

Feed The Future India Triangular Training Programme (FTF ITT) “Value Addition and Market Linkage Mechanisms in Millets”

(23rd January - 06th February, 2018)

REPORT



NIELAN - Technology Incubation Centre
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**Feed the Future India Triangular Training (FTF ITT) Program on
“Value Addition & Market Linkage Mechanism in Millets” held during
23-01-2018 to 6-2-2018 at ICAR – IIMR, Hyderabad.**

REPORT

Edited By

**Dr. B. Dayakar Rao, Program Director
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PREFACE

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 Sorghum Research and Development at national level through All India Coordinated Research Projects on Sorghum, Pearl Millet and Small Millets and provides linkages with various national and international agencies providing end to end solutions in a value chain mode.



Director, ICAR-IIMR

Nutri-cereals [Millets] are important crops for dry land farmers; they are highly nutritious and are climate-compliant crops. But, overall millet consumption in India has declined over the years. In order to revive the demand of millets in India, various efforts are being done by the central and state governments in India. Alongside, ICAR-IIMR has made an attempt to innovate technologies that enable in developing sorghum/millet based value added products through NAIP subproject, 'Creation of Demand through PCS Millets Value Chain. ICAR-IIMR and other stakeholders of millets have been striving hard in this present era, to take it to next level of production, utilization and marketing to position millets as 'Smart Foods' sustainable and potential future crops with embedded potential to offer food, feed fodder, nutrition, health and fuel security.

A new Agriculture Partnership between US and India to achieve ever green revolution to address global food security in general and particularly in African Countries is a welcome initiative sponsored by USAID for the benefit of low income countries across the globe. The effort included Triangular Cooperation Adaption of technological advances and innovative solutions to address Food Security Challenges in Africa. Hence, ICAR-IIMR organized a Feed the Future India Triangular Training program on **Value Addition & Market Linkage Mechanisms in Millets** during 23rd January to 6th February 2018 to disseminate millet based technologies. I take this opportunity to congratulate Dr. B. Dayakar Rao, Program Director and Dr. Sangappa, Program Coordinator, staff of NIELAN-TBI and MANAGE, Hyderabad for successfully organizing this Program. I extend my best wishes to all the executives of eight countries for adoption of technological innovations of ICAR-IIMR in their respective counties.

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1. INTRODUCTION

1.1 Background

1.1.1 About ICAR-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 Sorghum Research and Development at national level through All India Coordinated Research Projects on Sorghum, Pearl Millet and Small Millets and provides linkages with various national and international agencies providing end to end solutions in a value chain mode. ICAR-IIMR has two regional stations, Centre on Rabi Sorghum (CRS), Solapur and Off-Season Nursery, (OSN) Warangal to achieve the mandates of institute.

1.1.2 Chronology of Institute

Year	Milestone
1958	This institute was first established under the Project on Intensified Research on Cotton, Oilseeds and Millets (PIRCOM) in 1958 and engaged in research on important dry land crops such as sorghum, castor, groundnut, pigeon-pea and cotton as well as sorghum-based cropping systems.
1966	Subsequently served as Regional Research Station of the Indian Agricultural Research Institute (IARI) , New Delhi from 1966.
1970	During January 1970, it became the main unit of All India Coordinated Sorghum Improvement Project (AICSIP) .
1987	The National Research Centre for Sorghum (NRCS) was established on November 16, 1987 to further strengthen the basic and strategic research activities encompassing rabi sorghum productivity, sustainability of production, product utilization, and profitability.
1991	In order to meet these goals, a Regional Rabi Sorghum Research Centre Viz., Centre on Rabi Sorghum was also established on October 1, 1991 at Solapur, Maharashtra to strengthen rabi sorghum research in the core habitat of central and southern Maharashtra and Northern Karnataka.
1995	In addition, an Off-Season Nursery (OSN) centre was established in 1995 at Warangal, Telangana , primarily to facilitate multiplication of sorghum breeding lines during off-season.
2009	The National Research Centre for Sorghum (NRCS) was elevated as The Directorate of Sorghum Research (DSR) in 2009
2014	The Directorate of Sorghum Research was upgraded to the status of Indian Institute of Millets Research (IIMR) during 2014.

1.1.3 Mandates of ICAR- IIMR

- 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.



1.1.4 Mission of ICAR-IIMR

The envisaged primary mission is "to promote economic growth by generating and disseminating Ready-to-Use technologies which create markets, respond to current and future economic demands, and maintain the long-term sustainability of the agricultural resource base." The major output of the strategy is coherent with focused research program by ICAR-IIMR which not only targets technologies that respond to economic opportunities but also link producers to markets and make optimal use of existing technologies and technology providers. Through the goals and objectives of All-India Coordinated Sorghum, Pearl Millet

and Small Millets improvement programs under one umbrella of ICAR-IIMR, it hopes to lead the way in adoption of the new strategy by applying revised criteria in prioritization of programs and the specific activities under them, by helping the National Agricultural Research Systems to create strong linkages with producers, processors and markets of agricultural produce, and by working with other sister institutes to improve their capacity to carry out agricultural policy analysis and apply this analysis to influencing change in policies that negatively affect Millets production and productivity.

IIMR believes that food security objectives can best be met by stimulating growth in market-oriented production systems which should generate additional cash resources for small holders and increase off-farm employment for rural and urban poor and also develop and capitalize on avenues for value addition and exports.

1.1.5 Vision of ICAR-IIMR

The predicted 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”.

The focus of our targeted outputs on a given timeline is in tune with the stated vision that could yield the expected gains in terms of enhanced production and stability of millets under low to moderate-rainfall situations, increased resistance to drought and other environmental stresses to address the climate change, diversification of the genetic base including hybrid cytoplasm, grain mold and leaf disease resistance, head bug, midge, stem borer and shoot fly, grain quality and acid and saline-soil adaptability in sorghum; and yield improvement, drought tolerance and downey mildew, rust and ergot resistance and value addition in pearl Millet; and Yield enhancement technologies and blast resistance, including exploring possibility of developing hybrids in finger millet and other small millets; including low and high temperature tolerance in millets. 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.

For accomplishing envisaged objectives following strategic goals are highly relevant:

1. Enhancing and sustaining Millets productivity and global competitiveness.
2. Improving the end-product quality and cost-effectiveness of Millet production systems.

3. Improving use-efficiency of natural resources and purchased input.
4. Reducing avoidable yield losses to stabilize yield gains without impairing the environmental quality.
5. Making Millets farming highly remunerative under a range of agro-ecologies.
6. Effective transfer and implementation of improved technologies.
7. Promotion of Millets as health-food, and as industrial raw material for potable and industrial alcohol, starch, and their products including those from the stalks.
8. Better utilization of Stover by increasing its quality, processing and storage.

1.1.6 Significant Achievements in millets Research /Research Highlights:

- All together 35 Sorghum Hybrids; 32 Sorghum Varieties released through AICRP system including 1 sweet sorghum Hybrid, 2 sweet sorghum varieties and 3 single-cut forage varieties; and 2 multi – cut hybrids besides about 175 state varieties released through various SAUs.
- The substantial impact has been made through the development of new hybrids and varieties, and improved production technologies to increase kharif and rabi sorghum productivity by 93.0%, and rabi production by 80% respectively.
- Sustainable production, protection, processing and seed technologies across cropping systems and agro-ecological zones for enhanced production and utilization of sorghum in food, feed, fodder and bio fuel sectors.
- Up-scaled value addition protocols through pilot studies for use of kharif grain in non-food sector, particularly feed, starch production and potable or industrial alcohol; and sweet stalked sorghum in the production of syrup and ethanol.
- New DNA markers have been developed and marker-assisted selection for evolving new cultivars resistant to drought, shoot fly, and other stresses is being practiced.
- Transgenic sorghum lines resistant to stem borer, drought and salinity are in pipeline.
- Quality of grain and fodder are being improved using transgenic and marker approaches.
- Wide hybridization and allele mining have been initiated to incorporate novel traits in new cultivars.
- To prevent the contamination of sorghum grains by myco toxins, new technologies are being developed.

1.1.7 Origin of FTF-ITT

A new Agriculture Partnership between US and India to achieve ever green revolution to address global food security was announced during the state visit of US President Mr. Barak Obama to India in November 2010. The effort included Triangular Cooperation

adapting technological advances and innovative solutions to address Food Security Challenges in Africa.

This pilot stage focused on three African Countries *i.e.*, Kenya, Liberia and Malawi with potential to expand throughout the African continent in future. Consequently, National Institute of Agricultural Extension Management (MANAGE), Hyderabad and National Institute of Agricultural Marketing (NIAM), Jaipur conducted 7 training programs covering 219 executives from Kenya, Liberia & Malawi. Participant's surveys were conducted in Kenya, Liberia & Malawi to assess the impact of training programs. Results were beyond expectations. Due to the success of first seven training programs, there has been considerable enthusiasm from the prospective executives from Africa and Asia to participate in the training program.

As a result, USAID and Ministry of External Affairs (MEA), Govt. of India identified 17 additional countries and designated as Feed the Future India Triangular Training (FTF-ITT) program is a joint effort of USAID and Govt. of India for fostering triangular cooperation for adapting technological advances and innovative solutions to address food security challenges in Africa. The programme is expected to enable India and the U.S. to share improved agricultural technologies worldwide, helping countries in Africa and Asia revolutionize their agriculture practices and ultimately, improve global nutrition levels. The FTF-ITT program was launched on 25th July, 2016 at New Delhi. Flagged off in 25th July 2016, this program aims to build capacities of 1400 agricultural professionals from 17 partner countries of Africa and Asia by 2020. The National Institute of Agricultural Extension Management (MANAGE), Hyderabad is implementing the program in collaboration with various Subject Matter Institutions.

1.1.8 Why FTF-ITT by ICAR-IIMR

Millet also known as nutria-cereals are potential crops to grow well in harsh environments unlike fine cereals like, wheat and paddy. These nutria-cereals are important staple food and, fodder for livestock population, especially in semi-arid regions. Millets including sorghum are the principal sources of energy, protein, vitamins and minerals for millions of the poorest people in the dry land areas of the world. Developing technology that makes millet value added products available as convenient to make and easy access at reasonable prices will find great demand and market particularly in urban places where there is growing conscious for nutritive intake of food and ready to cook and ready to eat foods for

the benefit of urban population in particular. Millets value added products are nutritionally rich and proved to be benefit for all age groups.

They are crops of the present with high impact on the poor in Africa for food security, and sources of energy and protein for about 130 million people in sub-Saharan Africa (SSA). The diverse production areas cover mostly the semi-arid tropics (SAT) and sub-tropics of Africa, and include other zones in the drought-prone sub-humid areas and medium-high altitudes. This is a significant coincidence as it does have socio-economic, food/feed, health, and environmental impact on the resource-poor peoples of Africa. It also has importance in strategies for responding to the needs and welfare of the poor including food security, nutrition and health, poverty alleviation, potential markets and dry environment enhancement. Millets also play pivotal role in achieving food security in Asian countries, by considering the above facts, MANAGE Hyderabad has chosen ICAR-IIMR as Partner Institution to implement Feed the Future India Triangular Training Program on “**Value Addition and Market Linkage Mechanisms in Millets**”. The program was scheduled during **23rd January, 2018 to 6th, February 2018** at IIMR. About 20 executives representing 8 countries participated in 15 days international training program. The inauguration training Program was held on 23rd January 2018. Dr. R Hemalatha, Director, National Institute of Nutrition, was chief guest on this occasion, Dr. Vilas A. Tonapi, Director, ICAR-IIMR, Dr. P. Chandra shekara, Director Agril Extension, MANAGE, Dr. K. Bhaskaracharry, NIN , Dr. B. Dayakar Rao, Program Director, Dr. Sangappa, Program coordinator and other faculty members of ICAR-IIMR graced the occasion.

Dr. B. Dayakar Rao, PS & CEO, NIELAN TBI, ICAR-IIMR initiated the inaugural session with welcome address. Participants were introduced to gathering with brief country profile. Director, NIN emphasized the nutritional importance of millets in her inaugural address. Dr. Vilas A. Tonapi Director, IIMR, briefly explained the objective and significance of the training programme. Dr. P. Chandra Sekhar, briefed the success stories of previous Training at partner institutes. The session was ended with vote of thanks by Dr. Sangappa Program Coordinator, ICAR-IIMR Hyderabad.

Prior to this, the registration committee comprising of Dr. Laxmi B. & Mr. Naresh welcomed all the participants with registration Kit for the training program. To understand the basic Knowledge of Trainees, Pre course evaluation exam was conducted which was comprised of 50 objective questions on various topics related to training content which will be compared with post training test.

International Training Program on
“Value Addition and Market Linkage Mechanisms in Millets”
 Executives of Asian and African Countries under Feed The Future India Triangular Training Program
 23rd January - 6th February - 2018



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Inaugural speech by PS & CEO, NIELAN TBI, ICAR-IIMR

In the afternoon session, Health Checkup of participants was carried out by Visiting Medical Officer of ICAR-IIMR and Legal Formalities of Training Program was completed by representative from MANAGE. Participants were exposed to various laboratories to make them acquaint with the various activities carried out by different laboratories of ICAR-IIMR during the training. The schedule of training program and daily activities is furnished in Annexure-I & the committee members list is enclosed in Annexure-II.

Development of Millets Value Chain

<http://millets.res.in>

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“Feed The Future India Triangular Training Program (FTF ITT)” On “Value Addition and Market Linkage Mechanisms in Millets”

Date :
23 January - 06
February, 2018

Training Program Brochure

1.2 Objectives of the training program

- USP (Unique Selling Proposition) of millets.
- 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.
- Creation of Market linkages for producers, processors and consumers.
- To tap the international market to use the export avenues.
- Visit to successful entrepreneurs on millets business and share their experiences.
- Policy support for promotion of millets.
- Value chain development models.

1.3 Key focus areas of training module

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

1.4 Selection of Executives

The program was formally announced by the National Institute of Agriculture Extension Management (MANAGE), Hyderabad, India. The Program Management Unit (PMU), FTF-ITT, at MANAGE prepared the program brochure, initiated the process and provided good publicity in partner countries through their Point of Contact (PoC), Indian Embassies, USAID Missions of respective countries, National Governments and previously trained executives. The partner country has nominated the executives working in agriculture and allied departments and the PMU-FTF ITT of MANAGE has finalized the nominations.

1.5 Profile of the Executives

Twenty executives from eight countries (3 from Ghana, 3 from Kenya, 1 from Liberia, 4 from Malawi, 2 from Mongolia, 3 from Myanmar, 2 from Sudan, and 2 from Uganda) have attended and successfully completed the programme. The selected executives belonged to diverse working areas *viz.*, Agriculture and Rural Development Officers, Agricultural Economists, Agricultural Extension officers namely Livestock, Fisheries, Nutrition and Agribusiness *etc.*, representing public, universities and Govt. organizations in partner countries. Out of 20 executives, half of the group consists of women executives. Complete list of Executives is enclosed in Annexure-III.

2. METHODOLOGY

2.1 Training methodology

The training program was participatory in nature, which included lectures, panel discussions, group discussions, case studies, Hands on experience and field visits. Each participant was expected to contribute ideas and take part in group activities thereon forming small groups to undertake various tasks allotted under the training. Although, experiential learning methodology was effectively incorporated in the program, the participants were expected to emulate learning's through group interaction, field visits and interactions with domain experts. A Back at Work Plan was in-built to ensure the transformation of learning into action at their workplace. The effectiveness of the training is proposed to be monitored after conducting pre and post tests to understand the impact of the training on the knowledge of the participants. A learner-centered approach was followed to orient the participants on **“Value Addition & Market Linkage Mechanisms in Millets”**. Methodology adopted for the program was as follows:

- Participatory approach.
- Participants expected to contribute ideas and work in groups.
- Experiential learning methodology (Cross learning, field experiences) Interactive session with the faculty of Institute and Guest Speakers.
- Lectures, group discussions, panel discussions and field visits to National and International institutions, agricultural university and export pack house like Sam Agritech.
- Special lectures/interactions with eminent personalities from the field were invited.
- Grow task assignment
- Participants were made to present “Back-at-Work-Plans”.
- Daily yoga sessions were organized.
- Regular feedback on the program was collected.

About 30% time was devoted to lecture-cum-interaction sessions, 40% time on hands on practices in laboratories and field demonstrations and 30% time for institutional visits and interaction.

2.2 Study material



Photos: Training materials/manuals

Study material, prepared by the Course Director, faculty and experts of ICAR-IIMR on all the major themes were provided to the executives. The soft copies of all the presentations made during the sessions were also provided to the executives. More than 150 of photographs of lectures, field visits and other important activities of program were also provided to the Executives. The executives had full access to ICAR- IIMR laboratories/Food lab on Millets and Library.

In order to increase access to information and share knowledge on continuous basis, Wi-Fi as well as desk tops with Internet facility were provided during the entire course period.

INTERACTIVE LECTURE SESSIONS

Day wise lecture sessions:

Day 1: 23-01-2018

Session – 1	Topic	Description
Mr. Naresh Kumar	Registration	Registration Kit arrangement
Chief Guests & Director, ICAR-IIMR	Inauguration of training program	1. Briefing about Training 2. Interaction with Executives
Dr. Vilas A. Tonapi	An Overview of ICAR-IIMR	1. Activities and Achievements of IIMR 2. Linkage Mechanisms with millets stakeholders
Drs. Sangappa & Laxmi ICAR-IIMR	Pre Training Test	1. Conducted the Pre Training Test to Executives on value addition of Millets in market. 2. Ice breaking session to participants to know each other, to build the rapport and to perform good in Training.

Day 2: 24-01-2018

Session – 1	Topic	Description
Dr. M. Elangovan ICAR-IIMR	Diversity of Millet Genetic Resources in India	1. He shared about the diversity of millet and explained how the millets are used as food, feed or forage in India. 2. Only 35 species comprising 20 generation have been domesticated 3. The millets account for 1% of the total food grains used in the world. 4. The executives asked questions to the speaker and received relevant answer along with examples.
	Visit to GENE Bank	1.Executives visited Gene bank to know diversity of Millets at ICAR-IIMR
Dr. Venkat Bhat ICAR-IIMR	Millet Crop Improvement Scenario in India	1. He shared how to improve millet cultivation by adopting better practices. 2. The executives given their ideas to improve the millets cultivation.
Dr. Ravi Kumar	Improved Production Practices of Millets	1. Speaker explained on the production of millets in different climate scenario. 2. He elaborated Agronomic package of practices to increase the yields of Millets.
Drs Ravi Kumar & Swarna Ronaki ICAR-IIMR	Millets Field Visit of ICAR-IIMR	1. Drs. Ravi Kumar and Swarna Ronaki along with executives visited the IIMR field. 2. They were very impressed by seeing the crops and asked question to the Field officers. 3. Executives while researching the crops discussed about the methods regarding

		how it can be improved/grow and which mechanism IIMR using. Executives collected data regarding improved mechanisms to grow the millets and decided to implement millets crop in their countries.
Dr. P.G. Padmaja ICAR-IIMR	Major pest and crop Protection Technologies in Millets	<ol style="list-style-type: none"> 1. Dr. Padmaja focused on mainly technologies to implement for crop protection. 2. She demonstrated infected specimens for the insects like, Shoot fly <i>Atherigona Soccata</i> insects etc., and explained the damage symptoms, losses caused by insects, pest in millets. 3. She stressed about the technology which has to be feed timely to care about the crop removal of alternate hosts. 4. Crop rotation in every season.

Day 3: 25-01-2018

Session – 1	Topic	Description
Dr. Sangappa ICAR-IIMR	Recap	<ol style="list-style-type: none"> 1. Dr. Sangappa has taken initiative to revising the before day sessions and asked executives about the doubts and how to improve further. 2. Executives shared how they are enjoying the classes.
Drs C.V. Ratnavathi & Venkateshwarulu	Importance of Millets to address malnutrition and achieve Nutritional & Fodder Security	<ol style="list-style-type: none"> 1. Speaker focused on the malnutrition and how to achieve nutritional in millets. 2. She has given a clear picture about fodder security and how millets are healthy for consumption. 3. She stressed about lack of awareness among urban population about the health benefits of millets. 4. In between executives clarified their doubts about health benefits of millets.
Drs C.V. Ratnavathi & Venkateshwarulu	Visit to Biochemistry lab	<ol style="list-style-type: none"> 1. All the executive went the bio chemistry lab along with speakers. 2. Dr Ratnavathi & Venkateshwarulu explained about the chemistry lab activities. 3. Executives seen how the research is going on in Bio-

		Chemistry lab with millets in IIMR.
Dr. P. Sudhakar Reddy PJ TSAU, Hyderabad	Visit to Farm Machinery Centre PJ TSAU	<ol style="list-style-type: none"> 1. Dr. P. Sudhakar Reddy explained about PJ TSAU mandates and activities to executives. 2. He showed the farm machinery unit and explained how works. 3. He explained about working condition of all the machineries at PJ TSAU. 4. Executives impressed by seeing improved machines and they experienced it practically.
Dr. B. Dayakar Rao, ICAR- IIMR	Visit to Centre of Excellence	<ol style="list-style-type: none"> 1. Executives stepped in to CoE lab and they saw different kind of production machines. 2. Executives seen all the machines which are present in lab and technical demonstrated how it works, what the purpose of each machines. 3. Some of the Executives practically done the production of biscuits, vermicelli/pasta. 4. They enjoyed while preparation and tasted the product which they have prepared by themselves and appreciated the technique.
Dr. Sangappa ICAR-IIMR	Visit to Primary Processing	<ol style="list-style-type: none"> 1. Dr. Sangappa took the executives to show primary processing unit. 2. The Executives saw different kind of processing machines and operated some of the machines like Dehuller, sieves practically.
	Visit to Incubation Facility of IIMR	<ol style="list-style-type: none"> 1. Executives visited Incubation Facility of IIMR. 2. In Incubation chamber or production / secondary centers? In business incubator they may have knew basics of business handling, training incubate.

Day-4: 26-01-2018

Session – 1	Topic	Description
Dr. Amarnath ICAR-IIMR	Republic day Celebrations & Visit to places of cultural and historical importance in India	<ol style="list-style-type: none"> 1. Executives are center of action on Republic day at IIMR. 2. Director, IIMR addressing the

		<p>executives for participated.</p> <p>3. They participated in several activities like singing, shared their greetings to IIMR family.</p> <p>4. In the same day, they visited scenic Hyderabad and enjoyed the various places.</p>
Dr. Elangovan ICAR-IIMR	Digital Agriculture to Reach Unreached through Field Book	<p>1. Speaker has detailing to executives how to reach digital agriculture to unreached.</p> <p>2. Illustrating the era of digital world, the speaker heighted India transforming into Digital India.</p> <p>3. Main point raised by speaker to develop the unreached areas, we want to grab the opportunity to survive that places.</p> <p>4. Speaker highlighted how to tap the unreached areas or tap the tremendous opportunities to address diverse issues.</p>

Day-5: 27-01-2018

Session – 1	Topic	Description
Dr. Laxmi B	Recap	Dr. Laxmi took initiative in revising the previous days training values/usefulness.
Mr. Suneel Vemu	Role of NIELAN-Technology Business Incubation for Millets Value chain Development	<p>1. Mr. Suneel Vemu explains about NIELAN –TBI for Millets in IIMR.</p> <p>2. He focused on the Nutrition benefits of millets.</p> <p>3. Explained Strengthening Farmer Organizations, Value Chains Model of various incubates.</p>
Mr. Suresh Kumar	Food Processing Landscape in India	<p>1. Speaker described the food processing situation in India.</p> <p>2. He explained about value of food and benefits in Millets.</p> <p>3. Executives raised the questions and speaker clarified the answer.</p>
Ms Sukrati Sharma	Hands on training on Primary processing of millets	<p>1. Ms Sukruti Sharma has given training to executives to Handle the machineries and plant activities.</p> <p>2. She guided the executives in doing dehulling of millets.</p> <p>3. Some executives learned about</p>

		how to use shifter while millet processing.
Dr. Amarnath	Feed Back on Hands on Training on Primary Processing of Millets	Executives' feedback regarding machineries was exited. They enjoy the smooth processing activities, which will be helpful to entrepreneurs and farmers in around their region.

Day-6: 28-01-2018

Session – 1	Topic	Description
Home Reading, Attending Personal Work and Religious Worship		

Day-7: 29-01-2018

Session – 1	Topic	Description
Dr. P. Chandra Shekhara	Field Visit to MANAGE, Hyderabad	<ol style="list-style-type: none"> 1. Drs. Dayakar Rao & Sangappa along with the executives visited MANAGE. 2. Dr. P. Chandrashekhara MANAGE, welcomed and addressed the Participants. 3. Dr. Ravi Nandi briefly explained the work of MANAGE, he showed a documentary film about MANAGE. 4. Executives also Visited computer lab, library and AC&ABC incubation centre.
Dr. B. Dayakar Rao	Entrepreneurial Journey & Market Linkage Mechanism in Millets – A panel discussion with Business Incubates of ICAR-IIMR	<ol style="list-style-type: none"> 1. Dr. Dayakar Rao introduced the entrepreneurs from IIMR. 2. Sai Krishna Health sutra has shared his experience, how the journey has started and the support received from IIMR 3. After hearing the lecture Executives were very eager to start the millet enterprise in their respective countries.

Day-8: 30-1-2018

Session – 1	Topic	Description
Dr. B. Laxmi	Recap	1. Dr. Laxmi discussed about the events of previous days

		and highlighted the opportunities in Millet enterprises.
Mrs. Vishala A.D & Dr. Amarnath ICAR-IIMR,	Hands on Training on Secondary Processing of Millets (Vermicelli and Pasta)	1. Mrs Vishala introduced has shared and demonstrated production of vermicelli to executives 2. Executives were involved in the Production. 3. They voluntarily prepared Vermicelli and Pasta production and packaging with Guidance of Mrs.Vishala, IIMR
Dr. Sangappa & Mr. Sateesh	Hands on Training on secondary processing of Millets (Cookies)	Mr Sateesh as introduces to executives and shared production of cookies. 2. Executives are involved in the Production. 3. They prepared cookies production and packaging under the Guidance of Mr. Sateesh, IIMR.
Mrs. Vishala A.D & Dr. Amarnath ICAR-IIMR,	Hands on Training on Secondary Processing of Millets (Vermicelli and Pasta)	1. Mrs Vishala as introduces to executives and shared production of vermicelli. 2. Executives are involved in the Production. 3. They prepared Vermicelli and Pasta production and packaging under the Guidance of Mrs. Vishala, IIMR.
Ms Sukrati Sharma ICAR-IIMR	Hands on Training on Secondary Processing of Millets (Puffs Preparation)	1. Ms. Sukrati Sharma explained about the preparation of Puffs and involved executives in preparation of puffs.
Ms. Sunitha & Ms Kiranmai	Hands on Training on Secondary Processing of Millets (Kurkure)	1. Executives shown keen interest in preparation of multi millets kurkure.
Ms Sukruti Sharma ICAR-IIMR	Hands on Training on Secondary Processing of Millets (Puffs Preparation)	1. Ms. Sukrati Sharma explained about the preparation of Puffs and involved executives in preparation of puffs.

Day-9: 31-01-2018

Session – 1	Topic	Description
Dr. Sangappa ICAR-IIMR	Recap	1. Dr. Sangappa taken the

		session and recalled the experience gained in preparation of millets food products. 2. Received the feedback from the executives
Dr. B. Dayakar Rao ICAR-IIMR	Millets Value Chain Development – A Experiences from ICAR-IIMR	1. Dr. B. Dayakar Rao ICAR- IIMR, explained about the Value Chain Development on Millets. 2. He shared Benefits of Millets, Functionality of millet polyphenols and how Millets reduce Obesity. 3. He also explained that Millets possess anti-tumorogenic property, Millets reduce hypertension.
Shri Arun Tiwari Care Hospital Founder	Global Scenario of Millets Production and Importance to address the problems	1. Shri Arun Tiwari describes Global Scenario of Millets Production. 2. Importance of Millets to Address the problems.
Dr. R. G. Math Head CFTRI Hyderabad	Exposure visit to CFTRI Regional Resource centre, Hyderabad to understand the food processing Technologies	1. Dr. R. G. Math welcomed the executives and introduced about the CFTRI. 2. He shown the activities and technologies of CFTRI.
Mr. Sai Krishna Popuri, Fountainhead Foods P (Ltd) (HealthSutra)	Field Visit to Fountainhead Foods P (Ltd), Industrial Area, Nacharam to understand the marketing linkages in Millets	1. Mr. Sai Krishna Popuri introduced to executives. 2. They seen the Flakes machine and Multi grain Atta making machine. 3. He explained how healthy flakes with millets.
Grand Trunk Hotel Jubilee Hills	Cultural Evening	1. Mr Arun Tiwari along with Executive's attended the cultural programme.

Day-10: 01-02-2018

Session – 1	Topic	Description
Dr. Laxmi ICAR-IIMR	Recap	
Mr. B. K Karna, Director, Packaging clinic & Research Institute ICAR-IIMR	Importance of Packaging of food products	1. Mr. B. K. Kama Introduced to Executives. 2. He told Importance of Packaging. 3. For packaging how different it works is there for food products.
	Modern Techniques on packaging of ready to eat and	1. Mr. B. K. Kama explains about importance of

	ready to cook food products	packaging. 2. He given information ready to cook food products with packaging. 3. For packaging it is crucial role, food products.
Dr. Umakanth ICAR-IIMR	Sweet sorghum Value chain management	1. Dr. Umakanth explained the value chain, sweet sorghum management.
Dr. Sangappa ICAR-IIMR	Practical Session on labeling, branding and commercialization of millets value added products	2. Development and identification of high biomass and high sugar yielding. 3. Sweet sorghum hybrids/varieties with shoot pest tolerance suitable for use in bio-ethanol production
Dr. Dayakar Rao ICAR-IIMR	Practical Session on packaging of millets value added products at Centre of Excellence, IIMR	1. Dr. Dayakar Rao explains about the packaging of millets value added products. 2. He showed the packing items its importance. 3. Production of millets different varieties what is the better idea to packaging. 3. In packaging mainly showed the Nitrogen packing and normal packing items.

Day-11: 02-02-2018

Session – 1	Topic	Description
Dr. Laxmi B	Recap	1. Dr. Laxmi discussed about the events of previous days and highlighted the opportunities in Millet enterprises.
Dr. Gangireddy, NIRD & PR	Exposure Visit to Rural Technology Park, NIRD & PR	1. Dr. Gangireddy has welcomed and introduced himself to executives. 2. He explained about the NIRD&PR activities. 3. Executives visited Rural Technology Park and observed its functioning and visited different stalls at RTP. 4. Speaker shared his experience to the executives.
Dr. K. Srinivas, Principal Scientist, ICAR-NAARM	Exposure visit to, a-idea Technology Business Incubation ICAR- NAARM	1. Dr. K. Srinivas ICAR-NAARM welcomed and introduce to executives. 2. He described briefly about

		<p>the NAARM organization, its mandates and activities.</p> <p>3. They Visited a-idea it is a technology incubator centre.</p> <p>4. He explained the meaning and working nature of a-idea to executives.</p>
T-Hub	Exposure Visit to t-hub, (Telangana Hub) Gachibowli Hyderabad	<p>1. Exposure visit to t-hub in Hyderabad.</p> <p>2. It is the newly innovation centre for various business adopters in Telangana.</p> <p>3. t-hub is a unique public/private partnership, India's largest incubator for startup.</p> <p>4. The executives also visited its market place.</p>

Day-12: 03-02-2018

Session – 1	Topic	Description
Dr. Sangappa	Recap	1. Dr. Sangappa taken the session and recalled the experience gained in lat days visits and sessions.
Mr. T. Sudhakar, APEDA Hyderabad	Export opportunities and issues in Millets	<p>1. Mr. T. Sudhakar APEDA explained about the export standards.</p> <p>2. He also explained the opportunities in utilizing millets exports in different places.</p> <p>3. He told a different module and examples and insisted what we should need to inculcate in export or import of millets.</p> <p>4. Executives are interested to export/import to being their countries.</p>
Dr. Satyanarayan K V Food Regulatory expert Hyderabad	Regulatory systems and quality assurance in food processing sector	<p>1. Dr. Satyanarayana shared about Regulatory systems quality assurance in food processing sector.</p> <p>3. He explained Quality & Safety Assurance and management Systems.</p> <p>4. He added Quality makes in food processing sector.</p>
Mr. Sai Prasanth & Mr.	Exposure Visit to Exhibition	1. Exposure Visit to

Naresh Kumar	centre, Nampally	Nampally Exhibition in Hyderabad. 2. In this Exhibition executives visited stalls and took the needed information and purchased the things from stalls.
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Day- 13: 04-02-2018

Session – 1	Topic	Description
Indian Cultural Exposure (Charminar and other places, Hyderabad) to International Delegates		

Day – 14: 05-02-2018

Session – 1	Topic	Description
Dr. Sangappa ICAR-IIMR	Presentation by Executives on Back at Work Plan	1. Dr. Sangappa discussed about Back at Work Plan to the executives. 2. Each executive choose a topic and are presented their plans in their respective countries.
Mr. Murli Sharma, ICRISAT	Field exposure visit to ICRISAT, Hyderabad	1. Mr. Murli Sharma welcomed and addressed the executives. 2. He explained the activities of ICRISAT organization. 3. They visited some production machines and technology. 4. Executives questioned about technology to implement their countries.

Day – 15: 06-02-2018

Session – 1	Topic	Description
Dr. Sangappa ICAR-IIMR	Recap	1. Dr. Sangappa taken the session and recalled the experience gained in previous days activities.
Drs Dayakar Rao/Sangappa ICAR-IIMR	Post Training Test & Interactive meeting with participants	1. Drs. Dayakar Rao & Sangappa conducted the Post Training Test 2. Interactive meeting with participants, after training what to do? 3. Executives replied that the technology using in IIMR, implement in their countries.
Dr. Laxmi B	Synthesis, evaluation and	1. Dr. Laxmi given the

	Feedback	executives an evaluation perform and instructed to rate the sessions which were conducted in previous days training programme and received feedback from the executives.
Chief Guests and Director IIMR	Closing ceremony of Training	<ol style="list-style-type: none"> 1. Chief Guests and Director IIMR addressed Closing ceremony and given send off to executives. 2. They have given suggestions and given ideas to executives. 3. All the executives shared their words, opinion about this programme and they said it was very helpful and they learnt so much.

2.3 Resource Persons

Besides ICAR-IIMR faculty members, resource persons were invited from reputed organizations across the country. The list of organizations that contributed resource persons to the program is as follows:

Sl.No	Resource Persons	Institute
1	Dr. P. Sudhakar Reddy	Professor Jayashankar Telangana State Agricultural University, Hyderabad
2	Mr. Suresh Kumar	Consultant, Food Industry
3	Shri Arun Tiwari	Care Hospital Founder
4	Dr. R. G Math	Head Central Food Technology Research Institute, Regional Station, Hyderabad
5	Mr. B. K Karna	Director, Packing clinic & Research Institute
6	Dr. Gangireddy	National Institute of Rural Development & Panchayati Raj
7	Dr. K. Srinivas	Indian Council of Agricultural Research-National Academy of Agricultural Research Management
8	Mr. T. Sudhakar	Agricultural and Processed Food Products Export Development Authority, Hyderabad
9	Dr. Satyanarayan K V	Food Regulatory Expert
10	Mr. Murli Krishna	International Crop Research Institute for the Semi – Arid Tropics, Patancheruvu

FIELD VISTS



2.4 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, CFTRI, ICAR-NAARM, t-hub, Nampally Exhibition.

The International Crop Research Institute for the Semi-Arid Tropics (ICRISAT) is an international organization which conducts agricultural research for rural development located in Patancheru (Hyderabad, Telangana, India). There are 8 research centers in Sub Saharan Africa with the global headquarters in Hyderabad. The regional centers includes Bamako (Mali), Nairobi (Kenya) and Research Stations Niamey (Niger), Kano (Nigeria), Lilongwe (Malawi), Addis Ababa (Ethiopia), Bulawayo (Zimbabwe). ICRISAT is founded in 1972.

The participants were taken to ICRISAT, Patancheru on 5th February, 2018. Participants were shown presentation about ICRISAT's work in Asia and Africa about creating Smart Foods, Watershed Crop Production, Agriculture that benefits farmers and consumers. These techniques are being implemented in more than 5000 villages in India. Kothapally, one of the villages in AP is also one of the places where farmers are profited by ICRISAT's work. Then Mr. Murali M Sharma took the participants to visit the farms and briefed them about the various crops grown, biotechnology used and processes involved. The 6 major crops grown are pearl millet, finger millet, groundnut, chickpea, sorghum and pigeon pea. Mr Murli stressed on the need to conserve water. He told us about the 2nd Green Revolution that is growing 2 crops in a year to feed the future generations.

Mr. Murali explained about watershed management, rain water harvesting systems, different breeding programs for drought tolerance in sorghum, early maturity in chickpea etc., visited solarized field to control nematodes, farm machinery unit, Model villages of Africa and India, Soils of India models, soil sterilization unit, Crop work area, Insect museum and poster area. Participants showed interest in some germplasm collections and took his advises to get the germplasm to their country and he ended by taking email IDs of all participants to post ICRISAT happenings in future.

The Central Research Institute for Dryland Agriculture is an institute under the Indian Council of Agricultural Research. It was formed in 1985 as the Project Directorate of the All India Coordinated Research Project for Dryland Agriculture. Dr. G. Pratibha, Principal

Scientist (Agronomy) explained the various activities going on at the Institution and was taken to the field visit around.

2.5 Professor Jayashankar Telangana State Agricultural University Farm Machinery

The executives visited farm machinery workshop located at, Professor Jayashankar Telangana State Agricultural University (PJ TSAU) and interacted with Dr. Sudhakar Reddy, Head of the organization. He explained about various farm machineries and their working principle.



Visit to Health Suthra

2.6 National Institute of Agricultural Extension Management:

The executives have visited the National Institute of Agricultural Extension Management (MANAGE) campus on 29.01.2018 and interacted with Smt. V. Usha Rani, Director General and Dr. P. Chandrashekara, Director (Agri. Extn.) MANAGE.





Field Visits

CULTURAL EVENING



2.7 Collective action and participatory learning

All the executives were divided into groups to enhance learning in small groups throughout the training program including field/ Institutional visits and prepare for cultural programme. The groups were given responsibility for learning from interactions, collection of literature, photographs, contact details, use of library and identify useful technology to their respective countries. The group also participated and managed cultural programme successfully.

2.8 Life Membership to professional bodies and journals

All the executives were made life members of National Institute of Agricultural Extension Management (MANAGE) Journal of “Agricultural Extension Management” (Formerly MANAGE Extension Research Review), which is bi-annual covering latest developments in the extension sectors published by MANAGE. As life members, they will receive Journal time to time.

2.9 Back-at-work-plans

The present program aimed at “**Value Addition and Market Linkage Mechanisms in Millets**”. Hence, the expected outcome is a professional commitment by each executive to try new initiatives learnt during the training programs at their work place after the training program. In the backdrop of orientation, inputs, interactions, study material and experiences received during the program, the executives prepared and presented individual “Back-at-work-plans” which would help operationalize the relevant concepts learned during the program in their respective countries. Back at work plan also trace the connectivity between experiences in India and back home extension issues. Details of individual Back-at-work-plans are given at Annexure-IV.

TRAINING EVALUATION

3.1 Evaluation of Technical sessions

Feedback of Executives was collected on all technical sessions taken by resources persons, and field visits on a scale of 0 to 10 *i.e.* '1 being the least and 10 being highest.' In addition, their suggestions on other areas such as boarding and lodging were obtained in order to bring necessary changes. 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. The feedbacks received from executives are tabulated.

3.2 Pre and post-training test

Pre and Post Training test were conducted for the executives at the beginning and at the end of the training respectively. Fifty thematic questions on Plant Health Management with a maximum of 50 marks were administered for pre and post-training test and obtained answers of the executives to assess their change of knowledge levels and effectiveness of the training programme. The average score of executives in the pre-training test was 22.54, whereas the average score of post-training was 42.92. Thus, it was found that the level of knowledge of executives was increased by 20.38 percent after the training programme. Details of pre and post-training test are given at Annexure-VI.

3.3 Evaluation

Executives rated the overall training program with a score of 9.10 on 10 point continuum *i.e.* Excellent.

3.4 Post-training monitoring

Post-training impact evaluation in respective countries by IIMR and Program Management Unit (PMU) is an integral part of the programme. PMU will be regularly in touch with executives through emails to monitor the progress of their "Back-at-Work-Plans" and it will help in effective monitoring and impact evaluation which is one of the important aspects of Program Monitoring & Evaluation (M & E).

VALEDICTORY AND FEED BACK

4.1. Feed Back

Feedback information was received from the executives about the training programme. Feedback given by the executives is enclosed in the Annexure V

4.2. Valedictory

Valedictory session was conducted on 06th February, 2018, The valedictory session was attended by Guest of Honor Smt. V. Usha Rani IAS, Director General, MANAGE, Dr. Vilas A. Tonapi, Director, ICAR-IIMR, Dr. B. Dayakar Rao, PS & CEO, NIELAN TBI, ICAR-IIMR, Dr. Sangappa Program Coordinator, FTF ITT and Dr. Vilas A. Tonapi, Director, ICAR-IIMR. An Introduction of “FTF-ITT” was given by Dr. P. Chandrashekara Program Director, MANAGE.

Brief report of the training program was given by Dr. Vilas A. Tonapi, Director, ICAR-IIMR. The executives were asked to give their valuable feedback on the training program, which was followed by the opening remarks by the Director General, IIMR.

Special address by guests of honor of the program were delivered, followed by the valedictory address by chief guest Smt. V. Usha Rani IAS, Director General, MANAGE. Certificates were distributed to the participants by the guests. Vote of thanks was delivered by Dr. Sangappa Program Coordinator, FTF ITT. The valedictory program was wrapped up by taking a group photograph of the executives along with the special guests of the program.

List of Annexure

Annexure - I: Valedictory Photos



Valedictory Photos



Annexure II: Training Program Schedule

Feed the Future India Triangular Training (FTF-ITT) On **“Value Addition & Market Linkage Mechanisms in Millets”** ICAR- Indian Institute of Millets Research, Rajendranagar, Hyderabad- 500030

(Date: 23rd January to 6th February 2018)

Venue: ICAR-IIMR, Hyderabad

Day & Time	Program	Resource Person(s)
Day-1 23.01.2018 (Tuesday)		
09:30-10:00	Registration	Mr. Naresh Kumar ICAR- IIMR, Hyderabad
10:00-11:30	Inauguration of training Program	Chief Guests & Director, ICAR-IIMR
11:30-11:45	Networking High Tea & Group Photo	Mr. H. S. Gawali, ICAR-IIMR
11:45-13:00	An Overview of ICAR-IIMR and Interaction with executives	Dr. Vilas A. Tonapi Director, ICAR-IIMR
13:00-14:00	Lunch Break	
14:00-14:45	Medical and Legal Formalities	Visiting Medical Officer, ICAR-IIMR & Representative from MANAGE
14:45-15:30	Pre Training Test	Drs. Sangappa & Laxmi ICAR- IIMR, Hyderabad
15:30-15:45	Tea Break	
15:45-17:00	Socialization and Country profile of participants	Drs. Sangappa & Laxmi ICAR- IIMR, Hyderabad
Day-2 24.01.2018 (Wednesday)		
09:30-10:00	Recap	Dr. Sangappa, ICAR- IIMR, Hyderabad
10:00-10:45	"Diversity of Millet Genetic Resources in India"	Dr. M. Elangovan ICAR-IIMR, Hyderabad
10:45-11:30	Visit to Gene Bank	Drs. M. Elangovan & Avinash Singode, ICAR-IIMR, Hyderabad
11:30-11:45	Tea Break	
11:45-13:00	Millets Crop Improvement scenario in India	Dr. Venkatesh Bhat ICAR-IIMR, Hyderabad
13:00-14:00	Lunch	

14:00-14:45	Improved Production practices of Millets	Dr. Ravi Kumar ICAR-IIMR, Hyderabad
14:45-15:30	Millets Field visit of ICAR-IIMR	Drs. Ravi Kumar & Swarna Ronaki, ICAR-IIMR, Hyderabad
15:30-15:45	Tea Break	
15:45-17:00	Major pest and Crop Protection Technologies in Millets	Dr. P.G. Padmaja ICAR-IIMR, Hyderabad
Day-3 25.01.2018 (Thursday)		
09:30-10:00	Recap	Dr. Sangappa, ICAR- IIMR, Hyderabad
10:00-10:45	Importance of Millets to address malnutrition and achieve Nutritional & Fodder Security	Drs. C.V. Ratnavathi & Venkateshwarulu R.
10:45-11:30	Visit to Biochemistry Lab	Drs. C.V. Ratnavathi & Venkateshwarulu R.
11:30-11:45	Tea Break	
11:45-13:00	Millets Value Chain Development- A Experiences from ICAR- IIMR	Dr. B. Dayakar Rao ICAR-IIMR, Hyderabad
13:00-14:00	Lunch	
14:00-14:45	Exposure Visit to Centre of Excellence	Dr. B. Dayakar Rao ICAR-IIMR, Hyderabad
14:45-15:30	Exposure Visit to Primary processing	Dr. Sangappa ICAR-IIMR, Hyderabad
15:30-15:45	Tea Break	
15:45-17:00	Exposure Visit to Incubation Facility of IIMR	Dr. Sangappa ICAR-IIMR, Hyderabad
Day-4 26.01.2018 (Friday)		
09:00-17:00	Republic Day Celebration & Visit to places of cultural and historical importance in India	Dr. Amarnath ICAR- IIMR, Hyderabad
Day-5 27.01.2018 (Saturday)		
09:30-10:00	Recap	Dr. Laxmi B. ICAR- IIMR, Hyderabad
10:00-11:30	Role of NIELAN-Technology Business Incubation for Millets Value Chain Development	Mr. Suneel Vemu ICAR-IIMR, Hyderabad
11:15-11:30	Tea Break	
11:30-13:00	Digital Agriculture to Reach Unreached	Dr. M. Elangovan ICAR-IIMR, Hyderabad
13:00-14:00	Lunch	
14:00-15:30	Hands on Training on Primary processing of Millets	Ms. Sukrati Sharma ICAR-IIMR, Hyderabad





15:30-15:45	Tea Break	
15:45-17:00	Feedback on Hands on Training on Primary processing of Millets	Dr. Amarnath ICAR- IIMR, Hyderabad
Day-6 28.01.2018 (Sunday)		
	Home Reading, Attending Personal Work and Religious Worship	
Day-7 29.01.2018 (Monday)		
09:30-14:00	Field Exposure Visit to MANAGE, Hyderabad	Dr. P. Chandrashekhara Director, MANAGE, Hyderabad
13:00-14:00	Lunch	At MANAGE Hyderabad
14:00-17:00	Entrepreneurial Journey & Market Linkage Mechanism in Millets – A panel discussion with Business Incubatees of ICAR-IIMR	Panel discussion Chaired by Dr. B. Dayakar Rao ICAR-IIMR, Hyderabad
Day-8 30.01.2018 (Tuesday)		
09:30-10:00	Recap	Dr. Sangappa, ICAR- IIMR, Hyderabad
10:00-11:30	Hands on Training on Secondary Processing of Millets (Vermicelli and Pasta) (Group A)	Mrs. Vishala A. D., Dr. Amarnath ICAR-IIMR, Hyderabad
	Hands on Training on Secondary Processing of Millets (Cookies) (Group B)	Dr. Sangappa & Mr. Sateesh ICAR-IIMR, Hyderabad
11:30-11:45	Tea Break	
11:45-13:00	Hands on Training on Secondary Processing of Millets (Cookies) (Group A)	Dr. Sangappa & Mr. Sateesh ICAR-IIMR, Hyderabad
	Hands on Training on Secondary Processing of Millets (Vermicelli and Pasta) (Group B)	Mrs. Vishala A. D. & Dr. Amarnath ICAR-IIMR, Hyderabad
13:00-14:00	Lunch Break	
14:00-15:30	Hands on Training on Secondary Processing of Millets (Puffs preparation) (Group A)	Ms. Sukrati Sharma ICAR-IIMR, Hyderabad
	Hands on Training on Secondary Processing of Millets (Kurkure) (Group B)	Ms. Sunitha & Ms. Kiranmai ICAR-IIMR, Hyderabad
15:30-15:45	Tea Break	
15:45-17:00	Hands on Training on Secondary Processing of Millets (Kurkure) (Group A)	Ms. Sunitha & Ms. Kiranmai ICAR-IIMR, Hyderabad
	Hands on Training on Secondary	Ms. Sukrati Sharma ICAR-IIMR, Hyderabad






	Processing of Millets (Puffs preparation) (Group B)	
Day-9 31.01.2018 (Wednesday)		
09:30-10:00	Recap	Dr. Sangappa, ICAR- IIMR, Hyderabad
10:00-13:00	Field Visit to Fountain head Food Pvt Ltd /HealthSutra Industrial Area , Nacharam to understand the Marketing Linkages in Millets	Mr. Sai Krishna Popuri Fountainhead Food
13:00-14:00	Lunch Break at CFTRI or Health Sutra	
14:00-17:00	Exposure Field Visit to CFTRI Regional Resource Centre, Hyderabad to understand the Food Processing Technologies	Dr. R. G. Math , Head CFTRI Regional Station, Hyderabad
Day-10 01.02.2018 (Thursday)		
09:30-10:00	Recap	Dr. Sangappa, ICAR- IIMR, Hyderabad
10:00-11:15	Importance of Packaging of Food Products	Mr. B. K. Karna, Director, Packaging clinic & Research Institute , Hyderabad
11:15-11:30	Tea Break	
11:30-13:00	Modern Techniques on Packaging of Ready to Eat and Ready to Cook Food Products	Mr. B. K. Karna, Director, Packaging clinic & Research Institute , Hyderabad
13:00-14:00	Lunch	
14:00-15:30	Practical Session on Packaging of Millets Value Added Products at Centre of Excellence, IIMR (Group A)	Dr. B. Dayakar Rao ICAR-IIMR, Hyderabad
	Practical Session on Labeling, Branding and Commercialization of Millets Value Added Products (Group B)	Dr. Sangappa ICAR-IIMR, Hyderabad
15:30-15:45	Tea Break	
15:45-17:00	Practical Session on Labeling, Branding and Commercialization of Millets Value Added Products (Group A)	Dr. Sangappa ICAR-IIMR, Hyderabad
	Practical Session on Packaging of Millets Value Added Products at Centre of Excellence, IIMR (Group B)	Dr. B. Dayakar Rao ICAR-IIMR, Hyderabad
Day-11 02.02.2018 (Friday)		
09:30-10:00	Recap	Dr. Sangappa, ICAR- IIMR, Hyderabad
10:00-11:30	Exposure Visit to Rural Technology Park , NIRD & PR	Dr. Gangireddy, NIRD & PR Hyderabad
11:15-11:30	Tea Break	
11:30-13:00	Exposure Visit to, e-idea Technology Business Incubation ICAR-NAARM	Dr. K. Srinivas, Principal Scientist, ICAR-NAARM





		Hyderabad
13:00-14:00	Lunch	
14:00-17:00	Field Exposure Visit to Millets Incubation Centre, PJTSAU, Hyderabad	Dr. Uma Maheshwari PJTSAU, Hyderabad
Day-12 03.02.2018 (Saturday)		
09:30-10:00	Recap	Dr. Sangappa, ICAR- IIMR, Hyderabad
10:00-11:30	Export Opportunities and Issues in Millets	Mr. T. Sudhakar , APEDA Hyderabad
11:15-11:30	Tea Break	
11:30-13:00	Regulatory Systems and Quality Assurance in Food Processing Sector	Dr. Satyanarayan K V Food regulatory Expert Hyderabad
13:00-14:00	Lunch	
14:00-17:00	Exposure Visit to T-Hub, (Telangana Hub) Gachibowli Hyderabad	T-Hub officials , Hyderabad
Day-13 04.02.2018 (Sunday)		
07:30-17:00	India Cultural Exposure to International Delegates/Ramoji Film City Visit	Dr. Sangappa, ICAR- IIMR, Hyderabad
Day-14 05.02.2018 (Monday)		
09:30-13:00	Field Exposure Visit to Ahobilam Millets Foods, Hyderabad	Ms. Hemamalini Director, Ahobilam Foods
13:00-14:00	Millets Lunch at Ahobilam	
14:00-17:00	Field Exposure Visit to ICRISAT, Hyderabad	Mr. Murli Sharma, ICRISAT
Day-15 06.02.2018 (Tuesday)		
09:30-10:00	Recap	Dr. Sangappa, ICAR- IIMR, Hyderabad
10:00-11:30	Post Training Test & Interactive meeting with Participants	Drs. Dayakar Rao/ Sangappa, ICAR- IIMR, Hyderabad
11:15-11:30	Tea Break	
11:30-13:00	Synthesis, Evaluation and Feedback	Dr. Laxmi B. ICAR- IIMR, Hyderabad
13:00-14:00	Lunch	
14:00-17:00	Closing Ceremony of Training	Chief Guests and Director IIMR
Day-16 07.02.2018 (Tuesday) Departure		






Visit to Temple/Church/Mosque will be arranged on Sundays based on request.

ANNEXURE – III: List of Executives

Sl.No.	Name	Address
	Country	Ghana
1		Mr. Huudu Bampuori Abu Regional Crop Officer Department of Agriculture Ghana Tel: +233244027209 Email: abuhuudu@yahoo.com
2		Mr. Mahama Dangana Assistant Director of Agriculture/Agriculturist Ministry Of Food And Agriculture /Babile Agric Station Ghana Tel: 23326177710 Email: dangana.mahama@yahoo.com
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: abednegoabosore@ymail.com
4	Country	Kenya
		Mr. George Waroga Kamau Training Coordinator Ministry of Agriculture Livestock & Fisheries, State Department of Livestock, Directorate of Livestock Production Kenya Tel : +254202330755/6, +254725208143 Email: warogakam@yahoo.com

5		<p>Mr. Benjamin Mutooni Maringo Veterinary Farm Manager Directorate of Veterinary Services 00625, Private Bag, Kamgemi Kenya Tel: 0208043441, +254727873613 Email: infodvs@kilimo.go.ke, benmutooni2015@gmail.com</p>
6		<p>Mr. John Muinde Masila 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: katumaniatdc@yahoo.com, jmasila33@gmail.com</p>
7	Country	Liberia
		<p>Mr. Josef Beamah Technician Ministry of Agriculture P.O.Box 10-9010 1000 Monrovia 10, Liberia Tel: +231-777368888 Email: beamah2017@gmail.com</p>
	Country	Malawi
8		<p>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: lucyndiwo@yahoo.com, lucymchenga@gmail.com</p>
9		<p>Ms. Chikondi Solomoni Lilongwe East Agriculture Office, P/ Bag 36 Lilongwe, Malawi Tel: +265 999129902/+265886495330 Email: ymchikho@yahoo.co.uk</p>

10		<p>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/ 0888304520/0882077824 Email: doriskay28@yahoo.com</p>
11		<p>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: s.mbale@pwdoctor.org</p>
	Country	Sudan
12		<p>Ms. Sara Mustafa Ahmed Mustafa Agricultural Engineer Ministry of Agriculture and Forestry General Administration of Planning & Agriculture Economies Khartoum, Sudan Tel: +249912564383 Email: saramstafa35@yahoo.com</p>
13		<p>Ms. GawahirSiddig Salim Abashar Ministry of Agriculture and Forestry General Administration of Planning & Agriculture Economies Khartoum, Sudan Tel: +249129180493 Email: gawhi731@gmail.com</p>
	Country	Uganda

14		<p>Ms. Robinah Akiror Teacher, Kamonkoli College, P.O. Box 775, Mbale, Uganda Tel: +256 712870009, +256 784967288, +256 706042428 Email: akiror87@gmail.com</p>
15		<p>Ms. Loy Kitalambwa Kwikiriza Teacher, Kyemeire International Vocational Secondary School Jinja District, Uganda Tel: +256 782464903, +256 Email: kwikirizaloy@gmail.com</p>
	Country	Myanmar
16		<p>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: asawboylay@gmail.com</p>
17		<p>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, +95-09-440503448 Fax No.: +95-63-2023165 Email: doa.mgy.mgy@gmail.com</p>
18		<p>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</p>
	Country	Mongolia

19		<p>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, doogii2z@yahoo.com</p>
20		<p>Ms. Oyun Erdene 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</p>

ANNEXURE –IV: Back to Work Plan

Sl.No.	Name and Address		BACK TO WORK PLAN
	<p>Country</p>   <p>Name : Mr. Huudu Bampuori Abu Country : Ghana</p>  <p>C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Ghana</p> <p>Mr. Huudu Bampuori Abu Regional Crop Officer Department of Agriculture Ghana Tel: +233244027209 Email: abuhuudu@yahoo.com</p>	<p>Community seed multiplication of improved millet and sorghum varieties in the Upper West Region</p>
	  <p>Name : Mr. Mahama Dangana Country : Ghana</p>  <p>C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Mr. Mahama Dangana Assistant Director of Agriculture/Agriculturist Ministry Of Food And Agriculture /Babile Agric Station Ghana Tel: 233261777710 Email: dangana.mahama@yahoo.com</p>	<p>Seed material multiplication of millet and sorghum varieties and adaptive trial in the Babile Agricultural Station U.W.R.</p>
	  <p>Name : Mr. Abednego Abosore Country : Ghana</p>  <p>C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Mr. Abednego Abosore District Director of Agriculture Mion District Assembly Department of Agriculture P.O.Box 1, Sang, Northern Region Tel: +233208546425, +233244457651 Email: abednegoabosore@ymail.com</p>	<p>Sensitization of staff and farmer groups on health benefits of millets and sorghum in Minor district</p>
	<p>Country</p>	<p>Kenya</p>	

	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Mr. George Waroga Kamau Country : Kenya</p> <p><i>George Waroga Kamau</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Mr. George Warogakamau Training Coordinator Ministry of Agriculture Livestock & Fisheries, State Department of Livestock, Directorate of Livestock Production Kenya Tel : +254202330755/6, +254725208143 Email: warogakam@yahoo.com</p>	<p>Introduction and utilization of Sweet sorghum as fodder crop in Embu and Kirinyaga counties of Central Kenya</p>
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Mr. Benjamin Mutooni Maringo Country : Kenya</p> <p><i>Benjamin Mutooni Maringo</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Mr. BENJAMIN MUTOONI MARINGO Veterinary Farm Manager Directorate of Veterinary Services 00625, Private Bag, Kamgemi Kenya Tel: 0208043441, +254727873613 Email: infodvs@kilimo.go.ke, benmutooni2015@gmail.com</p>	<p>Forage/fodder production & Management by Using High Biomass Sorghum</p>
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Mr. John Muinde Masila Country : Kenya</p> <p><i>John Muinde Masila</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Mr. John Muinde Masila 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: katumaniatdc@yahoo.com, jmasila33@gmail.com</p>	<p>Sensitization of famers groups and youth groups on Millets & Sorghum utilization</p>
	<p>Country</p>	<p>Liberia</p>	

	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p> <p>Name : Mr. Joseph Beamah Country : Liberia</p> <p><i>Signature</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Mr. Josef Beamah Technician Ministry of Agriculture P.O.Box 10-9010 1000 Monrovia 10, Liberia Tel: +231-777368888 Email: beamah2017@gmail.com</p>	<p>Sensitization of farmers and staff on millets and sorghum in Liberia</p>
	<p>Country</p>	<p>Malawi</p>	
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p> <p>Name : Ms. Lucy Mchenga Country : Malawi</p> <p><i>Signature</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>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: lucyndiwo@yahoo.com, lucymchenga@gmail.com</p>	<p>Processing and value addition of millets in Phalombe - Malawi</p>
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p> <p>Name : Ms. Chikondi Solomoni Country : Malawi</p> <p><i>Signature</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Ms. Chikondi Solomoni Lilongwe East Agriculture Office, P/ Bag 36 Lilongwe, Malawi Tel: +265 999129902/+265886495330 Email: ymchikho@yahoo.co.uk</p>	<p>Up scaling of millet production and value addition</p>

	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Ms. MSISKA DORIS Country : Malawi</p> <p><i>Doriskay</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>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/ 0888304520/0882077824 Email:doriskay28@yahoo.com</p>	<p>Irrigated millets/sorghum demonstrations in Mpingu EPA Lilongwe District</p>
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Ms. Sarah Mbale Country : Malawi</p> <p><i>Smbale</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>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: s.mbale@pdoctor.org</p>	<p>Processing and value addition of millets in Salima District</p>
	<p>Country</p>	<p>Sudan</p>	
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Ms. Sara Mustafa Ahmed Mustafa Country : Sudan</p> <p><i>Saramstafa</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Ms. Sara Mustafa Ahmed Mustafa Agricultural Engineer Ministry of Agriculture and Forestry General Administration of Planning & Agriculture Economies Khartoum, Sudan Tel: +249912564383 Email:saramstafa35@yahoo.com</p>	<p>Cooperative corporation for production and marketing of horticultural products through packaging in selate agricultural scheme – Khartoum State</p>

	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p> <p>Name : Ms. Gawahir Siddig Salim Abashar Country : Sudan</p> <p><i>D. Srinivas</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Ms. Gawahir Siddig Salim Abashar Ministry of Agriculture and Forestry General Administration of Planning & Agriculture Economies Khartoum, Sudan Tel: +249129180493 Email: gawhi731@gmail.com</p>	<p>Training group of women on value added products of Millets</p>
	<p>Country</p>	<p>Uganda</p>	
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p> <p>Name : Ms. Robinah Akiror Country : Uganda</p> <p><i>D. Srinivas</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Ms. Robinah Akiror Teacher, Kamonkoli College, P.O. Box 775, Mbale, Uganda Tel: +256 712870009, +256 784967288, +256 706042428 Email: akiror87@gmail.com</p>	<p>Processing and value addition of millets products in Budaka District</p>
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p> <p>Name : Ms. Loy Kitalambwa Kwikiriza Country : Uganda</p> <p><i>D. Srinivas</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Ms. Loy Kitalambwa Kwikiriza Teacher, Kyemeire International Vocational Secondary School Jinja District, Uganda Tel: +256 782464903, +256 Email: kwikirizaloy@gmail.com</p>	<p>Implementation of Secondary processed millets at Schools</p>
	<p>Country</p>	<p>Myanmar</p>	

	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Mr. Naing Saw Country : Myanmar</p> <p><i>Naing Saw</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>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: asawboylay@gmail.com</p>	<p>Comparison of yield between different sowing method in finger millet</p>
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Ms. Nan Ngu War Hlaing Country : Myanmar</p> <p><i>Nan Ngu War Hlaing</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>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, +95-09-440503448 Fax No.: +95-63-2023165 Email:doa.mgy.mgy@gmail.com</p>	<p>Comparison of yield between different sowing method in sorghum</p>
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Ms. Aye Aye Mon Country : Myanmar</p> <p><i>Aye Aye Mon</i> C.E.O</p> <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Ms. Aye Aye Mon Assistant Staff Officer, Horticulture and Plant Biology Division Department of Agriculture Ministry of Agriculture, Livestock and Irrigation Mandalay Region, Myanmar <u>Tel:+95-09-444026419</u> Fax No.: +95-67-2847815 Email:doa.mdy.mdy@gmail.com</p>	<p>Comparison of yield between two Local Sorghum varieties</p>
<p>Country</p>		<p>Mongolia</p>	

	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Ms. Dolgorsuren Choijoo Country : Mongolia</p>  C.E.O <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>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, doogii2z@yahoo.com</p>	<p>Value addition in crop production sector of Mongolia and Millets Production</p>
	<p>Feed The Future India Triangular Training Program For African & Asian Countries (23rd January to 6th February 2018)</p>  <p>Name : Ms. Oyun Erdene Danaajav Country : Mongolia</p>  C.E.O <p>NIELAN - Technology Business Incubator ICAR - Indian Institute of Millets Research Rajendranagar, Hyderabad - 500030</p>	<p>Ms. Oyun Erdene 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</p>	<p>Value addition in Crop production sector of Mongolia</p>

Annexure – V Feedback Report

Evaluation of Presentations

Presentation Topic	Rating
Diversity of Millet Genetic Resources in India	9.50
Visit to Gene Bank	8.95
Millet Crop Improvement Scenario in India	9.50
Improved Production practices of Millets	9.75
Major pest and Crop Protection Technologies in Millets	9.40
Importance of Millets to address Malnutrition and Achieve Nutritional & Fodder Security	9.30
Digital Agriculture to Reach Unreached through Field Book	8.80
Role of NIELAN-Technology Business Incubation for Millets Value chain Development	8.95
Food Processing Landscape in India	9.55
Hands on Training on Primary Processing of Millets	9.65
Feedback on Hands on Training on Primary Processing of Millets	9.10
Field Exposure Visit to MANAGE, Hyderabad	8.95
Entrepreneurial Journey & Market Linkage Mechanism in Millets – A panel Discussion with Business Incubatees of ICAR-IIMR	9.15
Hands on Training on Secondary Processing of Millets (Vermicelli and Pasta)	8.95
Hands on Training on Secondary Processing of Millets (Cookies)	9.65
Hands on Training on Secondary Processing of Millets (Puffs Preparation)	9.45
Hands on Training on Secondary Processing of Millets (Kurkure)	9.80
Millets Value Chain Development - A Experiences from ICAR- IIMR	9.45
Global Scenario of Millets Production and Importance to Address the Problems	9.90
Importance of Packaging of Food Products	9.95
Modern Techniques on Packaging of Ready to Eat and Ready to Cook Food Products	9.65
Practical Session on Packaging of Millets value added products at Centre of	9.65

Excellence, IIMR	
Practical Session on labeling, branding and commercialization of Millets Value Added Products	9.50
Export Opportunities and Issues in Millets	9.15
Regulatory Systems and Quality Assurance in Food Processing Sector	9.25
Accommodation Facility	9.65
Food Facility	9.55
Transport Facility	9.40
Overall Impression about Training Programme	9.75

1. List of Suggestions on the Presentations

The presentations had enough pictorials that assisted the trainees. The flip side was the time taken per session tended to be short thus more location of time would be good.

Trainees said the presentation was very good and they have gain knowledge a lot. They mentioned, “we are sure to relay the message to the target groups so that we join hands in implementation of the activities in possible areas.”

All the presentations were rated 5, which is exactly what expected and most of the material or concepts can be implemented especially on upcoming farmers to see how the reception will be similar to expectation. Those rated low were a bit out of the line of assignments; the trainees are from the different department (wild life). For them, it might not be easy to directly impose or sell the technologies to farmers, unless they plan on joint effort.

Some mentioned that they mostly liked the presentation on overview of plant health management techniques and approaches.

1. Good for capacity building
2. It's all good
3. I am pleased about the whole programme THANK YOU!!

The overall presentations were simple to follow. However some required more time and application to field situations.

Evaluation of Field Trip	Rating
Visit to IIMR	9.90
Visit to International Crops Research Institute for the Semi-arid Tropics (ICRISAT)	9.58
Visit to Central Research Institute for Dryland Agriculture (CRIDA)	9.34
Center of Excellence (CoE) Food Lab	9.00
Visit to Farm machinery work shop at PJTSAU	9.16
Visit to National Institute of Agricultural Extension Management (MANAGE)	8.92
T-Hub Telangana Hub	8.50
CFRTI	8.84
Visit to the Gene Bank, IIMR	8.95

1. List of Field Trip Suggestions

1. The trips were relevant and well thought out.
2. The field visits helps one visualize the field conditions on technology use. All the visits were very fruitful and we got the real feelings of what agriculture is all about in India. For example, we never knew before that there are so many varieties of millet and rice but through these visits, it broaden our knowledge and skills.
3. The visits at some point were quick and rushed. At the Mechanization station, due to rushes we struggled to learn.
4. I gained a lot from IIMR on Millets. I was very impressed to learn that we can collaborate on various millets researches and improve many varieties with high yielding lines.
5. Trainee mentioned, “there are many unemployed graduates from Kenya who can do the for income generation. Training from ICAR-IIMR was an eye opener and we can spread the knowledge in our country. Well done!”
6. All the Visits Were Very Useful.
7. Very interesting and encouraging.
8. There should be enough time for interact. I LOVE INDIA AND THANK YOU VERY MUCH.

EVALUATION FORM

Feed the Future India Triangular Training (FTF ITT) Program on “Value Addition and Market Linkage Mechanisms in Millets” for Executive of African and Asian Countries. 23rd January - 6th February, 2018 at IIMR, Hyderabad, India

Please give your rating on the 1-10 scale (1 being the least and 10 being high)

Sl. No.	Sessions taken by Guest Faculty	Rating									
		1	2	3	4	5	6	7	8	9	10
1	Diversity of Millet Genetic Resources in India	1	2	3	4	5	6	7	8	9	10
2	Visit to Gene Bank	1	2	3	4	5	6	7	8	9	10
3	Millets Crop Improvement Scenario in India	1	2	3	4	5	6	7	8	9	10
4	Improved Production Practices of Millets	1	2	3	4	5	6	7	8	9	10
5	Millets Field visit of ICAR-IIMR	1	2	3	4	5	6	7	8	9	10
6	Major Pest and Crop Protection Technologies in Millets	1	2	3	4	5	6	7	8	9	10
7	Importance of Millets to Address Malnutrition and Achieve Nutritional & Fodder Security	1	2	3	4	5	6	7	8	9	10
8	Visit to Biochemistry Lab	1	2	3	4	5	6	7	8	9	10
9	Visit to Farm Machinery Centre PJTSAU	1	2	3	4	5	6	7	8	9	10
10	Exposure Visit to Centre of Excellence (CoE)	1	2	3	4	5	6	7	8	9	10
11	Exposure Visit to Primary processing	1	2	3	4	5	6	7	8	9	10
12	Exposure Visit to Incubation Facility of IIMR	1	2	3	4	5	6	7	8	9	10
13	Digital Agriculture to Reach Unreached through Field Book	1	2	3	4	5	6	7	8	9	10

14	Role of NIELAN-Technology Business Incubation for Millets Value Chain Development	1	2	3	4	5	6	7	8	9	10
15	Food Processing Landscape in India	1	2	3	4	5	6	7	8	9	10
16	Hands on Training on Primary Processing of Millets	1	2	3	4	5	6	7	8	9	10
17	Feedback on Hands on Training on Primary processing of Millets	1	2	3	4	5	6	7	8	9	10
18	Field Exposure Visit to MANAGE, Hyderabad	1	2	3	4	5	6	7	8	9	10
19	Entrepreneurial Journey & Market Linkage Mechanism in Millets – A panel discussion with Business Incubatees of ICAR-IIMR	1	2	3	4	5	6	7	8	9	10
20	Hands on Training on Secondary Processing of Millets(Vermicelli and Pasta)	1	2	3	4	5	6	7	8	9	10
21	Hands on Training on Secondary Processing of Millets (Cookies)	1	2	3	4	5	6	7	8	9	10
22	Hands on Training on Secondary Processing of Millets (Puffs preparation)	1	2	3	4	5	6	7	8	9	10
23	Hands on Training on Secondary Processing of Millets (Kurkure)	1	2	3	4	5	6	7	8	9	10
24	Millets Value Chain Development - A Experiences from ICAR- IIMR	1	2	3	4	5	6	7	8	9	10
25	Global Scenario of Millets Production and Importance to Address the Problems	1	2	3	4	5	6	7	8	9	10
26	Exposure Field Visit to CFTRI	1	2	3	4	5	6	7	8	9	10
27	Field Visit to Fountainhead Food Pvt Ltd/Health Sutra, Industrial Area	1	2	3	4	5	6	7	8	9	10
28	Importance of Packaging of Food Products	1	2	3	4	5	6	7	8	9	10
29	Modern Techniques on Packaging of Ready to Eat and Ready to Cook Food Products	1	2	3	4	5	6	7	8	9	10
30	Practical Session on Packaging of Millets	1	2	3	4	5	6	7	8	9	10

	Value Added Products at Centre of Excellence, IIMR										
31	Practical Session on Labeling, Branding and Commercialization of Millets Value Added Products	1	2	3	4	5	6	7	8	9	10
32	Exposure Visit to, e-idea Technology Business Incubation ICAR-NAARM	1	2	3	4	5	6	7	8	9	10
33	Exposure Visit to t-hub, (Telangana Hub) Gachibowli, Hyderabad	1	2	3	4	5	6	7	8	9	10
34	Export Opportunities and Issues in Millets	1	2	3	4	5	6	7	8	9	10
35	Regulatory Systems and Quality Assurance in Food Processing Sector	1	2	3	4	5	6	7	8	9	10
36	Field Exposure Visit to ICRISAT, Hyderabad	1	2	3	4	5	6	7	8	9	10
37	Accommodation Facility	1	2	3	4	5	6	7	8	9	10
38	Food Facility	1	2	3	4	5	6	7	8	9	10
39	Transport Facility	1	2	3	4	5	6	7	8	9	10
	Overall impression about Training Program	1	2	3	4	5	6	7	8	9	10

Pre Exam Average : 15.55

Post Exam Average: 19.25

Pre Exam Total Questions : 25

Post Exam Total Questions : 25

S.No	Name	Pre Exam Marks	Post Exam Marks
1	Mr. Abednego Abosore	20	23
2	Ms. Robinah Akiror	17	22
3	Ms. Aye Aye Mon	13	16
4	Mr. Joseph Beamah	11	20
5	Mr. Benjamin Mutooni Maringo	18	22
6	Mr. Dangana Mahama	17	20
7	Ms. Dolgorsuren Chojoo	11	14
8	Ms. Msiska Doris	20	21
9	Ms. Gawahir Siddig Salim Abashar	16	20
10	Mr. George Waroga Kamau	15	23
11	Mr. Huudu Bampuori Abu	17	22
12	Ms. Loy Kitalambwa Kwikiriza	19	24
13	Ms. Lucy Mchenga	18	21
14	Mr. John Muinde Masila	18	21
15	Ms. Sarah Mbale	15	20
16	Mr. Naing Saw	12	20
17	Ms. Nan Ngu War Hlaing	15	19
18	Ms. Oyun Erdene Danaajav	10	17
19	Ms. Sara Mustafa Ahmed Mustafa	13	19
20	Ms. Chikondi Solomoni	16	20

ANNEXURE – VI: PRE & POST EXAM REPORT

FEEDBACK FROM EXECUTIVES		
S.No	Name of the participants	Feedback
1.	Mr. Abednego Abosore	This training is very valuable for me because I got a lot of methodologies for mass production of available for our farmers. They can apply these technologies with their own facilities.
2	Ms. Robinah Akiror	If the similar trainings are available to our farmers, they can apply these.
3	Ms. Aye Aye Mon	Thanks IIMR and MANAGE.
4	Mr. Joseph Beamah	The training was very educative.
5	Mr. Benjamin Mutooni Maringo	Technologies with their own facilities.
6	Mr. Dangana Mahama	This training is very effective for my country. In my opinion, I live alone at my home the whole year. I meet my family once in a year. So, this training giver to me not only technologies but also friendships, communication and happy times.
7	Ms. Dolgorsuren Choijoo	We have learned the technologies.
8	Ms. Msiska Doris	The training has been an eye opener for me personally.
9	Ms. Gawahir Siddig Salim Abashar	I was very lucky to have been chosen for this.
10	Mr. George Waroga Kamau	The technologies we have learned and sure to implement them back home.
11	Mr. Huudu Bampuori Abu	The training was very educative. We learnt a lot from the training because it has filled a lot of gaps which were there at our division.
12	Ms. Loy Kitalambwa Kwikiriza	The training was very educative. I have learnt much knowledge from the training.
13	Ms. Lucy Mchenga	Technologies we have learned are sure to implement them back home.
14	Mr. John Muinde Masila	The training was very important.

15	Ms. Sarah Mbale	The training was very educative. We learnt a lot.
16	Mr. Naing Saw	The training was very important.
17	Ms. Nan Ngu War Hlaing	I will deliver the technologies to my smallholder farmers.
18	Ms. Oyun Erdene Danaajav	Technologies we have learned are sure to implement them back home.
19	Ms. Sara Mustafa Ahmed Mustafa	The training was very important.
20.	Ms. Chikondi Solomoni	I will deliver the technologies to my smallholder farmers.

Annexure -VI: Certificate of Participation



Certificate of Participation



This is to certify that _____
has Successfully completed International Training Program on
“Value Addition and Market Linkage Mechanisms in Millets”
for Executives of Asian and African Countries under
Feed The Future India Triangular Training Program
held during 23rd January - 6th February 2018
at
NIELAN - Technology Business Incubator
ICAR-Indian Institute of Millets Research(IIMR),
Hyderabad - 500030, INDIA

Dr. B. Dayakar Rao
Program Director

Dr. Vilas A. Tonapi
Director, ICAR-IIMR

Mrs. V. Usharani IAS
Director General (MANAGE)

Program Director
Dr. B. Dayakar Rao

Director ICAR-IIMR
Dr. Vilas A. Tonapi

Director General (MANAGE)
Mrs. V. Usharani IAS

Hyderabad - 500030, INDIA

ICAR-Indian Institute of Millets Research (IIMR)

Annexure -VII: Certificate of Appreciation



Certificate of Appreciation

Awarded to _____
for _____ during

Successfully completed International Training Program on
"Value Addition and Market Linkage Mechanisms in Millets"

**for Executives of Asian and African Countries under
Feed The Future India Triangular Training Program**

held during 23rd January - 6th February 2018

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Hyderabad - 500030, INDIA

Dr. B. Dayakar Rao
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Dr. Vilas A. Tonapi
Director, IIMR

Mrs. V. Usharani IAS
Director General (MANAGE)

Program Director
Dr. B. Dayakar Rao

Director IIMR
Dr. Vilas A. Tonapi

Director General (MANAGE)
Mrs. V. Usharani IAS

Hyderabad - 500030, INDIA

ICAR-Indian Institute of Millets Research(IIMR)

Annexure - IX: Mementos



Annexure – X: Banners



FEED the FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

USAID
FROM THE AMERICAN PEOPLE

सत्यमेव जयते

भारतीय
ICAR

भारत सरकार
IIMR

MANAGE
मन्न

NIELAN - TBI

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on
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www.millets.res.in

MANAGE
मन्न

भारतीय
ICAR

भारत सरकार
IIMR