

MANAGE International e-Bulletin

ISSN No. 2582-2101 Issue -59**October, 2021**

Message



Dr. P.Chandra Shekara
Director General

“Agriculture is central to Economic Development of the Nation. Agriculture, not only provides food, nutritional security to the nation but also income security to the farmers. Agricultural Extension is central to Agricultural Development and it links farmer to Technology, Credit, Input, Infrastructure, Processing, Marketing and Export. National institute of Agricultural Extension Management (MANAGE) being national level organization for Agricultural Extension, would wholeheartedly like to link with all stakeholders in Agricultural Development. For all our international trainees (FTF ITT and ITEC alumni) MANAGE is extending support in the form of MANAGE international webinar series. These webinars are quite helpful for international participants for connecting with reputed Indian institutes working for agriculture and development of rural societies. I urge all our international trainees to make use of them”

- P. Chandra Shekara
(Director General, MANAGE)

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International webinar – Technology backstopping for Agricultural extension Organized by ICAR – Central Institute of Fisheries Technology(CIFT), Kochi and National Institute of Agricultural Extension Management (MANAGE), Hyderabad

MANAGE in collaboration with ICAR-CIFT has conducted a webinar under the MANAGE Webinar Series on Technology Backstopping for Agri-Extension Experiences foreseeing on activates of ICAR- Central Institute of Fisheries Technology (CIFT).

The webinar started with a brief welcome by Dr. Mahantesh Shirur, Deputy Director (Agricultural Extension). Dr P Chandra Shekara, Director General, MANAGE in his inaugural address welcomed the resource person Dr. A K Mohanty, all the participants and shared how the fisheries technologies are important for addressing global challenges of food security.

Dr A K Mohanty through the webinar briefed about activities of CIFT. He highlighted that CIFT is making efforts in developing innovations that can boost harvest and post-harvest fishing. He further remarked that CIFT institute is dealing with technology part catering with harvest and post-harvest technologies related to fishing.



Dr. A.K. Mohanty
Head of Division
Extension
Information &
Statistics

Dr. A.K. Mohanty did his M.Sc (Agri) in Extension Education and Ph.D. in Agril. Extension & Communication. He is a recipient of several awards for his contribution to the discipline of agricultural extension.

- His area of Research includes Impact analysis, Entrepreneurship, Communication and Group Dynamics.
- He has written several articles and publications in national and international Journals.
- At present he is working as a Head of division in Extension information and Statistics.

The Institute mainly focus on the following 6 streams

- 1.Crafts and gear for responsible fishing
- 2.Resource/ energy optimization
- 3.Value adding high value bi-products
- 4.Processing/packing technologies
- 5.Fish processing equipment
- 6.Health care/aquaceuticals



CIFT has got three times the Best Institute Award by ICAR and Identified by ISO. CIFT has developed 74 new technologies and products 115 professional technologies, 29 new technologies under process



Central Institute of Fisheries Technology

Dr. A K Mohanty explained about special fish products such as chilled and frozen fish products, cured fish, extruded fish food product like fish kure with 3 months shelf life, fermented/smoked products- standardized these fish products with more shelf life. The other fish products include Fertifish supplemented with k and mg; Silage from cuttlefish waste is powdered and mixed with carbohydrate and binders and give to fish as animal feed. Seaweed nutridrink, cookies and yoghurt, Seaweed sanitizer, gargle, fucotea ex, CIFT test kit, Solar dryer and Descaling machine

“ The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings
- Booker T. Washington ”

Further, Dr. A K Mohanty highlighted that CIFT is providing handholding support to startups through business incubation centre established at CIFT. Through which CIFT supports entrepreneurs in fisheries related startups and exploring opportunities in fish business. Further, he emphasized that that Entrepreneurs can be in touch with CIFT to showcase their ideas, technology and solutions. Further, Dr. Mohanty added that, if any entrepreneurs have innovative ideas, they can work on consultancy mode for benefiting the stakeholders of fisheries.

A dozen innovations of CIFT in fishing technology

1. Fuel efficient deep sea vessel – 98 in operation (TN, GUJ , KER)- 34 are under construction in Andhra Pradesh, Tamil Nadu and Gujarat.
2. Solar boats for inland fisheries – 2 models (green/renewable energy) successfully introduced in Kerala and popularized in all states
3. Marine engine validation and regulations were carried out in all states. Also, CIFT has been recognized as Nodal Agency in India by Government of India, for testing and certification of marine diesel engines.
4. Responsible gear systems- popularized through WWF/UNDP/MSSRF/MPEDA/state fishers
5. Value added products – 19 innovative products were developed – ready to cook ready to eat shelf stable convince products from fish and shell fish.



FRP- Coated Rubber Wood Canoe



Fuel efficient multipurpose fishing vessel



De-Scaling Machine

6. High value by-products were developed. Around 9 new products such as Biovit, chito Pro, carotene+, omegaPro, Nutrimix, Healthpot etc
7. Seven novel Seaweed products were developed and they have more nutraceutical and nutritional importance. E.g. seaweed tablets.
8. CIFT has also developed Formaldehyde and ammonia kits:- rapid paper bases test kits for detecting adulteration in fish, transferred to HiMedia, Mumbai, widely adopted in many states
9. Refrigerated fish vending kiosk – hygienic fish vending kiosk developed and commercialized under made in India concept- promoted by dept. of fishers, govt. of Kerala/ CSR of cochin shipyard.
10. Energy efficient fish dryers – 5 models – cost effective and energy efficient dryers
11. Iron calcium rich fish soup powder – to address the malnutrition, micronutrient deficiency – collaborating with world fish centre WFC for intervention studies
12. Community fish smoking kilns – 50 units – in 7 states – more popular among tribals – promoted by CSR project.



Solar dryer with electrical back up



Fish curry in retortable pouches



Solar Fish Dryers



Large mesh purse seine

International Webinar Series on Technology Backstopping for Agri-Extension-Indian Experiences-ICAR-Central Food Technological Research Institute (CFTRI)

Feed The Future India Triangular Training (FTF ITT), MANAGE has started monthly International Webinar Series on Technology Backstopping for Agri-Extension: Indian Experiences from April, 2021. In this monthly webinar series reputed research institutes in the field of agriculture will be invited to share about their institution activities, so that the officers from the partner countries of Africa and Asia can explore the options of collaborative linkages on research, extension and joint publications. On 30-November-2021, the activities of CSIR-Central Food Technological Research Institute (CFTRI) will be presented for audience.

CSIR-Central Food Technological Research Institute (CSIR-CFTRI), since its inception in 1950, has been in the forefront in addressing many societal challenges while providing innovative solutions to Indian food industries including MSMEs. The Institute has been contributing immensely in the area of Food Processing, Food Safety, Automation in Traditional Foods Preparation and Value Addition to Agri-commodities along with translational sciences. The efforts are fully aligned with various national initiatives that cater to every strata of the society while translating knowledge into sustainable products contributing to the progress of the Nation.

Over the years, CFTRI has developed state-of-the-art infrastructure for advanced research in the areas such as Nutrition, Health and Wellness, Food Safety, Machinery development, Food Processing, Food Packaging, Traditional Foods, and post-harvest processing. The focus has brought dividends in terms of processes, products and publications in peer-reviewed journals. The webinar helps the national and international participants to acquaint about the various activities, innovations and technologies developed by the institute and for further academic collaboration.

The participants interested in food processing and CFTRI activities may register for the webinar through the link given below. Registration Link:
<https://rb.gy/uqrcpl>

**Technology Backstopping for Agri-Extension: Indian Experiences**
Presenting Technologies and Innovations of
CSIR – Central Food Technological Research Institute (CFTRI)
Tuesday, 30 November 2021
12.00 – 13.15 Hrs. IST (GMT + 5:30 hrs.)
Registration link: <https://rb.gy/uqrcpl>
(Open for all)



Revisiting the success stories of FTF ITT alumni in Food Processing and Value Edition

Value Addition in Ragi in Kenya

Mrs. Lucy Karimi Gachanja, Apiarist and Agripreneur from Nairobi, Kenya was trained under the FTF ITT International Training on 'Food Processing and Value Addition Technologies for Agripreneurship' at Central Food Technological Research Institute (CFTRI), Mysore, Karnataka, India. She decided to share her post training experience in food processing and value addition amongst her stakeholders and with fellow farmers on what she learnt at CFTRI in Mysore, India.



Mrs. Lucy Karimi Gachanja
Apiarist and Agripreneur
Nairobi, Kenya

She disseminated knowledge on some nutritional and health benefits of the Ragi grain, importance of sorting, selecting and crushing the grains in order to achieve the full benefits of value addition to their stakeholders. She was able to identify a Ragi crusher, sorter and separator machine that is used by small holder farmers at the village level. Growing ragi has been practiced for a long time in Kenya. Since ages it has been crushed using two smooth stones traditionally, a task reserved for elderly women in the village. The traditional method has disadvantage in many terms like skilled labor, manpower and time consumption.



Porridge is a food commonly eaten as a breakfast cereal dish, made by boiling ground, crushed or chopped starchy plants typically grain (Ragi) in water or milk. It is often cooked or served with added flavorings such as sugar, honey or jaggery to make a sweet cereal

No race can prosper till it learns there is as much dignity in tilling a field as in writing a poem
 - Booker T. Washington

Results of her Dissemination of knowledge on processing of Ragi to their stakeholders made them aware about importance of value addition in Ragi for higher income. Also because of better infrastructure at village level like having electricity supply, machines were made to improve the livelihoods of both men and women. With this initiative, the small scale farmers are able to produce large quantities of Ragi grains. A portable Ragi crushing, sorting, and selecting machine was made to support the small scale Ragi farmers. It added value and process the grains at the shortest time available. The machines are available either a diesel operated or an electric operated fitted with a motor. Now the automated machine made the farmers to get a better quality and quantity flour



Women farmer using traditional method for making flour out of Ragi



A portable small scale machine for milling and processing Ragi

Outcome:

1. Small farmers are able to produce fine quality as well as larger quantity of processed Ragi in a short span of time.
2. The Demand for machine processed Ragi enhanced resulting in improving income of small farmers.

Value Addition of Millets in Phalombe, Malawi

Ms. Lucy Mchenga is a Food and Nutrition Officer from Malawi. She was trained under Feed the Future India Triangular Training (FTF ITT) Program on “Value Addition and Market Linkage Mechanisms in Millets” at ICAR-Indian Institute of Millet Research (IIMR), Hyderabad, Telangana, India. She was involved in several activities such as briefing sessions with district staff on value addition of millets (District and 2 EPAs) and conducting sensitization meetings with food processing groups and cooperatives dealing with cereals.



Ms. Lucy Mchenga
Food and Nutrition
Officer, Malawi

Activity 1: The briefing included a presentation on what was covered in India on value addition of millets and the back at work plan.

Activity 2: Sensitization meetings with food processing groups and Nanguluwe cooperative dealing with cereals. The Nanguluwe Cooperative Group currently supplies various food items such as maize, sorghum, sweet potato, vegetables, legume and meat to two schools. This meeting was attended by four men 18 women.

Activity 3: She conducted a supervisory visit to sorghum demonstration plots in Mpinda and Tamani EPA. The demonstrations were conducted in order to create awareness among farmers on the importance of growing drought-tolerant crops in addressing food insecurity and encouraging the farmers to reproducing of those crops.

Outcome: The District Agriculture Development Officer encouraged Ms. Mchenga to sensitize all NGOs implementing food security programs in the district Nanguluwe cooperative members were excited with the idea of adding value to sorghum and are eager to learn further.



Sensitization Meetings with Food Processing
groups and Nanguluwe cooperative dealing
with cereals

Sneak peek into the upcoming issues of the e-bulletin

1. Report on International Webinar Technology backstopping for Agricultural extension Organized by ICAR – Central Food Technological Research Institute (CFTRI), Mysuru.
2. Upcoming International Webinar Series on Technology Backstopping for Agri-Extension-Indian Experiences- Bankers Institute of Rural Development (BIRD), Lucknow Uttar Pradesh.
3. More success stories from Back at Work Plans

International Training Programs an Overview of MANAGE

- Number of training programs completed under FTT ITT: 44/44
- Number of executives trained: 1144
- Male: Female: 709: 435
- Number of Countries covered: 20
- Asia: Afghanistan, Bangladesh, Cambodia, Lao PDR, Mongolia, Myanmar, Nepal, Sri Lanka and Vietnam, Africa: Botswana, Democratic Republic of Congo, Ghana, Kenya, Liberia, Malawi, Mozambique, Rwanda, Sudan, Tanzania and Uganda
- Number of training programs completed under ITEC-2
- Number of executives trained: 45
- International Webinars conducted : 3
- Monthly International webinars – Technology backstopping for Agricultural extension conducted: 7

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