoma Blandina Ndamwesiga Program Coordinator for Soy Value Chain CARE International in Tanzania Box: 750, Iringa, Plot 175 Upper Kinondoni, ADA Estate, P.O. Box 10242, Plot 175B Ruhinde Rd, Dar es Salaam, Tanzania Mob: +255 755464500 Tel: 255 755464500, +255 783160016 Email: blandina.karoma@care.org,	Title: Facilitate development of Mobile App to link women farmers with financial institutions
	Uganda	
26.	Ms. Nakundu Pamela Kokunda Advocacy Officer Agri-Tech Uganda, Mpigi, Uganda Mob: +256 700858869, Tel: +256776444590 Email: npamelak@gmail.com, agritech4uganda@gmail.com,	Title: Awareness and dissemination about Zero budget and natural farming methods in improving soil fertility and increase crop yield

42. Good Agricultural Practices for Sustainable Agriculture in Developing Countries

- Title of the Training Program: Good Agricultural Practices for Sustainable Agriculture in Developing Countries
- ICRISAT INTERNATIONAL CROPS RESEARCH INSTITUTE FOR THE SEMI-ARID TROPICS

- Date: 11 25 February, 2020
- Venue: International Crops Research Institute for Semi-Arid Tropics (ICRISAT), Hyderabad, Telangana, India
- Program Director / Coordinators

Program Director	Dr. Sreenath Dixit Theme Leader ICRISAT Development Center International Crops Research Institute for the Semi-Arid Tropics Patancheru, Hyderabad, Telangana - 502324, India Phone: +91 40 3071 3475 Fax: +91 3071 3074, +91 3071 3075 Email: <u>D.Sreenath@cgiar.org</u>
Program Coordinators	Dr. Anantha K.H. Senior Scientist-Natural Resource Management ICRISAT Development CenterAsia Program Email: <u>K.Anantha@cgiar.org</u> Dr D Kumara Charyulu Senior Scientist, Agricultural Economics ICRISAT Development CenterAsia Program "KumaraCharyulu, Deevi (ICRISAT-IN)" <u>D.KumaraCharyulu@cgiar.org</u>

> Participants profile: 25 executives from 9 countries (16 male & 9 female)

Country	No. of Executives	Country	No. of Executives
Bangladesh	2	Liberia	2
Nepal	7	Tanzania	2
Sri Lanka	2	Uganda	2
Kenya	4	Mozambique	2
Myanmar	2		

Training objective

 To sensitize international executives from partner countries on Good Agricultural Practices (GAPs) of various crops and allied activities for sustainable agricultural development.

Training Curriculum

SI. No.	Theme	Sessions
1.	Good Agricultural Practices in Crop Improvement	Paddy, Pulses, Maize, Groundnut, Chick Pea, Finger Millet, Sor- ghum, Pearl Millet and Pigeon Pea
2.	Sustainable Natural Resource Manage- ment in Semi Arid Tropics (SAT) India and Africa	Sustainable Water Management, Integrated Pests and Disease Management, Feed and Fodder Management, Sustainable Nu- trition revolution through bio-fortification of staples
3.	Seed Systems	Strengthening formal and informal seed systems, GAPs in germ- plasm resources management, Role of transgenic in crop im- provement and food safety, Application of genomics tools in crop improvement
4.	Digital Agriculture	Digital Agriculture – Pathway to Prosperity, Enabling Advisory Services for Climate Smart Agriculture, MEASURE Platform and Measure Book, GAPs in Research Prioritization and Technology Evaluation



SI. No.	Theme	Sessions
5.	Agri-Business	Agri Business and Innovation Platform, Product designing and Promotion, Low cost mechanization tools from rainfed agricul- ture, GAPs in value chain analysis, Promoting livelihoods and nutrition through vegetable cultivation

Training Outcome

The training outcomes were that the participants started crop field demonstrations on GAPs in their respective countries and popularising the various GAPs among the farming community learnt during the training at India.

Change in Knowledge of the participants

It was observed that the average score of the pre-test was 12.52 while that of the post test was 15.52 out of 25 marks indicating a change of 23.96 percent increase in the knowledge level of the participants.

Evaluation

The participants were asked to rate the technical session on a linear rating scale of 10. The overall impression of the training program from the participant's perspective was **9.2** indicating the level of satisfaction by the participants as **EXCELLENT**.

Field Visits

The participants were exposed to various farms and fields, agricultural research organizations of practical importance to the trainings. The participants visited ICRISAT and Charles Renard Analytical Lab and Gene bank, Kothapally watershed and Mahindra CSR site, National Institute of Plant Health Management (NIPHM), Institute of Oilseeds Research (ICAR-IIOR), India Institute of Millet Research (ICAR-IIMR) and the Central Research Institute of Dryland Agriculture (CRIDA).



SI.No.	Name and address	BAWP Title
	Bangladesh	
1.	Mr. Mohammed Razu Ahmed Senior Instructor Bangladesh Institute of Research and Training on Applied Nutrition (BIRTAN), Ministry of Agriculture, Room No.46, Level-4, East Block, Sech Bhaban, Manik Mia Avenue, Farmgate, Dhaka, Bangladesh Mob: +880 1718009999 Email: <u>razu.ahmeddae@gmail.com</u> ,	Contribute to reduce Aflatoxin problem in groundnut
2.	Mr. Mohammad Hedayatul Islam Senior Technical Coordinator Agriculture based Livelihoods RAOWA Complex, VIP Road, Mohakhail, Dhaka-1206, Bangladesh Mob: +880 1716007944, Tel: +880 29889041 Email: <u>hedyatul.islam@care.org</u> ,	Sensitization and Trainings on Management of Fall Army Worm
	Nepal	
3.	Ms. Pramila Waagle Horticulture Development Officer Department of Agriculture Hariharabhawan, Lalitpur, Nepal Mob: +977 9841902459 Email: <u>pramilawagle@gmail.com</u> ,	Awareness on safe use of pesticides in vegetables crops
4.	Mr. Devendra Shahu Agriculture Officer Ministry of Agriculture and Livestock Development Prime Minister Agriculture Modernization Project, Project Implementation Unit, Dhankuta, Nepal Mob: +977 9842672888, Tel: +977 026404190 Email: <u>newtondevu868@gmail.com</u> ,	Exploring IPM Practices through Plant health Clinic linked with Plantix App in vegetables
5.	Mr. Janak Narayan Acharya Agriculture Productivity and Marketing Manager CEAPRED Dhangadhi, Sub-Metropolitan City-5, Hasanpur, Kailali, Nepal Mob: +977-9847276184 Email: janak2043@gmail.com, janak.acharya@ ceapred.org.np,	To reduce post-harvest losses in Onion and to increase market price
6.	Mr. Prakash Kafle Cluster Business Manager CEAPRED/USAID/Feed The Future/Kisan II Project Kapilvastu Municipality-3, Kalika Tole, Taulihawa, Kapilvastu, Nepal Mob: +977 76561166, Email: <u>prakash.kafle@ceapred.org.np</u> ,	To increase knowledge and skills of farmers on Good Agricultural Practices of Vegetables and Cereals through private sectors

SI.No.	Name and address		BAWP Title
7.	Mr. Sunil Dhungel Program Manager Centre for Environment and Agricultural Policy Research, Extension and Research (CEAPRED), Nayabato, G.P.O.Box.5752, Lalitpur, Nepal Mob: +977 9851176726, Tel: +977 14184272 Email: <u>sunil.dhungel@ceapred.org.np</u> , <u>contact@ceapred.org.np</u> ,		Enhance the attractiveness of farm work for the younger generations IN Agri Value Chain Enterprises
8.	Mr. Upendra Raj Joshi Agriculture Productivity and Marketing Manager, Winrock International / Kisan-II USAID/KISAN-II Project, Sanepa, Lalitpur, Nepal Mob: +977 91526381, +977 9848423724 Tel: +977 15543861 Email: <u>upendra.joshi2035@gmail.com</u> , <u>upender.joshi@winrock.org.np</u>		Awareness on compost and bio fertilizers
9.	Mr. Prem Lal Chaudhary Senior Agriculture and Production Manager Feed The Future Knowledge-based Integrated Sustainable Agriculture in Nepal (KISAN) II/ CEAPRED Project Regional Office, Nepalgunj, Submetropolitincity, Madanmarg, Nepal Mob: +977 081524725, Email: prem. chaudhary@ceapred.org.np, premlchaudhary@yahoo.com;		Introduction and multiplication of beneficial nematode (ENP) among the farmers
	Sri Lanka		
10.	Mr. Senarath Yapa Sarath Desapriya Assistant Director of Agriculture (Research) Department of Agriculture Agriculture Research Station, Weerawila New Town, Sri Lanka Mob: +94 718081443, Telefax: +94472237079 Email: <u>arsweerawila@yahoo.com</u> , <u>senarathyapadesapriya@yahoo.com</u> ,		Popularize GAP technologies for field crops and introduce Climatic resilient Pigeon pea as a new crop
11.	Ms. Wellawala Archchige Dona Achala Dilhani Development Officer Ministry of Agriculture, Rural Economic Affairs, Irrigation, and Fisheries and Aquatic Resourced Development 288, Sri Jayawardanapura Mawatha, Rajagiriya, Sri Lanka Mob: +94773910386, Tel: +94 112872093 Email: <u>dilhaniachala@gmail.com</u> ,	(in the second	Development of an Agricultural Database for quick access
	Kenya		
12.	Ms. Mwanyigha Winnie Mashaghala Project Research Assistant Emerald Environment Limited P.O.Box.24464-00100, Nairobi, Kenya Mob: +254 722104045, +254 727873653 Email: <u>mwanyighawinnie@gmail.com</u> ,		Emphasize on the Adoption of Smart Foods in Kenya

Sl.No.	Name and address	BAWP Title
13.	Ms. Nzesya Jane Katunge Principal Agricultural Officer State Department for Crop Development and Agricultural Research, Ministry of Agriculture, Livestock and Fisheries, P.O.Box.30028-00100, Nairobi, Kenya, Mob: +254 00722760582 Email: <u>inzesya.andz@gmail.com</u> ,	Promote Good Agriculture Practices and drought tolerant crop varieties/hybrids for improved market access and food security
14.	Ms. Juliana Mumbua Mutua Quality Assurance Bio Food Products Limited, P.O.Box.27623-00506, Industrial Area After Sameer Industrial Park, Nairobi, Kenya Mob: +254 729462775 Email: jmumbua3@gmail.com,	Address Chronic malnutrition in lactating mothers and school-age children by ensuring food and nutritional security through GAPs
15.	Mr. Njuguna Paul Kariuki Assistant Director of Agriculture Department of Agriculture, Turkana County Government, Nairobi, Kenya Mob: +254 710911644, Tel: +254 712278294 Email: <u>njugupak@yahoo.com</u> , <u>abraham.</u> <u>losinyen@gmail.com</u> ,	Address the Lifestyle diseases especially liver cirrhosis due to food safety issues
	Liberia	
16.	Ms. Kwennah Demai K Quarantine Officer Ministry of Agriculture, P.O.Box.10-9010, 1000 Monrovia, Liberia, Mob: +231 777220333 Email: <u>dkkwennah@gmail.com</u> , <u>skdkwennah@gmail.com</u> ,	Value Addition Of Duo-Purpose Sorghum for increased Food Security
17.	Mr. James Allen Bohr District Agriculture Officer (DAO) Humanity Liberia, Ministry of Agriculture, Gbarnga, Bong County, Liberia Mob: +231 770149148 Email: <u>ajames@moa.gov.lr</u> , <u>allenj344@yahoo.com</u> ,	To create awareness about the importance of food safety and aflatoxin food safety
	Mozambique	
18.	Mr. Langa Carlos Tomas Eduardo Technology Transfer Officer Provincial Directorate of Agriculture and Food Safety, Department of Agrarian Extension, Niassa Province, Government Building, 1 st & 2 nd Floor, P.O.Box.43, Freedom Square Lichinga, Mozambique, Mob: +258 8468540 Email: <u>carlostlanga@mail.com</u> , <u>dpaniassa@gmail.com</u> ,	Identify the gaps in farmer-to-farmer cooperation in enhancing sustainable Agricultural practices
19.	Mr. Wazenguia Roberto Eduardo Gaspar Agricultural Extension Technician-Rural Extensionist, District Economic Activities Services, Mandlakazi Distirct, SDAE, Samora Machel Avenue, Gaza Province, Mozambique Mob: +258 845884224 Email: <u>robertowazanguiua7@gmail.com</u> ,	Change the cropping system in cotton production

SI.No.	Name and address	BAWP Title
	Myanmar	
20.	Ms. Han Thin Thin Deputy Staff Officer Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation (MOALI), Ayeyarwaddy Region, Myanmar Mob: +954 50825228, Email: <u>thinthinhan505@gmail.com</u> , <u>doaayeyarwady@gmail.com</u> ,	Integrated weed management in paddy field in Ayeyarwaddy Region, Myanmar
21.	Ms. Htwe Thwe Han Deputy Staff Officer Department of Agriculture, Ministry of Agriculture, Livestock and Irrigation (MOALI), Mandaley District, Myanmar Mob: + 959 796518559 Email: <u>thwehan78@gmail.com</u> ,	Extention of Aflatoxin Management Practices in Groundnut
	Tanzania	
22.	Ms. Iddi Mwanaidi Japhary Agriculture Tutor Ministry of Agriculture, P.O.Box.97, Kidatu, Morogoro, Tanzania Mob: +255 684862060, Tel: +255 786238272 Email: <u>mwanaidi.iddi79@gmail.com</u> , ramadhanmshesha39@gmail.com,	Sensitize different group of people in our community on good agriculture practices which are climate sensitive
23.	Mr. Mwera Makindi Jacob Ward Agricultural Extension Officer Serengeti District Council of Agriculture P.O.Box. 176, Mugumu, Serengeti, Tanzania Mob: + <u>+255 625719124</u> , Email: <u>mjmwera2012@gmail.com</u> ,	To Sensitize the farmers and other Stakeholders on Good Agriculture Practices
	Uganda	
24.	Mr. Mpagi Henry Tumusiime Programme Officer-Linkages Shine Cares Uganda Bushnyi District, South Western Region Ishaka, Uganda Mob: +256 703832409, Tel: +256 774042359 Email: <u>henrympagi7@gmail.com</u> , <u>shinecareuganda@gmail.com</u> ,	Sensitization on Good Agricultural Practices
25.	Mr. Kademeri Amon Skill Advisor AVIS Foundation-Uganda Mbarara, Kacence Kampala, Uganda Mob: +256 0782301516, Tel: +256 782301516, +256 312501604 (o) Email: <u>kadems2012@gmail.com</u> , <u>amon.</u> <u>kademeri@avsi.org</u> ,	Capacity Building of agri-institutions to offer hands on market oriented incubation service

43. Food Processing and Value Addition Technologies for Agripreneurship

- Title of the Training Program: Food Processing and Value Addition Technologies for Agripreneurship
- Date: 4-18 March, 2020
- Venue: Central Food Technological Research Institute (CFTRI), Mysuru, Karnataka, India
- Program Director/Coordinators



Program Director	Dr. Raghavarao K S M S Director Central Food Technological Research Institute (CFTRI) Council of Scientific and Industrial Research (CSIR) Cheluvamba Mansion, Valmiki Road, Opp. Railway Museum, Devaraja Mohalla, CFTRI Campus, Kajjihundi, Mysuru-570020, Karnataka Telephone: 91-821-2517760, Fax: 91-821-2516308 E-mail: <u>director@cftri.res.in</u>
Program Coordinator	Dr. Ashutosh Inamdar Principal Scientist Central Food Technological Research Institute (CFTRI) Council of Scientific and Industrial Research (CSIR) Email: <u>aainamdar@cftri.res.in</u>
	Dr. B S Roopa Sr. Scientist Central Food Technological Research Institute (CFTRI) Council of Scientific and Industrial Research (CSIR) Email: <u>roopa@cftri.res.in</u>
	Mr. Aruna Kumar Senior Technical Officer, Food Safety & Analytical Quality Contral Facility (FSAQCL) Central Food Technological Research Institute (CFTRI) Council of Scientific and Industrial Research (CSIR)

> Participants profile: 23 executives from 10 countries (13 male & 10 female)

Country	No. of Executives
Bangladesh	2
Cambodia	1
Кепуа	2
Liberia	1
Mozambique	1
Myanmar	3
Nepal	5
Sri Lanka	3
Tanzania	2
Uganda	3

Training objectives

- To train the participants on processing and value addition technologies in agriculture crops, Capacity building and impact assessment of technologies
- Coordinate research and validation of technologies
- Incubation of start ups on food production and processing technologies

Training Curriculum

- 1. Flour, Milling & Baking Confectionary Technology
- 2. Food Engineering
- 3. Food Protection and Infestation Control (FPIC), Food Safety & Analytical Quality Control Laboratory
- 4. Grain Science & Technology
- 5. Food Packaging Technology Department (FPT) and Plant Cell Biotechnology
- 6. Spice & Flavor Science Department (SFS) and Protein Chemistry Technology
- 7. Fruits and Vegetables Technology
- 8. Microbiology and Fermentation & Meat and Marine Science
- 9. Traditional foods and Sensory Science Technology

Training Outcome

The training outcomes are proper understanding of the concepts of food processing technologies and implementation of these technologies in their respective countries for adding value addition to food products and generating additional income to the farmers.

> Change in Knowledge of the participants

It was observed that the average score of the pre-test was 13 while that of the post test was 19 out of 25 marks indicating a change of 46.15 percent increase in the knowledge level of the participants.

Evaluation

The participants were asked to rate the technical session on a linear rating scale of 10. The overall impression of the training program from the participant's perspective was 9.3 indicating the level of satisfaction by the participants.

> Field Visits

Apart from the regular classroom and laboratory sessions the participants had exposure and field visits to private enterprises involved in Food processing in Mysuru.



Field Exposure Visits of the 43rd FTF ITT Participants



SI.No.	Name and address	BAWP Title
	Bangladesh	
1.	Mr. Md. Mahfuz Asraf Private Sector Advisor CARE Bangladesh RAOWA Complex, Level-7, VIP Road, Mohakhail, Dhaka-1206, Bangladesh Mob: +880 1763540736 Email: <u>mahfuz.ashraf@care.org</u> ,	Dried fish processing for extreme poor people in Bangladesh
2.	Mr. Basunia Mohammad Jahangir Alam Senior Technical Coordinator Off-Farm & Financial Inclusion CARE Bangladesh, RAOWA Complex, VIP Road, Mohakhail, Dhaka-1206, Bangladesh Mob: 8801973377013 Email: jahangiralam.basunia@care.org,	Enhace income of the vegetable producers located in remote areas through increasing their product value and reduction of loss due to rotting
	Cambodia	
3.	Ms. OL Eliny Office Vice Chief Post-harvest Office of the General Directorate of Agriculture, Ministry of Agriculture, Forestry and Fisheries (MAFF), #54B/49F, Street 395-656, SangkatToeuk La- ak3, Tumpun2, Khan Meanchey, Phnom Penh, Cambodia, Mob: +855012620015, Email: <u>elinyol2016@gmail.com</u> ,	Value addition and processing of fruits and vegetables
	Sri Lanka	
4.	Mr. RanathungaArachchigaChandana Prasad Assistant Commissioner (Development Service) Department of Agrarian Development, Department of Administration services, No.42, Sir Marcus Fernando Mawatha, P.O.Box.537, Colombo-07, Sri Lanka Mob: +070 2728296, Tel: 077 9962751 Email: <u>insdev.dad@gmail.com</u> ,	Post harvest technology in mangoes
5.	Mr. Senadeera Pathirannahelege Palitha Senadeera Assistant Commissioner Sri Lanka Administrative Service Department of Agrarian Development, District Office, Kurunegala Road, Chilaw, Sri Ianka Mob: 070 2198800, Tel: 032 2222596 Email: <u>dadchilaw@gmail.com</u> ,	Post harvest technologies for pumpkin in Puttlam District
6.	Ms. WellalaChandiKanchanaDeepali Assistant Director of Agriculture (Agric. Development) Food Research Unit, Department of Agriculture, Gannoruwa, Ministry of Agriculture, Rural Economics Affairs, Irrigation, Fisheries and Aquatic Resources Development, Peradeniya, Sri Lanka Mob: +094714998018 Email: <u>chandiwellala@gmail.com</u> ,	Capacity building on food processing and value addition by farmers

SI.No.	Name and address	BAWP Title
	Kenya	
7.	Ms. Kabaji Mary Njeri Principal Agriculture Officer State Department for Crops Development, Ministry of Agriculture, Livestock and Fisheries, Agri-Nutrition Unit,P.O.Box. 30028-00100, Nairobi, Kenya Mob: +254 722323696, Email: <u>njerikabaji@yahoo.com</u> ,	Capacity building of the youth groups on processing of spices and herbs
8.	Ms. Gachanja Lucy Karimi Apiarist and Agripreneur Luken Enterprises Farm 19127-00501, JKIA, Nairobi, Kenya Mob: +254 722 700559, Email: <u>lucykarimigachanja@gmail.com</u> , <u>lukenenterprises@gmail.com</u> ,	Capacity building to farmer groups on value addition for their farm produce
	Liberia	
9.	Mr. Dudley Stalin Aboyonme Quarantine Inspector Technical Department, Ministry of Agriculture, P.O.Box.10-90100, 1000 Monrovia 10, Liberia Mob: +231 886992785, Tel: +231 770472390 Email: <u>dudleystalin@gmail.com</u> ,	Promote food processing and ensure disease free food
	Mozambique	
10.	Mr. Chitulo Anibal Ernesto Extension Training Officer Agrarian Extension Department Niassa Province, Government Building, P.O.Box. 43, Freedom Square, Lichinga City, Mozambique Mob: +258 861415266, Tel: +258 27120557 Email: <u>anibalchitulo19@gmail.com</u> , <u>dpaniassa@gmail.com</u> ,	Post harvest technology in fruits
	Myanmar	
11.	Ms. SoeSoe Deputy Staff Officer Department of Agriculture, Myaung Township, Sagaing Region, Ministry of Agriculture, Livestock and Irrigation (MOALI), Naypyitaw, Myanmar Mob: +959 796556794, +957143217 Email: <u>soesoeyau07@gmail.com</u> ,	Food Safety in Peanut Production
12.	Ms. LwinPhyuPhyu Deputy Staff Officer Small-Scale Industries Department, Ministry of Agriculture, Livestock and Irrigation (MOALI), Office No.16, Naypyitaw, Myanmar, Mob: +959 420756306 Email: phyuphyulwin0507@gmail.com,	Food Processing and Value Added Products

SI.No.	Name and address	BAWP Title
13.	Mr. HtunZaw Linn Deputy Staff Officer Department of Agriculture, Coffee-Seasonal Crops Division, Office No.50, Ministry of Agriculture, Livestock and Irrigation (MOALI), Naypyitaw, Myanmar Mob: +959422460308 Email: <u>zawlinhtunyau@gmail.com</u>	Food safety in paddy production
	Nepal	
14.	Mr. BhaskarGautam Cluster Business Manager (for Dang Cluster Office) Feed The Future USAID's Kisan II Project Winrock International, Sanepa, Lalitpur, Nepal Mob: 00977-980-333-4345 Email: <u>bhaskarrgautam@hotmail.com</u> , <u>bhaskar.</u> <u>gautam@winrock.org</u> ,	Minimum cost fresh vegetable processing
15.	Mr. Madhab Paudel Agriculture Officer Ministry of Agriculture and Livestock Development Bharatpur-10, Chtwan, Nepal Mob: 00977-9851015307, Tel: 00977- 9855061823, Email: <u>paudel.madhab@gmail.com</u> , <u>pmamp.</u> <u>piy.chitwan@gmail.com</u> ,	Market Promotion of Spring paddy through linkage & legal framework approach in Chitwan District, Nepal.
16.	Ms. Ranjana Chaudhary Food Research Officer Department of Food Technology and Quality Control Babarmahal, Kathmandu, Nepal Mob: 977 9851237369 Email: joinman2@gmail.com,	To minimize the loss of seasonal fruits and vegetables through processing
17.	Mr. Ghanshyam Sharma Proprietor UnnatKrishi Kendra Kapurkot Rural Municipality-3, KapurkotSalyan, Nepal Mob: +9857825665, 9812805277 Email: <u>sharmags2004@gmail.com</u> ,	Processing of tomato, pea and carrot
18.	Mr. Krishna Prasad Sapkota Agriculture Productivity and Marketing Manager (APMM), Winrock International/ KISAN II/ Program Implementation, KISAN II Kapilvastu Cluster Office, KalikaMarga, KapilvastuMunicipality-3, Taulihawa, Province 5, Nepal Mob: +9779857632320, Tel: +977-76-561166 Email: Krishna.Sapkota@winrock.org,	Value Addition technologies in rice and Fresh vegetables

SI.No.	Name and address	BAWP Title
	Tanzania	
19.	Ms. Carolyine Charles Lecturer St. John's University of Tanzania P.O.Box.47, Dodoma, Tanzania Mob:+255 0719831821, Tel: +255 0262390044 Email: <u>cruhembe@gmail.com</u> , <u>admin@sjut.ac.tz</u> ,	Assessment of hygienic practices among food vendors around universities in Dodoma municipality
20.	Ms. Kuwese Gladys Naul Agricultural Tutor Ministry of Agriculture, Mati Uyole, P.O.Box. 2292, Mbeya, Tanzania Mob: +255 684543290 Email: <u>gnaul86@gmail.com</u> , <u>mati-uyole@kilimo.go.tz</u> ,	Nutritional Awareness to Paddy Farmers in Mbuyuni Ward Inmbalali District Mbeya
	Uganda	
21.	Mr. PeterByaruhanga Agricultural Officer Rubirizi District Local Government, P.O.Box. 239, Rubirizi District, Uganda Mob: +256 782712004 Email: <u>pripe87@yahoo.com</u> ,	Food safety and Quality management in food processing and value addition
22.	Ms. HadijahMeeme Head of the Fruits and Vegetables Technology Department and Training Coordinator, Uganda Industrial Research Institute, Mukabya Road, Nakawa, Uganda Mob: +256 759766168, +256 702120840 Email: mehade49@gmail.com,	Build the capacity of potential MSMEs on how to produce nutritious and quality value added pineapple products enriched with turmeric
23.	Mr. Kasule Denis Quality Assurance and Control Manager Brisk Beverages Uganda Limited Plot 1068, KisaasiKyanja Road, Kampala, Uganda Mob: +256 0706702450, Tel: +256 0782022240 Email: <u>briskbeverages@gmail.com</u> ,	Organic Waste recycling and organic solid management.



44. Production to Post Harvest Management in Horticultural Crops



- > Title of the Training Program: Production to Post Harvest Management in Horticultural Crops
- Date : 9-23 March, 2020
- Venue: University of Agricultural Sciences, Bangalore & University of Horticultural Sciences, Bagalkot, Karanataka, India

Program Director/ Coordinators

Program Directors	Dr. S. Rajendra Prasad Vice Chancellor, University of Agricultural Sciences (UAS), Gandhi Krishi Vigyan Kendra (GKVK), Bellari Road, Bangalore-560065, Karnataka Tel: +91-080-23332442, Mob: +91-9449866900 Email: vc@uasbangalore.edu.in Dr. Indiresh K.M. Vice Chancellor University of Horticultural Sciences (UHS), Udyanagiri, Navanagar, Bagalkot – 587104, Karnataka, India Mob: 9449872872, Tel: 91-8354-230351 / 230364
Program Coordinators	Email: vc@uhsbagalkot.edu.in Dr. A P Mallikarjuna Gowda Asst. Professor, College of Horticulture, University of Horticulture Science, G.K.V.K POST,Bangalore-65 Mobile: +09449866928, Email: kvkbrd@gmail.com Dr. G. K. Sadananda Assistant Professor College of Horticulture University of Horticultural Sciences (UHS) Campus, GKVK Post, Bengaluru – 560065, Karnataka Mob: 09481181749, Email: gk.sadananda@gmail.com

> Participants profile: 23 executives from 6 countries (14 male & 9 female)

Country	Number of participants
Afghanistan	1
Bangladesh	1
Cambodia	1
Kenya	2
Nepal	8
Sri Lanka	8
Uganda	2

> Training objective

To sensitize international executives from partner countries on Production and Post-harvest aspects of various horticulture crops.

Training Curriculum

- 1. Advanced production technology of Horticultural crops
- 2. Biotechnology and Horticulture
- 3. Commercial floriculture
- 4. Horticulture and Allied Disciplines
- 5. Crop Protection Technologies in Horticultural Crops
- 6. Post Harvest Management and Techniques in Horticultural Crops

> Training Outcome

The participants are expected to expose the potential of horticulture crops in terms of processing and popularize the post harvest management technologies among the farmers to ensure increase in income.

> Change in Knowledge of the participants

It was observed that the average score of the pre-test was 12.4 while that of the post test was 15.5 out of 25 marks indicating a change of 24.91 percent increase in the knowledge level of the participants.

> Evaluation

The participants were asked to rate the technical session on a linear rating scale of 10. The overall impression of the training program from the participant's perspective was 9.5 indicating the level of satisfaction by the participants as **EXCELLENT.**

> Field Visits

The participants were exposed to various field trips to complement their classroom learning. The practical sessions of the trainings had the objective of familiarizing the participants with Indian field technologies. The participants visited the All India Coordinated Research Project (AICRP) on Dryland Agriculture GKVK, Model farm of 'Organic Mandya', CFTRI, Mysuru and Kelagoor Tea Estate.



SI.No.	Name and address		BAWP Title& Objective
	Afghanistan		
1.	Mr. Ghulam Hazrat Ghulami Assistant Professor Forestry and Horticulture Department Bamyan University, Kabul, Afghanistan Mob: 093 793 7870937 Email: <u>ghazratsarabi@yahoo.com</u>		Title: To popularize the environmental benefits of Biofertilizer and reduce chemical usage Objective: To inform the benefits of biofertilizer. Decrease the use of chemicals
	Bangladesh		
2.	Mr. Ahmed Selim Uddin Technical Manager-Agriculture Livelihoods CARE Bangladesh 521, Nilganj Road, Solakia, Kishoreganj-2300, Bangladesh Mob: +880 1754536153 Email: <u>selimuddin.ahmed@care.org</u>		Title: Vermicompost and floating gardening Objective: Orient frontline project staffs on dryland horticulture and Organic farming so that they can demonstrate vermicompost and organic farming both in Char and haor area.
	Cambodia		
3.	Mr. Morm Sophany Coordinator Department of Agriculture Science University of Battambang, #Road No. 5, Orchay Village, Prakpreshdach Commune, Battamambang Town, Battambang Province, Cambodia. Mob: (+855)16 669 906, (+855)11 669 905 Email: <u>sophanymorm@gmail.com</u> ,		Title: Technical extension advisories through social media Objective: Promote farmers to understand post harvest technology and marketing demand strategy
	Kenya		
4.	Mr. Samuel Kelwon Chairperson Post-harvest Handling Sub-Committee Marigat Farmers' Cooperative Society Limited P.O.Box.23-30403, Marigat, Nairobi, Kenya Mob: +254 720232252 Email: <u>skelwon@gmail.com</u>	0	Title: Senstization and awareness programs on post harvest technologies
5.	Ms. Stallow Dorothy Masiga Junior Research Fellow Training and Extension, University of Kabianga Box.2030, Off KerichoKissi Road Kericho, Kenya Mob: + 254 789888293 Email: <u>dsyallow@gmail.com</u>		Title: To establish an organized Farmer group to support dairy farming Objective: To reduce the Dairy Farmer exploitation by milk brokers
	Nepal		
6.	Ms. Ale Shanti Pathak Area Coordinator Centre for Environment and Agricultural Policy Research, Extension and Development (CEAPRED), Nepal (USAID/Kisan II Project) NayaBato, Ring Road, Lalitpur, Nepal Mob: +977 9860313655 Email: <u>apeace6@gmail.com</u>		Title: Training on use of ripening agent to do artificial ripening on Banana Objective: To aware farmers on right ripening agent and to build a low cost ripening chamber for demo

SI.No.	Name and address	BAWP Title& Objective
7.	Mr. Kiran Joshi Program Coordinator Bindhavasini Saving & Credit Cooperative Society Limited (BISCOL) Panauti-10, Khopasi, Nepal Mob: +977 011660965 Email: joshikiran42@gmail.com	 Title: Adoption of Multiple cropping and Zero energy cool chamber Objective: Multiple cropping system for the sustainability of farms and diversified source of income for farmers. Maximize the use of biofertilizer and biopesticides to promote organic farming.
8.	Ms. PrativaKhanal Agriculture Extension Officer National Centre for Potato, Vegetable and Spice Crops, Department of Agriculture, Kirtipur, Kathmandu, Nepal Mob: +977 9847146342 Email: npvsckhumaltar@gmail.com,	 Title: Training on protected horticulture crop production to technicians and farmers. Objective: Techniques of protected cultivation of horticultural crops
9.	Mr. Ram Kumar Yadav Horticulture Development Officer Tropical Horticulture Centre, Department of Agriculture, Nepal Nawalpur, Sarlahi, Nepal Mob: +977 9842099005, Tel: +977 9855053105 Email: <u>yadavramkumar317@gmail.com</u>	 Title: Reduction of Post harvest loss in management in Mango and litchi Objective: Reduce the post harvest loss of mango because mango is the most important produce in my region.
10.	Mr. Shah Shiva Narayan Area Coordinator Centre for Environment and Agricultural Policy Research, Extension and Development (CEAPRED), Nepal, (USAID/Kisan II Project) Kapilavastu Cluster Office, Taulihawa, Kapilavastu, Nepal Mob: 9847040626, 984560724 Email: shahshiva@gmail.com	Title: Promote Plastic mulching in vegetable productionObjective: Reduce cost of production of horticultural produce and help manage soil borne diseases effectively.
11.	Mr. Subedi Jyoti Manager Small Farmer Agriculture Cooperative Ltd.,Manahari-8, Makawanpur, Nepal Mob: +977 9855071127 Email: Jyoti.sss.33@gmail.com,	Title: Senstization and awareness programs on post harvest technologies Objective: To disseminate information on organic vegetables and benefits of the organic vegetables
12.	Mr. Thakulla Kamal Bahadur Manager Unnat Agriculture Cooperative Ltd., Tikapur-1, Kailali, Nepal, Mob: 9868111149 Email: <u>kamalthakulla107@gmail.com</u> , <u>uacinp@gmail.com</u> ,	Title: Production of vermincompost and organic fresh vegetables Objective: Product of organic vegetables
13.	Ms. Laxmi Tiwari Area Coordinator Centre for Environment and Agricultural Policy Research, Extension and Development (CEAPRED), Nepal (USAID/Kisan II Project) Kalinchowk, Birendranagar Municipality-8, Surkhet, Karnali Province, Nepal Mob: +977 9851121851, Email: <u>Itiwari@gmail.com</u>	 Title: Climate resilient horticulture and diagnosis of major pests in horticulture crops Objective: To deliver the technical knowledge to the farmer to increase their livelihood. To promote the production through minimizing the insect pest problems.

SI.No.	Name and address	BAWP Title& Objective
14.	Ms. Eshani Karnahalupedigu Champika Development Officer Ministry of Agriculture No.288, Sri JayawardenapuraMawatha, Rajagiriya, Sri Lanka Mob: + 94718050400 Tel: +911 12702992, +947 184050400 (o) Email: <u>cegodigamuwa@gmail.com</u> , <u>pmeagri@gmail.com</u> ,	Title: To increase income by following suitable post harvest management techniques Objective: To increase the production of farmers fields
15.	Ms. Hewage Kumari Nilanthi Habaraduwa Agriculture Monitoring Officer Ministry Mahaweli, Ministry of Agriculture Irrigation and Rural Development No.288, Sri JayewardenepuraMawatha, Rajagiriya, Sri Lanka Mob: 07144911114, Tele: 01 12872093 / 01 t2034351 Email: <u>kumari.hewage@gmail.com</u> , <u>moaprojects@gmail.com</u> ,	Title: Promotion and popularization of PHT through field visits and trainings
16.	Mr. Samathapala Rajapaksha Disanayakalage Development Officer Ministry Mahaweli, Ministry of Agriculture Irrigation and Rural Development No.288, Sri JayewardenepuraMawatha, Rajagiriya, Sri Lanka Mob: +947 14140733 Email: <u>rdsamatha@gmail.com</u> agrimonitoring@gmail.com	Title: Introduce the concept of minimizing the post harvest losses in Sri Lanka Objective: Post harvesting losses reduction in fruits and vegetables
17.	Ms. Narangoda Gayani Mekala Development Officer Ministry of Mahaweli, Ministry of Agriculture Irrigation and Rural Development No.288, Sri JayawardenapuraMawatha, Rajagiriya, Sri Lanka Mob: +94 775763508, Fax: +94112863669 Email: <u>mekala.narangoda@gmail.com,</u> <u>agrifinpay@gmail.com,</u>	Title: Smart investments and new technology to increase water harvesting Objective: Identify currently using methods to store warer and their sustainability
18.	Ms. Samaratunge Dissanayakage KusumSriyani Development Officer Ministry Mahaweli, Ministry of Agriculture Irrigation and Rural Development No.288, Sri JayawardenapuraMawatha, Kotte, Rajagiriya, Sri Lanka Mob: +94 714466322 Email: <u>samarakusumsriyani@gmail.com</u>	Title: Organize trainings on Post Harvest Technology Management in fruits and vegetables

SI.No.	Name and address		BAWP Title& Objective
19.	Mr. Limbias Milton Development Officer Ministry Mahaweli, Ministry of Agriculture Irrigation and Rural Development No.288, Sri JayawardenapuraMawatha, Rajagiriya, Sri Lanka Mob: +94716389797, Tel: +942034367, Fax: +94112868925 Email: <u>lambiasm@gmail.com</u> , agritecmoa@gmall.com,		Title: Production technology of bio fertilizer Objective: Build up the knowledge on bio fertiliser amoung the farmers
20.	Ms. Liyanage Himali Development Officer Ministry of Mahaweli, Ministry of Agriculture Irrigation and Rural Development No.288, Sri JayawardenapuraMawatha, Rajagiriya, Sri Lanka Mob: +94 714409952 Email: <u>hliyanage1234@gmail.com</u> ,		Title: Senstization and awareness programs on post harvest technologies
21.	Mr. Warakogoda Acharige Don Amila Roshan Rathnasooriya Statistical Officer Ministry Mahaweli, Ministry of Agriculture Irrigation and Rural Development No.288, Sri JayawardenapuraMawatha, Kotte, Rajagiriya, Sri Lanka Mob: +94 714406123 Email: <u>amilarasoo@gmail.com</u> , <u>info@agrimin.gov.lk</u> ,		Title: Conduct a sample survey on post harvest losses of crops Objective: There are no stastatistics about post harvest loss
	Uganda		
22.	Mr. Bbaale Moses Field Extension Officer Kayunga District Farmers Association Kayunga Town Council, Kayunga, Uganda Mob: +256 782344684 Tel: +256 782344684, +256 700414348 Email: <u>bbaalemoses44@gmail.com</u> , <u>kayungadfa@yahoo.com</u> ,		Title: Shallow technology on production and post-harvest management of horticultural crops Objective: Improve famers knowledge and skills on post-harvest production and post-harvest management technology
23.	Mr. Mwongyera Benjamin Farm Manager Rukungiri Agriculture College, Buyanja County, Rukungiri District, Uganda Mob: +256 772772272 Email: <u>bmkbenjamin@yahoo.com</u> , etkikoni@gmail.com,		 Title: Introduce new horticultural technologies to the farmers Objective: Change of perception and approach to horticultural farming. Introduction of new technologies as learnt from the Indian situation

International Webinars organized under FTF ITT by MANAGE and USAID

MANAGE in collaboration with the USAID organized three International webinars as per the need of the trainees. The webinars were organised on the following topics.

- 1. Agriculture Extension Strategies for Asia and Africa during COVID-19 Pandemic- on 8th July 2020.
- 2. Core Competencies for Agriculture Extension Professional- on 17th July 2020
- 3. Webinar on Back at Work Plans by FTF ITT trainees- on 8th September. 2020

The first webinar on "Agriculture Extension Strategies for Asia and Africa during COVID-19 Pandemic" was organised on 8th July 2020 with four session as given below

SI. No.	Торіс	Speaker	
1.	Orientation of the Feed The Future India Triangular Training Program, FTF ITT achievements and challenges of Covid-19 Pandemic on agriculture operations in Africa and Asia	Dr. Mahantesh Shirur Dy. Director (Agril.Extn.) MANAGE, Hyderabad	
2.	ICTs for Agricultural Extension: Innovations and Experiences during Covid-19	Dr. Saravanan Raj Director (Agril. Extn.) MANAGE, Hyderabad	CTS for Agricultural Estension Constitutions and Experiences during Covid-19 Constitutions C
3.	Role of Farmer Producer Companies for addressing marketing constraints of agriculture commodities	Dr. K. C. Gummagolmath Director (M&E) MANAGE, Hyderabad	
4.	Extension innovations and measures by Government in agriculture sector during Covid -19 Pandemic	Dr. M. J. Chandregowda Director ICAR-ATARI, Bengaluru	
5.	Question and Answer Session	Interactions with trainees and experts	



International Webinar on Core Competencies for Agriculture Extension Professionals

The second webinar on "Core Competencies for Agriculture Extension Professionals" was organized on 17th July, 2020. Focus of the webinar was on the important core competencies of extension personnel and the ways to enhance them. The assessment of competency is important to find 'right man to do the right task'. Four speakers from MANAGE and ICAR-NAARM delivered relevant topics as given below. The concluding remarks were given by Mr. Mustapha El Hamzaoi, Director, Food Security Office, USAID India.

Торіс	Speakers	
The New Extensionist: Core Competen- cies for Extension Professionals	Dr. Saravanan Raj Director (Agricultural Extension) MANAGE, Hyderabad	
Process Skills for Extension Professionals	Dr. G. Jaya Dy. Director (HRD) MANAGE, Hyderabad	Process Skills for Extension Process Skills for Extension Barry
Competencies for Programme Planning, Implementation and Evaluation and Im- pact Assessment	Dr. Mahantesh Shirur Dy. Director (Agricultural Extension) MANAGE, Hyderabad	
Capacity Development of Extension Pro- fessionals: Competency-based Approach	Dr. Bharat Sontakki Head, ESM Division, ICAR-NAARM, Hyderabad	
Concluding remarks and Discussion	Mr. Mustapha El Hamzaoi Director, Food Security Office, USAID India	M Conserve for an and a second secon

The third International webinar under FTF ITT was organized on Back at Work Plans on 8th September. 2020. Seventeen selected officials from eight countries presented their works and shared their experiences in the webinar.



FTF ITT Team at MANAGE

Director General



Smt. V. Usha Rani, IAS (July 2016 - Oct 2019)



Smt. G Jayalakshmi, IAS (Oct 2019 - Sept 2020)



Program

Directors

Dr. P. Chandra Shekara (July 2016 - May 2018)



Dr. Saravanan Raj (May 2018 - Aug 2018)



(Aug 2018 - Sept 2020)



Program

Dr. Ravi Nandi (July 2016 - Nov 2018)



Dr. Goldi Tewari (Nov 2018 - Nov 2019)



(Oct 2019 - Sep 2020)

Program Management Unit (PMU)



Ms. Poonam Thakur

(July 2016 - Oct 2017)

Ms. Kanika Singh (Oct 2016 - Nov 2017)





Mr. B. Chinna Rao (July 2016 - Sep 2020)



Mr. Dharmaraj B M (Oct 2019 - Oct 2020)



National Institute of Agricultural Extension Management (MANAGE)

(An autonomous organization of Ministry of Agriculture and farmer's welfare, Government of India)

Rajendranagar, Hyderabad- 500030, Telangana, India

ABOUT THIS REPORT

Feed the Future India Triangular Training (FTF-ITT) program is a global initiative designed to address the food production challenges of the developing countries in Asia and Africa continents. A new agriculture partnership was formed between the US and India during 2010 to achieve evergreen revolution to address the issues of global food Security in Africa and Asia through triangular cooperation. More than 1100 officials from 21 countries were trained on technological advances and innovations from Indian Agriculture during 2016 - 2020. This report on FTF ITT gives the detailed account of training methodology, curriculum followed, partner institutes, points of contact (PoCs) and trainers and trainees' database of all the 44 training programs organised under FTF ITT. This report will serve as an important reference for designing global level training and capacity development programs on agriculture and food security.



Authors



Dr. Mahantesh Shirur Deputy Director (Agricultural Extension). Centre for Agri. Extn. Policy, PPP and International Centre of Excellence in Agricultural Extension, National Institute of Agricultural Extension Management (MANAGE) Rajendranagar, Hyderabad-500 030. INDIA Email: pmu.manage@manage.gov.in / URL: www.manage.gov.in Mobile Phone No.: +91-9916220767/ Phone No.: +91-40-24594538



Dr. Jyothi S.S.P Program Manager, FTF ITT Email: ssp.jyothi@gmail.com / Mobile No.:+91-9550379341



Mr. Dharmaraj B.M Program Executive, FTF ITT Email: bmdharmaraj@gmail.com / Mobile No.:+91-7661044888



Mr. B.Chinna Rao Junior Program Execurive, FTF ITT Email: bcraomanage@gmail.com / Mobile No.:+91-7732050607



Mr. Sharath H.N Consultant, FTF ITT Email: sharathhnsharath@gmail.com / Mobile No.:+91-7730841234