



SHINE

(Sustainable Hill Agriculture Information Network for Excellence)



ICAR- ATARI Umiam Newsletter

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Inside this Issue

Hon'ble Secretary DARE and DG ICAR visits ICAR-ATARI, Umiam
Hon'ble Agril Minister, Govt of Tripura inaugurates the Millets Promotion Programme
ICAR-ATARI conducts Annual Zonal Workshop of NICRA-TD Component
Hon'ble Vice Chancellor, CAU, Imphal visits ICAR -ATARI, Umiam
Former DDG (An. Science), ICAR and Member RAC-ATARI lauds ATARI, Umiam
Shri Tarun Kapoor Visits KVK, Senapati
Zonal Monitoring Committee visits NICRA-TD Adopted villages in Meghalaya
Field day on improved processing variety of Potato
Nagaland farmers steer for doubling farm income from GI tagged Mokochung cucumber
KVK East Khasi Hills Hosts Interaction Meet with Agripreneurs
KVK, Mokochung conducts Soil Health Management campaign
National Webinar on Awareness and use of ICT
Collaboration of NABARD and KVK
KVK, Mon takes initiative on spreading awareness on Swine Fever/African Swine fever
KVK, Kiphire trains Farmers on IPM for control of FAW in Maize
Important Day Celebration
KVK, Ri-Bhoi, Meghalaya celebrates World Environment Day
KVK, West Garo Hills Celebrates World Milk Day
Awards and Citations
Meetings/Seminar/ symposium /Trainings/ Conferences attended
Talks/Lectures delivered
MoU signed
Publications
Glance of various extension activities conducted by KVKs

Director's Desk



Warm greetings from ICAR-ATARI, Zone VII, Umiam !!

It gives me immense pleasure to note that ICAR-ATARI, Umiam could bring out its first ever Newsletter (Quarterly) "SHINE" (Information for Sustainable Hill Agriculture in North East Region). I am sure that the information included in the newsletter would be useful to the farmers and different stakeholders to a considerable extent. In this issue, I would like to give emphasis on the role of rural youth in agriculture.

Rural Youth is considered as an ideal catalyst to bring a reformation in agriculture. Out of 18.9% of rural -urban population in India (2020-21), youth accounts for 30%; which play a pivotal role for the sustainability of Indian Agriculture. According to the 2022, World population revision report, more than half of India's population is under the age of 25, and 65% under 35 years, that shows the maximum opportunities for the youth to be engaged in agricultural sector. Hence, there is an urgent need to transform the subsistence form of agriculture to a commercial level to arouse interest and confidence among the rural youth in agriculture and allied sector.

In this circumstances agri-business and micro-enterprise in agriculture may address the needs of the rural youth in income generation and employment opportunities, thereby providing avenues for revitalizing agriculture. Government has also launched many lucrative schemes to support potential agripreneurs to run their own farm enterprises.

Realizing the importance of rural youth in agricultural development, the Indian Council of Agricultural Research (ICAR), New Delhi, has initiated the project entitled Attracting and Retaining Youth in Agriculture (ARYA) project during 2015-16, in which efforts have been made to attract, engage and retain rural youth in agriculture through technology backstopping for developing location specific sustainable and profitable agro-enterprises in the villages in order to check the migration of rural youth to cities. Krishi Vigyan Kendra's (KVKs) had taken up various entrepreneurship development programmes in agriculture and allied sector for the rural youth. Hence, a strong commitment is required for redirecting attention and utilization of resources to meet significant goals of linking youth to agriculture. Skilled training on post-harvest processing, value addition, agro-ecotourism may encourage the rural youth for agripreneurship.

I urge all the KVKs to take a lead role in encouraging the rural youth to accept agriculture as a livelihood option, which may result in sustainable hill agriculture in NE region.

Lastly, I must congratulate the whole KVK fraternity in Zone VII, for their active support in bringing out ATARI Newsletter "SHINE" in time

(Amulya Kumar Mohanty)
Director

भारत कृषि प्रौद्योगिकी अनुप्रयोग अनुसंधान संस्थान, क्षेत्र-VII, उमियाम, मेघालय
ICAR-Agricultural Technology Application Research Institute
Zone-VII, Umiam, Meghalaya



Important Programmes Organised

Hon'ble Secretary DARE and DG ICAR visits ICAR-ATARI, Umiam

ICAR ATARI, Umiam extended a red-carpet welcome to Dr Himanshu Pathak, Hon'ble Secretary, DARE & DG, ICAR at ICAR-ATARI, Umiam during his brief visit to the institute on 24 June, 2023. Hon'ble DG inaugurated the state-of-the-art Digital Conference Room of the Institute in the presence of luminaries such as Dr. V.K. Mishra, Director of ICAR RC NEH, Umiam; Dr. V.K. Gupta, Director of ICAR-NRC Pig; Dr. G Kadirvel, Director of ATARI, Guwahati in the presence of Director ICAR-ATARI, Umiam, Dr. A.K Mohanty. During the interaction with scientific staff, honourable DG advised for PPP mode of technology dissemination, collaborative application research with different ICAR Research Institutes and urged for taking up externally funded projects to create large-scale impact of technologies in the region for development of hill agriculture. The visit programme was very fruitful.



Visit of Hon'ble DG ICAR, Dr. Himanshu Pathak to ICAR-ATARI, Umiam, Meghalaya

Hon'ble Agriculture Minister, Govt of Tripura inaugurates the Millets Promotion Programme at Gandacherra Block, Dhalai, Tripura

Shri Ratan Lal Nath, Hon'ble Minister for Agriculture & Farmer's Welfare, Power and Election Department, Govt. of Tripura as chief Guest, inaugurated a programme on "Promotion of millets cultivation, Natural farming & Input Distribution" conducted on 10 May 2023, at Gandacherra Town Hall, Dhalai. Smt. Nandita Debbarma (Reang), Hon'ble Member of Tripura Legislative Assembly, Raima Valley (ST) Constituency, along with Shri. Bhumika Nandan Reang, Hon'ble Member of District Council (MDC), Ganganagar- Gandacherra Constituency graced the occasion as Guest of Honour.

Shri Pradip Baran Roy, Hon'ble President, All Tripura Farmer Clubs, Shri Samir Ranjan Tripura, Social Activist, Shri Bikas Chakma, Hon'ble Vice-Chairman, BAC, Dumburnagar and Shri Nakuljoy Reang, graced the programme as special guest. Besides, the officials from line departments, along with more than 1075 farmers from nearby villages participated in the programme.

In his address, the Chief Guest emphasized the benefits of millets for human health and encouraged the farmers to take the help of KVK for adopting innovative technologies related to millet cultivation. He said that millets like Jowar, Bajra and Ragi have been emerged as the wonder crop in the Indian agriculture and considered as most potential climate smart and highly nutritive food crop with lots of health advantages. In this context the minister urged the farming community to convert Gandacherra block of Dhalai, self-reliant in millet production.

Different inputs like paddy, vegetables, pulses, oilseeds, millets (finger millet and foxtail millets) seeds, IPM kits, farm machineries (motor operated paddy winnowing, paddy thresher, wheel hand hoe, power tiller, drum seeder), natural farming inputs etc were distributed among farmers of this aspirational block.



Chief Guest addressing the audience



Inputs Distribution programme

ICAR-ATARI conducts Annual Zonal Workshop of NICRA-TD Component

The Annual Review cum Action Plan Workshop of NICRA-TD Component for Krishi Vigyan Kendras (KVKs) under Zone-VII was organised by ICAR-ATARI, Umiam during 28-30 April, 2023 in DNB Conference Hall of ICAR RC for NEH Region, Umiam. The workshop was inaugurated by Shri Vincent Pala, Hon'ble M.P. of the Lok Sabha, Shillong in the presence of Dr. S.K. Choudhry, DDG (NRM), ICAR, New Delhi; Dr. B. Venkateswarlu, Former Director, ICAR-CRIDA and Former Vice Chancellor, VNMKV, Parbhani as Guest of Honours along with Dr. V.K. Mishra, Director, ICAR RC for NEH Region, Umiam; Dr. V.K. Singh, Director, CRIDA, Hyderabad as Special Guests and Dr. A. K. Mohanty, Director, ICAR-ATARI, Umiam as the Convenor. The Chief Guest Hon'ble MP, Shillong Shri Pala lauded the initiatives of ICAR for working upon the climate resilient agriculture to withstand the various climatic hazards affecting the hill agriculture. In his deliberation, the Guest of Honour Dr. B. Venkateswarlu highlighted the probable biotic and abiotic stresses that affecting the Indian agriculture giving emphasis on various technologies for facing the climatic aberrations. Addressing the gatherings Dr. S.K. Choudhry, DDG (NRM), ICAR, New Delhi spelt out the hill farming scenario under the perils of climate change and possible technological solutions evolved by various ICAR research institutes for large scale demonstrations through NICRA-TD project. Dr. V. K Singh, Director, ICAR-CRIDA, Hyderabad extended a warm welcome and Dr A. K. Mohanty, Director, ICAR-ATARI, Umiam gave a brief account of the NICRA-TD achievements of the KVKs in popularization of potential climate resilient technologies under different components. The workshop was attended by the scientists of ICAR RC NEH, Umiam; ICAR-ATARI, Umiam and KVKs of NICRA-TD projects along with NICRA beneficiaries.



Dr. S.K. Choudhry, DDG (NRM) felicitating Shri Vincent Pala, Hon'ble M.P. of the Lok Sabha, Shillong



Dr. S. K. Chaudhari, Hon'ble DDG (NRM), ICAR, New Delhi, Dr. B. Venkateswarlu, Former Director, ICAR-CRIDA, Dr. V.K. Singh, Director, CRIDA, Hyderabad, Dr. A. K. Mohanty, Director, ICAR-ATARI, Umiam, Shri Vincent Pala, Hon'ble M.P. and Dr. C. A. Srinivasamurthy, NICRA -ZMC on the dais during the Review cum Action Plan Workshop of NICRA-TDC on 28th April, 2023.

Hon'ble Vice Chancellor, CAU, Imphal visits ICAR -ATARI, Umiam

Dr. Anupam Mishra, Hon'ble Vice Chancellor, Central Agriculture University (CAU), Imphal, Manipur had a courtesy visit to ICAR-ATARI, Umiam on 10 June, 2023. On his maiden visit to the institute, Hon'ble VC advised the scientists to pursue for technology application research for strengthening the KVK System. During the visit he planted a sapling in the ATARI Campus.



Tree Plantation done by Hon'ble VC CAU, Imphal



Dr. Anupam Mishra, Vice Chancellor, CAU, Imphal, with ATARI Director & Staff

Former DDG (An. Science), ICAR and Member RAC-ATARI lauds the accomplishments of ATARI, Umiam



Dr. KM Bujarbaruah, Former DDG (An. Sc.) ICAR with other dignitaries in ICAR-ATARI, Umiam



Tree Plantation by Dr. K M Bujarbaruah in ATARI Campus

On 9 June, 2023 Dr. KM Bujarbaruah, Former DDG (Animal Science), ICAR and Former Vice Chancellor, Assam Agricultural University, Jorhat visited ICAR-ATARI, Umiam. Lauding the accomplishments of ICAR-ATARI, Umiam, in his address Dr. Bujarbaruah urged the scientists to reorient the action plan for rebooting, reinventing and refurbishing the technology dissemination system for building a sustainable farming system in the region. Later, a tree plantation programme was held in ATARI campus as a symbolic gesture towards environmental stewardship.

Shri Tarun Kapoor, Advisor to PM visits KVK, Senapati

Shri Tarun Kapoor, Advisor to Hon'ble Prime Minister, GOI in his official trip to Manipur during 15 to 16 April 2023 in connection with the review of central schemes, paid a visit to KVK Senapati on 15th April, 2023. Shri Tarun Kapoor was delighted to see the campus of KVK with excellent infrastructure, various technology demonstration units, and overall campus activities. And he had a very fruitful interaction with KVK scientists regarding their field activities.



Shri Tarun Kapoor, Advisor to Hon'ble Prime Minister, GOI Visits KVK Senapati

Zonal Monitoring Committee visits NICRA-TD adopted villages of Ribhoi and Jaintia Hills district of Meghalaya

The Zonal Monitoring Committee of NICRA-TD project of ICAR-ATARI, Zone VII led by Dr. C. A. Srinivasamurthy, Former Director of Research, CAU, Imphal & Chairman, NICRA- ZMC along with Dr. S. Hazarika, Member, NICRA-ZMC (DG Nominee), Dr TV.Prasad , Co-PI NICRA , ICAR-CRIDA, Hyderabad, Dr. A. K. Singha, Dr. R. Bordoloi, Principal Scientists from ICAR-ATARI, Umiam visited the NICRA-TDC adopted village in Ribhoi, namely Thadongiaw and two in West Jaintia Hills namely Wahiajer and Niriang on 30 April 2023 and 1 May,2023 respectively. The committee was highly impressed with the performance of the NICRA-TD project through interaction with beneficiaries and suggested for extending the project activities to other climate vulnerable villages in the district.



Zonal Monitoring Committee visiting NICRA villages under KVK Jaintia Hills



NICRA-ZMC interacting with beneficiaries under KVK Ri-Bhoi

Outreach Programmes

Field day on improved processing variety of potato

Krishi Vigyan Kendra, Ri-Bhoi, in collaboration with ICAR-Central Potato Research Institute, Regional Station Shillong organised a field Day on improved processing variety of potato (Kufri Frysona) on 26th April, 2023 at Thadnongiaiw village. The field day was graced by official from NABARD Shri Madrass Dkhar, DDM and Shri Mightystar Lyngdoh, DPD, ATMA alongwith 30 nearby villagers at the field of Mrs. Manosha Syngkli and Mrs. Jemnud Marpan of Thadnongiaiw village. The programme was attended by Dr. Mokidul Islam, Principal Scientist & Head, Dr. Utpal Barua, SMS(Horticulture), Dr. Meghna Sarma, SMS(Agronomy) of KVK Ri Bhoi along with Dr. Clarissa Challam, Head; Dr N Sailo, Senior Scientist; Dr Janani P, Scientist and Dr Yvonne Angel Lyngdoh, Scientist from CPRI, Regional Station, Shillong. The objectives of the programme are introduction of potato for crop diversification and intensification of processing varieties of potato for entrepreneurship development which are helpful for employment generation and doubling farmers income. The farmers obtained a yield of 30-35 t/ha which is higher than the national average yield (24t/ha), which indicates a future possibility of area expansion and adoption of potato processing varieties in Ri-Bhoi district of Meghalaya.



Field day of Potato variety Kufri Frysona in collaboration with CPCRI, Shillong

Nagaland farmers steer for doubling farm income from GI tagged Mokokchung cucumber



Cucumber Field of Aliba Village, Mokokchung

The scientists from KVK, Mokokchung participated in the farmers-scientist interaction during cucumber festival celebration held at Aliba village under Ongpangkong South block of Mokokchung district from 9 -10 May, 2023, which was organized by the village council. The festival was celebrated for the second time in a row with resounding success last year generating earnings of more than Rs 40 lakhs by selling cucumber alone by the villagers. It is to be noted that the cucumber purchased at Aliba village has a GI Tag, which gives the farmers a recognition at national level. During the programme the farmers scientist interaction was very effective and opened opportunities for the farmers of the region for doubling farm income through Mokokchung cucumber cultivation.



Best Individual Farmer of Aliba Village

KVK East Khasi Hills hosts interaction meet with agripreneurs



Dr. Saravanan Raj, Director (AE), MANAGE Hyderabad among young agripreneurs of Meghalaya

Dr. Saravanan Raj, Director (Agricultural Extension), MANAGE Hyderabad had an interaction with emerging agripreneurs of KVK East Khasi Hills, regarding rural entrepreneurship development. It was hosted by KVK east Khasi Hills and jointly organised by MANAGE and MAMETI, Meghalaya on 10 May, 2023. He briefed about the various schemes of GOI for rural entrepreneurship development and encouraged the young rural youths of Meghalaya for processing of health drinks from locally available fruits with limited fermentation.

KVK, Mokokchung conducts Soil Health Management campaign under the Mission LiFE

The Krishi Vigyan Kendra, Mokokchung organized a campaign on soil health management on 27, May 2023 at Aliba village under Ongpangkong South block of Mokokchung district to observe the Weeklong Campaign (22-28 May 2023) on LiFE. The campaign was organized as a part of Kisan Gosthi through a training programme conducted on Soil health management followed by demonstration on soil sample collection method.



Campaign on soil health management



Demonstration on soil sample collection

Collaborative Programmes

National Webinar on awareness and use of Information and Communication Technology at Aizawl, Mizoram



National Webinar on Awareness and Use of Information and Communication Technology

A National Webinar on awareness and use of Information and Communication Technology was organized under the Project “Impact of Access and Usage of Information and Communication Technology in IPM at North Eastern Region of India” on 13 April, 2023 at Aizawl, Mizoram. The Webinar was organized by KVK, Siaha and Directorate of Agriculture, Government of Mizoram, Aizawl in collaboration with ICAR-NCIPM, New Delhi. More than 70 participants composing of officials, farm youths attended the programme.

Collaboration of NABARD and KVK through Springshed based Watershed Development Programme



Stakeholders Meeting on Springshed based Watershed Development Programme

A Stakeholders meeting on Springshed based Watershed Development Programme was held at North Pulinpur ADC village on 18 May, 2023, organized by Krishi Vigyan Kendra, Khowai in collaboration with NABARD, Regional office, Tripura. The program was effectively co-ordinated by Dr. Dipankar Dey, Subject Matter Specialist (Soil Science). The objective of the programme was to make the farmers aware about Springshed, its importance and management for successful implementation of the watershed development project. The programme was attended by Mr. Amit Das, DDM, NABARD, Khowai, Mr. Bibash Biswas, Superintendent of Fisheries, Teliamura, Mr. Shaibal Biswas, Agri sector Officer, SA, Teliamura, Surjya Kr. Debbarma, President, Uttarpulinpur, Representative from Lamps Ltd, Duski; Assistant Manager from Tripura Gramin bank along with around 22 progressive farmers and social workers, interested members of this village.

KVK, Kiphire trains farmers on Integrated Pest Management for control of FAW in Maize

Krishi Vigyan Kendra, Kiphire, Nagaland in collaboration with Forest Management Project, Kiphire and NSRLM, Longmatra Block, Kiphire jointly conducted training programme on 'Integrated Pest Management for control of FAW in maize' followed by input distribution program at five different villages of Kiphire district. As a resource person of the training program, Dr. N. Khumdemo Ezung, i/c Head, KVK Kiphire, discussed about its life cycle of the FAW and stated that in order to control any insect pest, the right knowledge about the life cycle is the pre-requisite so as to adopt any control measures. Later, Ms. Temjenna Jamir (SMS) apprised the farmers about the IPM approach for the control of FAW and encouraged the farmers to adopt biopesticide application for the control of FAW. The training program was graced by Shri. Senti Longhcar, DHO Kiphire; Shri. Nzanthung Yanthan, DFO (Fishery), Kiphire, Shri. Chubitho, Asst. Conservator of forest, Kiphire, as Guest of Honour along with many other officials of line departments. All together 207 farmers attended the training program. Pest management inputs were distributed to the farmers including 3000 kgs of wheat bran under TSP to Kiphire farmers, 2000 kgs poultry feeds to farmers of Kepongya ward and 2000 vanarja chicks to farmers of Thsingar village.



Distribution of Wheat Bran under TSP



Training in the field on IPM for FAW

KVK, Mon takes initiative on spreading awareness on Swine Fever/African Swine fever



Awareness programme on Swine Fever/African Swine fever

Krishi Vigyan Kendra, Mon, Nagaland in collaboration with ADC Aboi organized an awareness programme on Swine Fever/African Swine Fever at ADC conference hall, Aboi. During the programme, Dr. Rongsensusang, SMS (Animal Science) discussed about identification methods, signs and symptoms, quarantine and bio security measures, management of affected pigs and proper disposal of dead pigs. About 45 participants representing different wards of Aboi town, leaders of NGOs, civil societies and village council chairmen and GBs of 4 surrounding villages attended the programme.

Important Day Celebration

KVK, Ri-Bhoi, Meghalaya spearheads 'Beat the Plastic Pollution' campaign on World Environment Day

The World Environment Day with the theme "***Beat the Plastic Pollutions***" was celebrated by ICAR-KVK, Ri-Bhoi, Meghalaya at KVK Premises on 5 June, 2023.

With the aim for providing solution to single use plastic pollutions for sustainable environment development by creating public awareness. About 25 participants attended the programme including farmers from Umeit village and staff of KVK Ri-Bhoi, Meghalaya. The programme started with the plantation of saplings of medicinal value by the farmers and officials at KVK Compound. A Pledge was taken for LiFE/ "Lifestyle for Environment" to protect the environment, motivate the friends, family and others about the importance of environment friendly habits.



Pledge taking by farmers & Staff of KVK R-Bhoi



Tree plantation programme



Awareness cum interaction for world environment day

KVK, West Garo Hills celebrates World Milk Day with school children

The World Milk Day was celebrated by KVK, West Garo Hills on 1 June, 2023 through an awareness programme on benefits of drinking milk among the school children. An “extempore speech competition” on ‘Milk’ was conducted among the school children and the three best performers were awarded with 1st, 2nd and 3rd prizes and 5 consolation prizes to the other participants. At the end of the programme, all the participants were provided one glass of milk produced at KVK dairy demonstration unit as a special gesture on the occasion of World Milk Day celebration.



World Milk Day celebrated by KVK, West Garo Hills

Awards and Citations

- Dr A. K. Mohanty, Director, ICAR-ATARI, Umiam was honoured with ‘Fellow of IAHF’ during the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held at ICAR research Complex for NEH Region, Umiam, Meghalaya during 8-9 June, 2023.
- Dr A. K. Mohanty, Director, ICAR-ATARI, Umiam was conferred with ‘ISEE Fellow Award’ during the ISEE national seminar on “Evolving Extension Science towards Secondary Agriculture for Sustainable Development” held at University of Agricultural Sciences (UAS), Bengaluru during 22-24 June, 2023.



Dr. A. K Mohanty felicitated with ISEE Fellow Award during ISEE National Seminar at UAS, Bengaluru

- Abhijit Debnath, Senior Scientist & Head, KVK Dhalai, Tripura awarded with second prize for poster presentation under theme “Smart Technology for Millet Cultivation” during National Seminar on Climate Resilient Millet Production Technologies for Sustainable Agriculture (CRMPTSA), organized by College of Agriculture, Tripura in association with National Bank for Agriculture and Rural Development, Agartala, ICAR- Indian Institute of Millets Research, Hyderabad & Society for Advancement of Agricultural Innovations at College of Agriculture, Tripura, during 28 to 29 April 2023.
- Dipankar Dey, Subject Matter Specialist (Soil Science), KVK, Khowai awarded with Best Oral Presentation Award on the topic “Paddy- Maize Cropping Sequence Doubled the farmers income in Khowai district of Tripura under changing climate conditions” during National Seminar on Climate Resilient Millet Production Technologies for Sustainable Agriculture (CRMPTSA) during 28 to 29 April 2023.
- Shri. Lalnunzira, Chawnhu Village, KVK Lawngtlai, Mizoram received Best NICRA Innovative Farmer Award during 39th Foundation Day Celebration of ICAR-CRIDA, Hyderabad. This prestigious award was awarded for adoption of in situ water harvesting, cultivation of improved varieties of maize, groundnut, cabbage, okra and use of tractor drawn implements and vermicomposting.



Best Innovative Farmer Award awarded to Shri. Lalnunzira, Chawnhu Village, Lawngtlai District, Mizoram

- Mandira Chakraborti, SMS (Agronomy) KVK West Tripura, conferred with Krishak Bandhu Award 2023 from Society for Advancement of Agricultural Innovations (SAAI) on 29th April, 2023 for her contribution in popularisation of improved agriculture practices.

Meetings/ Seminar/ Symposium /Trainings/ Conferences attended

- Dr. A. K Mohanty, Director, ICAR-ATARI, Umiam attended the QRT meeting (Second Round) of National Research Centre on Mithun (NRCM), Nagaland during 1-2 May, 2023.
- Dr. A. K Mohanty, Director, ICAR-ATARI, Umiam participated in the Brainstorming workshop on “Problems and prospect of Fisheries Development in Northeastern Region” through *virtual mode*, which was organized by College of Fisheries, CAU, Lembuchera, Tripura on 22 May, 2023 as part of the Silver Jubilee Celebration of College of Fisheries, Lembuchera.
- Dr. A. K Mohanty, Director, ICAR-ATARI, Umiam participated in the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya and chaired a technical session on ‘*Farm mechanization, digitisation and secondary agriculture*’ on 9 June, 2023 along with Dr D.J Rajkhowa and Dr S Hazarika as Co -Chairman.
- Dr. A. K Mohanty, Director, ICAR-ATARI, Umiam delivered a Lead lecture on ‘Promoting entrepreneurship in secondary agriculture: Options and way forward’ in the Technical Session “Market oriented agricultural advisory services and

agribusiness promotion” during the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya.

- Dr A. K. Mohanty, Director, ICAR-ATARI, Umiam delivered a Lead Lecture on *“Impact of Secondary Agriculture in Doubling the Income of Farm Families and Successful Case Studies in your zone”* in the ISEE national seminar on “Evolving Extension Science towards Secondary Agriculture for Sustainable Development” held at University of Agricultural Sciences (UAS), Bengaluru during 22-24 June, 2023.
- Dr A. K. Mohanty, Director, ICAR-ATARI, Umiam participated in the Investors’ meeting at CAPGS, CAU, Umiam, Meghalaya held during 24-26 June, 2023.
- Dr A. K. Mohanty, Director, ICAR-ATARI, Umiam attended the CIFT-NEH programme implementation meeting along with a CAS meeting at ICAR-CIFT, Cochin during 27-29 June, 2023.
- Hejbina Mehjabin Hussain, SRF ICAR-ATARI, Umiam participated in the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya and delivered a poster presentation on *‘Assessment of Scientific Pig Farming in doubling farmers income: An explorative study in Lunglei district of Mizoram’*.
- Subrata Das, SRF ICAR-ATARI, Umiam participated in the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya and delivered a poster presentation on *‘Ecosystem services and environmental advantages of agroforestry in context to NEH Region’*.
- Wanphrang Kharkongor, SRF ICAR-ATARI, Umiam participated in the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya and delivered a poster presentation on *‘Backyard poultry Farming for livelihood improvement of farmers in Manipur: An insight under Farmer First Programme’*
- Emidaka Suting, SRF ICAR-ATARI, Umiam participated in the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya and delivered a poster presentation on *‘Yield Performance study of Indian Mustard (Brassicca Juncea var. NRCHB 101) through Cluster Frontline Demonstration in North Tripura’*
- Fenestella, SRF ICAR-ATARI, Umiam participated in the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya and delivered a poster presentation on *‘Comparative Performance Analysis of Backyard Poultry Farming as a viable option for empowering the Rural Youths in North Eastern Region (NER)’*
- Rikynjai Nangbah, SRF ICAR-ATARI, Umiam participated in the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya and delivered a poster presentation on *‘Natural Farming for ecosystem restoration and sustainable livelihoods- An experience in Mon district of Nagaland’*
- Azriel Mervin, SRF ICAR-ATARI, Umiam participated in the IAHF National Conference on “Rebooting the Hill Farming for Sustainable and Livelihood Security” held during 8-9 June, 2023 at ICAR research Complex for NEH Region, Umiam, Meghalaya and delivered a poster presentation on *‘Performance of short duration improved paddy (cv. RC Maniphou-13) for enabling early planting of rabi crops to escape terminal drought’*
- Abhijit Debnath, Senior Scientist & Head, KVK Dhalai, Tripura, Dr. M.S Sachan, Senior Scientist & Head, KVK Khowai; Dr. S. Shil, SMS(Horticulture), Dr. A. Chakraborty, SMS (Plant Pathology) and Dr. D. Dey, SMS(Soil Science) from KVK Khowai, Tripura participated in the National Seminar on “Climate Resilient Millet Production Technologies for Sustainable Agriculture” organized by College of Agriculture, Tripura in association with National Bank for Agriculture and Rural Development(NABARD) Agartala, ICAR- Indian Institute of Millets Research, Hyderabad & Society for Advancement of Agricultural Innovations at College of Agriculture, Tripura during 28th to 29th April 2023, They presented the following paper:
 - a) Dipankar Dey on the topic “Paddy- Maize Cropping Sequence Doubled the farmers income in Khowai district of Tripura under changing climate conditions
 - b) M.S Sachan presented on the topic Resource utilization, enhancement of farmers income and cropping intensity under Jhum farming system: A case study under NICRA- TDC
 - c) S. Shil, presented on the topic “Effect of Integrated Nutrient Management on yield and yield attributes of Sweet Potato (*Ipomoea batatas* L.)”
 - d) A. Chakraborty presented on the topic “Eco- friendly management and host preference of melon fly under field condition of Tripura”
- Mokidul Islam, Principal Scientist & Head, KVK Ri-Bhoi, Meghalaya attended the online-training programme on “Seed production and quality control” organized by ICAR Manipur centre from 11-13 April 2023

Talks/Lectures delivered

- Dr A. K. Mohanty, Director, ICAR-ATARI, Umiam delivered a Lead Lecture on *“Impact of Secondary Agriculture in Doubling the Income of Farm Families and Successful Case Studies in your zone”* in the ISEE national seminar on “Evolving Extension Science towards Secondary Agriculture for Sustainable Development” held at University of Agricultural Sciences (UAS), Bengaluru during 22-24 June, 2023.



Talk delivered by Dr. A. K Mohanty, Director ICAR- ATARI Umiam in ISEE National Seminar at UAS, Bengaluru

- Dr. Meghna Sarma, SMS(Agronomy), KVK RiBhoi, Meghalaya as a resource person delivered a lecture on Improved Millet Cultivation during the Training cum Awareness programme on Millet conducted by KVK RiBhoi in collaboration with NESFAS, Shillong at Khweng village on 25 May 2023.
- Shri Bankitkumar Mukhim, SMS (Fishery Science), KVK RiBhoi, Meghalaya delivered a lecture on “Integrated Fish Farming” as a resource person during Capacity Building program for fish farmers on 11 May- 25 May,2023 and 06 June,2023 held at Meghalaya State Fisheries Training and Research Institute, Mawpun.
- Smt. K.Lalmalsawmi SMS (Home Science), KVK, Serchhip attended as a resource person delivered a lecture on “If you ate today- Thank a Woman Farmer” in National conference on Changing Roles of Gender in Agriculture jointly organized by ICAR-Central Institute for Women in Agriculture, Bhuvaneswar and Jaipur National University.
- Kenny Zohmingliana SMS (Agronomy), KVK Serchhip, as a resource person delivered a lecture on KVK Serchhip initiative to combat climate change in Agriculture” during the Workshop on Climate Resilient and Smart Agriculture, organised by Department of Agriculture, Government of Mizoram on 24 May, 2023.

MoU signed



KVK Thoubal signed an MoU with Lovely Professional University, Punjab

- KVK, Dhalai, Tripura signed MOU with NABARD on Promoting Integrated Fish Farming for Sustainable Farm Ecosystems and Year-Round Income.
- KVK, Jaintia Hills and NABARD inked an MOU for the project on 'Buckwheat cultivation- A potential pseudo cereal for seed production and way beyond.
- Farmers Producers Organization and Tholua Pratisthan Pvt. Ltd signed MOU with KVK Serchhip, Mizoram on Buyers Hrangturzo sellers for Gooseberry candy on 19 April, 2023.
- KVK, Thoubal signed an MoU with Central Agricultural University, Imphal as Cluster Based Business Organisation (CBBO) for promotion and Formation of 1 FPOs namely ApunbaLoumee FPC Ltd., Thoubal District.
- KVK, Thoubal signed an MoU with Lovely Professional University, Punjab for convergence linkage for Training, Awareness and other Students oriented Programmes like RAWE and ELP

Publications

A. Research Articles

- Sajesh V.K., Suresh A. and Mohanty A.K., 2023. Marine Fisheries in Kerala, India : An Extension Perspective. *Fishery Technology*, 60 (2023) : 1-7.
- Rejula, K., Sajesh V.K., M. Devi Sukham, Ashaletha S., Gopal Nikita, Mohanty A.K. and Ravishankar C.N., 2023. Development of a scale to measure fishers' attitude towards responsible fishing. *Indian Journal of Fisheries*, 70(2):126-132.(doi: 10.21077/ijf.2023.70.2.114696-16).
- Mohanty A.K., Bordoloi R.M., Amrutha T., Singha A.K., Bagish Kumar, Athare Tushar, Jangid B.L., Keshava and Anjani Kumar, 2023. Promotion of Beekeeping as a potential options for agripreneurship : Insights in context of *Mann Ki Baat* (inner thoughts). *Indian Journal of Agri. Sciences*, 93(5):3-11, May 2023. (<https://doi.org/10.56093/ijas.v93i5.35462>)

B. Abstracts

- Rikynjai Nangbah, A. K Mohanty, R. Bordoloi, E. Renbomo Ngullie, Azriel M. Tariang, Fenestella Dkhar, Hejbina M Hussain, Subrata Das, Emidaka Suting, Wanphrang Kharkongor. 2023. Natural farming for ecosystem restoration and sustainable livelihood-An experience in Mon District of Nagaland, published in the *Souvenir Book of Abstracts in National Conference "Rebooting the hill farming for future sustainability and livelihood"* held during 8-9 June, 2023, organized by Indian Association of Hill Farming at ICAR Research Complex for NEH Region, Umiam, Meghalaya
- Subrata Das*, T. Amrutha, A.K. Mohanty, A.K. Singha, R. Bordoloi, Wanphrang Kharkongor, Hejbina M. Hussain, Emidaka Suting, Manendra Singh. 2023. Ecosystem services and environmental advantages of agroforestry in context to NEH Region, published in the *Souvenir Book*

of Abstracts in National Conference “Rebooting the hill farming for future sustainability and livelihood” held during 8-9 June,2023, organized by Indian Association of Hill Farming at ICAR Research Complex for NEH Region, Umiam, Meghalaya

- Emidaka Suting*, A.K. Mohanty, A.K. Singha, R. Bordoloi, Amrutha T. Subrata Das, Hejbina. M Hussain, Wanphrang Kharkongor, Santanu Das, Ranadhir Sarma. 2023. Yield performance study of Indian mustard (Brassica juncea var. NRCHB101) through cluster front line demonstration (CFLD) in North Tripura, published in the *Souvenir Book of Abstracts in National Conference “Rebooting the hill farming for future sustainability and livelihood”* held during 8-9 June,2023, organized by Indian Association of Hill Farming at ICAR Research Complex for NEH Region, Umiam, Meghalaya.
- Hejbina M Hussain*, D. Malsawmdawngliana, A. K. Mohanty, A.K Singha, R. Bordoloi, T. Amrutha , S. Das , W. Kharkongor , E. Suting. 2023. Assessment of scientific pig farming in doubling farmers income: An explorative study in Lunglei district of Mizoram, published in the *Souvenir Book of Abstracts in National Conference “Rebooting the hill farming for future sustainability and livelihood”* held during 8-9 June,2023, organized by Indian Association of Hill Farming at ICAR Research Complex for NEH Region, Umiam, Meghalaya.
- Fenestella Dkhar*, A.K. Mohanty, R. Bordoloi , H.M. Sangtum , N. Jyotsna , H. Saplaleinliana , C.A. Pariat , Z. Tongoe , A.M. Tariang , R. Nangbah. 2023. Comparative performance analysis of backyard poultry farming as a viable option for empowering the rural youths in North Eastern Region (NER), published in the *Souvenir Book of Abstracts in National Conference “Rebooting the hill farming for future sustainability and livelihood”* held during 8-9 June,2023, organized by Indian Association of Hill Farming at ICAR Research Complex for NEH Region, Umiam, Meghalaya.
- Wanphrang Kharkongor *, A.K. Mohanty, A.K. Singha , R. Bordoloi , T. Amrutha , R.S. Singh , H.M. Hussain , E. Suting , S. Das , L. Kjam. 2023. Backyard poultry farming for livelihood improvement of farmers in Manipur: An Insight under Farmer FIRST Programme, published in the *Souvenir Book of Abstracts in National Conference “Rebooting the hill farming for future sustainability and livelihood”* held during 8-9 June,2023, organized by Indian Association of Hill Farming at ICAR Research Complex for NEH Region, Umiam, Meghalaya
- Azriel M. Tariang*, A.K. Mohanty, A.K. Singha, N.A. Singh, F. Dkhar , R. Nangbah. 2023. Performance of short duration improved paddy (cv. RC Maniphou-13) for enabling early planting of rabi crops to escape terminal drought, published in the *Souvenir Book of Abstracts in National Conference “Rebooting the hill farming for future sustainability and livelihood”* held during 8-9 June,2023, organized by Indian Association of Hill Farming at ICAR Research Complex for NEH Region, Umiam, Meghalaya
- Abhijit Debnath, 2023. Assessment of suitable finger Millet (*Eleusine coracana L. Gaertn*) varieties for Dhalai District, Tripura, published in the *Souvenir Book of Abstracts in National seminar “Climate Resilient Millet*

Production Technologies for Sustainable Agriculture” held during 28-29 April, 2023, organized by College of Agriculture, Tripura.

- D. Dey, 2023. Paddy- Maize Cropping Sequence Doubled the farmers income in Khowai district of Tripura under changing climate conditions, *published in the Souvenir Book of Abstracts for National Seminar on CRMPTSA-2023* held at College of Agriculture, Tripura during 28 - 29 April ,2023.
- M.S. Sachan, 2023, Resource utilization, enhancement of farmers income and cropping intensity under Jhum farming system: A case study under NICRA-TDC , *published in the Souvenir Book of Abstracts for National Seminar on CRMPTSA- 2023* held at College of Agriculture, Tripura during 28 -29 April,2023.
- S. Shil, 2023. Eco- friendly management and host preference of melon fly under field condition of Tripura, *published in the Souvenir Book of Abstracts for National Seminar on CRMPTSA- 2023* held at College of Agriculture, Tripura during 28 -29 April, 2023
- A. Chakaraborty,2023. Effect of Integrated Nutrient Management on yield and yield attributes of Sweet Potato (*Ipomoea batatas L.*) *published in the Souvenir Book of Abstracts for National Seminar on CRMPTSA-2023* held at College of Agriculture, Tripura during 28-29 April ,2023

C. Extension Folders

- H. Vanlalhmulliana, Meenakshi Malik, Mukesh Sehgal, Mrs. C. Rachael and Dr. Subhash Chander,2023 Adoption of IPM in Siaha District, Mizoram: A Successful Achievement for Increasing the Farmer’s Income; p.4
- Meenakshi Malik, Mukesh Sehgal,Subhash Chander, Utpal Dey, H. Vanlalhmulliana, Mrs. C. Rachael, C. Lalfakawma and Raghbir Kumar Patidar, 2023. Extension folder on Decision Support System: A Friendly Tool for Integrated Pest;p.4
- Meenakshi Malik, Mukesh Sehgal, Subhash Chander, Utpal Dey, .H. Vanlalhmulliana, Mrs. C. Rachael,C. Lalfakawma,2023. Extension folder on How to Connect Online to the Farmers at the Critical Stages of Crop; p.2
- Meenakshi Malik,. Mukesh Sehgal, Subhash Chander, Utpal Dey,.H. Vanlalhmulliana, Mrs C. Rachael, C. Lalfakawma and.Raghbir Kumar Patidar,2023. Extension Folder on Effective Tool to Connect the Farmer’s World Across; p.4
- Meenakshi Malik, Mukesh Sehgal, Subhash Chander, Utpal Dey,.H. Vanlalhmulliana, Mrs C. Rachael, C. Lalfakawma, 2023. Extension folder on Different Categories of Information and Communication Technologies for Management of Pests; p.4
- Meenakshi Malik, Mukesh Sehgal, Subhash Chander, Utpal Dey,.H. Vanlalhmulliana, Mrs C. Rachael, C. Lalfakawma and Raghbir Kumar Patidar, 2023 Extension folder on Key Android Applications for Enhancing the Production and Productivity in Agriculture;p.4
- Smt.B.Kharbamon, A.Dympep, R.Suchiang, Smt.J.K.Marak, Smt.R.Lyngdoh, and D.Pasweth, 2023. Extension Folder on Impact of climate resilient technologies under NICRA Project in West Jaintia Hills, Meghalaya;p.4

Glance of various Extension activities conducted by KVKs



Tree Plantation drive (KVK Lunglei)



Veg seed distribution under NICRA (West Garo Hills)



Deworming of Pigs under NICRA (KVK WGH)



Field Demonstration on Natural Farming (KVK EKH)



RAWE Programme conducted by KVK Zunheboto



Training on millet's cultivation (KVK Dhalai)



Kisan Goshthi conducted by KVK Mokochung



Solid waste management using vermicompost (KVK Champhai)



Campaign on Soil Health management (KVK Senapati)



Farm & Farm Woman training (KVK EGH)



Demo on Pig Pen Model (KVK Siaha)



Poultry Chicks distribution for raised floor poultry housing system(KVK Ribhoi)



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