PROFORMA FOR ANNUAL REPORT OF KVKS 2023 (January- December)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

Address	Telephone		E mail
Krishi Vigyan Kendra, Ri-Bhoi ICAR Research Complex for NEH Region, Umroi Road, Umiam-793103, Meghalaya	Office	FAX	icarkvkribhoi@gmail.com

1.2 .Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail
	Office	FAX	
Director, ICAR Research Complex for NEH Region, Umiam – 793 103, Meghalaya	0364- 2570257, 9451990546	0364 - 2570363	director.icar-neh@icar.gov.in

1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Md. Mokidul Islam	ICAR Research Complex for NEH Region, Umroi Road, Umiam-793103, Meghalaya	9089611347	mokidul.islam@icar.gov.in

1.4. Year of sanction:F..No. 9-21/2002-AE-IDated 31st July, 2002; Established: 3rd August 2002

1.5. Staff Position

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Category (SC/ST/ OBC/ Others)
1	Sr. Scientist & Head	Dr. M. Mokidul Islam	Senior Scientist and Head	Agronomy	Level 14	177400.00	01-10-2015	Gen
2	Subject Matter Specialist	Moloy Sarmah Baruah	Subject Matter Specialist (T-9)	Animal Science	Level 12	112400	04.07.2006	Gen
3	Subject Matter Specialist	Ms. Meghna Sarma	Subject Matter Specialist (T-9)	Agronomy	Level 12	99800.00	04.07.2006	Gen
4	Subject Matter Specialist	Mrs. Mousumi Gohain Das	Subject Matter Specialist (T-9)	Plant Protection	Level 12	96900.00	06.07.2006	SC
5	Subject Matter Specialist	Mrs. Eliza C. Syiemlieh	Subject Matter Specialist(T-9)	Home Science	Level 12	99800.00	01.08.2006	ST
6	Subject Matter Specialist	Dr.PopihaBordoloi	Subject Matter Specialist(T-6)	Soil Science	Level 11	85800.00	01.12.2015	Gen
7	Subject Matter Specialist	Mr. Bankitkupar Mukhim	Subject Matter Specialist(T-9)	Fishery Science	Level 12	88700.00	07.02.2018	ST
8	Programme Assistant	Mrs. Jessica Dohtdong	Programme Assistant (T-7/8)	Home Science	Level 11	71800.00	01.06.2017	ST
9	Computer Programmer	Mr. Pynshaitbor Jana	Programme Assistant T-5	Computer Science	Level 7	55200.00	14.05.2010	ST
10	Farm Manager	Mr. Albertson L. War	Farm Manager T-5	Plant Pathology	Level 7	50500.00	16-01-2015	ST
11	Superintendent / Accountant	Vacant	-	-	-	-	-	-
12	Stenographer	Vacant				-	-	-
13	Driver	vacant	-	-	-	-	-	-
14	Driver	Vacant	-	-	-	-	-	-
15	Supporting staff	Mr. Winter Kharhujon	SSS Gr. I	NA	Level 2	32000.00	07.12.2006	Gen
16	Supporting staff	Mr. Binandra Rabha	SSS Gr. I	NA	Level 1	34400.00	12.10.2020	Gen
	Total							

Note: No column in the table must be left blank

1.6. a. Total land with KVK (in ha) : 3.0827

b. Total cultivable land with KVK (in ha):1.58

c. Total cultivated land (in ha):

S. No.	Item	Area (ha)
1	Under Buildings	0.0827
2.	Under Demonstration Units	4.70
3.	Orchard/Agro-forestry	10.2173
	Total	15.00

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	Dec 2009	518	48.22 lakh			
2.	Farmers Hostel	ICAR	Dec 2009	309	38.28 lakh			
3.	Staff Quarters (6)	Nil	Nil	Nil	Nil			
4.	Demonstration Units (2)	Nil	Nil	Nil	Nil			
5	Fencing	ICAR	Dec 2009	518	48.22 lakh			
	Rain Water harvesting system	ICAR	Dec 2009	309	38.28 lakh			
	Threshing floor							
	Farm godown							

B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero	ML10 B/6286	2017	652992.00	217819	Good

Power Tiller	Kamco Power Tiller	2005	173265.00	NA	Not working
Small Tractor with small Trolley and cultivator	Small Tractor ML10 C 0240	2019	484424.00		Working
Power tiller	Power tiller with accessories	2019	483000.00		Working

C) Equipments& AV Aids

Name of the equipments	Year of purchase	Cost (Rs.)	Present status
Ricoh photocopier	2023	72380.00	Good
Computer all in one PC	2023	67793.00	Good
Computer all in one PC	2023	76500.00	Good
Refractometer	2022	5733.00	Good
Brush cutter	2022	17600.00	Good
Photo copier	2022	72380.00	Good
UPS	2022	7600.00	Good
Weighing balance	2022	5740.00	Good
Computer	2019	30000.00	Good
UPS	2004	3226.00	Good
Inkjet printer	2004	16940.00	Good
Epson Printer cum scanner	2023	24950.00	Good
Epson printers (4 nos.)	2023	44348.00	Good
Epson printers	2022	44348.00	Good
Digital camera	2010	13990.00	Good
Refrigerator	2004	12200.00	Good
Oven Inalsa	2004	5170.00	Good
Laptop Computer	2005	68502.00	Good
Juicer	2006	2700.00	Good
Sewing machine	2006	8400.00	Good
Lexus juicer	2003	1893.00	Good

Hand compression sprayer	2003	2252.00	Good
Groundnut decorticator	2006	1900.00	Good
Laminar Air Flow	2011	46320	Working
BOD Incubator	2011	65787	working
Mridaparikshak	2016	75000	Good , need upgradation

1.8. A). Details SAC meeting* conducted in 2023

Date	**Name and Designation of Participants**	**Salient Recommendations**
20th Feb' 2024	1. Dr. A.K. Mohanty, Director, ATARI, Zone VII, Umiam 2. Dr.S K Das, Director In-charge, ICAR RC for NEH Region, Umiam–Chairman 3. Dr. B. P. Singh, Principal Scientist & Head DTAC, ICAR RC for NEH Region, Umiam 4. Dr. M. Mokidul Islam, Principal Scientist & Head, KVK Ri Bhoi-Member Secretary 5. Mrs P. Iawim, District Agriculture Officer, Nongpoh 6. Dr. (Mrs) M. Thabah, A.H & Vety Officer, Nongpoh 7. Shri. M. Makdoh, District Horticulture Officer, Nongpoh 8. Shri. H. Papang, Agriculture Development Officer, Umsning 9. Shri. R. Nongkynrih, Programme Manager, Deparment of Fisheries, Nongpoh 10. Fr. Anugrah K, Deputy Director, RRTC, Umran 11. Shri. Graphite Lyngdoh, BTM, Umsning Block, ATMA Nongpoh 12. Smt. Sarah Wahlang, ATM, Bhoirymbong Block, ATMA Nongpoh 13. Shri. M. Dkhar, Asst General Manager, NABARD, Nongpoh	**A) In relation to progress report for Jan-Dec. 2023of SMS Agronomy the house has suggested and remark as follows:** 1. The ATARI Director suggested to include other data like parameters of disease resistance in millet crops 2. It was also suggested to mention the problem identified, records of soil fertility in different farmers field so as to apply FYM based on the soil test 3. It was suggested for OFT-2 to change the title to Performance of high yielding of finger millet under lower altitude 4. To be taken up as OFT: Cultivation of Maize + Frenchbean on the recommended nutrient dose with 500 kg lime/ha to check the soil fertility improvement 5. For FLD-1 to be taken as trial for SMS Home Science for making chips with Kufri Chipsona 6. FLD-2 for field pea popularization, if the farmers are growing Pea (Var. TRCP- 8) then comparison should be done with Arkel so that the best can be selected and disseminated to farmers field by State Department. 7. Change of title for FLD- 3 to Popularization of Pea Var. IPFD 10-12 through Zero Tillage 8. In regard to FLD- 4

	14. Dr.Sourabh Deori,Senior Scientist, Division of Aniaml &Fisheries Science,ICAR RC forNEH Region, Umiam 15. Dr. T Ramesh, Principal Scientist Soil Science, Division of System Research and Engineering, ICAR RC for NEH Region 16. Dr. Amit Kumar, Senior Scientist Genetics & Plant Breeding, NBPGR, ICAR RC for NEH Region, Umiam 17. Dr Meghna Sarma, SMS Agronomy, KVK Ri Bhoi 18. Dr. Moloy S Baruah, SMS Animal Science, KVK Ri Bhoi 19. Smt. Eliza C Syiemlieh, SMS, Home Science 20. Shri. Bankitkupar Mukhim, SMS, Fisheries Science,KVK Ri Bhoi 21. Dr Popiha Bordoloi, SMS, Soil Science, KVK Ri Bhoi 22. Mr. Albertson L. War, Farm Manager, KVK Ri Bhoi 23. Mr. Winter Kharhujon, S.S.S, KVK Ri Bhoi 24. Mr. Binandra Rabha, S.S.S, KVK Ri Bhoi 25. Shri. Fillbert N Lyngkhoi, Project Manager, CBBO, KVK Ri Bhoi 26. Shri. Samuel Klein, Project Assistant, CBBO, KVK Ri Bhoi 27. Smt. Elgiva Wanshnong, SRF, NICRA-TDC, KVK Ri Bhoi 28. Smt. Arbis Rani, Farmer, Bhoirymbong 29. Shri. Elbert Ramde, Farmer, Bhoirymbong 30.	9. Millet Score Card to be done and should publish in paper **In relation to Annual Action Plan for Jan-Dec. 2024 of SMS Agronomy the house has suggested and remark as follows:** 1. It was also suggested that next year Megha Maize- 1 and Megha Maize- 2 to be incorporated in State Action Plan so that the variety can be popularized 2. For OFT-1 it is suggested to take parameters on cultivation of 1. Zinc 2. Iron 3. Both Zinc + Iron biofertified rice 3. Promotion of Jalkund should be removed from FLD **B) In relation to progress report for Jan-Dec. 2023 of SMS Animal Science the house has suggested and remark as follows:** 1. In regard to OFT the title should be change to Performance of Improved Birds Breed under Backyard Poultry System. 2. FLD on popularization of improved breeds is suggested to develop one to two breeding units for production of more piglets for distribution to other villages. 3. Trials should be taken whatever technology that has been generated to set up a project with the help of NABARD and Head of DTAC, ICAR 4. **In relation to Annual Action Plan for Jan-Dec. 2024 of SMS Animal Science the house has suggested and remark as follows:** 1. For FLD- 2: parameters to be taken upto 10 months old starting from weaning 2. To propose training programme on AI in collaboration with Division of Animal Science **C) In relation to progress report for Jan-Dec. 2023 of**

		SMS Home Science the house has suggested and remark as follows: 1. The nutritional content of pickle should be labelled in FLD 2. Nutritional content of Nutri thali should be given 3. Nuti-content in Nutritional garden should be based on the nutritional status of the area, then plan accordingly the components of nutritional garden **In relation to Annual Action Plan for Jan-Dec. 2024 of SMS Home Science the house has suggested and remark as follows:** 1. It OFT- 2, the dryers should be compared both between the dryer from engineering division, ICAR with the VL Solar dryer and observation of cost of effieciency relation should be done. **D) In relation to progress report for Jan-Dec. 2023 of SMS Fishery Science the house has suggested and remark as follows:** 1. FLD on popularization on integrated fish pig vegetable in Ri Bhoi districtshould be incorporated with cultivation of spice as high value crops (Ginger and Turmeric) in place of vegetable cultivation 2. It was suggested to practice central pond in fish cum paddy for FLD- 2 3. To form group of paddy cum fish farmers- FPO **In relation to Annual Action Plan for Jan-Dec. 2024of SMS Fishery Science the house has suggested and remark as**

		follows: 1. The Chairman suggested to go for combination of 2 species to follow according to 2021 technology published in Indian Farming Journal 2. To change OFT-1 to performance of 2 or 3 species culture Gonius+Common Carp+ IMC 3. In OFT-2 should be done only for Rohu as periphyton is done mainly for Rohu 4. Title should be changed for OFT-2 to Performance of Rohu fish on periphyton based fish farming 5. For FLD-2 to incorporate horrticultural crops 6. Supplement of lime through application of wood ash (50% lime & 50% wood ash) **E) In relation to progress report for Jan-Dec. 2023 of SMS Soil Science the house has suggested and remark as follows:** **In relation to Annual Action Plan for Jan- Dec. 2024 of SMS Soil Science the house has suggested and remark as follows:** General recommendation given by all the members are as follows: 1. The Head of DTAC suggested the KVK SMS, DAO, DHO, NABARD, etc to provide advisory to farmers through whatsapp groups. A lecture to farmers or stakeholders should be given about digital tools. He told to download the All India Radio app called Newzone Air so that the farmers can listen. 2. The Principal Scientist Soil Science suggested that statistical analysis is very important for presenting the data so as

		to see whether it is statistically significant or not. The ATARI Director ask to include geographical and statistical data. He also encouragedto work in groups to get more papers for publication. He also suggested to go for copyright of video films and for documentation should be more scientific

** Attach a copy of SAC proceedings along with list of participants*

PROCEEDINGS OF 18th SCIENTIFIC ADVISORY COMMITTEE MEETING 2024

The 18th Scientific Advisory Committee Meeting of KVK, Ri Bhoi was held on 20thFeb' 2024 in the conference hall of KVK Ri Bhoi, ICAR RC for NEH Region, Umiam under the chairmanship of Dr. S. K Das, Director In-charge, ICAR RC for NEH Region. The meeting was attended by the following members–

- Dr. A.K. Mohanty, Director, ATARI, Zone VII, Umiam
- Dr.S K Das, Director In-charge, ICAR RC for NEH Region, Umiam–Chairman
- Dr. B. P. Singh, Principal Scientist & Head DTAC, ICAR RC for NEH Region, Umiam
- Dr. M. Mokidul Islam, Principal Scientist & Head, KVK Ri Bhoi-Member Secretary
- Mrs P. Iawim, District Agriculture Officer, Nongpoh
- Dr. (Mrs) M. Thabah, A.H & Vety Officer, Nongpoh
- Shri. M. Makdoh, District Horticulture Officer, Nongpoh
- Shri. H. Papang, Agriculture Development Officer, Umsning
- Shri. R. Nongkynrih, Programme Manager, Deparment of Fisheries, Nongpoh
- Fr. Anugrah K, Deputy Director, RRTC, Umran
- Shri. Graphite Lyngdoh, BTM, Umsning Block, ATMA Nongpoh
- Smt. Sarah Wahlang, ATM, Bhoirymbong Block, ATMA Nongpoh
- Shri. M. Dkhar, Asst General Manager, NABARD, Nongpoh
- Dr.Sourabh Deori,Senior Scientist, Division of Aniaml &Fisheries Science,ICAR RC forNEH Region, Umiam
- Dr. T Ramesh, Principal Scientist Soil Science, Division of System Research and Engineering, ICAR RC for NEH Region
- Dr. Amit Kumar, Senior Scientist Genetics & Plant Breeding, NBPGR, ICAR RC for NEH Region, Umiam
- Dr Meghna Sarma, SMS Agronomy, KVK Ri Bhoi

- Dr. Moloy S Baruah, SMS Animal Science, KVK Ri Bhoi
- Smt. Eliza C Syiemlieh, SMS, Home Science
- Shri. Bankitkupar Mukhim, SMS, Fisheries Science,KVK Ri Bhoi
- Dr Popiha Bordoloi, SMS, Soil Science, KVK Ri Bhoi
- Mr. Albertson L. War, Farm Manager, KVK Ri Bhoi
- Mr. Winter Kharhujon, S.S.S, KVK Ri Bhoi
- Mr. Binandra Rabha, S.S.S, KVK Ri Bhoi
- Shri. Fillbert N Lyngkhoi, Project Manager, CBBO, KVK Ri Bhoi
- Shri. Samuel Klein, Project Assistant, CBBO, KVK Ri Bhoi
- Smt. Elgiva Wanshnong, SRF, NICRA-TDC, KVK Ri Bhoi
- Smt. Arbis Rani, Farmer, Bhoirymbong
- Shri. Elbert Ramde, Farmer, Bhoirymbong

At the outset of the meeting Dr. M. Mokidul Islam, Principal Scientist & Head, KVK, Ri-Bhoi welcomed all the dignitaries. After the welcome address the Senior Scientist,Soil ScienceDr. T. Ramesh, Principal Scientist, Soil Science, DSRE, ICAR RC for NEH Regiongave a brief remarkon the major soil constraints leading degradation of Natural Resource and decline in food production. The Optimum pH of 6-7is required to be maintained so lime applicationat 3-4 days before sowing in furrows @ 500kg/ha/seasonis sufficient to increase soil pHfor availability of maximum nutrients in the soil. Dr. B. P. Singh, Principal Scientist & Head DTAC, ICAR RC for NEH Region, requested the line department for their valuable suggestions for the welfare of the farmers and appealed the officers to engage rural youths in entrepreneurship.Dr. S.K. Das, Director In-Charge, ICAR RC for NEH Region,made a remark that Ri Bhoi district is most suitable for agricultural science because of the altitude and temperature. He explained about the five thump rules of extension 1. Create awareness 2. Development of interest 3. Evaluation of farmers (Resources evaluation) 4. Small scaled trial 5. Adoption (the rate of impact of technology on adoption). Dr. A. K. Mohanty, Director, ATARI Zone VII, ICAR, Umiam gave a presentation on Reorienting KVKs for TransplantingResearch to Development.Thereafter discipline wise presentation of Annual Progress Report for January-December 2023 and Action Plan January-December 2024 was done by the SMSs' KVK Ri Bhoi followed by the open discussion and suggestions from the members.

The recommendations and the action taken against the recommendation were discussed in details and suggestions were given by the members. During the technical session many suggestions were given to improve the performance of the KVK by the various scientific advisory committee members that are as follows:

- In relation to progress report for Jan-Dec. 2023of SMS Agronomy the house has suggested and remark as follows:
- The ATARI Director suggested to include other data like parameters of disease resistance in millet crops
- It was also suggested to mention the problem identified, records of soil fertility in different farmers field so as to apply FYM based on the soil

test

- It was suggested for OFT-2 to change the title to Performance of high yielding of finger millet under lower altitude
- To be taken up as OFT: Cultivation of Maize + Frenchbean on the recommended nutrient dose with 500 kg lime/ha to check the soil fertility improvement
- For FLD-1 to be taken as trial for SMS Home Science for making chips with Kufri Chipsona
- FLD-2 for field pea popularization, if the farmers are growing Pea (Var. TRCP- 8) then comparison should be done with Arkel so that the best can be selected and disseminated to farmers field by State Department.
- Change of title for FLD- 3 to Popularization of Pea Var. IPFD 10-12 through Zero Tillage
- In regard to FLD- 4
- Millet Score Card to be done and should publish in paper
- **In relation to Annual Action Plan for Jan-Dec. 2024 of SMS Agronomy the house has suggested and remark as follows:**
- It was also suggested that next year Megha Maize- 1 and Megha Maize- 2 to be incorporated in State Action Plan so that the variety can be popularized
- For OFT-1 it is suggested to take parameters on cultivation of 1. Zinc 2. Iron 3. Both Zinc + Iron biofertified rice
- Promotion of Jalkund should be removed from FLD
- **In relation to progress report for Jan-Dec. 2023 of SMS Animal Science the house has suggested and remark as follows:**
- In regard to OFT the title should be change to Performance of Improved Birds Breed under Backyard Poultry System.
- FLD on popularization of improved breeds is suggested to develop one to two breeding units for production of more piglets for distribution to other villages.
- Trials should be taken whatever technology that has been generated to set up a project with the help of NABARD and Head of DTAC, ICAR
- **In relation to Annual Action Plan for Jan-Dec. 2024 of SMS Animal Science the house has suggested and remark as follows:**
- For FLD- 2: parameters to be taken upto 10 months old starting from weaning
- To propose training programme on AI in collaboration with Division of Animal Science
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- The nutritional content of pickle should be labelled in FLD
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- FLD on popularization on integrated fish pig vegetable in Ri Bhoi districtshould be incorporated with cultivation of spice as high value crops (Ginger and Turmeric) in place of vegetable cultivation
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- The Chairman suggested to go for combination of 2 species to follow according to 2021 technology published in Indian Farming Journal
- To change OFT-1 to performance of 2 or 3 species culture Gonius+Common Carp+ IMC
- In OFT-2 should be done only for Rohu as periphyton is done mainly for Rohu
- Title should be changed for OFT-2 to Performance of Rohu fish on periphyton based fish farming
- For FLD-2 to incorporate horrticultural crops
- Supplement of lime through application of wood ash (50% lime & 50% wood ash)
- **In relation to progress report for Jan-Dec. 2023 of SMS Soil Science the house has suggested and remark as follows:**
- **In relation to Annual Action Plan for Jan- Dec. 2024 of SMS Soil Science the house has suggested and remark as follows:**
- General recommendation given by all the members are as follows:
- The Head of DTAC suggested the KVK SMS, DAO, DHO, NABARD, etc to provide advisory to farmers through whatsapp groups. A lecture to farmers or stakeholders should be given about digital tools. He told to download the All India Radio app called Newzone Air so that the farmers can listen.
- The Principal Scientist Soil Science suggested that statistical analysis is very important for presenting the data so as to see whether it is statistically significant or not.
- The ATARI Director ask to include geographical and statistical data. He also encouragedto work in groups to get more papers for publication. He also suggested to go for copyright of video films and for documentation should be more scientific.
- At the end of the open discussion session, a vote of thanks was delivered by Shri. Bankitkupar Mukhim, SMS, Fishery Science, KVK Ri Bhoi .

2. DETAILS OF DISTRICT

2.1 Major farming systems/enterprises (based on the analysis made by the KVK)

Sl. No.	Farming system/enterprises
1.	Agri + Horti+ AH+ Fishery
2.	Agri+ Horti+ AH
3.	Agri+ Horti
4.	Agri + Seri + Horti + AH
5.	Agri + Horti + AH + Seri
6.	**Enterprises:** 1. Agri – Paddy, Maize, groundnut 2. Horti – Tomato, Ginger, Turmeric, Cabbage, cauliflower, chilies, pineapple, strawberry 3. AH &Vety – Poultry, Pig, Goat, Dairy, Duckery 4. Fishery – Polyculture 5. Seri – Mulberry silk worm 6. others -Jalkund

2.2 Description of Agro-climatic Zone & major agro-ecological situations (based on soil and topography)

Sl. No	Agro-climatic Zone	Characteristics
1	Subtropical hill zone	400-1200 m MSL, Temperature: 30ºC-12ºC,All area of Ri-Bhoi district except southern part
	Mild/ tropical hill zone	200 - 800 m MSL, Temperature: 32 - 12ºC**,** Southern part of district

2.3 Soil types

Sl. No	Soil type	Characteristics	Area in ha
1	Dark reddish brown	The soils are derived from Gneissic complex parent materials: they are dark reddish brown in colour varying in depth from 20-200 cm. The texture of soils varies from loamy to fine loamy	NA

2.4. Area, Production and Productivity of major crops cultivated in the district

Sl. No	Crop	Area (ha)	Production (ton)	Productivity (Qtl /ha)
A				
1	**Beetroot**	33	343	10394
2	Cabbage	64	1306	20406
3	Cauliflower	44	255	5795
4	Radish	38	389	10237
5	Tomato	212	3350	15802
B	Carrot	62	510	8226
1	Cucumber	103	732	7107
2	Capsicum	111	795	7162
3	Beans	70	636	9086
4	Brinjal	49	382	7796
C	Ladies Finger	102	830	8137
1	Turnip	39	278	7128
2	Bottle Gourd	98	1113	11357
3	Knol-Khol	28	251	8964
4	Lettuce	49	235	4796
5	Pumpkin	71	545	7676
D	Mustard (Leave)	58	398	6862
1.	Onion	75	861	11480
2.	Bitter Gourd	72	697	9681
3.	Teasle Gourd	57	416	7298
4.	Ridge Gourd	95	1074	11305
5.	Broccolli	72	611	8486
6.	Squash	2	36	18000
7.	Pea	63	72	1143
8.	Cow Pea	13	19	1462
9.	Chillies green	119	242	2034
10.	Turmeric green	182	1460	8022
11.	Arecanut green	194	110	567
12.	Khasi Mandarin	273	1142	4183
13.	Assam lemon	55	372	6764

14.	Pomelo	44	427	9705
15.	Black-pepper	169	137	811
16.	Strawberry	50	527	10540
17.	Sweet Potato	166	1128	6795
18.	Ginger	1032	10998	10657
19.	Tapioca	73	461	6315
20.	Banana	951	17655	18565
21.	Papaya	206	1642	7971
22.	Pineapple	4063	53035	13053
23.	Winter Potato	9	30	3333
24.	Jackfruit	91	904	9934

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
January	6.8	2	22.0	2.9
February	17.6	4	24.7	4.1
March	24.8	9	29.2	7.4
April	32.0	16	30.1	12.5
May	78.4	24	28.8	15.3
June	90.2	23	30.2	17.8
July	95.6	26	29.1	19.8
August	38.6	18	32.0	19.5
September	110.7	23	32.0	18.5
October	112.6	23	29.7	15.0
November	45.2	2	27.0	7.8
December	25.4	1	25.8	4.8

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production		Productivity
Cattle	Exotic/Crossbreed	**2012**	**2019**	**Growth Rate (%)**
	Indigenous	9295	16468	77.17
	Total	27614	38094	37.95
Buffalo	Indigenous	**36909**	**56581**	**53.30**
Total Bovine	**Total Bovine**	5043	4259	-15.55
Goat	Indigenous	**41952**	**60840**	**45.02**

Pig	Exotic/ Crossbred	24033	14629	-39.13
	Indigenous	12596	50282	299.19
	Total pig	17082	3397	-80.11
Sheep	Indigenous	**29678**	**53679**	80.87
Total Livestock	**Total Livestock**	10	13	30.00
Poultry	Fowl- Desi	**95673**	**129161**	**35.00**
	Fowl-Improved	327182	NA	NA
	Duck- Desi	129772	NA	NA
	Duck-Improved	960	NA	NA
	Turkey	21	NA	NA
	Others-Guineas fowls etc	76	NA	NA
	Total poultry	167	NA	NA

Note: Pl. provide the appropriate Unit against each enterprise

2.7 Details of Operational area / Villages (2023)

Sl. No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprises	Major problem Identified	Identified thrust area
1		Bhoirymbong, Umling, Jirang, Umsning,	Purdwa,Umwang ,Umsariang, Umketieh, Phamshikam,Pahamsyiem, Umsaitphrah,Marngar, Khweng, Thadondgiaw, Mawbri,Mawlasnai	Paddy, Maize, Groundnut,Millets, Pea, Potato, Jalkund	• High cost of production • Low productivity,lodging of Paddy • Unscientific method of cultivation • Use of local cultivars • Lack of Awareness and skill • Lack of processing units • Marketing constraints	• Promotion of natural farming for improving livelihood and sustainability • Popularization of HYV's of Crops with proper scientific package and practices to enhance farmers income • Introduction of Jalkunds for water conservation • Popularizing processing varieties of potato for enhancing income

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2023

Discipline	OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises)			
	Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Agronomy	2	2	20	20	3	4	55	90
Fishery	1	1	5	5	3	3	30	30
Home Science	2	1	40	20	2	1	40	20
Animal Sc	2	2	25	25	2	1	25	25
Soil Science	2	2	20	20	2	2	20	20
Total	**9**	**8**	**110**	**90**	**12**	**11**	**170**	**185**

Note: Target set during last Annual Zonal Workshop

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Agronomy	12	12	360	500	8	15	100	150
Fisheries Science								
Farmers	9	11	180	215	0			
Rural youth	4	4	80	88	0			

Extn. Functionaries	1	1	20	20	0			
Animal Science	7	7	100	115	0			
Home Science								
Farmers	12	12	207	211				
Rural youth	0	4	80	88				
Extn. Functionaries	1	1	18	18				
Farmers	3	3	45	54				
Rural youth	4	4	60	81				
Total	20	24	410	452	8	15	100	150

Seed Production (ton.)		Planting material (Nos. in lakh)	
Target	Achievement	Target	Achievement

3. B. Abstract of interventions undertaken during 2023

Sl. No	Thrust area	Crop/ Enterprise	Identified problems	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
	Varietal Evaluation	Megha maize 1 and 2	Low productivity due to use of local cultivars and poor management practices	Performance of improved Maize varieties for higher productivity	-	Improved Cereal production technology through hyvs of Maize	NA	Training,Method demons, field day	Seeds,Fertilizers and plant protection chemicals

	Varietal Evaluation	Fingermillet	To increase production and productivity of millets in Ri-Bhoi district	Performance of high yielding varieties of fingermillet under low altitudes				Training,Method demons, field day	Seeds,Fertilizers and plant protection chemicals
	popularization of processing varieties of Potato	KufriFrysona	Low productivity due to use of local cultivar	----	Promotion of improved processing variety of Potato (Var. KufriFrysona)	Scientific production technology for potato processing variety	NA	Training,Method demons, field day	Seeds, Fertilizers and plant protection chemicals
	Water Conservation	Jalkund	Water scarcity during winter season for growing vegetables	-----	Promotion ofJalkund for multipurpose use of water	Water conservation through small water harvesting srtructures		Trainings	Silpauline sheets
	Popularising HYVs of Pea	Maize(var RCM 76)	Poor performance due to use of local cultivars -	-----	Promotion of Pea crop (Var. TRCP 8) under raised bed in rice fallows for rabi season	Scientific cultivation techniques for growing HYV of pulses	NA	Training,Method demons, field day	MaizeSeeds, Fertilizers and plant protection chemicals
	Value addition	Millets	Non utilization of millets for value addition	Performance of Value addition of millets into value added products	-	Value-added products from millets	-	-	All ingredients like millets, sugar, milk etc
	Value addition	Ginger	Not processing of ginger into other high value-added products.	-	Performances of Value addition of Ginger for higher income	Processing of Ginger into different value added products	-	-	All ingredients like ginger Oil,spices, vinegar

	Fisheries management	Labeogoniu s	Low productivity unavailability of suitable species for mid-range altitude region.	Performance Of Minor Carp In Poly Culture	na			Training, method demonstration	Fingerlings, feed, lime etc
	Evaluation of breed	Rainbow Rooster, Vanaraja	Low productive performance local birds	Performance Of Rainbow Rooster Under Backyard Poultry Breeds	na			Training, method demonstration	Fingerlings, feed, lime etc
	Fisheries management	IMC and Amur carps	Low growth and productivity of local common carps		Popularisation Of Amur Common Carp			Training, method demonstration	Fingerlings, feed, lime etc
	IFS	Integrated Fish Farming	Low productivity and production from single enterprise		Popularisation Of Paddy Cum Fish Farming System For Higher Income	Integrated Paddy cum Fish farming System		Training, method demonstration	Fingerlings, feed, lime etc
	Fodder management	Kent and Hybrid Napier	Scarcity of green fodder during lean season		Popularization Of Different Fodders During Lean Season			Training, method demonstration	Fingerlings, feed, lime etc
	IFS	Integrated Fish Farming	Low productivity and production from single enterprise		Popularization of Integrated Fish-pig-vegetable in Ri Bhoi district	Integrated fish Pig farming system		Training, method demonstration	Fingerlings, feed, lime etc
	Backyard poultry	Poultry	Low reproductive performance of indigenous poultry	Performance of Rainbow Rooster under Backyard system.	-	"Backyard poultry production with improved breeds"	-	Awareness meeting	Poultry chicks 750
	Introduction of improve breeds	Piggery	Low productive performance of indigenous pigs	-	Popularization of improved crossbreed pigs	Pig farming with improved breeds	-	Group discussion	Piglets 15

	Soil Fertility Management	Finger Millet (Var. VL 379)/ Organics	Low productivity due to poor soil fertility management	Performance of Finger Millet under Organic Soil Fertility Management (Second Year)					
	Soil Fertility Management	Megha SA2, Rapeseed/Mustard Var.: M-27/ Organics	Low productivity due to poor soil fertility management	Effect of Organics on Soil Health and crop productivity in Lowland Rice-Mustard/Rapeseed cropping system in acidic soil.					
	Acid Soil Management	Organics/ ginger	Low productivity due to soil acidity problem		Promotion of organic ginger production practices for soil acidity management and productivity enhancement.				

	Organic Farming	Organics/ Turmeric	Low productivity due to poor soil Fertility Management		***Promotion of Organic nutrient management in Turmeric*** FYM @ 10 t/ha + vermicompost @ 5 t/ha + Trichoderma harzanium @10 ml/ kg of seed + Azotobacter 10 ml / kg of Seed + Neem cake @250 kg/ha+ 150 kg/ ha Rock Phosphate + Lime 500 kg/ha				
	Organic Farming	Turmeric/ Organics	Low productivity due to poor soil Fertility Management			Training on Organic Nutrient Management in Turmeric Crop			
	Organic Farming	Turmeric/ Organics	Low productivity due to poor soil Fertility Management			Training on Organic Packages and Practices of Turmeric Cultivation			
	Production and Use of Organic Inputs	Enriched Compost	Improper decomposition of Organic Manure			Training on Promotion of Enriched compost made from locally available biomass for soil nutrient management and profit maximization			

	Soil Fertility Management	Megha SA2, Rapeseed/Mustard Var.: M-27/ Organics	Low productivity due to poor soil fertility management			Training on Effect on Biochar on C sequestration, Soil Health and crop productivity in low land rice- mustard cropping system in acidic soil			
	Soil Testing	Soil Testing	Imbalance Fertilizer application			Training on Need and importance of Soil Testing			
	Organic Farming	Organics/ Turmeric	Low productivity due to poor soil Fertility Management			Training on Organic Lakadong Turmeric Production and processing for rural empowerment generation			
	Management of Problematic Soil	Biochar	Low productivity due to soil acidity problem			Training on Biochar production and soil acidity management and **Celebration of World Soil Day**			

3.1 Achievements on technologies assessed and refined during 2023

A.1 Abstract of the number of technologies assessed* in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	-									
Seed / Plant production	-									
Weed Management	-									
Integrated Crop Management	-									
Integrated Nutrient	1								1	2

Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition	1								1	2
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	2								2	4

* *Any new technology, which may offer solution to a location specific problem but not tested earlier in a given micro farming situation.*

A.2. Abstract of the number of technologies refined* in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation										
Seed / Plant production										
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										

Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL										

* *Technology that is refined in collaboration with ICAR/SAU Scientists for improving its effectiveness.*

A.3. Abstract of the number of technologies assessed in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitery	Fisheries	TOTAL
Evaluation of Breeds		1						
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management								
TOTAL		1						

A.4. Abstract on the number of technologies refined in respect of livestock / enterprises

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitery	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								
Disease of Management								
Production and Management								
Feed and Fodder								
Small Scale income generating enterprises								
TOTAL								

A.5. Results of On Farm Testing (OFT)

Sl. No.	Title of OFT	Problem Diagnosed	Name of Technology Assessed	Crop/Cropping system/ Enterprise	No. of Trials	Results of Assessment/ Refined (Data on the parameter should be provided)				Feedback from the farmer	Feedback to the Researcher	B:C Ratio (if applicable)
							No of grains/cob	G.Yd	N.Ret			
	Performance of improved maize varieties for higher productivity	Low productivity due to use of local cultivars and poor management practices	Evaluation of HYVs of maize	Maize	10	T_1-Megha maize-1 T_2-Megha maize-2 T_3-FP	675 698 487	39.50 40.25 27.8	43,100 44,450 24,366	Satisfied with the performance	Well adopted by the farmers	2.53 2.61 1.97
	Performance of high yielding varieties of fingermillet under low altitudes	Low productivity due to monocropping	Performance of Fingermillet varieties under low altitudes	Fingermillet	10	T_1-VL-379 T_2-VL-380 T_3-FP	No. of fingers/ear 6.81 6.38 5.92	18.72 18.08 13.08	28050 26450 13950	Satisfied with the performance	Well adopted by the farmers	2.50 2.41 1.8

1	Performances of Value addition of Millet into nutri rich breakfast items	Non utilization of Millet for value addition	Value addition of Millet	Millet	5	1.Shelf life-winter season Flour - no spoilage or hardening) Pancake-2days Idly-1 day 2.Sensory acceptability score card rating -1-5 (based on Appearance,Aroma,Texture,Taste,color) No of sample: 20 Ranking of Acceptance: Pan cake 100% Idli 85% Flour 80%	6000	18000	3	The farm women are readily accepting the products prepared from millets and they find it highly nutritious.	Spread of the technology to other villages and more numbers of millets products with longer shelf life which can be sold in the market.	3
1	Performance Of Minor Carp In Poly Culture	Low productivity unavailability of suitable species for mid-range altitude region.	TO-1 : Labeogonius at 10% inclusion TO-2 : Labeogonius at 20% inclusion	Labeogonius	5	Catla Rohu Mrigal C carp Gonius	512.03±4.08 453.5±3.897 374.2±12.73 839.5±11.16 318.31±4.1	Catla Rohu Mrigal C carp Gonius	532.16 ±4.5 412.68 ±2.6 353.19 ±8.9 868.53 ±9.9 287.23 ±3.8	Labeogonius can be included in poly culture with carps since the demand for this fish is high		

							3					
						Gross cost Gross return Net return BCR	12050 45120 33070 2.74	Gross cost Gross return Net return BCR	12050 42007 29957 2.49			
							Vanaraja	R. Rooster	Indigenous			
2	Performance Of Rainbow Rooster Under Backyard Poultry Breeds	Low productive performance local birds	TO1 : Vanaraja TO2: Rainbow Rooster TO3: Indigenous	Poultry	5	Wt at maturity M Wt at maturity F Age at sexual maturity (days) Egg Production(Nos)/yr Egg weight(g) Body weight at different age at 8th week 20th week 40th week 50nd week	3.63±0.159 2.65±0.12 179.6±4.7 138.3±1.7 57 ±2.4 788.2±6.4 1755.5±11.1 2998.6±18 3663.1±20.1	3.63 ±0.12 2.5±0.1 178.9 ±0.5 108.7 ±1.8 54.4 ±0.4 753.13±5.16 1592.15±7.8 2903.1±19.2 3634.1±21.3	1.68±0.05 1.3±0.02 198.2 ±1.1 51.2 ±1.4 38.1±0.28 355.12±2.3 795.11±5.3 1129.3±8 1685.4±15.1	Availability of good and quality chicks especially month old chick is still a constraint		

						Cost of production (GC) Cost of production (GC)/Bird Total Gross income Net Income Net income/ Bird Mortality Survivability % up to 6 weeks FCR BCR	6206.5 310.325 26360 20153 1007.7 10% 90% 2.23 4.2	6406.5 320.325 19980 13573.5 678.7 10% 90% 2.52 3.1	4729.5 236.475 11030 6300.5 315 5% 95% 3.16 2.3			
							Vanaraja	R Rooster	Indigenous			
2	Performance Of Rainbow Rooster Under Backyard Poultry Breeds	Low productive performance local birds	TO1 : Vanaraja TO2: Rainbow Rooster TO3: Indigenous	Poultry	5	Wt at maturity M Wt at maturity F Age at sexual maturity (days) Egg Production(Nos)/yr Egg weight(g) Body weight at different age at 8th week 20th week 40th week 50nd week	3.63±0.159 2.65±0.12 179.6±4.7 138.3±1.7 57 ±2.4 788.2±6.4 1755.5±11.1 2998.6±18 3663.1±20.1	3.63 ±0.12 2.5±0.1 178.9 ±0.5 108.7 ±1.8 54.4 ±0.4 753.13±5.16 1592.15±7.8 2903.1±19.2 3634.1±21.3	1.68±0.05 1.3±0.02 198.2 ±1.1 51.2 ±1.4 38.1±0.28 355.12±2.3 795.11±5.3 1129.3±8 1685.4±15.1	Availability of good and quality chicks especially month old chick is still a constraint		
						Cost of production (GC) Cost of production (GC)/Bird Total Gross income Net Income Net income/ Bird Mortality Survivability %	6206.5 310.325 26360 20153 1007.7 10% 90%	6406.5 320.325 19980 13573.5 678.7 10% 90%	4729.5 236.475 11030 6300.5 315 5% 95%			

						up to 6 weeks FCR BCR	2.23 4.2	2.52 3.1	3.16 2.3			
	OFT on Performance of Finger Millet under Organic Soil Fertility Management	Low productivity due to poor soil fertility management	Finger Millet under Organic Soil Fertility Management	Finger Millet/ Organics	5			T1:12.24 q/ha T2:9.34 q/ha T3: 7.55 q/ha T4:5.87 q/ha		The Farmers are satisfied by the result of the OFT by achieving higher yield and good Soil Health	Suitable and Low-cost Technology for the Farmers of Ri-Bhoi District for increased the yield.	
	Effect of Organics on Soil Health, C-sequestration and crop productivity in Low-land rice-Mustard/Rapeseed cropping system in acidic soil	Low productivity due to poor soil fertility management	Use of Organics on Soil Health, C-sequestration and crop productivity in Low-land rice-Mustard/Rapeseed cropping system in acidic soil	Rice-Rapeseed/ Mustard cropping system	5			Rice T1:39.14 q/ha Rice T2: 19.34 q/ha Mustard / Rapeseed: T1: 8.2 Mustard/ Rapeseed T2: 4.8		The Farmers are satisfied by the result of the OFT by achieving higher yield and good Soil Health	Suitable and Low-cost Technology for the Farmers of Ri-Bhoi District for increased the yield.	

**Field crops – ton/ha, * for horticultural crops -= kg/t/ha, * milk and meat – litres or kg/animal, * for mushroom and vermicompost kg/unit area.*

*** Give details of the technology assessed or refined and farmer's practice*

3.2 Achievements of Frontline Demonstrations during 2023

a. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous years and popularized and recommended for large scale adoption in the district

Sl. No	Crop and Variety/ Enterprise	Technology demonstrated	Horizontal spread of technology		
			No. of villages	No. of farmers	Area in ha
1	Paddy	Improved cultivation technology	4	66	7.0
2	Maize	Scientific cultivation techniques for growing HYV of maize	5	79	5.0
3	Potato	Package and practices for growing HYV of Potato	5	87	6.0
4	Pea	Package and practices for growing HYV of Pea	6	65	7.0
5	Jalkund	Water conservation through construction of small micro watershed	--	30	5.0
6	Ginger	Performances of Value addition of Ginger for higher income	1	20	0.005
7	Organics/ ginger	Promotion of organic ginger production practices for soil acidity management and productivity enhancement.	5	20	2 ha
8	Organics/ Turmeric	Promotion of Organic nutrient management in Turmeric	5	20	1 ha

** Thematic areas as given in Table 3.1 (A1 and A2)*

b. Details of FLDs conducted during reporting period (Information is to be furnished in the following three tables for each category i.e. cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement	Farming situation (Rainfed/ Irrigated, Soil type, altitude, etc)	Status of soil (Kg/ha)		
												N	P	K
					Proposed	Actual	SC/ST	Others	Total					
1	Potato	Production & management	Scientific cultivation techniques for growing Potato (Kufri Frysona)	Rabi2022	2.0	5.0	70		70		Rainfed Sandy loam	229	21	126
2	Pea	Production & management	Scientific cultivation techniques for growing Pea (TRCP-8)	Rabi 2022	5.0	5.0	85		85		Rainfed Sandy loam	218	22	128
3	Organics/ ginger	Acid Soil Management	Promotion of organic ginger production practices for soil acidity management and productivity enhancement.	2022-23	2.0	2.0	10		10		Rainfed Sandy loam	280.52	12.54	143.43
4	Organics/ Turmeric	Organic Farming	Promotion of Organic nutrient management in Turmeric	2023-24	1.00	1.00	10		10		Rainfed Sandy loam	296.15	10.09	134.09

c. Performance of FLD on Crops during 2023

Sl. No.	Crop	Thematic area	Area (ha.)	Avg. yield (Q/ha.)		% increase in Avg. yield	Additional data on demo. yield (Q/ha.)		Data on parameters other than yield, e.g., disease incidence, pest incidence etc.		Econ. of demo. (Rs./ha.)				Econ. of check (Rs./Ha.)			
				Demo.	Check		H*	L*	Demo	Local	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR
1	Potato	Production and management	7.0	195.2	126.3	54.55	211.8	175.5	Nil	Nil	1,03,400	2,89,800	1,86,400	2.80	99500	1,89,000	98450	1.80
2	Pea	Seed production	5.0	42.34	28.95	46.25	49.6	35.65	Nil	Nil	55,400	1,27020	71620	2.32	35,100	72,375	37,275	1.9
3	Organics/ ginger	Acid Soil Management	2.0	192q/ha	T2: 135 q/ha	142.22	205.65	132.33			276657	960000	6,83343	3.47	364864	675000	310136	1.85
4	Organics/ Turmeric	Organic Farming	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*H-Highest recorded yield, L- Lowest recorded yield ** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio Produce Sale Price must be as per MSP or Registered Marketing Society Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC *Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.*

d. Extension and Training activities under FLD on Crops

Sl.No.	Activity	No. of activities organised	Date	Number of participants			Remarks
				Gen	SC/ST	Total	
1	Field days	2 (Potato and maize)	26.04.2023 20.04.2023		40 20	40 20	
2	Farmers Training						
3	Media coverage						
4	Training for extension functionaries						
5	Any other (Pl. specify)						
	Total	2 (Potato and maize)	26.04.2023 20.04.2023		60	060	

e. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	Crop	No. of farmers	Area (ha)	Performance parameters / Indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		

** Field efficiency, labour saving etc.*

(ii) Livestock Enterprises

Sl. No.	Enterprise/ Category (e.g., Dairy, Poultry etc.)	Thematic area	Name of Technology	No. of farmers	No. of units	No. of animals, poultry birds etc.	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
							Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1																				

(iii) Fisheries

Sl. No.	Category, e.g. Common carp, ornamental fish etc.	Thematic area	Name of Technology	No. of farmers	No. of units	No. of fish/ fingerlings	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
							Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1	Amur carp	IFS	Paddy cum fish	10	10	1000/0.1ha	Growth rate:303±3.45 Survival rate78.6±2.86 Fish production 313±2.45 Rice production 28.91±1.5		Rice production22.83±2.21 Maturity in (days) 135 ±4.11 B:C Ratio 2.3	59900	176775	59900	176775	115875	3.2	293955	67075	37680	2.3	

							Maturity in days 135±1.30													
2		IFS	IFS-Pig Vegetables	10	10	1000/0.1ha Piglet 2 nos/0.1 ha				30960	133235	30960	133235	1022 75	3.11	12050	19603	7553	1.6	

** *GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio*

Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

(iv)Other enterprises

Sl. No.	Category/ Enterprise, e.g., mushroom, vermicompost, apiculture etc.	Thematic area	Name of Technology	No. of farmers	No. of units	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
						Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
	Value addition of ginger		Performances of Value addition of Ginger for higher income	20	1	1.Shelf life at room temperature: there is no spoilage or bacterial growth 2. Sensory acceptability score card rating 1-5 No of sample: 20 • Taste- • Color- • Appearance- • Aroma- • Texture-	1.Shelf life: moulds formation after 2 months 2.Sensory acceptability65%	100%	-	-	8000	25000	18000	2.2	9000	17000	6000	0.6	

						Preference based on Score card Rating 1.Ginger Preserved-100% 2. Ginger Pickle – In oil-100% 3. Ginger pickle- In Vinegar-80%													
1	Fodder	Fodder management	**T1: Oat var Kent** **T2:Hybrid Napier**	10	10	Plant height(cm) Yield(q/ha)) Dry Fodder (q/ha) Sees/Slip rate/ha BCR	71.9 ±0.6 26.3 ±0.68 6.24±2.3 80kg 2.8		124.125 ±1.42 21.4±1.26 4.83±1.865 28000 2.6	29368	48898	19530	6520	2.8	23190	16670	2.6		

*** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio*

Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

(v) Farm Implements and Machinery

Sl. No.	Name of implement	Crop	Name of Technology demonstrated	No. of farmers	Area (In ha.)	Field observation (Output/ man-hours)		% change in the parameter	Labour reduction (Man days)	Cost reduction (Rs. per ha. or Rs. per unit etc.)	Remarks
						Demo	Check				

f. Performance of FLD on Crop Hybrids

Sl. No.	Crop	Name of hybrids	Area (ha.)	No. of farmers	Avg. yield (Q/ha.)		% increase in Avg. yield	Additional data on demo. yield (Q/ha.)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)			
					Demo.	Check		H*	L*	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR

**H-Highest recorded yield, L- Lowest recorded yield*

*** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio*

Note: Economics to be worked out based on total cost of production per unit area and not on critical inputs alone.

3.3. Achievements on Training during 2023

**(Attached separate in Excel format)

Annexure 1: Details of Training Programme (On Campus including Sponsored On Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue	Please specify Beneficiary group (Farmer & Farm women/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Agronomy	Natural Farming	Culivation of Hyvs through Jeevamrut and Beejamrut	23.10.22	1	KVK, Ri-Bhoi	Farmer & Farm Women				5	36				41

	Seed production	Scientific cultivation of growing Hyvs of major crops	13.02.2023	1	KVK, Ri-Bhoi	Farmers and farm women				3	15				18
Animal Sc	Poultry management	Scientific poultry farming	04.04.2023	1	KVK	F				2	18	20	2	18	20
Animal Sc	Poultry management	Scientific poultry farming	04.04.2023	1	KVK	F				7	11	18	7	11	18
Animal Sc	Piggery management	Scientific pig farming	06.04.2023	1	KVK	F				7	11	18	7	11	18
Fisheries	IFS	Integrated Fish Paddy farming system	15.06.2023	1	Banbudai	RY				0	11	11	0	11	11
Fisheries	IFS	Integrated Fish Poultry farming system	24.07.2023	1	KVK	F				0	25	25	0	25	25
Fisheries	IFS	Integrated Fish Poultry farming system	25.07.2023	1	KVK	F				2	28	30	2	28	30
Fisheries	IFS	Integrated Fish Poultry farming system	04.08.2023	1	KVK	F				17	4	21	17	4	21
Fisheries	IFS	Integrated Fish Poultry farming system	21.08.2023	1	KVK	F				18	2	20	18	2	20
Fisheries	IFS	Integrated Fish Poultry farming system	22.08.2023	1	KVK	F				6	4	10	6	4	10
Fisheries	IFS	Integrated Fish Poultry farming system	29.08.2023	1	KVK	F				10	18	28	10	18	28

Fisheries	IFS	Integrated Fish Poultry farming system	31.08.2023	1	KVK	F				6	4	10	6	4	10
Fisheries	Production of inputs	Feed formulation and production	04.09.2023	1	Umramblei	RY				0	30	30	0	30	30
Fisheries	Production of inputs	Feed formulation and production	27.09.2023	1	Umramblei	RY				9	13	22	9	13	22
Fisheries	Feed management	Feed and feeding management in carps	29.09.2023	1	Banbudai	RY				0	25	25	0	25	25
Animal Sc	Poultry management	Scientific poultry farming	06.10.2023	1	KVK	F				6	9	15	6	9	15
Fisheries	IFS	Sponsored Training Programme on Integrated farming System	09-13.10.2023	5	KVK	F				17	25	42	17	25	42
Fisheries	IFS	Integrated Fish Farming system	16.11.2023		MSFRTI	EP				20	0	20	20	0	20

Annexure 2: Details of Training Programme (Off Campus including Sponsored Off Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue	Please specify Beneficiary group (Farmer & Farm women/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Soil Science	Organic Farming	Training on Organic Nutrient Management in Turmeric Crop	21/04/2023	1	Thadnongiaw	RY				9	6	15	9	6	15
Soil Science	Organic Farming	Training on Organic Packages and Practices of Turmeric Cultivation	26/5/2023	1	Sumer	Farmers and Farm Women				2	18	20	2	18	20
Soil Science	Production and Use of Organic Inputs	Training on Promotion of Enriched compost made from locally available biomass for soil nutrient management and profit maximization	30/05/2023	1	Thadnongiaw	RY				5	17	22	5	17	22
Soil Science	Soil Fertility Management	Training on Effect on Biochar on C sequestration, Soil Health and crop productivity in low land rice- mustard cropping system in acidic soil	31/05/2023	1	Kyrdem	RY				4	19	23	4	19	23

Soil Science	Soil Testing	Training on Need and importance of Soil Testing	26/09/2023	1	Mawbri	Farmers and Farm Women				4	14	18	4	14	18
Soil Science	Organic Farming	Training on Organic Lakadong Turmeric Production and processing for rural empowerment generation	20/10/2023	1	Sumer	Farmers and Farm Women				7	9	16	7	9	16
Soil Science	Management of Problematic Soil	Training on Biochar production and soil acidity management and Celebration of World Soil Day	05/12/2023	1	Sumer Umbang	RY				6	15	21	6	15	21
Agronomy	Seed production	Scientific practices for growing Hyvs of Maize	02.05.2023	1	Purdwa	Farmer & Farm Women				7	18	25			25
	Cereal production technology	Maize Production technology	25.04.2023	1	Mawbri	Farmer & Farm Women				8	10	18			18
	Cereal production technology	Production technology for growing Hyvs of Cereals	28.04.2023	1	Kyrdem	Farmer & Farm Women				3	12	15			15
	Seed production	Promotion of Hyvs of Maize	04.05.2023	1	Thadnongiaw	Farmer & Farm Women				5	15	20			20
	Seed production	Cultivation of Millet crop for nutritional security	28.06.2023	1	Umktieh	Farmer & Farm Women				2	18	20			20

	Seed production	Promotion of millet crop for higher productivity	3.07.2023	1	Khilehumtrew	Farmer & Farm Women				4	11	15			15
	Crop diversification	Production technology of growing Hyv of pulses	19.02.2023	1	Khweng	Farmer & Farm Women				7	8	15			15
	Crop diversification	Scientific technology of growing Hyv of Pea	28.11.2023	1	Khweng	Farmer & Farm Women				12	26	38			38
	Crop diversification	Crop diversification through introduction of pulses	29.11.2023	1	Umktieh	Farmer & Farm Women				9	17	26			26
	Resource conservation technology	Introduction of Pea var IPFD 10-12	08.12.2023	1	Thadnongiaw	Farmer & Farm Women									45
Home Science	Storage techniques of food products	Storage techniques of food products	12.01.23 to 13.01.23	2 days	Khweng	Farm women	0	0	0	0	12	12	0	12	12
Home Science	Value addition of Tubers	Value addition of Tubers	7.02.23 8.02.23&10 .02.23	3 days	Khweng	Farm women	0	0	0	0	25	25	0	25	25
Home Science	Valueaddition of Vegetables	Valueaddition of Vegetables	20.02.23	1 day	Khweng	Farmwomen	0	0	0	0	25	25	0	25	25
Home Science	Value addition of chillies	Value addition of chillies	17.02.2023	1 day	khweng	Farm women	0	0	0	0	12	12	0	12	12
Home Science	Nutrition Gardening	Nutrition Gardening	28.3.23	1 day	Umroi	Farmers	0	0	0	3	17	20	3	17	20

Home Science	Nutrition Gardening	Nutrition Gardening	17.10.23 to 19.10.23	3 days	Khweng	Farmwomen	0	0	0	0	22	22	0	22	22
Home Science	Drudgery reduction	Drudgery reduction	10.11.23	1 day	Umsaitprah	Farmwomen	0	0	0	0	20	20	0	20	20
Home Science	Valueaddition of horticultural crops	Valueaddition of horticultural crops	20.11.23 to 22.11.23	3 days	Tyrso	Farmwomen	0	0	0	0	20	20	0	20	20
Home Science	Importance of Nutrition garden in Angan wadi centres	Importance of Nutrition garden in Angan wadi centres	29.11.23	1 day	Saiden	Extension personnel	0	0	0	0	18	18	0	18	18
Home Science	Mushroom cultivation for value addition	Mushroom cultivation for value addition	5.12.23 to 6.12.23	2 days	Khweng	Farmers	0	0	0	1	14	15	1	14	15
Home Science	Valueaddition of ginger	Valueaddition of ginger	12.12.23	1 day	Khweng	Farm women	0	0	0	0	12	12	0	12	12
Home Science	Valueaddition of Turmeric	Valueaddition of Turmeric	13.12.23	1 day	Khweng	Farm woman	0	0	0	0	12	12	0	12	12
Home Science	Valueaddition of Millet	Valueaddition of Millet	15.12.23	1 day	Mawbri	Farmwoman	0	0	0	0	16	16	0	16	16
Fisheries	IFS	Integrated Fish Paddy farming system	15.06.2023	1	Banbudai	RY				0	11	11	0	11	11
Fisheries	Production of inputs	Feed formulation and production	04.09.2023	1	Umramblei	RY				0	30	30	0	30	30

Fisheries	Production of inputs	Feed formulation and production	27.09.2023	1	Umramblei	RY				9	13	22	9	13	22
Fisheries	Feed management	Feed and feeding management in carps	29.09.2023	1	Banbudai	RY				0	25	25	0	25	25
Fisheries	IFS	Integrated Fish Farming system	16.11.2023		MSFRTI	EP				20	0	20	20	0	20

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date (From – To)	Duration (days	Area of training	Training title*	No. of Participants									Impact of training in terms of Self employment after training				Whether Sponsored by external funding agencies (Please Specify with amount of fund in Rs.)
					General			SC/ST			Total							
					M	F	T	M	F	T	M	F	T	Type of enterprise ventured into	Number of units	Number of persons employed	Avg. Annual income in Rs. generated through the enterprise	

*training title should specify the major technology /skill transferred

Annexure 3: Only Sponsored Training Programmes (On, Off and Vocational)

On/ Off/ Vocational	Beneficiary group (F/ FW/ RY/ EP)	Date (From-To)	Duration (days)	Discipline	Area of training	Title	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
							General			SC/ST			Total				
							M	F	T	M	F	T	M	F	T		

3.4.Extension Activities (including activities of FLD programmes) (Please mention specific Extension Activity conducted by the KVK such as Field Day, Kisan Mela, Exhibition, Diagnostic Visit, etc) during 2023

Sl. No.	Extension Activity	Topic	Date and duration	No. of activities	Participants											
					General (1)			SC/ST (2)			Extension Officials (3)			Grand Total (1+2)		
					M	F	T	M	F	T	M	F	T	M	F	T
1.	Exhibition and Recipes contest	Millets Recipes contest	21.07.23 04.08.23 18.08.23 03.10.23 4 days	4	0	0	0	5	100	105	1	3	4	6	103	109
2.	Special Programme	SwachhtaAbiyan (Special Campaign 2.0)	16-31.10.2023	10	0	0	0	105	150	255	0	0	0	105	150	255

3.	Special Programme	International Women's Day	08.03.2024	1	0	0	0	0	30	30	0	0	0	0	30	30
4.	Special Programme	Mahila Kisan Diwas	15.10.2023	1	0	0	0	0	26	26	0	0	0	0	26	26
5.	Special Programme	Fertilizer application awareness programme	22/10/2023		0	0	0	30	80	110	0	0	0	30	80	110
6.	Special Programme	World Water Day	22/03/2024	1	0	0	0	20	30	50	0	0	0	20	30	50
7.	Special Programme	World Soil Day	5/12/2023	1	0	0	0	02	28	30	0	0	0	02	28	30
8.	Special Programme	PM KISAN Flagship Scheme Programme	28/02/2024	1	0	0	0			51	0	0	0			51
9.	Special Programme	ICAR foundation day	16 to 18 /07/2023	1	0	0	0	5	7	12	0	0	0	5	7	12
10.	Special Programme	Constitution Day at KVK Ri Bhoi	26/11/2023	1	0	0	0	7	26	33	0	0	0	7	26	33
11.	Special Programme	National campaign on poshanabhiyan, nutri-garden & tree plantation	17/09/2023	1	0	0	0	14	41	55	0	0	0	14	41	55
1.	Special Programme	Swachhta Campaign	1-31st Dec 2023	10	0	0	0	130	122	252	0	0	0	130	122	252

		(Pakhwara)														
2.	Special Programme	Swachhata Diwas	23/12/2023	1	0	0	0	5	15	20	0	0	0	5	15	20
3.	Lectures delivered			7	0	0	0	35	75	110	0	0	0	35	75	110
4.	Diagnostic visits	-	-	12	0	0	0	20	32	52	0	0	0	20	32	52
5.	Advisory services	-	-	332	0	0	0	225	40	255	0	0	0	225	40	255
6.	Celebration of important days	-	-	3	0	0	0	15	60	75	0	0	0	15	60	75
7.	Field Day	-	-	4	0	0	0	40	65	105	0	0	0	40	65	105
8.	Scientist visits to farmers field	-	-	46	0	0	0	32	64	96	0	0	0	32	64	96
9.	Farmers visit to KVK	-	-	18	0	0	0	155	240	395	0	0	0	155	240	395
10.	Group discussion	-	-	10	0	0	0	35	60	95	0	0	0	35	60	95
11.	Awareness Camp /programme	-	-	6	0	0	0	115	228	343	0	0	0	115	228	343
12.	Kisan Gosthi	-	-	1	0	0	0	55	5	60	0	0	0	55	5	60
13.	Method Demonstrations	-	-	7	0	0	0	45	80	125	0	0	0	45	80	125
14.	Film show	-	-	4	0	0	0	90	110	200	0	0	0	90	110	200
15.	Ex-trainee sammelan	-	-	2	0	0	0	20	60	80	0	0	0	20	60	80
16.	Farmers' scientist interaction	-	-	3	0	0	0	10	70	80	0	0	0	10	70	80

17.	KMAS	-	-	100	0	0	0	250	350	600	0	0	0	250	350	600
18.	Research publication	-	-	9	-	-	-	-	-	-	-	-	-	-	-	-
19.	Newspaper Publication	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-
20.	Technical Bulliten	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
21.	Kisan Sarathi	-	-	5	0	0	0	230	330	560	0	0	0	230	330	560
22.	Total				0	0	0	1902	2761	4663	0	0	0	1902	2761	4663

3.5 Production and supply of Technological products during 2023

A. SEED MATERIALS

Major group/class	Crop wise	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries				
					General		SC/ST		Grand Total
					M	F	M	F	
SPICE CROPS	Turmeric	MT-1	07.0	22000.00	0	0	5	5	10
	Ginger	Nadia	07.0	22000.00	0	0	5	5	10
CEREAL	Maize	RCM-76	0.23	15000.00			10	10	20
	OATS	Kent	0.17	1700.00			5	5	10
	Millets	Vl-376 Vl-380 L-Madua-352	0.54	1000.00			5	5	10
OILSEEDS	GROUNDNUT	ICGS-76	4.0	4000.00			10	10	20
PULSES	RAJMAH	LOCAL	2.0	8000.00			10	10	20
			22.0	138700.00			50	50	100

A1. SUMMARY of Production and supply of Seed Materials during 2023

Sl. No.	Major group/class	Quantity (q) produced	Quantity (q) supplied	Value (Rs.) of quantity produced	Number of recipient/ beneficiaries				
					General		SC/ST		Grand Total
1.	CEREAL	1.77	1.77	17700.00			-	60	60
2.	OILSEEDS	4.0	4.0	4000.00				30	30
3.	PULSES	2.0	2.0	8000.00				10	10
4.	VEGETABLES	50000 nos.	50000 Nos.	50000.00				30	30
5.	SPICE CROPS	14.0	14.0	44000.00				10	10
6.	FLOWER (Gerbera RCGH-22)	1500Nos.	1500 Nos.	15000.00				10	10
TOTAL		22.0/65000 Nos.	22.0/65000 Nos.	138700.00				150	150

B. Production and supply of Planting Materials (Nos. in No.) during 2023

Major group/class	**Crop**	**Variety**	**Quantity (In No.) produced**	**Quantity (In No.) suppliedced**	**Value (Rs.) of quantity produced**	**Number of recipient/ beneficiaries**				
						General		SC/ST		Grand Total
						M	F	M	F	
VEGETABLES	Cabbage,	WONDER BALL	20000 Nos.	20000 Nos.	20000.00	0	0	0	20	20
	Cauliflower	PUSA SNOW WHITE	20000 Nos.	20000 Nos.	20000.00	0	0	0	20	20
	Broccoli	Green Magic	10000 Nos.	10000 Nos.	10000.00	0	0	0	10	10

FLOWER	Gerbera	(Gerbera RCGH-22)	1500Nos.	1500 Nos.	15000.00	0	0	0	10	10

C. Production of Bio-Products during 2023

Major group/class	Product Name	Species	produced Quantity		Value (Rs.)	Number of Recipient /beneficiaries				
			No	(Kg)		General		SC/ST		Grand Total
						M	F	M	F	
BIOAGENTS										
BIOFERTILIZERS										
1										
BIO PESTICIDES										
1										

D. Production of livestock during 2023

Sl. No.	Type/ category of livestock	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries				
			(Nos)	Kgs		General		SC/ST		Total
						M	F	M	F	

3.6. Literature Developed/Published (with full title, author & reference) during 2023

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.): _____

(B) Articles/ Literature developed/published

Item	Title /and Name of Journal	Authors name	Number of copies	
			Produced/ published	Supplied / distributed
Popular article	Construction of Jalkund for hill agriculture	Meghna Sarma&Mokidul Islam	Submitted to Intensive Agriculture(Accepted,2023)	

	Effect of climate change on weed flora shift	Meghna Sarma&Mokidul Islam	Biotica Research Today, Jan,2024,6(1):36-38.	
	Popular article on Plant response to temperature in various crop growth stages	Meghna Sarma&Mokidul Islam	The Agriculture,Vol-2,Sept,2023,pp-97-101	
	Vermicomposting for sustainable agriculture	Meghna Sarma&Mokidul Islam	The Agriculture,Vol-3,Dec,2023,pp-421-424	
Reports	Annual Action plan 2023 of KVK, Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	Annual report 2023-24 of NICRA KVK, Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	Annual Action plan 2023-24of NICRA KVK, Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	Monthly progress report of KVK Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	Monthly progress report of NICRA KVK Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	Quarterly progress report of KVK Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	Quarterly Monitorable target report of KVK Ri-Bhoiby Senior Scientist & Head, Staff of KVK			
	Half yearly report KVK Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	TSP /STC Annual Report of KVK Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	Natural Farming Annual Report of KVK Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
	SAP Annual Report of KVK Ri-Bhoi by Senior Scientist & Head, Staff of KVK			
Popular article	Area and distribution of problematic soils in India	Meghna Sarma&Mokidul Islam	The Agriculture,Vol-3,Jan,2023,pp-139-141	
Popular article	Types of Maize and its production technology"	Meghna Sarma&Mokidul Islam	The Agriculture ,Vol-2,January, 2023.pp-6-9.	
Research paper	Impact assessment of FLD for popularization of fingermillet in Ri-Bhoi district of Meghalaya	Meghna Sarma&Mokidul Islam	Journal of Agrisearch,10(3):213-216.Sept,2023	
Research paper	Quality Protein Maize (QPM): Impact Assessment in Ri-Bhoi district of Meghalaya	Meghna Sarma&Mokidul Islam	Journal of community mobilization and sustainable development(Accepted Dec,2023)	
Leaflet	Natural farming (Local language)	Meghna Sarma&Mokidul Islam		150
Journals	Aqua-rice- Integrated Farming System- A Sustainable Farming for Enhancing farmers Income	BankitkuparMukhim, M Islam, MoloySarmaBarua&ElgivaWanshnong		300
Journals	Fish health management in hill aquaculture: Best practices and strategies	Chandan Debnath, BankitkuparMukhim, Tasso Tayung, Sanjay Kumar Das,		150

		Sandeep Ghatak		
Leaflet	Soil Health Card (SHC): A boon for Enhancing Soil Productivity:	P. Bordoloi, M.M. Islam, M. Sarmah Baruah, E. Wanshnong (2023) Published by ICAR-KVK Ri-Bhoi, ICAR (RC) for NEH Region, Umiam, Meghalaya.		

N.B. Please enclose a copy of each. In case of literature prepared in local language, please indicate the title in English

(C) Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number produced
1.	Documentary Video Film	IFS development	5
	Documentary Video Film	Aqua rice integrated farming system- A sustainable farming for enhancing farmers income	5

24.7. Success stories/Case studies, if any (two or three pages write-up on each case with suitable action photographs)

3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year

3.9 Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK

3.10 Indicate the specific training need analysis tools/methodology followed for

3.11 Field activities

i. Number of villages adopted: 25

ii. No. of farm families selected:52

iii. No. of survey/PRA conducted: Nil

3.12. Activities of Soil and Water Testing

Status of establishment of Lab :
1. Year of establishment :2016
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment			Qty.	Cost
	S&WT lab	Mini lab/ Mridaparikshak	Manufacturer		
1		2			
Total					

3. Details of samples analyzed (2023) :

Details	No. of Samples analysed	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples				
Water Samples				
Plant Samples				
Petiole Samples				
Total				

1. Details of Soil Health Cards (SHCs) (2023)
   a. No. of SHCs prepared:
   b. No. of farmers to whom SHCs were distributed:
   c. Name of the Major and Minor nutrients analysed:
   d. No. of villages covered:

3.13. Details of SMS/ Voice Calls sent on various priority areas

Message type	Crop		Livestock		Weather		Marketing		Awareness		Other Ent.		Total	
	No. of Message	No. of Ben eficiary	No. of Message	No. of Benef iciary	No. of Message	No. of Benef iciary	No. of Message	No. of Benefi ciary	No. of Message	No. of Benef iciary	No. of Message	No. of Benef iciary	No. of Message	No. of Benefi ciary
Text only	407	406	153	200	0	0	0	0	25	25	65	65	650	696

Voice only														
Voice and Text both														
Total	407	406	153	200	0	0	0	0	25	25	65	65	650	696

3.14 Contingency planning for 2023

a. Crop based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Proposed Measure	Proposed Area (In ha.) to be covered	Number of beneficiaries proposed to be covered		
			General	SC/ST	Total

a. Livestock based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Number of birds/ animals to be distributed	No. of programmes to be undertaken	No. of camps to be organized	Proposed number of animals/ birds to be covered through camps	Number of beneficiaries proposed to be covered		
					General	SC/ST	Total

4.0. IMPACT

4.1. Impact of KVK activities (Not to be restricted for reporting period only)

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

4.2. Cases of large scale adoption

(Please furnish detailed information for each case)

4.3 Details of impact analysis of KVK activities carried out during the reporting period

5.0. LINKAGES ESTABLISHED

5.1 Functional linkage with different organizations established during 2021

Name of organization	Nature of linkage
Meghalaya State Fisheries Research and Training Institute, Mawpun ,	Subject Matter Expert
1. ATMA, Ri Bhoi District Nongpoh	Training & farmers Scientist Interactions, short term research .For undertaking demonstration on Lakadong turmeric in Jirang block of the district. KVK Ri Bhoi and ATMA Ri Bhoi district, Nongpoh organized a district level kisan mela on the theme, "Creating awrenss among farmers about the latest technologies for increasing their farm income".
2. FXB India Suraksha (NGO), Mawroh, Nongpoh	For undertaking demonstration and training programmes.
3. IARI, Pusa, New Delhi	For dissemination of their technologies suitable for NEH Region. Received various vegetable seed materials for distribution and popularization among farmers.
4. VPKAS, Almora	For dissemination of their technologies suitable for NEH Region. Received various vegetable seed materials for distribution and popularization among farmers.
5. IIHR, Hessargahta	Training, inputs & demonstration .For dissemination of their technologies suitable for NEH Region. Received various vegetable seed materials for distribution and popularization among farmers. Training for KVKs staff and progressive farmers Technologies of ICAR – IIHR suitable for NEH Region.
6. Horticulture and Soil Science unit of Division of System Research and Engineering (DSRE), ICAR NEH, Umiam, Meghalaya	For farmers programme at institute level.
7. DDM NABARD, Nongpoh Ri Bhoi district	For initiation of process to form FPOs'.
8. ICAR – Indian Institute of Agricultural Biotechnology, Ranchi, Jharkhand	For establishing 5 numbers of naturally ventilated polyhouses in the farmers field.
9. NCDC, Regional Office, Guwahati	For establishing FPO's in Ri Bhoi district.
10. ASCI New Delhi	KVK Ri Bhoi as training partner for conducting skill development training programme under ASCI QP Mushroom Grower, Floriculturist protected cultivation & Aquaculture Worker
11. CIH, Medziphema Nagaland	Training & inputs. Conducting 3 days training on Doubling farmers income through holistic approach in cultivation of horticultural crops
12. NBPGR RS, Umiam	Training, Melas. Biodiversity Fair Cum Plant Genetic Resources Awareness Camp
13. IARI, New Delhi	Inputs. Popularization of IARI varieties in North East Programme

14. Directorate of Coldwater Fisheries Research (DCFR), Bhimtal, Uttrakhand	Training & inputs. Training programme of Fish Farming
15. MANAGE Skill Training For Rural Youth	Training& inputs .Training for Rural youth on Production of Biopesticides; on Post harvest activities of fish handling and processing of fishes and Fish rearing and management
16. DAO/DHO	Meeting/training /demonstrations, field visit, joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration
TSP ICAR NEH Region	Meeting/training /demonstrations, field visit, joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies during 2023

Name of the scheme/ special programme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
CBBO/FPO	Trainings and other activities related to Promotionof FPO by KVK Ri Bhoi	2023-24	NCDC	1,00,000
SwachhtaAbiyan (Special Campaign 2.0)	SwachhtaAbiyan (Special Campaign 2.0)	16-31.10.2023 January 2024	Swatchata Action Plan	48,810.00
International Women's Day	International Women's Day	08.03.2024		
Mahila Kisan Diwas	Mahila Kisan Diwas	15.10.2023		
Fertilizer application awareness programme	Fertilizer application awareness programme	22/10/2023		
World Water Day	World Water Day	22/03/2024		
ICAR foundation day	ICAR foundation day	16/07/2023		
Constitution Day at KVK Ri Bhoi	Constitution Day at KVK Ri Bhoi	26/11/2023		
National campaign on poshanabhiyan, nutri-garden & tree plantation	National campaign on poshanabhiyan, nutri-garden & tree plantation	17/09/2023		
World Environment day Celebration	Environment day celebration and tree plantation campaign	05/06/2023		

Swachhta Campaign (Pakhwara)	Swachhta Campaign (Pakhwara)	1-31st Dec 2023		
SwachhtaDiwas	Kisan Samman Sammelan	23/12/2023		
Training in collaboration with ATARI & IIPR	Training cum demonstration in collaboration with IIPR	2023-24	ATARI –IIPR	61,000.00
NARI	Training cum demonstration under NARI	2023-24	NARI	80,000.00
KSHAMTA	Training cum demonstration under KSHAMTA	2023-24	KSHAMTA	80,000.00
Natural Farming	Training cum Demonstration under Natural Farming	2023-24	Natural Farming	1,30,000.00
CIFE Mumbai	Training cum demonstration under CIFE Mumbai	2023-24	CIFE-Mumbai	2,82,625.00
CBBO/FPO				
Strategic Strengthening of meat value chain of Meghalaya for self-reliance to ensure food safety and livelihood improvement of tribal beneficiaries of Ri-Bhoi, West Khasi Hills, West Garo Hills. S.O.RC/TSP/1/HQ/2020-21/02 dt.17.03.21	Training, demonstrations, awareness programme and other farmers related activities	2021-24	TSP-Butcher Kits	Rs.13.025lakhs

Strategically Improving Animal Health through Clinical Support emphasizing recent Animal Health Technological Interventions for tribal farmers of Meghalaya. S.o. RC/BP/AH/TSP/ 2020 /421 dt.31.03.2021	Training, demonstrations, awareness programme and other farmers related activities	2022-24	TSP-Animal health	11.10 lakhs
Outscaling of Natural Farming through KVKs	Training, demonstrations, awareness programme and other farmers related activities	2022-23	Natural farming	Rs.2,62,944
World Soil Day	World Soil Day	5/12/2023	Natural farming	

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district yes

Sl. No.	Programme	Nature of linkage	Remarks
1	Training	Training & farmers Scientist Interactions, short term research .For undertaking demonstration on Lakadong turmeric in Jirang block of the district. KVK Ri Bhoi and ATMA Ri Bhoi district, Nongpoh organized a district level kisan mela on the theme, "Creating awrenss among farmers about the latest technologies for increasing their farm income".	Trainings demonstration and millet recipe was conducted in collaboration with ATMA nongpoh

5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any

5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks

5.6 MGMG of KVKs during 2023

No of Villages	Participants		No of Visit made	Participants		No of demonstration	Participants		No of Farmers meeting	Participants	
	SC/ST	Others		SC/ST	Others		SC/ST	Others		SC/ST	Others

5.7 Natural Farming during 2023

No. of demonstrations conducted	Participants		No. Trainings	Participants		No. of Awareness Programs	Participants	
	SC/ST	Others		SC/ST	Others		SC/ST	Others
2(2.0 ha)	12(M)+28(F)=40		6	56(M)+140(F)=196		5	115(M)+203(F)=318	

5.8 Achievements under DAMU KVKs during 2023 (only selected KVKs)

No of KVKs	Beneficiaries	Advisories given (no)	Training organised (no)	Dissemination of Advisories

5.9 Format for Current Progress of Cluster Demonstrations on Organic Farming under PKVY during 2023 (only selected KVKs)

No. of clusters formed	No. of Farmers registered	Area covered (Ha)	No. of LRP identified	Number of clusters linked to certification agency	No. of clusters in which organic production started	Name of crops which are produced organically in clusters

Number of clusters linked to markets	Mobilization/ awareness camps organized		Farmers meetings organized		Training programmes organized		Exposure visits organized	
	No. of activities	No. of farmers	No. of activities	No. of farmers	No. of activities	No. of farmers	No. of activities	No. of farmers

6.0 Report on Agri Drone project (only selected KVKs)

S.No.	Name on the Project Implementing Centre (PIC)	No. of Kisan Drones Sanctioned	Target Area for Kisan Drone Demonstration (Ha)	No. of Kisan Drones Purchased by the PIC	Make and Model of Purchased Kisan Drone	Purchased cost of each drone (Rs.)	No. of Kisan Drone Demonstration organized	Date and Place of Kisan Drone Demonstration	Operation carried out (Pesticide/Nutrient application)	Area Covered under the Kisan Drone Demonstration	Number of farmers participated	Advantages of using Kisan Drones as observed during the demonstrations	Problems any encountered in Drone Purchase and their Demonstration	Additional Remarks if any

6.1 Status of NARI during 2023

Name of Nutri-SMART Village	T1	T2	T3	Area (ha)	No of Beneficiaries	Name of crop	T1			T2			T3		
							Name of variety	Yield (q/ha)	Consumption (kg)	Name of variety	Yield (q/ha)	Consumption (kg)	Name of variety	Yield (q/ha)	Consumption (kg)
Umsaitprah	-	-	-	0.05	10	Green leafy vegetables Tomato Cucumber chilies	Local Hybrid Hybrid Hybrid	30kgs 55kgs 68kgs 65	20 35 45 35						
Khweng				0.05	20	Green leafy vegetables Tomato Cucumber chilies	Local Hybrid Hybrid Hybrid	78kgs 40kgs 67kgs 80	45 35 43 39						

7. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2023

7.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit (Name and No.)	Year of estd.	Area	Details of production			Amount (Rs.)		Remarks
				Variety/ species/ breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1	Nutritional garden under NARI	2019	300m^2	Vegetable production	Vegetable production	500 kg		Rs 6000.00 per annum	Sold as per ICAR recommended rate
2	Naturally ventilated polyhouse	2020	12x8 m, 96 m^2	Broccoli Cabbage Cauliflower Chilli	Vegetable seedlings	25000		7800.00	Distributed to farmers
	Hydroponic	2021	48 m	Lettuce	Vegetable production	80 kg/year		Rs 3200.00 per annum	Sold as per ICARrate
	Floriculture production under low cost Protected cultivation		100 m^2	Gerbera	Flower seedlings	15500		-	Distributed to farmers
	Mushroom unit	2018	20x8m	Florida	Fresh mushroom	82kg/unit	12000	14400	
	Vermicompost unit	2018	5x2.5x1		5000 kg	5000 kg/unit	28900	42600	

7.2 Performance of instructional farm (Crops) including seed production during 2023

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	

Turmeric	April	December	250 m^2	Megha – Turmeric-1 & Lakadong	Powdered & seed material	2.0 Quintal		12000.00	Distributed to farmers and utilization in farm and Demonstration purposes in farm
Ginger	April	December	250 m^2	Nadia	Seed material	9.0 Quintal		54000.00	Distributed to farmers and utilization in farm and Demonstration purposes in farm
Legumes	November	February	250 m^2	Pea	Vegetable	80 kg		2400.00	Sold as per ICARrate
Cereal	April	June -July	250 m^2	Maize	Seeds	3.0 Quintal		18000.00	Distributed to farmers and utilization in farm and Demonstration purposes in farm
Oilseeds	Oct-Nov	February	250 m^2	Toria	Seeds	5 kg		-	Distributed to farmers and utilization in farm and Demonstration purposes in farm

Jalkund			3x2x1m						utilization in farm for live saving and micro irrigation and Demonstration purposes in farm

7.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.) during 2023

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1.	Vermi compost unit	9.0 q			Distributed to farmers and utilization in farm and Demonstration purposes in farm

7.4 Performance of instructional farm (livestock and fisheries production) during 2023

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed/ species	Type of Produce	Qty.	Cost of inputs	Gross income	

7.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Unit/ structure during 2023

Date	Title of the training course	Client (PF/RY/EF)	No. of Courses	No. of Participants including SC/ST		
				Male	Female	Total

7.6. Utilization of hostel facilities (Month-Wise) during 2023

Accommodation available (No. of beds):

Months	Title of the training course/Purpose of stay	Duration of Training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Total					

Note: (Duration of the training course X No. of trainees)=Trainee days

8. FINANCIAL PERFORMANCE

8.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location/ Branch	Account Number
With Host Institute	NA	NA	NA
With KVK	State Bank of India	ICAR Complex Branch, Umiam-793103	32427092435
Natural Farming KVK-RiBhoi		ICAR Complex Branch, Umiam-793103	42368437133
Revolving Fund	State Bank of India	ICAR Complex Branch, Umiam-793103	10228761292

8.2 Utilization of funds under CFLD on Oilseeds and Pulses (Rs. In Lakhs) if applicable during 2023

Item	Released by ICAR/ATARI (in lakh)		Expenditure (in lakh)		Unspent balance as on 31st March, 2018
	Amount	Amount	Amount	Amount	
TOTAL					

8.3 Utilization of KVK funds during the year 2023

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	Pay & Allowances	255.82112	255.82112	255.82112
2	Traveling allowances	2.90	2.90	2.90
3	Contingencies	32.10	32.10	32.10
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments			
	Working Capital			
C	Meals/refreshment for trainees			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
K	KSHAMTA	0.80	0.80	0.80
L	NARI	0.80	0.80	0.80
M	HRD	0.50	0.50	0.50
TOTAL (A)		**292.92112**	**292.92112**	**292.92112**
B. Non-Recurring Contingencies				
1	Works	101.46	101.46	101.46
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler, please specify)			

4	Library (Purchase of assets like books & journals)			
TOTAL (B)		101.46	101.46	101.46
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		**394.38112**	**394.38112**	**394.38112**

8.4 Status of Revolving Fund (Rs. in lakhs) for last three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance with KVK (in lakh)
January to December 2023	356545	32441	10499	378487

Note: No KVK must leave this table blank

8.5 Please include information which has not been reflected above. (Write in detail)

8.6 Constraints and Suggestion (Provide point-wise if any, for recommendation)

(a) Administrative:Lack of administrative staff strength for smooth functioning of activities

(b) Financial:Less amount and Untimely release of fund for various activities

(c) Technical:Lack of trained competent personnel

(Signature)
Sr. Scientist cum Head