



SHINE

(Sustainable Hill Agriculture Information Network for Excellence)



ICAR- ATARI Umiam Newsletter

Volume 03 / Issue 03

October-December, 2023

Director's Desk



Turning Waste into Wealth – A Vision for a Sustainable Future

As we stand on the brink of a transformative era in waste management, the **Waste to Wealth Mission** emerges as a cornerstone of our commitment to sustainable development. This mission seeks to redefine our perspective on waste—not as a burden to be discarded, but as a vital resource capable of driving economic growth and fostering environmental sustainability.

The challenges before us are formidable. With rapid urbanization and population growth, India's waste management systems are under unprecedented strain. Overflowing landfills have become a stark symbol of inefficiency, posing serious challenges for environmental and health hazards that could otherwise be reclaimed, recycled and reused. The **Waste to Wealth Mission** addresses these issues head-on by embracing cutting-edge technologies to convert waste into energy, recyclable materials, and other valuable resources. This initiative complements the ongoing efforts under the **Swachh Bharat Mission**, paving the way for innovative, circular economic models that ensure the financial sustainability in waste management practices.

However, this mission envisions a comprehensive cultural shift toward responsible waste management, starting from the segregation of waste at its source to its scientific processing. By fostering this change, we can transform our urban landscapes into cleaner, healthier, and more beautiful. This mission is about more than just managing waste—it is about empowering communities, safeguarding public health, and adopting sustainable practices that will leave a lasting legacy for generations to come.

As we embark on this journey, I urge all stakeholders—citizens, municipal bodies, industries, and policymakers—to actively participate in this transformative effort. Together, we can turn the challenge of waste into a powerful opportunity for wealth creation and environmental stewardship. Let us join hands to build a cleaner, greener, and more sustainable India where waste is not wasted but transformed into wealth.

This is our moment to redefine the future. Let's seize it


(Amulya Kumar Mohanty)
Director

Inside this Issue

ICAR-ATARI Umiam, Conducts Annual Review Workshop Of FFP
ICAR-ATARI, Umiam Organizes Vigilance Awareness Week 2023
ICAR-ATARI, Umiam conducts capacity-building program
Farmers-Scientists Interface Cum Input Distribution programme
KVK Lawngtlai, Mizoram organizes Farmer's Field Visit
KVK Lawngtlai, Mizoram conducts Natural Farming Poster Campaign
KVK Lawngtlai, Mizoram celebrates World Soil Day
KVK Dimapur, Nagaland celebrates National Farmers Day
KVK Champhai, Mizoram observes International year of Millets
KVK Zunheboto, Nagaland empowers farmers with innovative tools
Director, ICAR-ATARI, Zone VII, Umiam, Meghalaya visits KVK Dimapur
Hon'ble VC OUAT, Bhubaneswar, Odisha visits ICAR-ATARI Umiam
Director, Department of Agriculture, Mizoram visit to KVK Lunglei, Mizoram
Swachhta Pakhwada 2023 organized by ICAR ATARI Umiam
KVK West Garo Hills, Meghalaya organizes poultry vaccination camp
KVK Dimapur, Nagaland celebrates Swachh Bharat Programme
KVK Dimapur, Nagaland conducts training programme under ICAR-IARI, New Delhi NEH Component
KVK Wokha, Nagaland organizes On Campus training for youths
Awards and Citation
Seminar/Symposium/ Trainings
Talks/Lectures delivered in External programme
MoU signed
Publications
Personalia
Success story

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

ICAR-ATARI Umiam conducts Annual Review Workshop of FFP

The Annual Zonal Review Workshop of the Farmer FIRST Programme (FFP) was organized by ICAR-ATARI, Zone VII, on October 31, 2023 to evaluate the progress of different activities of two FFP centers in the NEH Region during 2022-23. The workshop was attended by Dr. Uttam Singh (PI, FFP), Dr. Anirudha Roy (Co-PI, FFP) and Lutmonhaki Dkhar (SRF) of ICAR RC, Umiam along with Prof. Th. Renuka Devi (Co-PI, FFP) and Shri. R.K. Sandeep Singh (SRF) from CAU, Imphal. The workshop was chaired by Dr. A.K. Mohanty, Director, ICAR-ATARI, Zone VII, Umiam. In his remarks he stressed upon the importance of Farmer FIRST programme for establishing a sustainable livelihood system in the farming sector and urged upon the impact assessment study of the technological interventions under the FFP project since last 5-6 years. In welcome address, Dr. A.K. Singha, Principal Scientist & Nodal Officer FFP, ICAR-ATARI, Zone VII, Umiam

briefed about the FFP project. During the review meeting there were presentations of Annual (2022-23) and half yearly (2023-2024) progress report by both FFP centers and suggestions were given to expand the project areas to new villages but not completely withdrawing from the old project sites.



ICAR-ATARI, Umiam Observes Vigilance Awareness Week 2023

ICAR- Agricultural Technology Application Research Institute, Umiam observed vigilance Awareness week 2023 starting with integrity pledge administered by Dr. A.K Mohanty, Director, ICAR-ATARI, in the presence of Dr. Rajumoni Bordoloi, Vigilance Officer on 30 October, 2023. Dr. A.K Mohanty spoke about the importance of collective participation of all stakeholders in the prevention of, and fight against corruption, to raise public awareness regarding the existence, causes and gravity of and the threat posed by corruption. He elaborated on this year's theme,



Vigilance Integrity Pledge during Vigilance Week

Upholding shared responsibility to honestly contribute to the advancement of our nation. Various activities were organised during the week-long campaign period of Vigilance Awareness Week-2023 celebration. All Staff including Scientists, Technical, Administrative and Supporting staffs participated in various activities during the week namely workshops, seminars, and different competitions in

schools that emphasized the role of vigilance in enhancing operational efficiency and ensuring effective utilization of resources for the benefit of farming community. Through these efforts, ICAR-ATARI aims to strengthen its institutional framework and promote good governance practices among its staff and associated organizations.

ICAR-ATARI, Umiam conducts capacity-building program on Efficient Administrative and Financial Management

ICAR-Agricultural Technology Application & Research Institute (ATARI), Zone VII Umiam, Meghalaya, organized a capacity-building programme from November 1 to 3, 2023 on "Efficient Administrative and Financial Management" for junior-level officers from Krishi Vigyan Kendras (KVKs) and ATARI. The primary objective of this program was to enhance the skills and knowledge of administrative and finance personnel, who are crucial to the workforce. The training was tailored based on a Training Needs Assessment (TNA) of junior-level officers engaged in administration and accounting tasks within KVKs and ATARI. Key topics included budgeting control, expenditure management, procurement processes according to General Financial Rules (GFR) and Government e-Marketplace (GeM), cash book maintenance, bank reconciliation statements (BRS), and taxation.

Mrs. Shefali S Andaleeb, Principal Accountant General (Audit) for Shillong, Meghalaya, was the Chief Guest at the inaugural function, in the presence of Dr. V.K Mishra, Director ICAR Research Complex for NEH Region, as the Guest of Honour.

Mrs. Shefali S Andaleeb, Principal Accountant General (Audit) emphasized the significance of the capacity-building initiative in adapting to evolving administrative and financial management practices. Mrs. Andaleeb praised ICAR's role



in fostering a sustainable food production system in India through its structured approach to technology development and application. Dr. V. K. Mishra, commended the initiative by ATARI for equipping junior-level staff with the necessary understanding of rules and regulations to effectively fulfill their roles in administrative and financial management. Dr. Sunil Kumar Das, Chief Finance & Accounts Officer and Course Director from ICAR-NIASM in Pune, highlighted the program's

objectives and teaching methods while providing a detailed course outline relevant to KVK staff job requirements. Further, A.K. Mohanty, Director of ICAR-ATARI Umiam reaffirmed the organization's commitment to enhancing agricultural practices in the North Eastern Himalayan region. The program attracted approximately 52 officials representing 43 KVKs across five states in the North Eastern region: Manipur, Mizoram, Meghalaya, Nagaland, and Tripura. The sessions were conducted in a hybrid format to accommodate participants from various locations.



Inauguration day of the Capacity Building Programme

Farmers-Scientists Interface Cum Input Distribution programme by KVK West Tripura

A Farmer-Scientist Interface and Input Distribution program was conducted by KVK, West Tripura on December 27, 2023. The event was inaugurated by Dr. A.K Mohanty, Director, ICAR-ATARI, Umiam in the presence of Dr. B.U. Choudhury, Head of the ICAR RC NEH Region, Tripura centre along with other notable attendees including Dr. Biswajit Das, Principal Scientist in Horticulture, and Dr. B.K. Nanda, Senior Scientist-cum-Head from KVK South Tripura.



During the programme, Director ICAR-ATARI, Umiam, emphasized the need for developing location-specific integrated farming system models to enhance farmers' livelihoods in the district. He encouraged the KVK staff to use the profitable technologies developed by ICAR institutes. Dr. B.U Choudhury also urged farmers to keep contact with these institutions for their benefit. A total of 110 farmers from various villages participated in the event. On this occasion various inputs related to natural farming were distributed among farmers.



KVK Lawngtlai, Mizoram organizes Farmer's Field Visit on Scientific cultivation of Soybean

On December 5, 2023, KVK Lawngtlai, organized a Farmer Field Visit focused on scientific cultivation of soybean, also known as the Golden Bean due to its high protein and oil content. In order to address this issue of low yield of soybean due to unscientific farming practices. KVK scientists aimed to demonstrate improved cultivation techniques of soybean through hands-on training. The field visit took place at the soybean field (Var JS 335) located in Chawnhu village. Farmers from different villages participated in the outreach program, where they received skill based training on scientific soybean cultivation methods.

The event was deemed to be very successful as farmers were convinced of the benefits of adopting scientific practices to enhance their soybean yields. This initiative reflects KVK's commitment to improving agricultural productivity

and supporting local farmers through education and demonstration of modern farming techniques.



Farmer field visit on Scientific cultivation on Soybean organized by KVK, Lawngtlai

KVK Lawngtlai, Mizoram conducts Natural Farming Poster Campaign

On November 15, 2023, KVK Lawngtlai, Mizoram organized a Poster Campaign in Chawnhu Village to promote Natural Farming, a chemical-free farming practice that integrates crops, trees, and livestock. It is designed to enhance soil fertility, improve environmental health, reduce greenhouse gas emissions, and increase farmers' incomes. The event aimed to raise awareness among local farmers about the principles and practices of natural farming, attracting 41 participants. Flyers detailing components such as Jivamrith, Bijamrith, Biomass, mulching, and natural pest management were distributed. The campaign emphasized techniques like biomass mulching, cow dung-urine formulations, and maintaining soil aeration while avoiding synthetic chemicals. This campaign was aligning with the states policy initiative towards chemical-free agriculture practices.



Poster campaign on Out scaling of Natural Farming organized by KVK Lawngtlai

KVK Lawngtlai, Mizoram celebrates World Soil Day

On December 5, 2023, KVK Lawngtlai, Mizoram organized a training programme on the occasion of celebration of "World Soil Day" focusing on the theme "Soil and Water: a source of Life." The event attracted 23 enthusiastic farmers from the Bru Yapri Development Organization, who participated in farmer-scientist interaction session. The training included a practical demonstration of soil sample collection techniques at the KVK Research Farm.

As part of its ongoing initiatives, KVK Lawngtlai has tested 1,436 soil samples from local farmers' fields and distributed corresponding Soil Health Cards to promote awareness about soil health management. This program aims to educate farmers on making informed decisions regarding crop planning and nutrient management

based on their soil characteristics, ultimately ensuring sustainable agricultural practices in the district.



Practical Demonstration on Soil Sample collection technique by KVK Lawngtlai, Mizoram

KVK Dimapur, Nagaland celebrates National Farmers Day

National Farmers' Day (Kisan Diwas) was celebrated by KVK Dimapur as a mark of homage to Chaudhary Charan Singh, on his birth anniversary on December 23, 2023. The event aimed to recognize farmers as the backbone of the country and to pay tribute to their contributions. During the celebration, four farmers and farm women were felicitated and agricultural inputs were distributed among farmers for their significant contributions. The recipients included Kheto Sema, Toshiho recognized for paddy seed production.; Mr. Zaren Michael, Kupuhe honored for his work in Integrated



Celebration of National Farmers Day by KVK Dimapur

Farming Systems.; Kevizasenuo Kera, New Chumukedidima felicitated for piggery efforts and Mrs. Tsunungbenla, Dimapur, recognized for her mushroom production.

Each recipient shared their farming experiences with their fellow farmers. Dr. Phool Kumari, the Senior Scientist and

Head, KVK Dimapur emphasized the importance of Kisan Diwas and praised the hardworking farmers whose efforts are priceless for food and nutritional security in the region. The program was attended by a total of 25 participants from different villages.

KVK Champhai, Mizoram observes International year of Millets

On November 18, 2023, KVK Champhai, Mizoram observed the International Year of Millets by conducting farmer's training programme with participation of 46 local farmers. The event featured a lecture by Mr. B. Ramnunsanga,



DAO, Champhai delivery lecture during the celebration of International Year of Millets

the District Agriculture Officer from Khawzawl on the importance of millets in sustainable agriculture and nutrition. He highlighted that millets are resilient crops that require minimal inputs and can thrive in arid conditions, making them essential for food security, especially in the face of climate change. The training aimed to raise awareness about the nutritional benefits of millets and promote their cultivation among local farmers. Participants learned about various millet varieties and their potential uses in improving dietary diversity.

The outcome of the event was encouraging, as it not only enhanced farmers' knowledge but also fostered a sense of responsibility towards sustainable agricultural practices. By promoting millets, KVK Champhai aims to revive interest in these nutritious grains, which have been overshadowed by more commonly cultivated cereals. This initiative aligns with global efforts to increase millet production and consumption, ensuring food security and better health for communities.

● OUTREACH/ COLLABORATIVE PROGRAMMES ●

KVK Zunheboto, Nagaland empowers farmers with innovative tools to enhance agricultural productivity

In a significant initiative to boost agricultural productivity, KVK, Zunheboto, Nagaland in collaboration with IARI, New Delhi provided advanced farming tools to local farmers in Satami Village, Suruhoto block for empowering the farmers and enhancing their productivity. The tools distributed included power-operated winnowers and Pusa Wheel Hoes, developed by IARI, New Delhi. The power operated winnowers is designed to simplify grain cleaning by efficiently separating impurities from grains, ensuring high-quality produce. Its features include effective dust removal and time efficiency, which could get better yields for farmers. The Pusa Wheel Hoe is a versatile implement that aids in weeding between rows of crops which allows for adjustable operation angles and can be used while standing, reducing fatigue and making weeding more cost-effective. This

initiative not only provided the farmers with innovative tools but also promoted sustainable agricultural practices that can significantly improve their livelihoods.



Distribution of power operated winnower and Pusa Wheel Hoe to farmers of KVK Zunheboto

Director, ICAR-ATARI, Zone VII, Umiam, Meghalaya visits KVK Dimapur

On December 12, 2023, Dr. A.K. Mohanty, Director, ICAR-ATARI, Umiam, Meghalaya, visited KVK Dimapur to review and assess the ongoing activities. The visit included inspection of the new administrative building which is under construction and visit to the KVK's demonstration units. During the visit, he interacted with the KVK staffs regarding

various administrative and financial issues. The outcome of the visit was very much productive, as Dr. Mohanty's insights guided KVK for its future initiatives aimed at supporting farmers and promoting improved agricultural practices in Dimapur and surrounding areas.



Director, ICAR-ATARI Umiam inspecting new Administrative Building of KVK, Dimapur



Director, ICAR-ATARI Umiam visiting KVK Dimapur farm

Hon'ble VC OUAT, Bhubaneshwar, Odisha visits ICAR-ATARI Umiam

Dr. Pravat Kumar Roul, Hon'ble Vice Chancellor, OUAT, Bhubaneshwar, Odisha and RAC member of ATARI visited ICAR- ATARI Zone, VII, Umiam on the 29 December, 2023 and interacted with scientists and staffs of the institute. During

his short interaction he urged the scientist of ATARI, Umiam to explore the possibilities of Application research om line with the mandated activities of KVK. Later Hon'ble VC planted a sapling in the institute campus.



Tree planting by Hon'ble VC OUAT, Bhubaneshwar



Director, ICAR-ATARI, Umiam welcoming Hon'ble VC OUAT Bhubaneshwar

Director, Department of Agriculture, Mizoram visit to KVK Lunglei, Mizoram

On November 22, 2023, the Director, Department of Agriculture, Government of Mizoram visited KVK Lunglei to interact with the KVK staff and discuss various agricultural initiatives. The visit aimed to strengthen communication and collaboration between the Directorate and KVK, focusing on enhancing agricultural productivity in the region.



Director, Department of Agriculture, Mizoram with the Staffs of KVK Lunglei

During the visit, the Director interacted with KVK staff to address challenges faced by local farmers and explore strategies for resource allocation and training programme. The discussions emphasized the importance of KVKs as vital centers for agricultural innovation and education. The outcome of the visit was positive, fostering a collaborative environment crucial for formulation and implementation of policies that can significantly benefit the farming community in Mizoram.

The visit underscored the commitment of the Directorate of Agriculture to support local farmers through enhanced training and resource allocation, thereby contributing to improved agricultural productivity in the region.

● FLAGSHIP PROGRAMMES ●

Swachhta Pakhwada 2023 organized by ICAR ATARI Umiam

In order to celebrate, Swachhata Pakhwada 2023, the dedicated team of ICAR-ATARI Umiam, consisting scientific, administrative, technical, and supporting staff, actively engaged in the Swachhata Sewa Divas Shramdan event from 2 October, 2023 to 31 October, 2023. The participation of these individuals was orchestrated under the guidance of the coordinator of the Swachhata Committee, Dr. Rajumoni Bordoloi, Principal Scientist. Swachhata Pakhwada campaign focusing on promoting cleanliness and hygiene drives were taken up by committed group involved in cleaning of area situated in front of ATARI office. Besides, the Swachhata Pakhwada celebration includes various activities like distribution of dustbins and cleaning materials to Maryland Secondary School, Mawlein which encouraged the school students to actively participate in cleaning the campus and nearby surrounding of the school.



KVK West Garo Hills, Meghalaya organizes poultry vaccination camp under the banner of Janjatiya Gaurav Divas

KVK, West Garo Hills, Meghalaya organized a vaccination program for poultry as part of the Jana jatiya Gaurav Divas celebrations, which took place from November 18 - 26, 2023. This initiative aimed to raise awareness about poultry health and enhance the productivity of local farmers. The programme featured active participation from 63 farmers and farm women, who were eager to learn about the importance of vaccination in maintaining healthy poultry.



Jana jatiya Gaurav Divas celebration by KVK, West Garo Hills

KVK Dimapur, Nagaland celebrates Swachh Bharat Programme with school children

KVK Dimapur, Nagaland organized a Swachh Bharat Programme in collaboration with the participation of local school children to promote cleanliness and hygiene. This initiative was part of the Special Campaign 3.0, which continued from October 2 - 31, 2023. During this campaign, various activities like cleaning the KVK office and its surroundings, weeding old files, and participating in a cleanliness drive organized by ICAR Nagaland Centre, Medziphema. The event also included an awareness programme on cleanliness at the Government Middle School in Jharnapani. The initiative not only helped in cleaning the school campus but also raised awareness about the importance of sanitation and hygiene among the students.



School Children participating in cleanliness drive



KVK staffs during the cleanliness activities.

KVK Dimapur, Nagaland conducts training programme under ICAR-IARI, New Delhi NEH Component

On November 2, 2023, KVK Dimapur, Nagaland conducted a Potato Seed Distribution and Training program under the ICAR-IARI, New Delhi NEH Component. During this event, 10 tonnes of potato seeds (Var. Kufri Jyoti) were distributed to various Self-Help Groups, progressive farmers, and farmers' societies. Dr. Homeswar Kalita, Head, Regional Centre of ICAR RC NEHR, Nagaland, encouraged the farmers to cultivate potatoes using the recommended agricultural practices. Mr. Kevin Solo, the Sub-Divisional Agriculture Officer (SDAO) of Chumukedima district, informed the farmers about

various departmental schemes and assured that assistance would be provided to genuine farmers after reviewing their performance.

Shri T. Honito Sema, BJP Mondal President of 5 Ghaspani-2, praised the efforts of KVK Dimapur and ICAR, RC, NEHR, Nagaland Centre in uplifting the farming community. In a technical session, Dr. Roben Singh discussed best practices for potato cultivation. The programme was coordinated by Dr. Bendangla Imsong and Dr. Moanaro. A total of 70 progressive farmers and officials from KVK and ATMA attended the event.



Training Session on Potato Cultivation



Distribution of potato seeds among farmers of KVK Dimapur

KVK Wokha, Nagaland organizes On Campus training for youths

KVK Wokha, Nagaland organized a five-day capacity development programme on "Livestock-Based Integrated Farming System for Enhancing Income Generation for Livelihood Security" for educated unemployed youths from October 30 to November 3, 2023. This initiative aimed to equip participants with the knowledge and skills necessary to improve their livelihoods through sustainable agricultural practices. During the training, participants learned about various aspects of integrated farming systems, including livestock management, crop production, and the importance of integrating different agricultural activities for better income generation. The programme emphasized practical skills and hands-on training to ensure that the youths could apply what they learned in real-world situations. The importance of this training lies in its potential to empower

rural youth, reduce unemployment, and promote sustainable farming practices in the region.



Training Session on Integrated Farming

● AWARDS AND CITATIONS ●

- Vanlalmalsawmi Sailo SMS (Soil Science), KVK Lawngtlai received best presentation award, presented by society of Krishi Vigyan during 27- 28 October, 2023
- Dr.N. Muhindro Singh, SMS (Animal Sc.), KVK Senapati awarded with Dr.MS Swaminathan Memorial Award during 1st International Conference on Natural Farming Vs Organic Farming: In context to Bharatiya Agriculture during from 24 - 26 December, 2023
- Mr. KB Sangkhuma, progressive farmer, Rabung Village, KVK Champhai received Millionaire farmer of India Award, 2023 by Krishi Jagaran on 7 December, 2023 at Pusa ground, New Delhi.

● SEMINAR/ SYMPOSIUM /TRAINING ATTENDED ●

- Dr. S. Zeshmarani, R.K Lembisana Devi and Salam Prabin Singh, KVK Thoubal participated in Agripreneurs Meet cum National Symposium organized by ICAR Research Complex for NEH Region Umiam Meghalaya during 4-5 October, 2023
- Mr.Lalvensanga Pachuau, KVK Aizawl attended training on Mushroom Spawn Production during 7-9 November, 2023 at ICAR-Directorate of Mushroom Research, Solan
- Mr.P.Ramnunsanga, KVK Aizawl attended Capacity Building Programme on Efficient Administrative and Financial Management from 1-3 November, 2023 at ICAR-ATARI, Umiam.
- Dr Sanjeev Kumar Singh, KVK Phek participated in Interface meeting on animal genetic resources of Nagaland on 13 October, 2023 at ICAR-NRC on Mithun, Medziphema.
- Dr Sanjeev Kumar Singh, Dr T Esther Longkumer and Dr Hannah K Asangla, KVK Phek attended workshop on Zonal Monitoring Committee of NICRA during 21-22 November, 2023 at ICAR-NRC on Mithun, Medziphema.
- Dr Sanjeev Kumar Singh and Dr Hannah K Asangla, KVK Phek participated in CAU Regional Agri cum Education fair during 12 -14 December, 2023 at State Agri Expo, 4 Mile, Chumukedima. Nagaland.
- Martha Chakruno, KVK Mokochung attended Orientation Training to the Master Trainers for Safe and Judicious use of Glyphosate on 11th October, 2023 at National Institute of Plant Health Management (NPIHM), Hyderabad
- Khekali Sema, KVK Mokochung attended training on Post harvest Management and Value addition of Horticultural crops and Millets from 28 November – 02 December, 2023 at Directorate of Extension Education, AAU, Jorhat
- Mr.K. Homen Singh, KVK Senapati attended training course on Mushroom production technology from 11-15 December, 2023 at DMR, Solan
- Dr. H. Lembisana Devi, KVK Tamenglong attended National Conference on Spices, Aromatic and Medicinal Plants for Economic Prosperity and Ecological Sustainability-2023 during 5-6 October, 2023 at ICAR-CIARI, Port Blair
- Dr. Popiha Bordoloi, KVK Ri Bhoi presented a paper on Organic Nutrient Management for Productivity Enhancement of Lakadang Turmeric (*Curcuma longa*) for Preserving Agricultural and Environmental Sustainability in Meghalaya, North East India” at the National Conference on Natural Resource Conservation and Management for Agricultural and Environmental Sustainability organized by Academy of Natural Resource Conservation and Management (ANRCM), Lucknow, during 8-9, December, 2023.

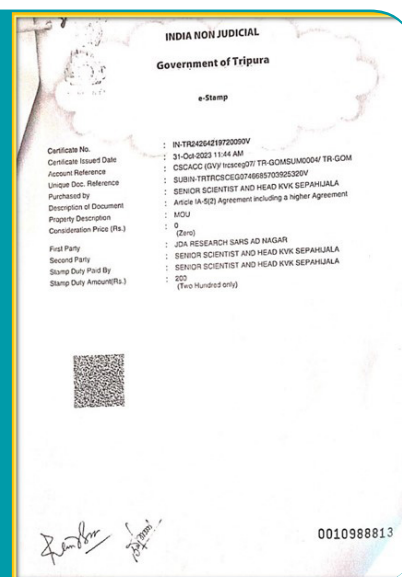
● TALKS/LECTURES DELIVERED IN EXTERNAL PROGRAMME ●

- Sribidya Waikhom, SMS(Fisheries) of KVK Thoubal, delivered a lecture on Scientific Fish farming at District Administrative Office Thoubal on 25 October, 2023
- Dr. Chuwang Hijam, SMS(PBG) of KVK Thoubal, delivered a lecture on Cultivation Practice of Millet at Department of Environment and Climate Change on 31 October, 2023
- Dr. W. Jiten Singh, Farm Manager of KVK Thoubal delivered a talk on Importance of Bee in crop production at Kshetri Sanglen community Hall, Thoubal on 23 December, 2023
- Mr. Lalvensanga Pachuau, Farm Manager, KVK Aizawl Delivered lecture on the topic “Soil and Water; A source of life” on World Soil Day on 5 December, 2023 at Conference Hall CVSC &AH, CAU, Selesih, Aizawl organized by College of Veterinary Sciences & Animal Husbandry, CAU, Selesih, Aizawl

- Mrs Lalrohlupuii, SMS (Home science) of KVK Aizawl delivered lecture on “Indian sweets making” on the programme “Entrepreneurship Development programme i.e Skill Training for Selh help group members under DAY-NULM on 28 – 29 November, 2023 at Zotlang , Aizawl Organized by Urban Development and Poverty Alleviation (UD&PA), Govt. of Mizoram, Aizawl.
- Shri. Z. James Kikon, KVK Peren delivered a talk on Oyster Mushroom Cultivation organized by SBI RSETI, Peren, Nagaland on 19 October, 2023 at SBI RSETI, New Peren
- N. Bandana Devi (SMS-Home Sc.) of KVK Bishnupur delivered a talk on Faculty Development programme (Food processing and preservation) organized by Directorate of University and Higher Education Govt. of Manipur on 18 Dec. 2023 at TMC College, Oinam.
- Kh. Maipak Singh, SMS, Plant Pathology of KVK Bishnupur delivered a talk on Crop residue management organized by ATMA, Bishnupur on 27th Oct., 2023 at KVK-Bishnupur.

• MOU SIGNED •

- KVK Sepahijhala signed MoU with State Agricultural Research Station, Arunhatinagar under the Department of agriculture and Farmers, Welfare Government of Tripura on 31 October, 2023 for setting up of soil testing laboratory in KVK, Sepahijhala.



• PUBLICATIONS •

Research article

- ❖ Sachan, M. S., Chakraborty, A., Dey, D., Shil, S., Das, R., & Biswas, S. C. 2023. Yield Gap Analysis of Field Pea (*Pisum sativum* L.) through Cluster Front Line Demonstration under NFSM Pulses Scheme in Khowai District, Tripura, India. *International Journal of Environment and Climate Change*, 13(11), 4733-4740
- ❖ Chakraborty, A., Bhattacharya, S., Das, B. 2023. Field evaluation of different pest management modules against shoot and fruit borer (*Leucinodes orbonalis* Guenee) infesting brinjal in Tripura. *Research Biotica* 26-21, (1)5.
- ❖ Longjam Boris Singh, Dr. S. Zeshmarani, Chuwang Hijam, MK Maqbool Qutub, Yangleme Herojit Singh, S. Prabin and Oinam Washington Singh. 2023. Nanotechnology and its role in plant pathology. *The Pharma Innovation Journal*. 12(12): 37-49 DOI: <https://doi.org/10.22271/tpi.2023.v12.i12a.24452>
- ❖ Khinis Khumlo, Khumlo Levish Chongloi, M. A. Ansari, K. Sonamani Singh and Amitabh Singh. 2023. Assessment of Carbon Stock in Response to Varied Land Use Systems and Soil Depths in Chandel District, Manipur, India. *Int. J. Environ. Clim. Change*, vol. 13, no. 12, pp. 997-1001
- ❖ Kh. Rishikanta Singh · L. Somendro Singh · R.K. Roshan · K. Sonamani Singh · Th. Motilal Singh · Umakanta N. Kenjit Tongbram · Ramgopal Laha. Shifting cultivation and perspectives of Jhumias to climate change: A study in hill districts of Manipur. *Indian Journal of Hill Farming* December 2023, Volume 36, Issue 2, Pages 190-196
- ❖ Bordoloi P. 2023. Effect of Biofertilizer based Organic Nutrient Management in Soil Health and Productivity Enhancement of Pea (*Pisum sativum*) in North East India. *Biological Forum – An International Journal*. 15(5a): 421-423
- ❖ Bordoloi P. 2023. Vermicompost: a tool for Agripreneurship Development for the Unemployed Youths of India. 15(8a): 10-13

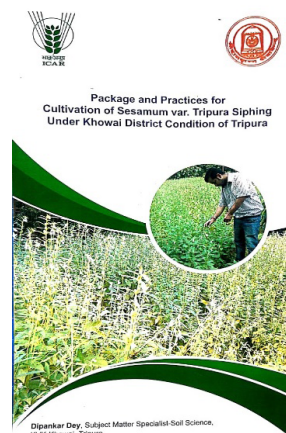
- ❖ Bordoloi P. 2023 Status and scope of organic farming for entrepreneurship development among rural youth of North East India. *The Pharma Innovation Journal*. SP-12(7):2789-2793
- ❖ Sahoo L, Kandpal BK, Das A, Debnath C, Singh V, Devi HL, Bharati H, Parhi J, Singha A, Datta J, Das B and Mishra VK. 2023 Improving the nutritional and livelihood security of landless laborer through the Backyard Farming System. *Front. Sustain. Food Syst.* 7:1206367
- ❖ Awaneesh Kumar, Anjumoni Deves, N. Ajitkumar Singh and Abhinandan Yadav. 2023 Traditionally used Botanicals: The Potential Source of *Tribolium castaneum* (Herbst) Management. *International Journal of Environment and Climate Change*. Volume 13, Issue 10, Page 1222-1233, 2023
- ❖ Pooja Upadhyay, Kalpana Gairola and Sanjarambam Nirupama Chanu 2023. Defence inducing molecules for the management of plant diseases in the book *Recent Advances in Agricultural Science and Technology published by Dilpreet Publishing House, New Delhi. Pp.1041-1049*
- ❖ HL Devi, B Das & A.G. Devi 2024. Production of Organic Pineapple (*Ananas comosus*) in the Book *Organic Culture of Tropical and Subtropical Fruit Plants*, Ghosh, SN Hare Krishna & Rymbai (Eds) *published by Gyanavi Publishers and Distributors, New Delhi. Pp 432-448*

Popular article

- ❖ K. Sonamani Singh 2023. *Jalkund*: Low-Cost Water Harvesting Structure for Sustainable Livelihood in Rainfed Agroecosystem of the Chandel district of Manipur, India. *AgriTech Today*. Vol. 1, Issue 9 December, 2023. pp 17-18
- ❖ Tarun Kumar Das and Sagarika Borahn 2023) Conventional cultivation method of millet production and their characteristics by tribal farmers of West Garo Hills of Meghalaya. *Agriculture and Food E- Newsletter*. Article ID: 44110. Vol.-5(10) 324-327.
- ❖ Meghna Sarma and Mokidul Islam. 2023. Area and distribution of problematic soils in India. *The Agriculture*. Vol-3, Jan, 2023, pp-139-141
- ❖ Meghna Sarma & Mokidul Islam. 2023. Plant response to temperature in various crop growth stages. *The Agriculture*, Vol-2, Sept, 2023. pp-97-101

Book Chapters

- ❖ Sanajarambam Nirupama Chanu, Chingsubam Johnson Singh, Milind B Katare and Kalpana Gairola. 2023 Hydroponic farming as a new way of farming for future entrepreneurship in the book *Recent Advances in Agricultural Science and Technology published by Dilpreet Publishing House, New Delhi. P. 899-911*
- ❖ Kalpana Gairola, Pooja Upadhyay, Meenakshi Rana and Sanjarambam Nirupama Chanu. 2023. Artificial Intelligence in Plant Disease Management in the book *Recent Advances in Agricultural Science and Technology published by Dilpreet Publishing House, New Delhi. p.1679-1685*



Bulletin and Extension Folders

- ❖ Dipankar Dey, Manoj Singh Sachan, Ardhendu Chakraborty. 2023. Package and Practices for Cultivation of Sesamum var. Tripura Siphing under Khowai District Condition. p .5 by KVK Khowai, Tripura
- ❖ R Vanlalduati. 2023. Package of Practices of French Bean Variety Zorin Bean. p.2 by KVK Champhai, Mizoram
- ❖ Samuel Sangtam & Longma Yanger Pongen 2023 Basics of Kitchen Gardening p 2 by KVK Tuensang, Nagaland
- ❖ Shri. Z. James Kikon, Dr. K.L Meena, Dr. Babita Devi, Dr. Patu K. Zeliang. 2023 Jalkund p.3 by KVK Peren, Nagaland
- ❖ F. Lalthasanga. 2023 Package & practices of rapeseeds and Mustard p.2 by KVK Lunglei, Mizoram
- ❖ Tarun Kumar Das, Monica Singh, Joyoshree Mahanta, Sagarika Borah & Rodrick Marak (2023). Meghalaya A. dokni Garo Hills Bak-o Kesunat Bipangni Jo. ong-Rangko Nirok Simsakani (Insect Pest management of Cashewnut in Garo Hills district of Meghalaya). The Director, ICAR Research Complex for NEH Region, Umroi Road, Umiam- 7931 03, Meghalaya, India. Pp. 1-40 by KVK West Garo Hills, Meghalaya
- ❖ P. Bordoloi, M.M. Islam, M. Sarmah Baruah, E. Wanshnong. 2023 Soil Health Card (SHC): A boon for Enhancing Soil Productivity by KVK RiBhoi, Meghalaya

New Joining

- Dr. L. Kanta Singh joined as Sr. Scientist & Head, KVK Imphal West w.e.f 11 October,2023
- Dr. Hari Charan Kalita joined as Sr. Scientist & Head, KVK Longleng, Nagaland w.e.f 7 November,2023
- Dr Sanjeev Kumar Singh joined as Sr. Scientist & Head, KVK Phek w.e.f 1 October,2023
- Dr. Sandeep Deshmukh joined as Sr. Scientist & Head, KVK, Wokha w.e.f 6 November, 2023
- Dr. Soibam Khogen Singh joined as Sr. Scientist & Head, KVK Ukhrul w.e.f 28 November,2023
- Dr. H. Lembisana Devi joined as Sr. Scientist & Head, KVK Tamenglong w.e.f 9 November,2023
- Dr. Phool Kumari joined as Sr. Scientist & Head, KVK Dimapur w.e.f 6 November,2023
- Isaac Lallawmkima joined as Subject Matter Specialist (Agronomy), KVK Siaha w.e.f 22 September, 2023

Promotions

- Dr. K.P.Chaudhary promoted to Principal Scientist, KVK Aizawl w.e.f 28 November, 2023
- Smt. Yuimi Raising promoted to Sr. Technical Officer (T-6), KVK Longleng w.e.f 13 November,2023
- Dr. A. Ameeta Devi promoted to Sr. Scientist and Head, KVK Chandel w.e.f 11 October,2023

Superannuation

- Smt. Jubirian Lakhiat Skill Supporting Staff (SSS), ICAR-ATARI Umiam superannuated on 30 November,2023
- Dr. R.K Nirmala Devi CTO, Animal Science, KVK Imphal West superannuated on 31 December,2023



Bidding farewell to Smt. Jubirian Lakhiat, SSS, ICAR-ATARI Umiam on her retirement day

Livelihood improvement through kitchen gardening-a Success story

Mr Talam is a retired pastor of 57 years. He lives in Jalukieram village with his family on a small homestead farm of 0.2 acres. He practices jhum farming and cultivates king chilly, colocasia, local brinjal, solanum and other cash crops. In 2021, his village was adopted by KVK Peren for development of IFS model village under TSP (Tribal Sub Plan) programme. Selected individuals from his village were given training on vegetable cultivation. Practical demonstration on nursery preparation and how to set up a small vegetable garden in backyard was imparted to them. After attending the programme, shade net, vegetable seeds, compost, small farm tools were provided by KVK Peren. Mr. Talam made a small

plot of 15 x 30 ft to start vegetable cultivation. On this he sowed tomatoes, frenchbean, bittergourd, brinjal, cucumber and some fruit trees in the borders. He could fulfill his family requirement. The excess vegetables he shared among his neighbours and also took to the Jalukie market for selling. In 2022, from the homestead kitchen garden, he got a B:C ratio of Rs. 2.05. Earlier he used to regularly visit the weekly bazaar at Jalukie for purchasing vegetables for his family needs every week. Now his family is able to enjoy varieties of fresh vegetables along with additional income to the family by selling the vegetables.





हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

*Agr*search with a human touch



Chief Editor : Dr. A.K Mohanty
Associate Editors : Dr. A.K Singha & Dr. Amrutha T
Compilation : Hejbina Mehjabin Hussain

Published by

The Director

ICAR-Agricultural Technology Application Research Institute

Zone VII, Umiyam, Meghalaya-793103

Phone : 91-364-2950033

Email: icarzcu3@gmail.com/director.atariumiam@gmail.com

URL: <http://www.atariumiam.icar.gov.in>