

**Minutes of Meeting on Interface meeting between Department of Agriculture & Farmers' welfare, Meghalaya and ICAR-ATARI, Zone-VII, Umiam, Meghalaya held under the Chairmanship of the Additional Secretary, Department of Agriculture & Farmers' Welfare, Government of Meghalaya on 8<sup>th</sup> of April 2025 in the Multipurpose Hall, ICAR-ATARI, Umiam.**

**Officers/Members Present:**

1. Shri. Gunanka DB, IFS, Additional Secretary, Department of Agriculture & Farmers' Welfare Department, Govt. of Meghalaya.
2. Dr. A. K. Mohanty, Director, ICAR- ATARI, Zone VII, Umiam.
3. Dr. A. K. Singha, Principal Scientist, ICAR-ATARI, Zone-VII, Umiam.
4. Shri S. Rani. Joint Director Horticulture (Hqr)
5. Shri C. S Shabong. Joint Managing Director (MgSFAC)
6. Shri I Saibome, State Soil Survey Officer
7. Smt D. Barishisha Mukhim, Deputy Director Horticulture (MKT)
8. Shri M.D Shadap, Agriculture Marketing Officer
9. Shri M Lamare, Agriculture Information Officer
10. Shri I Majaw, ADA, i/c Ginger Development Umsning
11. Shri B. Keri. Assistant Director Horticulture (Planning)
12. Shri S.K Sangma, Assistant Director Horticulture (MgSFAC)
13. Shri C.D Sangma, Assistant Director Horticulture (VFT)
14. Dr. Md. Mokidul Islam, Principal Scientist & Head, KVK Ri-Bhoi
15. Dr. Athokpam Haribhushan, Principal Scientist & Head, KVK South Garo Hills
16. Shri. L. Victor Khonglah, Senior Scientist & Head, KVK East Khasi Hills
17. Dr. Shah Mustahid Hussain, Senior Scientist and Head, KVK East Garo Hills
18. Larika Lakiang Challam, Senior Scientist & Head, KVK Jaintia Hills
19. Dr. Monica Suresh Singh, Sr. Scientist West Garo Hills
20. Smt. Vereena Jean Lyngdoh, Senior Scientist & Head West Khasi Hills
21. Dr. Amrutha. T, Scientist ICAR-ATARI Zone VII

An Interface meeting was held between officials from the Department of Agriculture and ICAR-ATARI regarding collaboration between ICAR and the Department of Agriculture, Meghalaya.

**Agenda:**

The agenda for the meeting was to deliberate on the collaboration for Developing Region-Specific Package of Practices and continuous Engagement with ICAR-ATARI, Zone VII, Umiam, Meghalaya.



## A. FORMAL SESSION.

### 1. About ICAR-ATARI:

The Director ICAR-ATARI gave an overview of the Institute to the Department Officials which are as follows:

- ICAR-ATARI, Umiam (Zone VII) oversees the activities of **43 Krishi Vigyan Kendras (KVKs) spread across five North-Eastern states** out of the **731 KVKs under 11 ATARIs** (Zone basis) in India. Under the current financial plan, **another 120 KVKs** are going to be established all over India, out of which **20 KVKs have been approved for Zone VII**, which includes some new districts in Zone VII.
- Till date, there are **102 ICAR Research Institutes, 73 State Agriculture Universities, 4 Central Agricultural Universities** functioning in the country that are developing region-specific technologies for different crops for different agricultural-related problems.
- **ICAR-ATARI, through its KVKs** is responsible for:
  1. **Technology assessment and technology refinement** in consultation with stakeholders (farmers, Agriculture officers). In case of improvement in the technology after On Farm Trials (OFTs), ICAR-ATARI facilitates the process of refinement the technology through the research institutes.
  2. KVKs conduct **Frontline Demonstrations (FLDs)** on a minimum of 5 hectares to showcase improved agricultural technologies in comparison with traditional practices. These are implemented under the supervision of KVK scientists and involve both method and result demonstrations. Field days are organized to allow farmers to observe outcomes and interact with peers. The aim is to build confidence and promote the adoption of technologies.
  3. Aside from these, ICAR-ATARI is also involved in implementing Government Programmes like **Natural Farming, CFLD-Oilseeds, CFLD- Maize, Oilseed model village projects, NICRA Project** etc.
- The Director of ICAR-ATARI also informed the Department officials that, since agriculture is constitutionally a state subject, the State Government—through the Department of Agriculture, has the primary responsibility for implementing technologies and including them in the State Action Plan for scaling up. These technologies are developed by research institutes and assessed by ICAR-ATARI through the KVKs.
- It was informed that KVKs have developed customized Integrated Farming System (IFS) models. Across the 43 KVKs, region-specific IFS models have been designed based on the unique challenges faced in each region. Using this scientific foundation, the Department of Agriculture can adopt and implement these models in farmers' fields.
- It was also informed that ICAR-ATARI has initiated the establishment of 10 Rural Incubation Centres across five states on pilot basis, with the objective of encouraging, nurturing, and supporting agri-enterprises in rural areas. Meghalaya has two such Rural Incubation Centres, both managed by KVK Jaintia Hills and East Garo Hills.

### 2. About State Agriculture Department – Scenario and challenges.

The Additional Secretary, Department of Agriculture & Farmers' Welfare Department spoke on the overall agriculture scenario and challenges faced by the State, which are as follows:





- It was highlighted that the state has taken many initiatives for **developing the agricultural sector** under the leadership of the Chief Minister, Agriculture Minister and Commissioner & Secretary (DoA&FW), including **collaborations** with research institutes.
- Among the many problems in agricultural sector, **limited collaboration and communication between the research institutes and State department** were one of the main challenges in the growth of agricultural sector in the state.
- Meghalaya, primarily being an agrarian society with **more than 70% dependent on agriculture** in one way or the other, while having **one of the highest population growth rates** in the country, it is **necessary to enhance productivity** through a collaborative approach.
- He emphasized the other challenges in agricultural sector such as resource availability especially land, **low production and productivity (lower than the national average)**. He also informed that this was also highlighted during the field visits to **cashew and citrus plantations conducted by ICAR-Directorate of Cashew Research (DCR), Puttur and ICAR-Central Citrus Research Institute, Nagpur**. Attention was drawn to the fact that effort needs to be given to address these challenges through collaboration.
- He informed that the **allocation of funds to the agriculture sector has been increased significantly for the next financial year by the State Government**, a 43% increase over the previous financial year's allocation.
- He informed that **investment in the agriculture sector** by the State Government was **not a constraint** and interaction on improving the packages of practices in the field to increase the farmer's income through **collaboration between ICAR and State Government** needs to be the focal point of the discussion.

## B. INTERACTIVE SESSION

#	Issues/challenges/information highlighted by Department officials	Inputs/Solutions/information given by ICAR-ATARI
1.	Lack of Quality Planting materials.	<ul style="list-style-type: none"> <li>• ICAR-ATARI informed that KVKs were already engaged in demonstrations for producing QPM.</li> <li>• <b>Ginger and turmeric</b> have been planted in more than 1 ha by KVK <b>Ri-Bhoi</b> to increase access to quality planting materials in the district.</li> <li>• High quality <b>Broccoli seedlings are being grown</b> in a polyhouse by the KVK Ribhoi.</li> <li>• <b>Strawberry varieties have been</b> planted in KVK farm by the KVK Ri-Bhoi to propagate and produce planting materials.</li> <li>• Collaborate with the state department farm to produce more planting materials.</li> <li>• Bhoirymbong Block- <b>Ginger Hub</b>. Two FPOs have been formed by KVK Ribhoi, out of which one is for Ginger (as a major crop).</li> <li>• <b>Pineapple</b> – KVK Ribhoi is working with one FPO in <b>Marngar village</b> for organic pineapple production.</li> </ul>

2.	Soil erosion and Soil fertility problem	<ul style="list-style-type: none"> <li>• Soil conservation practices like <b>mulching</b> have been found to be effective in preventing soil erosion in the state.</li> <li>• Covering the soil before the rain by growing <b>leguminous crops, particularly rice bean, has yielded good results</b> both for soil conservation and soil fertility, and these practices can be adopted, as the soil is enriched through <b>green manuring</b> through <b>nitrogen fixation</b>.</li> <li>• Following Integrated Nutrient Management and Natural farming techniques improves soil fertility.</li> <li>• <b>Use of <i>Eisenia fetida</i></b> (Earthworm) for vermicomposting. KVKs can support the department in managing the worm shed for the continuous supply of worms.</li> <li>• <b>Integrated Farming System (IFS)</b> has been developed by the KVKs under Zone VII, which can be taken up the department for popularizing among farmers.</li> <li>• <b>Neem leaves or turmeric</b> can be used to protect the vermicomposting units from ants and other pests.</li> </ul>
3.	Solution for diseases in Khasi mandarin, bud rot in arecanut, ginger and other spices.	<ul style="list-style-type: none"> <li>• Treatment with <b>Bordeaux Mixture</b>.</li> <li>• Treatment with <b>Trichoderma</b> for effective control of Ginger rhizome rot.</li> <li>• Other line departments can collaborate with the KVKs for monitoring and evaluation, as well as for the effective control of plant diseases, since KVKs have specialists in plant protection.</li> <li>• <b>Field visit</b> with the department for places prone to Citrus decline and ginger rhizome rot.</li> <li>• Citrus rejuvenation technologies are available with ICAR institutes and can be tested through KVKs and successful technologies can be implemented in farmers' fields with the support of the Department.</li> </ul>
4.	Suggestions for High value crops in Meghalaya. Blueberry, Rambuthan, Cocoa, Avocado, thyme, Oregano being targeted for Meghalaya by the Department.	<ul style="list-style-type: none"> <li>• Intercropping of <b>cocoa in arecanut and coconut plantations in Jaintia Hills and Garo Hills</b>.</li> <li>• <b>Lemongrass</b> can be grown. (Medicinal plant)</li> <li>• <b>Hydroponics</b> can be taken up on a small scale.</li> <li>• Cut flowers like <b>gerbera</b> and <b>anthurium</b> can be another area of intervention.</li> </ul>
5.	Packages of Practices, agricultural Inputs	<ul style="list-style-type: none"> <li>• KVK Ribhoi has shared a soft copy of the Package of Practices for 34 crops, developed by ICAR and assessed by KVKs, with the Department of Agriculture, Meghalaya.</li> <li>• Inputs like biofertilizers are not produced for commercial purposes by ICAR, as its primary focus</li> </ul>

		<p>is on research. These inputs need to be procured from external sources as per recommendations</p> <ul style="list-style-type: none"> <li>• KVK West Khasi Hills has already established vermicomposting enterprises. The Department can promote such entrepreneurs to produce inputs locally, which would be more sustainable.</li> <li>• <b>All the KVKs have supported in providing technical assistance to the state government for developing vermicomposting units.</b></li> <li>• RRTC (<b>Regional Rural Training Centre</b>) can also be leveraged for such inputs.</li> <li>• Engage FPO and agri entrepreneurs for seed production through <b>contract farming and a buyback system.</b></li> </ul>
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**C. ACTION POINTS:**

#	Action Points	Deadline	Assigned to
1	<p><b>Phase I : Identification of sectors for collaboration</b></p> <p>Department of Agriculture &amp; Farmers' Welfare to submit the following data to ICAR-ATARI, Zone VII, Umiam.</p> <ol style="list-style-type: none"> <li>1. <b>Priority Sectors</b> and <b>Priority/Critical crops</b> that need to be taken up jointly with ICAR for research and development.</li> <li>2. <b>List of High-value crops</b> identified by the Department for the State</li> <li>3. <b>Specific State Programmes</b> under the Department that are currently being implemented in the state to support the farmers.</li> </ol>	Last week of April	Department of Agriculture & Farmers' Welfare. Government of Meghalaya.
2	<p><b>Phase II : Joint Discussion/Symposium/Workshop</b></p> <p>Meeting between ICAR- ATARI, Zone VII, Umiam, ICAR-RC for NEH Region, Meghalaya, Central Agriculture University, Imphal, Manipur, College of Post Graduate Studies in Agricultural Sciences (CPGSAS), Umiam and Department of Agriculture to deliberate on the issues highlighted to ICAR by the Department of Agriculture &amp; farmers' welfare and come up with the first set of solutions.</p>	To Be Determined (TBD)	<ol style="list-style-type: none"> <li>1. ICAR-ATARI, Zone VII, Umiam, Meghalaya</li> <li>2. ICAR-RC for NEH Region Umiam</li> <li>3. Central Agriculture University, Imphal, Manipur</li> <li>4. College of Post Graduate Studies in Agricultural Sciences (CPGSAS), Umiam</li> </ol>



3	<b>Phase III : Memorandum of understanding</b> Signing of Memorandum of understanding (MoU) between the participating stakeholders to develop Region-Specific Package of Practices (PoP) and field assessment of technologies in collaboration with state government.	To Be Determined (TBD)	1. ICAR- ATARI, Zone VII, Umiam. 2. Central Agriculture University, Imphal, Manipur. ICAR-RC for NEH Region Umiam 3. College of Post Graduate Studies in Agricultural Sciences (CPGSAS), Umiam 4. Department of Agriculture & farmers' welfare, Government of Meghalaya.
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(Shri. Gunanka DB, IFS)

Additional Secretary to the Govt. of Meghalaya,  
 Department of Agriculture & Farmers' Welfare.

**Memo No:** *AGRI (G) 17/2018/46I - A,*

**Dated:** Shillong the 9<sup>th</sup> of April 2025.

**Copy To:**

1. The P.A. to the Commissioner & Secretary, Department of Agriculture & Farmers' Welfare for kind information of the Commissioner & Secretary.
2. The P.A. to Secretary, Department of Agriculture & Farmers' Welfare for kind information of the Secretary.
3. The P.A. to Additional Secretary, Department of Agriculture & Farmers' Welfare for kind information of the Additional Secretary.
4. The Director, ICAR Research complex NEH Region, Umiam, Meghalaya for information.
5. The Director, ICAR-ATARI Zone VII, Umiam, Meghalaya for information.
6. The Vice Chancellor, Central Agriculture University (CAU), Lamphelpat, Imphal West for information.
7. The Dean, College of Post Graduate Studies in Agricultural Sciences (CPGSAS), CAU, Umiam for information.
8. The Director, Directorate of Agriculture, Department of Agriculture & Farmers' Welfare, for information.
9. The Director, Directorate of Horticulture, Department of Agriculture & Farmers' Welfare, for information.
10. Office Copy / Guard File.

By Order etc.



**Joint Secretary to the Govt. of Meghalaya,  
Department of Agriculture & Farmers' Welfare.**