

## Proceedings of Annual Zonal Workshop of KVKs, 2021

(30<sup>th</sup> June to 2<sup>nd</sup> July, 2022)

The Annual Zonal Workshop of KVKs-2022 under ICAR-ATARI, Zone-VII, Umiam and Zone-VI, Guwahati was organized in collaboration with Central Agricultural University, Imphal during **30<sup>th</sup> June-2<sup>nd</sup> July, 2022** at CAU, Imphal, Manipur. The primary objective of the workshop was to review the progress and achievements of mandated as well as other special programmes/ activities of KVKs during 2021. The workshop started with its technical sessions on 30<sup>th</sup> June, 2022. The formal inaugural programme of the workshop was held on 1<sup>st</sup> July, 2022, which was graced by Dr. A.K. Singh DDG (AE), ICAR as the Chief Guest in the presence of Dr. Anupam Mishra, Hon'ble Vice-Chancellor, Central Agril. University, Imphal and Dr. Bidyut C. Deka, Hon'ble Vice-Chancellor, Assam Agril. University, Jorhat as the Guest of Honours.

Initially, Dr. A K Singha, Director (Acting), ATARI, Zone VII welcomed the dignitaries and other participants. He highlighted the very objectives of the workshop and briefed about the achievements of KVKs during the reporting period. Dr. Ranjit Sharma, Director of Extension Education, CAU, Imphal proposed the ceremonial vote of thanks at the end of the inauguration session.

On this occasion, more than 20 publications from different KVKs and ATARI, Umiam were released by the dignitaries on the dais. Besides invited guests, experts, representatives of host institutes, ATARI Scientists, the workshop was attended by all Heads/ In-charge of KVKs under the Zone-VI, Guwahati and Zone-VII, Barapani representing all 8 states of the region.

**State-wise and KVK-wise technical recommendations are given below.**

### State: Manipur

Sl. No	Name of KVK	Specific Recommendation
1.	Imphal West	<ul style="list-style-type: none"><li>• In OFT No. 2 of Agronomy discipline incorporate soil data for liming application in soil</li><li>• Soil moisture status should be monitored in case of OFT on mulching in strawberry</li></ul>
2	Bishnupur	<ul style="list-style-type: none"><li>• GPS data must be recorded and location must be reflected in the report and images displayed.</li><li>• Discontinue local red potato cultivation</li></ul>
3.	Thoubal	<ul style="list-style-type: none"><li>• Same family of fishes must be used for comparison in Seed production of Climbing Perch.</li><li>• Trial on Nutri Garden must be continued as FLD.</li><li>• Scientific observation should be done in natural farming.</li><li>• Approach should be holistic through integration of livestock, IFS, crops etc</li></ul>
4.	Senapati	<ul style="list-style-type: none"><li>• OFT on Introduction of Kamrupa Poultry must be change to</li></ul>

		Assessment of Kamrupa Poultry.
5.	<b>Chandel</b>	<ul style="list-style-type: none"> <li>PM is not rapeseed; it should be written as rapeseed / mustard.</li> <li>Boron should be corrected as Borax.</li> <li>In problem column lack of awareness should be corrected.</li> <li>In rapeseed OFT, lack of awareness should be corrected to non-availability.</li> <li>Title of performance of half Moon is to be corrected as performance of Papaya in half moon terrace.</li> <li>In Mushroom, technology to be demonstrated should be added.</li> </ul>
6.	<b>Ukhrul</b>	<ul style="list-style-type: none"> <li>In OFT year should be mentioned.</li> <li>Fishery: Title should be changed to comparison of Pengba fish with Common carp.</li> </ul>

**State: Meghalaya**

Sl. No	Name of KVK	Specific Recommendation
1.	East Garo Hills	<ul style="list-style-type: none"> <li>In PP discipline, for any trial/ demonstration, severity of disease/insect attack must be provided in a scale of 1-10.</li> <li>Incorporate variety in case of Organic management of insect pests of tomato.</li> <li>Date/time of sowing in King chilli under OFT needs to be mentioned.</li> <li>Variety of tomato susceptible to pest and disease has to be taken into consideration</li> </ul>
2	East Khasi Hills	<ul style="list-style-type: none"> <li>Evaluation of bio-pesticides application on late blight in Kufri Girdhari &amp; Kufri Himalini"-The title should be changed to "Effect of bio-pesticides application on late blight in Kufri Girdhari and Kufri Himalini".</li> <li>In varietal evaluation, at least 3 varieties should be there.</li> <li>The third-year Front Line Demonstration should not be repeated next year.</li> </ul>
3.	Ribhoi	<ul style="list-style-type: none"> <li>FLD on Jalkund- Suggested to include fish culture as one parameter</li> <li>Suggested to increase the number of soil testing and soil health card</li> </ul>
4.	West Khasi Hills	<ul style="list-style-type: none"> <li>Suggested to increase the number of villages covered in the district</li> <li>Suggested to increase the number of soil testing &amp; soil health Card</li> <li>Suggested to adopt only the validated technology released</li> </ul>

		from ICAR institute , CAU etc
5.	West Garo Hills	<ul style="list-style-type: none"> <li>• Under OFT on Organic nutrient management in turmeric- Suggested to change the problem and include all the recommended technology for turmeric</li> <li>• OFT under Plant Protection- Management of late blight in Tomato- suggested to include one resistant variety- Arka Abhed</li> <li>• Under FLD on To study the use of smart phone by farmers – suggested to include feedback from the farmers</li> <li>• Suggested to increased the number of soil testing and soil health card to 500 numbers</li> </ul>
6.	South Garo Hills	<ul style="list-style-type: none"> <li>• OFT under Fisheries- Assessment of fish cum duck farming was suggested to conduct in FLD programme</li> </ul>

### State: Mizoram

Sl. No	Name of KVK	Specific Recommendation
1.	Lunglei	<ul style="list-style-type: none"> <li>• Incorporation of treatment wise results in case of OFT on enriched compost technology</li> <li>• Universal unit should be used for all trials/demonstration</li> <li>• Repeat the Osmodehydration trial of Mango and Pineapple with new treatment. Comparison of both the crops must be shown in the results. This trial should continue as FLD.</li> <li>• In case of Demonstration on Arka Abhed, incorporate disease parameter if found. The growth habit of tomato plants whether determinate or indeterminate should be mentioned. Both yield and crop duration must be shown in the results of the trial.</li> <li>• FLD on Osmodehydration of Oyster mushroom should be continue again as OFT.</li> <li>• For demonstration on Birds eye chilli, focus on developing packaging for export purpose as it has high potential in the market</li> </ul>
2	Saiha	<ul style="list-style-type: none"> <li>• As potato variety Kufri Jyoti is quite old, new variety like Kufri Megha should be used for the trial.</li> <li>• Variety comparison of any crops/ treatments should be done with varieties possessing similar characteristics/purpose.</li> <li>• Soil data and GPS location must be mentioned.</li> <li>• Farmers practice of any trial must be specified properly.</li> <li>• Description of all trial/ demonstration must be shown in the slides including source of technology, year, scientific observation etc.</li> </ul>
3.	Aizawl	<ul style="list-style-type: none"> <li>• OFT on Jam preparation of Dragon Fruit should be continue as FLD.</li> <li>• Soil erosion control measures should be mentioned</li> </ul>

4.	Serchhip	<ul style="list-style-type: none"> <li>• Number of Bee Box per hectare is to be standardized.</li> <li>• Preservation of sugarcane juice should be done in large container and not in bottle</li> </ul>
5.	Champhai	<ul style="list-style-type: none"> <li>• Agronomy: 15 June is recommended for sowing soybean.</li> <li>• FLD: Pea source of technology is to be included.</li> <li>• Horticulture: Popularization should be replaced as assessment or performance.</li> <li>• Soil Science: OFT 1 Source of technology should be added.</li> <li>• OFT 2 Title should be changed; source of technology should be changed to CPGS; year should be mentioned in slide.</li> </ul>
6	Kolasib	<ul style="list-style-type: none"> <li>• Distance should be maintained between plots while using yellow sticky trap.</li> <li>• Include chemical treatment in French bean</li> </ul>
7	Mamit	<ul style="list-style-type: none"> <li>• In dragon fruit testing red fresh and white fresh should be included.</li> <li>• OFT title should be corrected as cultivation of garden pea.</li> <li>• Potato Kufri Jyoti to be done as FLD and Kufri Jyoti as check.</li> <li>• Agro-forestry – OFT Title should be corrected.</li> <li>• Fishery – Problem diagnose should be corrected.</li> </ul>

**State: Nagaland**

Sl. No	Name of KVK	Specific Recommendation
1.	Longleng	<ul style="list-style-type: none"> <li>• Suggested to increase the numbers of seed , planting materials produced and extension activities conducted</li> </ul>
2	Peren	<ul style="list-style-type: none"> <li>• Under OFT on Performance of lowland rice under rainfed condition- Suggested to rechecked the yield</li> <li>• Under OFT on Acid soil management in Green gram- Unreleased technology should not be adopted</li> <li>• Under OFT on INM in French bean- Suggested to changed the problem to low yield</li> <li>• Suggested to write remarks in OFT and FLD programmes</li> <li>• Suggested to rechecked the yield as the yield of same variety has lots of variability</li> <li>• Under FLD on Low cost Vermicomposting-Suggested to include vermiwash as one parameter</li> </ul>
3	<b>Dimapur</b>	<ul style="list-style-type: none"> <li>• Change variety RCM9 to RCM7 as the name has been changed.</li> <li>• For trial on hermetic storage, determination of moisture content must be carried out first. It should not be less than 9%.</li> </ul>
4	<b>Mokokchong</b>	<ul style="list-style-type: none"> <li>• Remark and objective are not matching in the OFT “Assessment of disease resistant Chilli”. Standard check must be conducted for this trial.</li> </ul>

		<ul style="list-style-type: none"> <li>Tomato variety Arka Abhed is recommended to be used as disease resistant variety instead of Arka Samrat.</li> <li>OFT on Crossbred Goat should be conducted directly as FLD.</li> </ul>
5	<b>Kohima</b>	<ul style="list-style-type: none"> <li>INM in Rajma, source of technology needs to be corrected.</li> <li>Yellow sticky trap should be placed at different location for assessment.</li> <li>In low-cost diet for piggery assessment is not necessary</li> </ul>
6	<b>Zunheboto</b>	<ul style="list-style-type: none"> <li>Samples should be taken from more numbers of plants in OFT.</li> <li>Wood ash should not be used as a treatment as there are some issues with environmental pollution.</li> <li>Preparation of Tuiti fruiti from chow chow is outdated so change it to some other suitable crop</li> </ul>
7	<b>Tuensang</b>	<ul style="list-style-type: none"> <li>Data should be checked and some plant characteristics to be added in Bio-fortified Pearl Millet variety Dhanshakti.</li> <li>The severity percentage in all OFTs should be mentioned.</li> <li>In the number of pods, there are too many differences example- Soybean varieties like JS-95-60 and JS-335.</li> <li>The unit should be mentioned in foot threshing and hand threshing and paddy operated. Paddy thresher is outdated and therefore should be replaced with a motor run machine.</li> </ul>
8	<b>Mon</b>	<ul style="list-style-type: none"> <li>Correct the title as assessment on tomato var. Arka Rakshak. Include results.</li> <li>Mention Source of Technology for Animal Science OFT4- Assessment Pig Feed</li> </ul>
9	<b>Phek</b>	<ul style="list-style-type: none"> <li>Source of technology under OFT and FLD should be clearly indicated.</li> <li>Generation of more revenue from the farm</li> </ul>
10	<b>Wokha</b>	Cultivation of tomato in open field may be tried
11	<b>Kiphire</b>	<ul style="list-style-type: none"> <li>Trial on foxtail millet may be initiated.</li> <li>ITKs on management of aphid and white fly for control of leaf curl in king chilli</li> </ul>

### State: Tripura

Sl. No	Name of KVK	Specific Recommendation
1.	<b>Dhalai</b>	<ul style="list-style-type: none"> <li>Diseases incidence percentage (%) should be mentioned in all the treatments.</li> <li>Mustard Variety should be mentioned in the Front Line</li> </ul>

		Demonstration.
2	<b>Gomati</b>	<ul style="list-style-type: none"> <li>• Suggested to improve the slide format</li> <li>• OFT-3 under Horticulture- Suggested to change the title</li> <li>• OFT under Fisheries- Performance of duck cum fish culture was suggested to conduct in FLD programme</li> </ul>
3.	<b>Khowai</b>	<ul style="list-style-type: none"> <li>• Yellow sticky trap should be placed far from treatment plot.</li> <li>• OFT-5 - Arka Abedh to be included</li> </ul>
4.	<b>North Tripura</b>	<ul style="list-style-type: none"> <li>• Suggested to take the action photos for OFTs , FLDs and other extension activities along with proper sign board and flex</li> <li>• OFT under Agricultural Extension- Assessment level of adoption of IPM in Bittergourd- Suggested to conduct in FLD as impact assessment</li> <li>• FLD under Agronomy-Popularization of aromatic rice- suggested to remove IET</li> </ul>
5.	<b>Sepahijala</b>	<ul style="list-style-type: none"> <li>• Suggested to increase the number of villages covered.</li> <li>• OFT on Low cost rainwater-Jalkund under Agricultural Engineering was suggested to conduct as FLD programme.</li> <li>• Suggested to increase the number of trainings, extension activities, publications, seed and planting materials, soil and water testings, voice messages and mobile advisory services.</li> <li>• Suggested to change the title Popularization of plastic mulch in Capsicum production.</li> </ul>
6.	<b>South Tripura</b>	<ul style="list-style-type: none"> <li>• Plastic mulching should not be used for natural farming.</li> <li>• Bio-degradable natural materials may be used instead.</li> </ul>
7	<b>Unakoti</b>	<ul style="list-style-type: none"> <li>• In case of varietal evaluation, three varieties should be taken along with control and farmer practice.</li> <li>• Farmer database should be increased for Kisan sarathi portal</li> </ul>
8	<b>West Tripura</b>	<ul style="list-style-type: none"> <li>• OFT entitled 'Evaluating the fertilizer N dose for optimum production of the improved rice variety <i>Gomati</i> in the agro-climatic condition of West Tripura, : Assessment should be written instead of evaluation, Fertiliser recommendation of rice i.e. 80:40:40 NPK/ha should be taken as additional treatment and Soil data should be taken into consideration</li> <li>• Suggested to cover forest area under Natural Farming</li> <li>• Suggested for application of standardized dose of fertilizer</li> </ul>

### **General Recommendations**

- Number of villages in KVK district should be mentioned and percentage of villages covered should be given.
- GPS reading and soil testing report have to be highlighted for all OFTs and FLDs.
- First year OFT cannot be recommended for FLD unless it is confirmed.

- Source of technology is to be compulsorily indicated for all technologies.
  - For all OFTs' the number of years conducted should be mentioned.
  - For all FLDs' whether it can be recommended for FLD should be mentioned.
  - Revolving fund should be enhanced.
  - Universal unit for all trial/demonstration should be used.
  - Natural Farming mandatory for all KVKs. Area expansion along with combination of enterprises must be done in the coming years.
  - Details of all trial and demonstration undertaken must be provided.
  - Presentation of slide in attracting manner.
  - Title must be highlighted as well as results for easy access. Photograph used should be of high quality.
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