



SHINE

(Sustainable Hill Agriculture Information Network for Excellence)



ICAR- ATARI Umiam Newsletter

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Today's era is rightly the "age of science and technology," as it has revolutionized every aspect of human life. At ICAR-ATARI, Umiam, we are committed to harnessing the vast potential of technological innovations that are exceptionally suited to tackle the most pressing challenges of our time. Our focus is to promote cost-effective, accessible, and sustainable solutions that can make a real difference in the agricultural landscape.



I would like to commend the Krishi Vigyan Kendras (KVKs) for their exceptional efforts in demonstrating climate-resilient interventions, promoting area expansion of pulses and oilseed crops, and implementing impactful outreach and flagship programs. The remarkable strides made in capacity-building initiatives are paving the way for establishing a robust agricultural sector in NEH region. Among the notable achievements, the promotion of cutting-edge innovations like drone technology has added tremendous value to modern farming practices.

ICAR-ATARI, Umiam has made significant progress in fostering the growth of startups, entrepreneurs, and collaborations between academia and industry. This collaborative approach is vital in creating a roadmap to drive information, incubation, and innovation across the five states of the North Eastern Region (NER) namely Manipur, Meghalaya, Mizoram, Nagaland, and Tripura. Over the years, we have made remarkable strides in meeting the evolving needs of the farming community, providing opportunities for agri-preneurship development in line with Vikshit Bharat @ 2047.

I would like to congratulate the 43 KVKs under our zone for their exceptional work in promoting appropriate, affordable, acceptable and sustainable agricultural technologies that have not only improved individual living standards but also pushed technology driven revolutionary changes in the socio-economic development of farmers across the NEH region.

आज का युग सही मायने में "विज्ञान और प्रौद्योगिकी का युग" है, क्योंकि इसने मानव जीवन के हर पहलू में क्रांति ला दी है। आई.सी.ए.आर-अटारी, उमियाम में, हम तकनीकी नवाचारों की विशाल क्षमता का दोहन करने के लिए प्रतिबद्ध हैं जो हमारे समय की सबसे अधिक दबाव वाली चुनौतियों से निपटने के लिए असाधारण रूप से उपयुक्त हैं। हमारा ध्यान लागत प्रभावी, सुलभ और टिकाऊ समाधानों को बढ़ावा देना है जो कृषि परिदृश्य में वास्तविक अंतर ला सकते हैं।

मैं जलवायु-लचीले हस्तक्षेपों को प्रदर्शित करने, दलहन और तिलहन फसलों के क्षेत्र विस्तार को बढ़ावा देने और प्रभावशाली आउटरीच और प्रमुख कार्यक्रमों को लागू करने में उनके असाधारण प्रयासों के लिए कृषि विज्ञान केंद्रों (के.वी.के.) की सराहना करना चाहूंगा। क्षमता निर्माण पहलों में किए गए उल्लेखनीय कदम उत्तर पूर्वी क्षेत्र में एक मजबूत कृषि क्षेत्र की स्थापना का मार्ग प्रशस्त कर रहे हैं। उल्लेखनीय उपलब्धियों में, ड्रोन तकनीक जैसे अत्याधुनिक नवाचारों को बढ़ावा देने से आधुनिक कृषि पद्धतियों में जबरदस्त मूल्य जुड़ गया है।

आई.सी.ए.आर-अटारी, उमियाम ने स्टार्टअप, उद्यमियों और शिक्षाविदों और उद्योग के बीच सहयोग को बढ़ावा देने में महत्वपूर्ण प्रगति की है। उत्तर पूर्वी क्षेत्र के पांच राज्यों मणिपुर, मेघालय, मिजोरम, नागालैंड और त्रिपुरा में सूचना, ऊष्मायन और नवाचार को बढ़ावा देने के लिए रोडमैप बनाने में यह सहयोगात्मक दृष्टिकोण महत्वपूर्ण है। पिछले कुछ वर्षों में, हमने कृषक समुदाय की उभरती जरूरतों को पूरा करने और विकसित भारत 2047 के अनुरूप कृषि-उद्यमिता विकास के अवसर प्रदान करने में उल्लेखनीय प्रगति की है। मैं अपने क्षेत्र के अंतर्गत 43 के.वी.के. को उचित, सस्ती, स्वीकार्य और टिकाऊ कृषि प्रौद्योगिकियों को बढ़ावा देने में उनके असाधारण कार्य के लिए बधाई देना चाहता हूँ, जिससे न केवल व्यक्तिगत जीवन स्तर में सुधार हुआ है, बल्कि उत्तर पूर्वी क्षेत्र में किसानों के सामाजिक-आर्थिक विकास में प्रौद्योगिकी संचालित क्रांतिकारी बदलाव भी आए हैं।

(Amulya Kumar Mohanty)

Director

(अमूल्य कुमार मोहंती)

निदेशक

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Hon'ble Minister of State for Agriculture and Farmers' Welfare, GoI, Shri Kailash Choudhary Visits KVK, West Khasi Hills

Shri. Kailash Choudhary, Minister of State for Agriculture & Farmer's Welfare, Government of India, made an official visit to Krishi Vigyan Kendra (KVK), West Khasi Hills on 29 January, 2024, to assess the progress of Centrally Sponsored Schemes. The meeting convened in the presence of Shri. Gideon Kharmawphlang (IAS), Deputy Commissioner, Eastern West Khasi Hills district; Dr. V.K. Mishra, Director, ICAR RC NEH, Umiam; Dr. A.K. Mohanty, Director, ICAR-ATARI, Zone VII, Umiam, along with representatives from line departments and staff of the KVK, West Khasi Hills.

On 30 January, 2024; during his visit to the ICAR RC for NEH Region Honourable Minister Shri Kailash Chaudhary addressed to scientists of ICAR-RC NEH and ICAR-ATARI, Umiam. He commended their efforts in the introduction of

improved agricultural technologies in farmers' fields. Also, he expressed satisfaction, regarding the collaborative role of Krishi Vigyan Kendras (KVKs) in connecting laboratory innovations with practical field applications. The Minister highlighted the importance of cutting-edge technologies, such as drone-based fertilizer applications, AI-driven agriculture, and micro-irrigation systems and suggested for their proper implementation which could revolutionize Indian farming. Additionally, Shri Chaudhary distributed agricultural implements and improved seeds to the farmers. Later on there was demonstration of drone technology with the presence of farmers and scientists as part of the "Drone Didi" initiative.



Interaction of Hon'ble Minister with officials of West Khasi Hills.



Distribution of Inputs to Farmers by Hon'ble MoS at KVK, West Khasi Hills

Shri Arjun Ram Meghwal, Hon'ble Union MoS for Law and Justice and MoS for Parliamentary Affairs, GoI, Visits Kolasib District

Shri Arjun Ram Meghwal, Hon'ble Union Minister of State for Law and Justice and Minister of State for Parliamentary Affairs, GoI, visited Kolasib District on 11 February, 2024. Dr. Michelle C. Lallawmkimi, Senior Scientist and Head of KVK Kolasib, presented a summary of key activities of KVK and its achievements w.r.t. sustainable agricultural practices and capacity-building activities for the farmers in the district. She emphasised the KVK's role in enhancing agricultural productivity and improving rural livelihoods in the district by showing some success stories of farmers.



Shri P.C. Vanlalruata, Hon'ble Agriculture Minister, Mizoram Lauds the Achievements of KVK, Kolasib

Shri P.C. Vanlalruata, Hon'ble Agriculture Minister, Mizoram visited KVK, Kolasib District on 29 January, 2024. He interacted with KVK scientists and reviewed the agricultural interventions by KVK aiming at sustainable agricultural development in the districts. Shri Vanlalruata lauded KVK's achievements and urged the KVK scientists to identify the advanced technologies suitable for the region.



Hon'ble Secretary, DARE & DG, ICAR Lauds KVKs Exhibits



On 9 January, 2024, Dr. Himanshu Pathak, the Hon'ble Secretary of DARE and Director General of ICAR, New Delhi, inaugurated the exhibition stalls of KVKs under ICAR-ATARI, Zone VII, Umiam, during the 49th Foundation Day celebration of ICAR Research Complex for NEH Region, Umiam. He attended the KVK exhibits on flagship technologies and value-added products and encouraged the KVKs to extend their services to underserved locations.

Shri Pu Lalfamkima, Deputy Speaker, Mizoram Legislative Assembly Visits KVK, Kolasib

Shri Pu Lalfamkima, Deputy Speaker of the Mizoram Legislative Assembly, visited KVK, Kolasib, Mizoram on 29 February, 2024. During his visit, he emphasised on collaboration between government institutions and agricultural research centres to achieve food security in the region.



Mid-Term Annual Review Workshop for Manipur KVKs

ICAR-ATARI, Zone-VII, Umiam, organized the Annual Review Workshop for KVKs of Manipur during 22-23 January, 2024. The workshop was attended by the Heads of KVKs of Manipur state. The participants engaged in a brainstorming session focused on achievements related to KVK mandated activities. The discussions aimed to evaluate ongoing initiatives, share best practices, and identify strategies to enhance the effectiveness of KVKs in meeting the needs of farmers and agricultural stakeholders.



Interface Meeting of Manipur KVKs with State Agriculture and Allied Departments

The KVKs representing Bishnupur, Chandel, Imphal East, Imphal West, Senapati, Thoubal, Ukhrul, and Tamenglong districts participated in an interface meeting with the State Agriculture and Allied Departments of the Manipur Government on 6 March, 2024.



The meeting was convened at the Training Hall within the Directorate of Agriculture under the auspices of the Manipur Government. There was discussion about 68 successful agricultural technologies assessed and demonstrated by Manipur's KVKs for implementation by the State Agriculture and Allied Departments. This session underscored the significance of the synergy between frontline extension institutions like KVKs and state departments in ensuring that cutting-edge agricultural technologies may reached farmers, thereby fostering sustainable agricultural growth across Manipur.

ICAR-ATARI, Zone-VII, Umiam Collaborates with ICAR-RCER, Patna for Development of IFS Models

On 31 January, 2024 ICAR-ATARI, Zone-VII, Umiam organised a meeting with ICAR-RCER, Patna to devise project proposals for development and establishment of Integrated Farming System (IFS) models at KVK level customised for different Agro-Ecological Subregions (AES) of the North Eastern Hill (NEH) region. Gracing the programme, Dr. Anup Das, Director, ICAR Research Complex for the Eastern Region, Patna, underscored the significance of region-specific IFS for sustainable income and employment generating through hill agriculture. Dr. A.K. Mohanty, Director of ICAR-ATARI, Umiam stressed the importance of the IFS in regenerative agriculture and promoting the circular economy in rural areas. This meeting brought together experts and various stakeholders to explore the development of IFS models aimed at fostering sustainable agricultural practices and improving farmers' livelihoods in the NEH region. The session concluded with a

resolution to promote 43 demand-driven and customised IFS models at each KVK across Zone-VII.



• VISITS OF IMPORTANT DIGNITARIES •

Shri. G. P. Sharma, Joint Secretary (Finance), ICAR-New Delhi, Visits ICAR-ATARI, Zone VII, Umiam



Shri G.P. Sharma, Joint Secretary (Finance), ICAR, New Delhi visited ICAR-ATARI, Zone-VII, Umiam on 11 January, 2024 to interact with the scientists and administrative staff of ICAR-ATARI, Umiam regarding judicious and timely fund utilization. On this occasion he was honoured by Dr. A.K. Mohanty, Director of ICAR-ATARI, Zone-VII, Umiam.

Dr. G. K. Verma, Director, Quest Bio Organics Pvt. Ltd. Visits KVK, Jaintia Hills

Dr. G.K. Verma, Director, Quest Bio Organics Pvt. Ltd., along with Dr. A.K. Singha, Principal Scientist, ICAR-ATARI, Zone-VII, visited farmers' fields under the KVK, Jaintia Hills on 10 January, 2024 to assess the performance of biostimulants on crop growth, soil health and overall crop production. They were impressed by the performance and effectiveness of the biostimulants. One farmer expressed their desire to continue applying biostimulants even after the trials conclude, aiming to achieve high productivity.



• OUTREACH PROGRAMMES •

KVK, Khowai Organizes Awareness Programme on Natural Farming

KVK, Khowai in collaboration with the Sikkim State Cooperative Supply and Marketing Federation Ltd. (SIMFED) organised an awareness programme on natural farming on 24 February, 2024 at the KVK, Khowai premises. The programme aimed to educate farmers and farm women on the principles and practices of natural farming and promote sustainable agricultural practices. Dr. Jitendra Kumar, Senior Consultant at SIMFED and Mr. Sukracharya Rajput, Project Manager at SIMFED graced the programme and provided insights regarding the benefits of natural farming and its role in enhancing soil health, reducing input costs and increasing farm sustainability.



Farmers from Nagaland Participate in the Agri-Exposure Tour at KVK, East Khasi Hills

A group of farmers from Nagaland state visited KVK, East Khasi Hills during 6-7 February, 2024 as part of an Agri-Exposure Tour aimed at enhancing their agricultural knowledge and practices. During the two-day visit, farmers visited various demonstration plots and exposed to innovative farming technologies implemented by the KVK, East Khasi Hills. They interacted with KVK experts, who shared valuable insights regarding sustainable farming, crop diversification, and integrated farming systems.



PARTICIPATION IN EXHIBITIONS/ KRISHI MELAS/FARMERS FAIR

KVK, Dimapur Participates in Republic Day Exhibition



KVK, Dimapur, Nagaland participated in the Republic Day celebrations at the football ground in Medziphema on 26 January, 2024. Hon'ble Advisor for Land Resources, Shri G. Ikuto Zhimomi, Govt. of Nagaland inaugurated an exhibition with the various departments and Self-Help Groups. The farmer-friendly technologies showcased by KVK, Dimapur created significant interest among the visitors. The exhibits provided insights into innovative agricultural practices, reinforcing KVK's efforts to support sustainable farming and rural development in the region.

KVK, Unakoti Participates in District-Level Melas

KVK, Unakoti, Tripura took part in the "Vikshit Bharat" and "Har Ghar Sushasan" Mela at Govindapur School ground, Kailashahar, during 20 to 21 January, 2024. Hon'ble Minister of Welfare of Scheduled Castes, Animal Resource Development, Fisheries,



Govt. of Tripura, Sri Sudhangsu Das and Zilla Sabhadipati, Sri Amalendu Das impressed with the KVK stall, which featured live mushrooms, improved germplasm of paddy, oilseeds; IPM kits, quality planting materials and other agricultural innovations.

Additionally, KVK, Unakoti participated in the SARAS Mela during 28-29 February, 2024 at ITI ground, Kailashahar which was graced by Hon'ble Minister of Youth Affairs & Sports, Social



Welfare & Social Education and Labour, Govt. of Tripura, Sri Tinku Roy. He appreciated the exhibits showcased by KVK on innovative agricultural technologies and diverse activities.

KVK, Peren Conducts Kisan Mela cum Farmers-Scientist Interaction Programme under Tribal Sub Plan (TSP)

Krishi Vigyan Kendra, Peren, Nagaland, in collaboration with ICAR-NBPGR, New Delhi, organized a Kisan Mela cum Farmers-Scientists Interaction programme on 22 February, 2024 at New Town Hall in Tening Town, Peren. The programme aimed to promote plant genetic resource conservation. Inaugurating the programme as the Chief Guest, Smt. T. Lemlila Sangtam, the Additional Deputy Commissioner (ADC) of Tening in her inaugural address emphasized the importance of germplasm conservation for sustainable farming which may boost agricultural productivity and achieve food security. Smt. Sangtam highlighted the crucial role of women in agriculture and commended their participation to adopt innovative agricultural technologies.

The mela featured various stalls showcasing various agricultural technologies, traditional farming practices, and plant genetic resources, facilitating an opportunity for a meaningful knowledge exchange between farmers and scientists.



● SPECIAL DAY CELEBRATIONS ●

ICAR-ATARI, Zone-VII, Umiam Celebrates 75th Republic Day

On January 26, 2024, ICAR-ATARI, Zone-VII, Umiam, celebrated the 75th Republic Day with great enthusiasm and a deep sense of national pride. The event commenced with the ceremonial unfurling of the national flag by Dr. A.K. Mohanty, Director, ICAR-ATARI Zone-VII, Umiam followed by an inspiring speech to the gatherings.

In his address, Dr. Mohanty paid homage to the unsung heroes of India's freedom struggle, emphasizing the vital contributions of both scientists and farmers to the nation's development. He urged the youth to embrace the values of Gratitude, Generosity, and Genuineness (the 3Gs) to truly honor the spirit of the Constitution.

The celebration concluded with a tree plantation program held on the institution's premises, symbolizing growth, sustainability, and commitment to environmental stewardship. This event highlighted ICAR-ATARI's dedication not only to national pride but also to advancing agricultural practices for a better future.



International Women's Day Celebration at KVK, Ri-Bhoi

KVK, Ri-Bhoi, organized a vibrant programme to commemorate International Women's Day on 8 March, 2024 themed "Invest in Women: Accelerate Progress". The event brought together approximately 250 women farmers and entrepreneurs from various Self-Help Groups (SHGs) and Farmer Producer Organizations (FPOs) across the Ri-Bhoi district. The celebration aimed to recognize the significant contributions of women in agriculture and agripreneurship. Participants engaged in discussions and activities



that highlighted the importance of investing in women to foster sustainable development in agricultural sector.

The event served as a platform for sharing experiences, promoting collaboration among women-led entrepreneurs and empowering the next generation women farm leaders.

Celebration of International Women's Day at KVK, Aizawl

KVK, Aizawl, Mizoram in collaboration with NABARD, Mizoram Centre jointly celebrated International Women's Day on 8 March, 2024. The event honoured the invaluable contributions of women in society and promoted gender equality. Mrs. Lalrohlpuii, Subject Matter Specialist in Home Science delivered an inspiring lecture on the pivotal roles played by women across various sectors, emphasizing the importance of women empowerment. The celebration included engaging discussions and cultural performances, fostering a sense of community feelings among women from diverse backgrounds. KVK, Aizawl remains dedicated to supporting women's empowerment initiatives for a more equitable future.



Voters' Day Observance at KVK, Khawzawl and Kolasib, Mizoram

On 25 January, 2024, the staff of Krishi Vigyan Kendra in both Khawzawl and Kolasib observed Voters' Day with a solemn pledge to uphold democratic values in fostering civic responsibility among the staff. In Khawzawl, the event took place in the KVK Training Hall, where staff members reaffirmed their commitment to exercise their right to vote. Similarly, the staff of KVK, Kolasib participated in the pledge taking ceremony for promoting awareness about the significance of voting and encouraging all citizens to engage actively in the democratic voting process.



KVK, Unakoti Organises the Swachh Bharat Programme with SHGs and School Children

KVK, Unakoti, Tripura organized a special campaign as part of the “Swachh Bharat Abhiyan” to create awareness about the importance of sanitation among school teachers, students, villagers, and Self-Help groups (SHGs) during 27 -28 March, 2024. The campaign included a cleanliness drive at Chantail Higher Secondary School in Kailashahar, with approximately 200 participants including schoolteachers, staff, and students dedicated to improve the school’s hygiene. KVK also conducted informative sessions for SHGs and farm women on agricultural waste recycling, highlighting the need to reduce single-use products for a cleaner environment. These efforts reflected KVK Unakoti’s commitment for promoting sanitation, environmental stewardship, and community engagement in cleanliness.



KVK, Dimapur Conducts Swachtaa Campaign

KVK, Dimapur organized ten awareness programmes under the Swachhata Action Plan, which were conducted in villages such as Vidima, Socunuma, Bade, Maova, Urra, Kukidolong, Seithekima A, Medziphema, GHS, Molvom, and GMS Jharnapani during 7-25 March, 2024. These programmes aimed to educate communities on the importance of sanitation and eco-friendly practices through various campaign programmes. Additionally, cleanliness drives were organized in the KVK premises, promoting community involvement and responsibility for maintaining a clean environment. This initiative significantly enhanced awareness and fostered a collaborative spirit within the community towards cleanliness.



KVK, Longleng Organises Swachtaa Campaign

KVK, Longleng, Nagaland organized a Swachhta Programme on 26 March, 2024, engaging 77 students from Namching Government School. Also local farmers actively participated in this initiative, highlighting the community’s commitment to sanitation and sustainability. An awareness programme was conducted in the village on conversion of organic waste into vermicompost. This session provided practical insights in promoting environmental friendly waste management practices. KVK, Longleng distributed 10 vermi beds along with essential inputs among the participants. This initiative aims to foster a cleaner environment and enhance local agricultural practices through effective utilization of organic waste.



Mission: Green Campus Initiative by KVK, Kiphire under Swachhta Action Plan (SAP)

KVK, Kiphire, Nagaland launched a Green Campus Initiative during 6-8 February, 2024 with a focused mission to transform educational institutions into environmental friendly places. This initiative emphasizes the active involvement of teachers and students, aiming to cultivate a sense of awareness and responsibility towards a clean and green environment. The programme started on 6 February, 2024 with an essay writing competition that engaged 211 students at Saramati View Modern School in Kiphire, Nagaland. Ten best essays were selected for awards, which were presented by Dr. L.J. Bordoloi, Senior Scientist cum Head, KVK (Kiphire), Miss Asela Sangtam, Principal of the school and Miss Temjenna Jamir, SMS (DAMU), KVK, Kiphire during school assembly. This was followed by a cleanliness drive and the establishment of nutri garden in school campus, which was held on 7 February, 2024. Later, on 8 February, 2024, all the participants took a Swachhta pledge, reinforcing their commitment to cleanliness and environmental stewardship. In support of these cleanliness efforts, KVK, Kiphire also donated 10 dustbins to the school, encouraging students to develop good hygienic habits.



• HRD PROGRAMMES CONDUCTED •

ICAR-ATARI, Zone-VII, Umiam, and AAU Jorhat Launch ODL Training on Natural Farming

ICAR-ATARI, Zone-VII, Umiam, in collaboration with Assam Agricultural University (AAU), Jorhat, conducted an Open Distance Learning (ODL) training programme under HRD component entitled 'Scientific Practices in Natural Farming for Sustainable Agriculture'. During 15-28 February, 2024 to provide participants with advanced knowledge of natural farming practices this programme was developed for Subject Matter Specialists (SMSs) and Farm Managers from KVKs in Manipur, Meghalaya, Mizoram, Nagaland, and Tripura. This initiative was taken up by ICAR-ATARI, Umiam to enhance the capacity of KVK personnel, thereby enabling them to facilitate the dissemination of eco-friendly natural farming practices in Northeast India.



ICAR-ATARI Hosts a Customized Capacity Building Programme for SMS (Fisheries) at ICAR-CIFT, Cochin

ICAR-ATARI, Zone-VII, Umiam in collaboration with ICAR-CIFT, Kochi organised a 5-days capacity building programme on "Advances in harvest and post-harvest fisheries technology" during 12-16 February, 2024 for the SMS/PA/CTO/ACTO in Fisheries from different KVKs of Manipur, Meghalaya, Mizoram, Nagaland and Tripura at Kochi. About 24 staff from different KVKs participated in the programme. This programme was very much effective in providing the KVK staff with the knowledge and skills related to innovative fisheries technologies developed by ICAR-CIFT, Cochin; which were later incorporated into their action plan.



ICAR-ATARI, Umiam Collaborates with ICAR-NRRI, Cuttack for Advanced Rice Training Programme

ICAR-ATARI, Umiam, in collaboration with ICAR-NRRI, Cuttack, organized a capacity-building program on 'Advanced Rice Production Technologies Suitable for Hill Ecosystems' during 15-19 January, 2024. The training programme in crop science disciplines was designed to equip Subject Matter Specialists (SMSs) of different KVKs with cutting-edge rice production technologies tailored for hilly ecosystems. Through the programme, participants were introduced to innovative rice production techniques and practices aimed at enhancing rice productivity and sustainability in the hilly regions of Northeast India.



ICAR-KVK, Ri-Bhoi Promotes Poultry Entrepreneurship

ICAR-KVK, Ri-Bhoi, Umiam, conducted a one-day training-cum-input distribution programme on "Improved Techniques of Poultry Farming" on 27 March, 2024 as part of its On-Farm Trials (OFT) activity to support poultry entrepreneurship. The training highlighted scientific poultry rearing techniques for boosting productivity and ensuring sustainability. The programme centred on distribution of 300 Indian Runner ducks and 750 Rainbow Rooster chicks to 15 participants, providing them with the necessary input support to establish or grow their poultry enterprises. This endeavour aimed to stimulate rural entrepreneurship in poultry and encourage sustainable income in rural areas.



KVK, Zunheboto and ICAR-AICRP Conduct Programme on Vegetable Crop Promotion

On 13 February, 2024 KVK, Zunheboto, Nagaland in collaboration with ICAR-AICRP (Vegetable corps) of School of Agricultural Science(SAS), Nagaland University organised a programme entitled “Promotion of Vegetable Crops for Livelihood Security in Changing Climatic Scenarios” at the Lumami campus of Nagaland University. The initiative sought to enlighten farmers about the crucial role of vegetable crops in bolstering livelihood security, especially amid shifting climate patterns. Scientists provided valuable information on climate-resilient methods for vegetable farming, optimal practices and imparted training on promotion of vegetable cultivation. The programme featured interactive discussions and practical exercises that highlighted sustainable farming technology, encouraging the adoption of adaptive strategies to tackle climate-related challenges.



KVK, Aizawl and ICAR-CIFE, Mumbai Collaborate for Training and Input Distribution Programme under TSP

KVK, Aizawl in collaboration with ICAR-CIFE, Mumbai, organised a three-days long training-cum-input distribution programme under the TSP scheme during 27-30 March, 2024. The initiative aimed to promote improved fish-farming practices among local farmers. During the programme, 40000 fingerlings of common carp fish were distributed to farmers representing various villages. Participants were imparted training on the best practices of carp cultivation, including feeding techniques, pond management etc.



KVK, Kolasib Organizes Sponsored Training Programme on Fish Rearing & Management

KVK, Kolasib, Mizoram successfully conducted a Skill Training of Rural Youth (STRY) programme on Fish Rearing & Management, sponsored by SAMETI, Government of Mizoram during 19-24 February, 2024. The training aimed to equip rural youth with practical skills in fish rearing and effective management techniques to promote sustainable aquaculture practices in the region. The participants were awarded with certificates by Lallianpuii, District Fishery Development Officer for their successful completion of this training programme.



KVK, Lawngtlai Organizes Entrepreneurship Development Programme for Self-Help Groups



A four-days training programme on Entrepreneurship Development Programme for SHG and ALF members was organized by KVK, Lawngtlai, in collaboration with the Urban Development & Poverty Alleviation (UD&PA) Department, Lawngtlai district, during 5-8 March, 2024 at the KVK campus. The programme aimed to equip 24 participants from various Self-Help Groups (SHGs) with practical skills in food processing, fostering entrepreneurship, and income generation.

KVK, Lawngtlai Organizes Mega Workshop on Natural Farming

KVK, Lawngtlai District organized a “Mega Workshop/Seminar cum Exhibition on Natural Farming” on 26 March, 2024 at the KVK Complex, Chawnhu. The event was inaugurated by Shri H.C. Vanlalruatpuia, President of the Central Young Lai, who graced the occasion as the Chief Guest. In his address, Shri Vanlalruatpuia emphasized the critical role of natural farming in environmental sustainability and acknowledged the significant contributions of Krishi Vigyan Kendra in supporting farmers in the Lawngtlai District. During the event, a Technical Bulletin on Natural Farming was released and published by the Chief Guest.



Release/ Publish of Technical Bulletin on Natural Farming at Mega Workshop/Seminar cum Exhibition on 26 March, 2024



Visit to Exhibition stalls by special guests at Mega Workshop/Seminar cum Exhibition on 26 March, 2024

KVK, Lunglei Successfully Conducts STRY Programme

KVK, Lunglei, Mizoram conducted STRY (Skill Training of Rural Youth) programme on Organic Farming, sponsored by Govt. of Mizoram during 26 February - 2 March, 2024 at Phaileng South, Hnahthial District. The training was participated by 15 rural youths that focused on equipping them with practical knowledge and skills in organic farming practices to enhance sustainable agricultural production in the region.



KVK, Mon Organises Skill Building Programme for Rural Youths

KVK, Mon, Nagaland successfully conducted a state government sponsored Skill Training of Rural Youth (STRY) programme on Animal Science during 23-29 January, 2024. The programme imparted comprehensive training to 15 rural youths on various aspects of poultry farming like breed selection, breeding techniques, housing management, disease prevention, healthcare, and routine management practices. The training aimed to equip participants with the knowledge and skills necessary for efficient and sustainable poultry farming, thereby enhancing their livelihoods.



KVK, Unakoti Conducts Collaborative Programme on Natural Farming

KVK, Unakoti, Tripura organized a training cum input distribution programme on Natural Farming, in collaboration with the Tripura Rural Livelihood Mission (TRLM) and the Block Development Offices (BDO) of Kumarghat and Pecharthal, Unakoti, Tripura on 14 and 16 March, 2024, in which essential natural farming inputs were distributed to farmers. The distribution was facilitated by the Chairman of the Panchayat Samiti, Pecharthal, at Gournagar, with the aim of promoting sustainable agriculture.



KVK, Unakoti Imparts Fishery Science Skills in Collaboration with ICAR-CIFE

KVK, Unakoti, Tripura conducted five training cum demonstration programmes on various aspects of Fishery Science across the Unakoti District which were held on 31 January, 2 February, 6 March, 13 March and 20 March, 2024. These programmes were undertaken in collaboration with ICAR-Central Institute of Fisheries Education (CIFE), Mumbai, under the Tribal Sub-Plan (TSP) and North Eastern Hill (NEH) schemes, aiming at enhancing the skills and knowledge of local fish farmers for sustainable and improved fisheries management techniques.



Training Cum Method Demonstration on Integrated Pest Management Measures by KVK, Unakoti Tripura

KVK, Unakoti, Tripura in collaboration with ICAR-NCIPM, implemented various Integrated Pest Management (IPM) measures across multiple crops through different training-cum-demonstration programmes. Through these programmes key interventions like IPM technologies of paddy, brinjal, bottle gourd, chili, and tomato were implemented. Over 300 farmers adopted IPM kits for pest monitoring and control. Tools such as yellow sticky traps, pheromone traps, rat traps, lures, polyethylene mulching, and spraying machines were distributed. These efforts significantly improved pest management practices in the region.



Installation of Yellow sticky trap at paddy field for monitoring of insects and pests



Polythene mulching in Brinjal crop fields



Installation of melon fruit fly traps



Installation of Pheromone trap of BSFB

Skill Training of Rural Youth Conducts by KVK, Aizawl

KVK, Aizawl, Mizoram conducted a Skill Training of Rural Youth (STRY) on Post-Harvest Processing and Packaging of Fruits and Vegetables, sponsored by Govt. of Mizoram during 11-16 March, 2024. The training aimed to equip participants with practical knowledge and skills in processing and packaging techniques to enhance the value and shelf-life of produce, contributing to improve the market value of agricultural produce, promote agripreneurship among the youth.



● AWARDS/ CITATIONS ●

- Longjam Boris Singh (SMS, Plant Protection) of KVK, Thoubal was awarded the second best oral presentation award for his paper titled "Study on the impact of biopesticides on the population of mustard aphid *Lipaphis erysimi*." during the National Seminar on the theme Innovative Agricultural Technologies organised by Society of Krishi Vigyan during 5-6 January, 2024 (online).
- KVK, Khawzawl, Champhai District, Mizoram was awarded with the Cleanest Office within the district by Govt. of Mizoram during the Republic Day Ceremonial Function on 26 January, 2024.
- Dr. Malsawmkimi, Senior Scientist and Head of KVK, Champhai District, was conferred with the 'Award of Excellence for Promotion and Spread of ICAR-IIHR Technologies' at IIHR Bengaluru on 5 March, 2024.
- During the quarter of January to March, 2024 six rice varieties such as Kumuno, Thumuri, Kuthingir, Tenapuke Thau, Meluru, and Menamapo Ru from farmers of Phek district, Nagaland, were registered by KVK, Phek under the Protection of Plant Varieties and Farmers' Rights Act, 2001, at the Protection of Plant Varieties and Farmers' Rights Authority (PPV&FRA), Government of India, New Delhi.
- KVK, Imphal East participated and received the 3rd prize in the Best Stall Award in the organization category at the Millet Mela during the Two-Day Regional Convention on "Northeastern States on the Available Millets in Northeastern Region of Bharat and Its Benefits in Nutrition, MDM, Anganwadis, and Take-Home Raashan" held during 4-5 March, 2024, at the College of Agriculture, Iroisemba, CAU, Imphal.
- Dr. A. Ameeta Devi, Senior Scientist & Head, KVK, Chandel, was conferred with the Outstanding Women Scientist Award by the Society of Krishi Vigyan during the 4th SKV National Conference on Agriculture in 2050: Technology and Dissemination held during 1-3 March, 2024, at Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur.
- Mr. Rabi Debbarma, a farmer from West Tripura, Tripura received the Best Farmer Award on Integrated Farming System by ICAR RC for NEH Region, Umiam, Meghalaya during the 49th Foundation Day celebration on 9 January, 2024.
- Dr. Rajib Das, SMS (Agricultural Extension), KVK, Khowai received the best oral paper presentation award for his paper titled 'Assessing the Impact of Soil Health Cards: A Comprehensive Analysis of Soil Fertility, Crop Yields, Forecasting, and Adoption Challenges' during the National Seminar on "Growing Greener: Strengthening Horticulture through Innovations, Sustainability, and Market Research" held at ICFAI University, Tripura on 19 March, 2024.
- Mr. Dipankar Dey, SMS (Soil Science), KVK, Khowai, received a Certificate of Appreciation for his valuable contribution to Gramin Krishi Mausam Seva (GKMS) during the Celebration of World Meteorological Day 2024 at ICAR RC for the NEH Region, Tripura Center on 22 March, 2024.



ICAR-ATARI, Umiam Inks MoU with Quest Bio Organics Pvt. Limited, West Bengal for Technology Collaboration

KVK, Unakoti, Tripura in collaboration with ICAR-NCIPM, implemented various Integrated Pest Management (IPM) measures across multiple crops through different training-cum-demonstration programmes. Through these programmes key interventions like IPM technologies of paddy, brinjal, bottle gourd, chili, and tomato were implemented. Over 300 farmers adopted IPM kits for pest monitoring and control. Tools such as yellow sticky traps, pheromone traps, rat traps, lures, polyethylene mulching, and spraying machines were distributed. These efforts significantly improved pest management practices in the region.



ICAR-ATARI, Umiam Inks MoU with AAU, Jorhat for Capacity Building Programme under ODL-HRD Programme

ICAR-ATARI, Umiam inked MoU with AAU, Jorhat on 23 February, 2024 for undertaking capacity building programme under ODL-HRD programme of AAU, Jorhat; specially customised/designed for SMS, Farm Manager and other equivalent staff of KVKs under ICAR-ATARI, Zone-VII, Umiam on various cutting edge technologies in the field of agriculture and allied sectors through both online and offline mode.



ICAR-ATARI, Umiam Inks MoU with SLRD for Collaborative Work on Various Projects

ICAR-ATARI, Umiam signed MoU with School of Livelihood and Rural Development (SLRD), Meghalaya on 23 February, 2024 with an objective to formulate and work

collaboratively on various projects involving innovative technologies, practices for improving the livelihood of farming communities through agriculture, horticulture and floriculture.

KVK, Phek Inks MoU with CSIR-Northeast Institute of Science & Technology, Jorhat, Assam

KVK, Phek, Nagaland signed a Memorandum of Understanding (MoU) with CSIR-Northeast Institute of Science & Technology, Jorhat, Assam, on 3 January, 2024. The MoU aims to conduct On-Farm Trials (OFT) and Front-Line Demonstrations (FLD) for medicinal and aromatic plant cultivation. Additionally, it includes organising capacity-building programs for farmers in the Phek district as part of a collaborative research and development initiative.



●SEMINAR/ SYMPOSIA/TRAINING ATTENDED●

- Shri Longjam Boris Singh, SMS (Plant Protection) of KVK, Thoubal attended a virtual National Seminar organized by the Society of Krishi Vigyan on the theme Innovative Agricultural Technologies and delivered an oral presentation on the topic “Study on the impact of biopesticides on the population of mustard aphid *Lipaphis erysimi*” organized by the Society of Krishi Vigyan during -6 January 2024 .
- Smt. R.K Lembisana, SMS (H.Sc) of KVK, Thoubal attended the 35th Biennial Conference on “Multidisciplinary Approaches in Home and Community Science for Sustainable Development” organized by College of Community Sciences, Tura, Meghalaya, CAU(I) in Association with Home Science Association of India, Meghalaya held at College of Post Graduate Studies on Agricultural Sciences, Umiam, Meghalaya, CAU(I) during 17-19 January, 2024.
- Dr. Athokpam Haribhushan, Principal Scientist & Head and Dr. Rupam Bhattacharjya, SMS, (Livestock Production), KVK, South Garo Hills attended the 35th Biennial Conference of the Home Science Association of India (HSAI) at CPGS Umiam during 17-19 January, 2024 organised by HSAI and CCS, Tura.
- Dr. Rajib Das, SMS (Agri. Extension), KVK, Khowai attended the National Seminar on “Growing Greener - Strengthening Horticulture through Innovations, Sustainability and Market Research” on 19 March, 2024 organized by ICFAI University, Tripura.

●LECTURES DELIVERED AS RESOURCE PERSON●

- Dr. A. Ameeta Devi, Sr. Scientist & Head, KVK, Chandel delivered a lecture on the Scientific Rearing of Crossbreed Pigs and Feeding and Management of Dairy cattle on 5 March, 2024 organized by KVK, Imphal West sponsored by NABARD.
- Dr. Y. Prabhavati, SMS (Home Science), KVK, Chandel delivered lecture on
 - “Role of natural farming in nutrition gardening for healthy living” on 26 February, 2024 during a capacity building programme on “Potential and prospects of natural farming during 21-27 February, 2024 organised by ICAR-KVK, Tamenglong.
 - “Processing and value addition of fruits and vegetables” during “Entrepreneurship development programme on post-harvest management and value addition of economically important crops” during 4-6 March, 2024 at conference hall organized by ABI, ICAR Research complex in association with International Competence Centre for Organic Agriculture, Bangalore Service provider under MOVCD NER, Phase 111.
 - “Value addition on fruits” on 19 March, 2024 during 5-days training programme on “Livelihood improvement for poor and marginal farmers through improved horticultural practices” organized by ICAR-KVK, Tamenglong sponsored by CIH, Medziphema, Nagaland.
- “Food processing and value addition of important crops” on 21 March, 2024 during 3 days entrepreneurship development programme on “Production, processing and value addition of economically important crops” during 21-23 March, 2024 organised by DSSS, Mantripukhri in association with ABI, ICAR Research complex, Manipur Centre.
- Scientific Rearing of Poultry Birds on 4 March, 2024 organized by Imphal west KVK sponsored by NABARD.
- Mr. K. Homen Singh, Farm Manager, delivered a lecture on “Soilless Cultivation of Horticultural Crops” on 21 March, 2024 during a customized skill training programme on Precision Agriculture Technologies organized by COA, CAU, Imphal.
- Dr. Rupam Bhattacharjya (SMS Livestock Production), KVK, South Garo Hills, delivered a lecture as a resource person on “Piggery Management” at Bagdil training hall, Baghmara on 11 and 12 January, 2024 organised by Dabram Integrated Village Co-Operative Society supported by NABARD.
- Shri Basu Langpoklakpam (SMS-Horticulture), KVK, South Garo Hills, delivered a lecture as a guest lecturer at CCS, Tura during 12-20 January, 2024.
- Dr Malsawmkimi, Sr Scientist and Head, KVK, Champhai District delivered a lecture on 28 February, 2024 at Govt. Middle School- II on National Science Day at Khawzawl Vengthar.

- Dr. Dipankar Dey, SMS (Soil Science), KVK, Khowai, delivered a lecture on “Recent advances in soil and water conservation technologies” on 9 January, 2024.
- Dr. Ardhendu Chakraborty, SMS (Plant Protection), KVK, Khowai, delivered a lecture on “Important pests and diseases of major crops of Tripura” on 9 January, 2024.

- Dr. M. S. Baruah SMS, (Animal Science) and Mr. Bankitkumar Mukhim SMS, (Fishery Science), KVK, Ri-Bhoi, Umiam, Meghalaya acted as a resource person in a Training cum Input distribution programme on 28 February, 2024 under Extension Education Institute (EEI), Guwahati, Ministry of Agriculture and Farmers Welfare, GoI.

● PUBLICATIONS (ATARI/KVKs) ●

Research Paper

- Levish, K., Singh, D., Leenda, T. S., Singh, I. M., Anal, B. H., & Devi, A. A. 2024. Yield gap analysis for enhancement of rice production and productivity under rainfed condition of Chandel, Manipur. *Journal of Scientific Research and Report*, 30, 95-101.
- Bhupenchandra, I., Chongtham, S. K., Devi, A. G., Dutta, P., Lamalakshmi, E., Mohanty, S., Choudhary, A. K., Das, A., Sarika, K., Kumar, S., Yumnang, S., Sagolsem, D., Anand, Y. R., Bhutia, D. D., Victoria, M., Vinodh, S., Chongtham, T., Sharma, A. D., Deb, L., Sahoo, M. R., Seth, C. S., & Meena. 2024. Harnessing weedy rice as functional food and source of novel traits for crop improvement. *Plant Cell and Environment*. <https://doi.org/10.1111/pce.14868>
- Dey, D., Kundu, M. C., Sen, D., & Sachan, M. S. 2024. Conjoint application of lime, organic, inorganic fertilizers and bio-fertilizers increase groundnut productivity, available and microbial biomass phosphorus in acidic soils of Tripura, India. *International Journal of Plant & Soil Science*, 36(4), 110-117.
- Sarkar, V., Das, G., Roy, R., Rudra, B. C., Bhowmick, P., Chakraborty, S., Majumdar, D., Pal, P., & Sarkar, D. 2024. Impact analysis of the mushroom cultivation training and demonstrations programme in the Old Alluvial Zone of West Bengal, India. *Journal of Scientific Research and Reports*, 30(5), 472-476. <https://doi.org/10.9734/jsrr/2024/112944>

Leaflets

- R. Chelchak, A. Sangma, A. Haribhushan, 2024. A Leaflet on “Outscaling of Natural farming Neemastra and Agniastra (Garó version)”.
- K. Sonamani Singh, A. Ameeta Devi, 2024. A Leaflet on “Jalkund: low-cost water harvesting unit for sustainable agriculture”, Published by Director, ICAR Research Complex NEH Region, Meghalaya.
- K. Levish, A. Ameeta Devi, 2024. A Leaflet on “Package and practices of blackgram for chandel district”, Published by Director, ICAR Research Complex NEH Region, Meghalaya.
- K. Sonamani Singh, Hb. L. Anal, A. Ameeta Devi, R. Laha, 2024. A Leaflet on “Brief Report of reaping success at Lambung Village through NICRA interventions”.

- J. K. Marak, 2024. A Leaflet on “Utilization of Jalkund for nursing of carp fry to fingerling”.

Training Manual

- Training manual on Natural Farming. Prepared by Rike Chelchak a Sangma and Athokpam Haribhushan.
- Training manual on Oilseed production. Prepared by Rike Chelchak a Sangma Athokpam Haribhushan, Thokchom Robindro Singh, Ranjit Sharma, Dipak Nath and Telem Matouleibi Chanu.
- Training manual on Fish based Integrated Farming system. Prepared by Thongam Monika Devi and Athokpam Haribhushan.

Book Chapter

- M. Nath, S. Borah, D. Brahmacharimayum, H. C. Kalita, 2024. Climate smart agriculture systems: A way forward. A chapter in book: Current trends in agriculture & allied sciences, Published by SP Publication, pp. 320-325.
- S. Borah, M. Kashyap, H.C. Kalita, L. Devi, 2024. Strategies for promoting agri-entrepreneurship in India. A chapter in book: The agripreneurs path: Navigating success in business world, Published by Elite Publishing House, pp. 164-176.

Personalia (Joined/ transferred/Retired)

- SMS (Fisheries) of KVK, Senapati resigned on 29 February, 2024.
- Shri N. Tomba Singh, SMS (Agronomy) of KVK, Thoubal, retired on 31 January, 2024.
- Smt. Larika L. Challam, Senior Scientist & Head of KVK, Jaintia Hills, joined on 3 January, 2024.
- Mr. C. Ramdinsanga, Computer Programmer at KVK, Khawzawl, was transferred to KVK, Lengpui on 15 February, 2024.
- Mr. H. Lalhmachhuana, driver at KVK, Lawngtlai, has been transferred to KVK, Lengpui effective from 22 February, 2024.
- Dr. Ch. Roben Singh, ACTO (Agronomy), was transferred from KVK, Dimapur to KVK, Imphal West on medical grounds on 5 January, 2024.

● EXTENSION ACTIVITIES AT A GLANCE ●



Participatory seed production of mustard variety PM-26 at Phayeng village under KVK Imphal West on 13 February, 2024



Scientist Visit to Farmers' Field



Viksit Bharat Sankalp Yatra campaign conducted by KVK, Ri-Bhoi



Field day on Ginger at KVK Jaintia Hills



KVK, West Tripura webcasted PM Kisan Samman Nidhi Programme



KVK, Imphal East conducted programme on Release of 16th Instalment of PM Kisan on 28th February, 2024



KVK, East Khasi Hills conducted programme on Release of 16th Instalment of PM Kisan on 28th February, 2024



KVK, Kolasib conducted programme on Release of 16th Instalment of PM Kisan on 28th February, 2024



KVK Kolasib subject experts visited Toria Field under NFSM Oilseeds



Launching of Viksit Bharat Sankalp Yatra at KVK Senapati



Field Day at KVK Tamenglong



Field Day on Maize at Asugre village under KVK South Garo Hills



STRY Training on Vermicompost at KVK Khawzawl



Training programme on Nutritional security at KVK Mon



Vikshit Bharat Sankalp Yatra at KVK Dimapur



Interaction of a farmer from Aizawl district of Mizoram with the Hon'ble Prime Minister during the Viksit Bharat Sankalp Yatra (VBSY) programme on 8 January, 2024.



18th Scientific Advisory Committee meeting at KVK, Ri-Bhoi



Scientific Advisory Committee meeting at KVK, Dimapur



16th Scientific Advisory Committee meeting at KVK, Imphal East



KVK, Kolasib conducted Scientific Advisory Committee Meeting on 30 January, 2024



7th Scientific Advisory Committee meeting at KVK, West Tripura

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