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
	Office	FAX	
KVK Zunheboto, Nagaland University, Lumami, P.O. Lumami PIN-798627			kvkzunheboto@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Vice-chancellor, Nagaland University, Lumami PIN-798627	(0369)2268248	(0369)2268248	vc@nagalanduniversity.ac.in

1.3. Name of the Principal Scientist & Head with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Rakesh Kumar Chaurasia		09856072100	rchaurasia_2004@yahoo.co.in

1.4. Year of sanction: 2005

1.5. Staff Position **(As on 31st December 2023)**

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Pr. Scientist & Head	Dr. Rakesh Kumar Chaurasia	Principal Scientist & Head	Animal Science	Level 14	172200	24/04/2007	Permanent	OBC
2	Subject Matter Specialist	Wapangtoshi Longkumer	CTO	Plant Protection	Level 12	96900	17/04/07	Permanent	ST
3	Subject Matter Specialist	Dr. Kundan Kumar	SMS	Agril. Extension	Level 10	87400	19/04/07	Permanent	Others
4	Subject Matter Specialist	Edenly Chishi	CTO	Horticulture	Level 12	96900	20/04/07	Permanent	ST

5	Subject Matter Specialist	Dr. Visakho Shunyu	CTO	Agronomy	Level 12	96900	14/05/07	Permanent	ST
6	Computer Programmer	Imnameren	Sr. TO (Computer)	IT	Level 10	67000	02/04/07	Permanent	ST
7	Farm Manager	Naropongla	T.O. (Farm)	Soil and water conservation	Level 6	52000	17/10/12	Permanent	ST
8	Programme Assistant	Narola Anichari	T.O. (Home Science)	Home Science	Level 6	52000	25/10/12	Permanent	ST
9	Stenographer	Tiarenla	Jr. Steno. Cum Compt Operator		Level 4	35300	3/10/12	Permanent	ST
10	Driver	Wepretso Marhu	Driver cum mechanic		Level 4	38600	22/06/07	Permanent	ST
11	Driver	Toito N Sumi	Driver cum mechanic		Level 3	21700	01/05/2023	Permanent	ST
12	Supporting staff	Kekhriengulie	Skilled Supporting staff		Level 2	31100	2/4/07	Permanent	ST
13	Supporting staff	Shumben Patton	Skilled Supporting staff		Level 2	31100	2/4/07	Permanent	ST

Note: No column in the table must be left blank

1.6. a. Total land with KVK (in ha) : 20

b. Total cultivable land with KVK (in ha):19

c. Total cultivated land (in ha):6

S. No.	Item	Area (ha)
1	Under Buildings	1
2.	Under Demonstration Units	1.006
3.	Under Crops (Cereals, pulses, oilseeds etc.) (Pl. specify separately) i.Cereal ii.Pulses (Blackgram, Greengram, Field pea iii. Toria	0.04
4.	Under vegetables	0.005
5.	Orchard/Agro-forestry	2
6.	Others (specify)	2

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	April 2014	550	110.51			
2.	Farmers Hostel							
3.	Staff Quarters (2)	ICAR	April 2014	144				
4.	Demonstration Units							
5	Fencing							

B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bolero	NL 10 C- 758	2017	750696	78023	Working
Mini Tractor with trolley	NL 07- A2068	2006	369126/-	395	Working
Power tiller		2010	296200/-	310hrs	Working
Power tiller		2016	197500/-	New	Working

C) Equipments & AV Aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Camera	2017	51300/-	Working
Photo copier	2010	95000/-	Needs Repairing
Generator	2012	337000/-	Needs Repairing
PC	2016	43590/-	Not working
PC	2016	43590/-	Needs replacement
PC	2016	43590/-	Needs replacement
Laptop	2016	47590/-	Working
Laptop	2017	76700/-	Needs replacement
Scanner	2016	9350/-	Working
Generator	2016	129800/-	Working
PC	2021	52000/-	Working
PC	2021	52000/-	Working
LCD Projector	2020	45000/-	Working

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

Date	Name of Participants	Designation	Salient Recommendations	Action taken on last SAC recommendation
13/12/2023	Prof. J. K. Patnaik	Vice Chancellor	To provide ginger seeds so that farmers can grow ginger and feed the ginger factory (may include ginger programme in Action Plan)	**Coffee Plantation may be given priority:** Initiated at 3 villages viz, Phishumi, Lotisa old and Lotisa New
	Dr. L. Daiho	Dean	To reach remote villages of Zunheboto district	**Rhizobium in maize to be replaced by Azatobacter/Azospirilum:** Done
	Dr. K. K. Jha	Professor & REC Incharge	To have Farmers Hostel facilities at KVK for farmers from far villages for lodging while attending programme	**Promotion of Soybean through Soybean Festival**: Not initiated due to lack of fund
	Dr. T. Gohain	Professor	To provide seeds/saplings at right season	**Promotion of composite variety of maize:** Done
	Dr. Nizamuddin	Professor	To have exposure visit for farmers	**Promotion of Technology developed by SASRD, NU:** Initiative has been taken to collect all available technologies from SAS through REC
	Dr. Pankaj Neog	Associate Professor	Variety should be replace by breeds in animal science	**Inclusion of AICRIP Technology for OFT in Horticulture:** Incorporated in 2024 Action Plan
	Dr. Narola Pongener	Associate Professor	Spacing of tomato 1.5m X 1m is very high and change to recommended spacing of 90cm X 60cm	**Data pertaining to earlier OFT suggested by SASRD to be furnished:** Was shared and will be shared
	Dr. Marlan	DVO	while procuring seeds and planting material from outside the KVK should be Careful and screening for disease and pest infested should be	**Management of Anthracnose in King Chilli to be included:** Has proposed in last year Annual Zonal Workshop but has selected for management of whitefly on king chilly

			done	
	Dr. Azeze Seyie	Scientist	KVK may send seeds/planting material to SAS in sealed polybag for analysis of infestation before distribution to farmers	**Collaboration with NU SASRD for OFTs and sharing of data.:** Initiative has been taken to collect all available technologies from SAS through REC
	Mr. Tohoshe	Fisheries Incharge	To have collaborative programme with AICRP honey bee SAS, NU	**Needs to work on recognition from state and central level :** The KVK is trying its best to carry out the activities which will give recognition to KVK.
	Dr. R.K. Chaurasia	Principal Scientist & Head	The name king chilly to be replaced with Naga Mircha	
	Mr. Wapangtoshi Lkr	Chief Technical Officer	To provide name of the villages where activities/assistance are conducted by KVK in the discipline of animal science	
	Mrs. Edenly Chishi	Chief Technical Officer	To give aid only to those farmers who are really doing farming	
	Dr. Visakho Shunyu	Chief Technical Officer	To look into ginger production and include in action plan	
	Dr. Kundan Kumar	Subject Matter Specialist	To enlarge the use of technology developed by SAS	
	Dr. Nongothung Ezung	Subject Matter Specialist	To look into the wide area of the district (eastern part of the district)	
	Mr. Imnameren	Senior Technical Officer		
	Mrs. Naropongla	Technical Officer		
	Mrs. Narola Anichari	Technical Officer		
	Mrs. Tiarenla	Jr. Steno		
	Mr. Huluto Aye	Farmer		

	Mr. Kakuto Assumi	Farmer		

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

DATE: 13/12/2023 **VENUE: KVK OFFICE/HYBRID MODE**

SL. NO.	NAME	DESIGNATION	DEPARTMENT
1	Prof. J. K. Patnaik	Vice Chancellor	Nagaland University
2	Dr. L. Daiho	Dean	SAS, Nagaland University
3	Dr. K. K. Jha	Professor & REC Incharge	SAS, Nagaland University
4	Dr. T. Gohain	Professor	SAS, Nagaland University
5	Dr. Nizamuddin	Professor	SAS, Nagaland University
6	Dr. Pankaj Neog	Associate Professor	SAS, Nagaland University
7	Dr. Narola Pongener	Associate Professor	SAS, Nagaland University
8	Dr. Marlan	DVO	Veterinary
9	Dr. Azeze Seyie	Scientist	ICAR, NEH, Jharnapani
10	Mr. Tohoshe	Fisheries Incharge	Fisheries
11	Dr. R.K. Chaurasia	Principal Scientist & Head	KVK, Zunheboto
12	Mr. Wapangtoshi Lkr	Chief Technical Officer	KVK, Zunheboto
13	Mrs. Edenly Chishi	Chief Technical Officer	KVK, Zunheboto
14	Dr. Visakho Shunyu	Chief Technical Officer	KVK, Zunheboto
15	Dr. Kundan Kumar	Subject Matter Specialist	KVK, Zunheboto
16	Dr. Nongothung Ezung	Subject Matter Specialist	KVK, Zunheboto
17	Mr. Imnameren	Senior Technical Officer	KVK, Zunheboto
18	Mrs. Naropongla	Technical Officer	KVK, Zunheboto
19	Mrs. Narola Anichari	Technical Officer	KVK, Zunheboto
20	Mrs. Tiarenla	Jr. Steno	KVK, Zunheboto
21	Mr. Huluto Aye	Farmer	Tichipami village
22	Mr. Kakuto Assumi	Farmer	Litta New village

Proceedings of 14th SAC meeting of KVK, Zunheboto, Nagaland University

The 14th Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, Zunheboto Nagaland University was held on 13/12/2023 in online mode at 11:00 am under the Chairmanship of Prof. J.K. Patnaik, Vice Chancellor, Nagaland University. Dean SAS, Prof. L. Daiho, ICAR for NEH representative Dr. Azeze Seyie, HODs of different department of SAS and Agri. and allied departments of Zunheboto district, farmers representative male and female , KVK Principal scientist and Head along with Technical staffs attended the programme .Dr. Rakesh Kumar Chaurasia , Principal Scientist and Head welcomed all the members. The agenda items included the presentation of Annual Report 2022-23 along with Action taken report of last SAC by Dr. Kundan Kumar and Annual Action Plan 2024 of KVK by Dr. Visakho Shunyu CTO (Agronomy & GPB) to SAC members for their valuable suggestions/ recommendations which can be taken up by the KVK for improving the Agri. and allied sectors in the district.

MEETING MINUTES

Sl. No.	Agenda Items	Resolution/Recommendations	Recommended by	Action
1.	KVK/Lum/14th SAC 13/12/2023 1.Annual report	Annual Report 2022-2023 and action taken report of last SAC was presented by Dr. Kundan Kumar (SMS, Agril Ext)		
2.	KVK/Lum/14th SAC 13/12/2023 2.Annual action Plan	Annual Action Plan 2024 of KVK was presented by Dr. Visakho Shunyu CTO (Agronomy & GPB)		
	A.	To provide ginger seeds so that farmers can grow ginger and feed the ginger factory (may include ginger programme in Action Plan)	Mr.L.Holuto Ayemi	CTO, Horti
	B.	To reach remote villages of Zunheboto district	Mr.L.Holuto Ayemi	All subject specialist
	C.	To have Farmers Hostel facilities at KVK for farmers from far villages for lodging while attending programme	Mr.L.Holuto Ayemi	PS &Head
	D.	To provide seeds/saplings at right season	Mr.L.Holuto Ayemi	All subject specialist

	E.	To have exposure visit for farmers	Mr.L.Holuto Ayemi	All subject specialist
	F.	Variety should be replace by breeds in animal science	Dr. L. Daiho	SMS, AS
	G.	Spacing of tomato 1.5m X 1m is very high and change to recommended spacing of 90cm X 60cm	Dr. L. Daiho	CTO, Horti/PP
	H.	while procuring seeds and planting material from outside the KVK should be Careful and screening for disease and pest infested should be done	Dr. L. Daiho	All subject specialist
	I.	KVK may send seeds/planting material to SAS in sealed polybag for analysis of infestation before distribution to farmers	Dr. L. Daiho	All subject specialist
	J.	To have collaborative programme with AICRP honey bee SAS, NU	Dr.K.K Jha	CTO, PP
	K.	The name king chilly to be replaced with Naga Mircha	Dr. Azeze	CTO, PP
	L.	To provide name of the villages where activities/assistance are conducted by KVK in the discipline of animal science	Dr. Marlan	SMS, AS
	M.	To give aid only to those farmers who are really doing farming	Dr. Marlan	SMS, AS
	N.	To look into ginger production and include in action plan	V.C.	CTO, Horti
	O.	To enlarge the use of technology developed by SAS	V.C.	All subject specialist
	P.	To look into the wide area of the district (eastern part of the district)	V.C.	All subject specialist

Concluding Remark by Chairman

Honorable Vice Chancellor in his concluding remarks appreciated the KVK for the activities carried out during 2022-23 and stress on the following points which KVK needs to do in the coming year.

1. To look into ginger production and include in action plan.
2. To enlarge the use of technology developed by SAS.
3. To look into the wide area of the district (eastern part of the district).

The programme ended with vote of thanks by Mrs. Edenly Chishi (CTO, Horti.)

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
2	Agri + horti + Animal husbandry
3	Agri + Animal husbandry

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

Sl. No	Agro-climatic Zone	Characteristics
1	Agro Ecological Sub Region (ICAR)	Warm to hot moist (humid to per humid eco sub region), Tropical to sub-tropical (D2 A9)
2	Agro-Climatic Zone (Planning Commission)	Eastern Himalayan Region
3	Agro Climatic Zone (NARP)	Upper Brahmaputra Valley zone, Sub tropical hill zone (2,3)

2.3 Soil types

Sl. No	**Soil type**	**Characteristics**	**Area in ha**
1	Deep sandy loam to loamy soils	Akhuhuta series, Fine, mixed, thermic, typic Dystrudepts	36600
		Langposeries , Fine loamy, mixed, thermic, Dystric Eutrudeps	2040

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

Sl. No	**Crop**	**Area (ha)**	**Production (ton)**	**Productivity (Qtl /ha)**
1	Jhum paddy	9200	18321	19.91
2	WTRC Paddy	5850	16910	28.9
3	Maize	10115	20080	19.85
4	Small millet	821	931	11.3
5	Rajma/Kholar	948	1212	12.7
6	Rice beans/ Naga Dal	482	553	11.4
7	Pea	602	669	11.1
8	Soybean	5986	7586	12.6
9	Perila	225	135	6
10	Rapeseed mustard	2124	2169	10.2

Source: Statistical handbook of Nagaland 2021

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
January	2.4	15.1	4.3	76.6

February	2.3	16.4	5.8	80.2
March	89.5	21.0	9.8	73.5
April	45.9	22.9	14.9	73.1
May	195.4	22.3	13.7	74.6
June	340.8	23	17.2	83.3
July	648.5	22.5	17.9	88.6
Aug	442.9	22.5	17.5	88.9
Sept	180.5	24.9	18.2	82.6
Oct	105.7	22.6	15.5	79.3
Nov	42.8	20.8	12.9	72.1
Dec	34.7	20.3	11.3	66.5

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

Category	Population	Production	Productivity
1. Cattle	11,201		
2. Mithun	23,123 (total Nagaland population)		
3. Poultry (Fowl)	2,65,5157 (total Nagaland population)		
4. Pig	39,738		
5. Buffalo	9		

Note: Pl. provide the appropriate Unit against each enterprise

2.7 Details of Operational area / Villages (2022)

Sl. No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprises	Major problem Identified	Identified thrust area

1		Akuluto, Atoizu, Suruhuto, Agunato, Akuhaito	Khrimtomi, Alaphumi,,Litta Old, Lokobomi, Akuhaito, Sukhomi,, Tichipami, Sukhai,, Litta new, , Zunheboto, Naghuto New, Naghuto old, Keltomi, Shichimi, Zaphumi, Sumi settsu, Lotisa Old, Mapulumi, Sutemi, Lotisa new, Alaphumi, Phushumi, Asukhomi, Surumi village , Lumithsami, Philimo village, lumami, Ajiquami,	Pineapple, banana, orange, chilli, colocassia, ginger, maize, paddy, Soybean, cucumber, Large cardamom, Kiwi, Ginger, Tomato, Bambooshoot, Chilli, Soybean, Gooseberry, Citrus, Chow chow, Poultry, Piggery, Garden pea, khasi mandarin	1. Lack of improved Varieties and cultivation practices. 2. Lack of post harvest management 3. Poor performance by local indigenous chickens 4. Poor performance by indigenous variety of pigs, feeds 5. Irrigation facilities 6. Fall army worm 7. Damping off of chillies 8. Low yield and poor quality in local varieties, not practising crop rotation for subsequent crop 9.Non use of organic source of nutrients	1. Production of horticulture crops 2. Value Addition 3. Poultry production 4. Piggery production 5. High capacity energy water pump for custom hiring 6. Improvement of existing farming system with scientific intervention 7. Straw and crop residue management

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	4	6	2	2	35	43
Horticulture	3	3	17	100	2	2	10	10

Home Science	2	2	20	30	2	2	20	30
Plant Protection	2	2	6	6	2	2	6	6
A.Sc	2	4	20	40	2	1	10	10
Agril. Extension	1	0	10	0	1	1	10	10
Total	**12**	**13**	**77**	**182**	**11**	**10**	**91**	**109**

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								
Farmers								
Rural youth								
Extn. Functionaries								
Hort								
Farmers								
Rural youth								
Extn.								

Functionaries								
PP								
Farmers								
Rural youth								
Extn. Functionaries								
Total								

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

Note: Target set during last Annual Zonal Workshop

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.
1	Cereal production	Maize	Long duration, low yield of local varieties.	On farm testing on VLQPM59		Package of practices of maize		Field visit	2 kg Seeds supplied

2	Oil seed production	soybean	Low yield of local varieties.	On farm testing on the performance of soybean var. MACS-1460		Package of practices of soybean		Field visit	2kg Seeds supplied
3	Crop production	Maize	Long duration, low yield of local varieties.		Front line demonstration on the performance of Maize var. HQPM5	Package of practices of maize		Field visit, field day.	150 kg Seeds supplied
4	Oil seed production (CFLD)	soybean	Low yield		Front line demonstration on the performance of soybean variety JS9560	Package of practices of soybean		Field visit, field day.	400 kg Seeds supplied
5	Vegetable production	Tomato	Low yield and poor quality in local variety	Varietal trial of high yielding tomato var. Arka Samrat		Production technology of high yielding tomato			500g seeds
6	Vegetable production	Garden pea	Poor quality soil due to lack of soil rotation for the subsequent crop and non use of organic source of nutrients	Varietal evaluation on organic production of garden pea KSP-110 for enhancing the income of farmers					20kg seeds
7	Spice production	Ginger	Low yield due to non use of micro nutrients	OFT on IISR micronutrient mixture for ginger		IISR micronutrient mixture for increasing ginger production			IISR micronutrient mixture 6kg

8	Fruit production	Khasi mandarin	Lack of organic packages of citrus		Demonstration on organic nutrient management in Khasi mandarin orange	Organic Khasi mandarin production.			Organic nutrients, Bordeaux mixture materials, Neem powder, neem oil,Tricho
9	Fruit production	Kiwi	Low yield due to physical damage of flowers and new vegetative growth by heavy rainfall and hailstones		Demonstration on partial protection for organic Kiwi productions	Protected cultivation for kiwi production			Green shade net 50%
10	Value addition of millet	Millet	Lack of processing	Assessment of value added products from millet		Training on preparation of Millet pancake Training on preparation of Millet cake	-	-	-
11	Value addition of squash	Squash	Wastage of squash due to lack of preservation technique.	Squash pickle –a value added product		Training on preparation of Squash pickle	-	-	-
12	Value addition	Chips	Lack of value addition		Demonstration on Value Added Product of Jackfruit	Training on preparation of jackfruit chips			

13	Value addition	Tutti futti	Wastage of papaya due to lack of value addition		Preparation of value added Papaya Tutti frutti	Training on preparation of papaya tutti frutti			
14	IPM	King chilli	Low productivity due incidence of whitefly infestation	Assessment on management of whitefly on king chilly		IPM on King chilly		Method demonstartions	Saplings, pesticides & traps
15	IPM	Maize	Low productivity due Incidence of Fall Army Worm infestation	Assessment on biological management of Fall Army Worm		IPM on FAW management		Method demonstartions	Bio pesticides
16	Bee keeping	Apic cerena	-	-	Popularisation of Bee keeping	Bee keeping		Method demonstartions	Bee box
17	Mushroom production	Mushroom	-	-	Popularization of Oyster Mushroom	Mushroom Cultivation		Method demonstartions	Spawn,
18	Breed introduction	Vanaraja	Poor performance by indigenous Birds	Introduction and assessment of Vanaraja in backyard system of rearing for in different locations of Zunhebto district		Training on Poultry production and management			Distributed 400 nos of poultry birds
19	Feeding management	Piggery	Poor performance by indigenous variety of pigs	Performance of Hampshire crossbred pigs (50%) under local feeding condition		Training on Piggery production and management		Animal health camp	Distributed 10 piglets

20	Breed introduction	Poultry	Poor performance of local poultry (30%)	Introduction and assessment of Rainbow Rooster in backyard system of rearing in different locations of Zunhebto district		Training on Poultry production and management		Animal health camp	Distributed 250 nos of poultry birds
21	Piggery production	Piggery	Poor performance of indigenous pigs (35%)	Performance of Largewhite Yorkshire crossbreed pigs under local feeding condition in Zunheboto District of Nagaland		Training on feeding management		Animal treatment	
22	Poultry production	Poultry			Popularization of kalinga brown (Dual purpose breed)	Training on Poultry production and management			
23	Agril extension								
2									
3									
4									

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					3					3

Seed / Plant production	1	1								2
Weed Management										
Integrated Crop Management										
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition	1				1					2
Integrated Pest Management	1				1					2
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	3	1			5					9

* *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			1			2
Nutrition Management					1			1
Disease of Management								
Value Addition								
Production and Management		1						1
TOTAL		2			2			4

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)
1	On farm testing on Maize.	Low yield	VLQPM59	Rainfed	2	Enclosed in annexure A						
2	On farm testing on the performance of soybean var. MACS-1460	Low yield	MACS-1460	Rainfed	4	Enclosed in annexure B						
3	Varietal trial of high yielding tomato var. Arka Samrat	Low yield and poor quality in local variety	Tomato var. Arka Samrat	Rainfed	5	Enclosed in annexure C				The yield obtained from the new variety were higher than their local so farmers were satisfied with the technology provided	Good yield was obtained from tomato var. Arka samrat so it can be taken up for FLD.	Technology = 3.9 Farmers practice = 2.72

4	Varietal evaluation on organic production of garden pea KSP-110 for enhancing the income of farmers	Poor quality soil due to lack of soil rotation for the subsequent crop and non use of organic source of nutrients	Garden pea var. KSP-110 FYM 30 t/ha and seed treatment with Rhizobium leguminosa@20 g/kg seed	Rainfed	4	Enclosed in annexure D				Very satisfied with technology provided	It can be taken for FLD	Technology = 4.4 Farmers practice = 3.75
5	OFT on IISR micronutrient mixture for ginger	Low yield due to non use of micronutrients	IISR micronutrient mixture for ginger @5g/lit water sprayed on leaves at 60,90,120 DAP	Rainfed	8	Enclosed in Annexure E				Size of rhizome increased and no incidence of rhizome rot so very satisfied with technology	Yield was found good in sprayed plants than non - sprayed plants so it can be taken up for FLD.	Technology = 4.33 Non sprayed plant = 3.5
6	Assessment of value added products from millet	Lack of processing	Value addition of millet	Millet	3	Enclosed in annexure F				Farmers are ready to adopt the technology	It has been found that this technology is viable, efficient and highly acceptable by the villagers and recommended for further FLD.	B.C ratio-1.4:1

7	Squash pickle –a value added product	Wastage of squash due to lack of preservation technique.	Value addition of squash	Squash	3	Enclosed in annexure G				Farmers are ready to adopt the technology	From the trials conducted it has been found that the technology is acceptable to be adopted for further FLD.	B.C ratio-1.2:1
8	Assessment on management of whitefly on king chilly	Low productivity due incidence of whitefly infestation	T1: Application of imidachloprid @ 2ml/litre of water. T2: Set up of yellow sticky trap T3: Farmers practice (No management practices)	King chilly	3	1.Yield/ ha 2.% infestation	82 8%	76 14 %	59 21%	Satisfied	Recommended for FLD	T1:3.8 T2:3.5 T3:3.0
9	Assessment on biological management of Fall Army Worm	Low productivity due Incidence of Fall Army Worm infestation	T1-Metarhizium anisopliae @ 5g/l of water whorl application at 15-25 DAS + Beauveria bassiana & Bacillus thuringiensis @ 2gm/l	Maize	3	1.Yield/ ha 2.% infestation	74 9%	57 25 %		Satisfied	Recommended for FLD	T1-2.4 T2- 1.8

			T2- Farmers Practice									
10	Introduction and assessment of Vanaraja in backyard system of rearing for in different locations of Zunhebto district	Non availability of good breeds of chicken (35%)	Vanaraja	Poultry	10	ANNEXURE H						
11	Performance of Hampshire crossbred pigs (50%) under local feeding condition	Poor performance of indigenous pigs (30%)	Hampsire	Feeding management	10	ANNEXURE H						
12	Introduction and assessment of Rainbow Rooster in backyard system of rearing in different locations of Zunhebto	Poor performance of local poultry (30%)	Rainbow rooster	Poultry	10	Ongoing						

	district											
13	Performance of Largewhite Yorkshire crossbreed pigs under local feeding condition in Zunheboto District of Nagaland	Poor performance of indigenous pigs (35%)	Yokshire	Piggery	10	Ongoing						

**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*

ANNEXURE A

Parameters of Assessment	**Technology**	**Farmers practice**
Plant height	178 cm	252
Days to 50% tasseling	65	88
No. of cobs/plant	3	3
Average No. of grains/cob	288	208
Seed yield/plant	87g	70g
Seed yield/h	5655 kg	4550 kg

ANNEXURE B

Parameters of Assessment	**MACS1460**	**JS9560**	**Local**
Primary branches/plt	8	6.8	6.2
Plant height (cm)	72	48	56

No. of pod cluster/plt	30.4	31.6	38.6
No. of filled pods/plt	150.8	147.4	144.8
No. of seeds/pod	2.4	2.2	2
No. of seeds/plt	367	325	291
Crop duration (days)	100-103	117-120	139-142
Seed yield/plt (g)	19.55	18.37	13.11

ANNEXURE C

Parameters of Assessment	**Technology**	**Local (Farmers practice)**
Plant height (cm)	134.85	180
No.of fruits/plant	45.5	54.5
Fruit weight (g)	79.28	25
Yield/plant(kg)	3.6	1.36
BC ratio	3.9	2.72

ANNEXURE D

Parameters of Assessment	**Technology**	**Local (Farmers practice)**
Days to maturity (Days)	80	85
Plant height (cm)	46	40
No. of branches (Nos)	9.31	7
No. of pods/ plant	8	6
Pod length (cm)	7	7
Yield m2 (kg)	0.8	0.6
Yield/ ha (t)	8.0	6.0
Net return (Rs)	3,10,000	2,20,000

Annexure E

Parameters	Result in technology demonstrated	Result in farmers practice	
No. of tillers/plant	15.5	11	

Yield /plant(g)=	0.403	0.290	
Yield/ha(t)=	14.1	10.1	
Net return (Rs)=	5,85,775	3,71,250	
B.C. ratio	4.08	2.98	

ANNEXURE- F

Parameters on Assessment

1. 1. Shelf life

- Millet pancake – 1 week
- Millet cake – 3 days

2. Acceptability- Highly acceptable

3. B.C ratio- 1.4:1

4. Sensory acceptability (Sample size-67)

Hedonic scale (9 point)	Appearance (color, shape)	Taste/ flavor	Smell/ odour	Texture/ mouth feel
Like very much	70%	80%	65%	85%
Like Moderately	20%	20%	35%	15%
Like Slightly	10%	NIL	NIL	NIL

ANNEXURE G

Parameters on Assessment

1. Shelf life: 12 months
2. Sensory acceptability (Sample size-67))

Hedonic scale (9 point)	Appearance (color, shape)	Taste/ flavor	Smell/ odour	Texture/ mouth feel
Like very much	85%	90%	78%	60%
Like Moderately	10%	10%	15%	30%
Like Slightly	5%	NIL	7%	10%

ANNEXURE H

Parameters for Assessment	T1: Vanaraja	T2: Farmers practice	% Change
1.Average Body weight Gain at 32nd week (kg)	M=3.1, F=2.8	M= 1.9, F=1.9	M=362.6, F=2.8-
2. Average Daily gain at 32nd week (g/d)	M= 152 , F=134	M=91, F=75	M=67, F=78.6
3.Mortality rate	3%	3%	0
4.Age at 1st egg	24th week	30th week	41.6
5.No. of eggs laid per month per bird	9 nos.	9 nos	0
5.BC Ratio	1.8	1.6	12.25
6.Net return(Rs.)	413	185	123.2

ANNEXURE I

Parameters for Assessment	T1:Hampshire cross pigs	T2: Farmers practice	% change
1.Average Body weight gain at 2 months of age (kg)	M=117.6, F=109.66	M= 8.40, F=7.9	M= 10.12, F=9.49
2. Average daily gain at 2 months of age (g/d)	M= 275, F=250	M=14, F=13.17	M=10.07, F=9.49
2.Mortality rate	Nil	2%	2
3.Litter size	11 Nos.	10 Nos.	10
4. Age at maturity (Months)	M=10, F=8	M=10, F=8	M=o0,F=0
5.BC Ratio	2	1.5	33.3
6.Net return (Rs.)	14,848/-	6,498/-	128.50

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		
1	Maize	HQPM5	5	18	5
2	Soybean	JS9560	4	25	5

** 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	Tota					
1	Maize	Popularization of HYV, short duration variety of Maize	HQPM5	Kharif 2024	5	5	18		18	100%	Rainfed			

2	Soybean	Popularization of HYV of soybean	JS9560	Kharif 2024	5	5	25		25	100%	Rainfed			
3	Khasi mandarin orange	INM	FYM 30g mixed with Tricho 25g,neem powder 100g/plant as soil application+ Bordeaux paint and spray of neem oil (0.5%)	February 2023	2	2	5		5		Rainfed	285	60	123.65
4	Kiwi	Protected cultivation	50 % agro shade net to be mounted on kiwi fruit vines at the e end of February to protect flowers and new vegetative from hailstones and heavy rain. Remove shade net on May.	February 2023	2.25	2.25	5		5		Rainfed	210.8	25.02	127.2

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	Maize	Popularization of HYV, short duration variety of Maize	5	55	40	37.5	58	52	Plant height, days to 50% tasseling, no. of cobs/plt	Plant height, days to 50% tasseling, no. of cobs/plt	48,000.00	137,500.00	89,500.00	2.8	44,000.00	100,000.00	56,000.00	2.2
2	soybean	Popularization of HYV of soybean	5	20.4	14.5	40.6	21.6	19.2	Primary branches/plt, No. of seeds/plt.	Primary branches/plt, No. of seeds/plt.	55,800.00	173,600.00	117,600.00	3.1	43,600.00	123,250.00	79,650.00	2.8
3	Khasi mandarin	INM	2	59.94	27.64	116	87.58	32.34			155000	479520	324520	3.09	98000	221120	123120	2.25

	orange																
4	Demonstration on partial protection for organic Kiwi productions	Protected cultivation	2.5	65.02	41.9	55.1	76.5	53.7			299400	650200	350800	2.17	259400	419000	159600	1.61

*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	1					
2	Farmers Training	7	2/2/2023,17/2/2023 22/2/2023		64	64	
3	Media coverage						
4	Training for extension functionaries						
5	Any other (Pl. specify)	Field visit -12 Method demo on Bordeaux mixture-1	2/2/2023,10/6/2023 10/6/2023		54	54	

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 Param para	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	Poultry		Kalinga brown	10	5	400														Ongoing

(iii) Fisheries

Sl. No.	Category, e.g. Common carp, orname	Thematic area	Name of Technology	No. of farmers	No. of unit	No. of fish/ fingerlings	Major Performance parameters / indicators	% change in the Param	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
									Demo	Check	G	G	N	B	GC	GR	N	B	

	ntal fish etc.				s		Demo	Check	para			C**	R**	R**	CR**			R	CR	
1																				

** *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 farmer	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	
1	Jackfruit chips	Value addition	Demonstration on Value Added Product of Jackfruit	50	1	1.Storage stability ➢ Chips packed in LDPE- 1 week ➢ Chips packed in HDPE- 1 month 2. Economic analysis ➢ Input- Rs 230.00 ➢ Output- Rs.800.00 (Rs. 80/pkt) ➢ Profit- Rs. 570.00					Rs .230.00	Rs .800.00	Rs .570.00	2.4:1					

2.	Papaya tutti frutti	Value addition	Preparation of value added Papaya Tutti frutti	67		1. Drying duration : 3-4 days 2. Storage stability : 12 months 3. Acceptability: Highly acceptable					Rs .60 .00	Rs .20 0.0 0	Rs .14 0.0 0	2.3 :1					
3	Mushroom	Mushroom cultivation	Oyster mushroom	3	3	*Average yield/ bag: 1.3kg/bag	NIL	NIL	Yield in 90 bags		40 00	18 15 0	14 15 0	4.5					
4	Apriculture	Bee keeping	Apis cerena	3	3	1.Yield/box 2.B.C.ratio	NIL	NIL	On-going										

*** 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

Animal Science	Piggery	Training on prevention and control of swine diseases for better farm profitablity	06-10-2023	1	On campus	PF				10	15	25	10	15	25
Home Science	Value addition	Training on preparation of millet pan cake	19-09-2023	1	On campus	RY				0	18	18	0	18	18
Home Science	Value addition	Training on preparation of millet pakora	19-09-2023	1	On campus	RY				0	18	18	0	18	18
Agronomy	IFS	Training on integrated farming system	19-09-2023	1	On campus	RY				0	18	18	0	18	18
Horticultur e	Other	Training on cultivation practices for garden pea	19-09-2023	1	On campus	RY				0	18	18	0	18	18
Animal Science	Pigery	Piggery	06-10-2023	1	On campus	PF				10	15	25	10	15	25

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	Date (From – to)	Duration in days	Venue	Please specify	General participants	SC/ST	Grand Total

		programme				Beneficiary group (Farmer & Farm women/ RY/ EP and NGO Personnel)	M	F	T	M	F	T	M	F	T
Animal Science	Piggery	Piggery	26-05-2023	1	Mapulumi	RY	0	0	0	10	18	28	10	18	28
Animal Science	Piggery	Piggery	26-05-2023	1	Mapulumi	RY	0	0	0	10	18	28	10	18	28
Animal Science	Piggery	Piggery	25-05-2023	1	Sutemi	RY	0	0	0	20	10	30	20	10	30
Animal Science	Poultry	Poultry	25-05-2023	1	Sutemi	RY	0	0	0	20	10	30	20	10	30
Agronomy	Integrated farming	Package and practices of maize	10-05-2023	1	Sutemi	RY	0	0	0	10	10	20	10	10	20
Agronomy	Integrated farming	Training on integrated farming system	02-08-2023	1	Asukhomi	RY	0	0	0	9	5	14	9	5	14
Agronomy	Integrated farming	Training on integrated farming system	13-10-2023	1	Phishumi	RY	0	0	0	1	16	17	1	16	17
Horticultur	Planting material	Production	01-05-2023	1	Alaphumi	RY	0	0	0	10	0	10	10	0	10

e	production	technology of HYV of Tomato														
Horticulture	Planting material production	Nursery raising of horticultural crops for income generation	01-05-2023	1	Sutemi	RY	0	0	0	0	10	10	0	10	10
Horticulture	Planting material production	Training on year round production of vegetables under low cost polyhouse	02-08-2023	1	Asukhomi	RY	0	0	0	9	5	14	9	5	14
Home Science	Value addition	Training on preparation of jackfruit chips	02-08-2023	1	Asukhomi	RY	0	0	0	9	5	14	9	5	14
Home Science	Value addition	Training on preparation of bamboo shoot pickle	02-08-2023	1	Asukhomi	RY	0	0	0	9	5	14	9	5	14
Home Science	Value addition	Training on preparation of tutti frutti from papaya fruit	13-10-2023	1	Phishumi	RY	0	0	0	1	16	17	1	16	17

Home Science	Value addition	Training on preparation of chow chow pickle	13-10-2023	1	Phishumi	RY	0	0	0	1	16	17	1	16	17
Agril. Extension	PRA	PRA	28-04-2023	1	Mapulumi	RY	0	0	0	10	10	20	10	10	20
Agril. Extension	Sociometry	Sociometry	28-04-2023	1	Mapulumi	RY	0	0	0	10	10	20	10	10	20
Agril Extension	Others	Program evaluation and review technique & Critical path management for farming	25-05-2023	1	Sutemi	RY	0	0	0	20	10	30	20	10	30
Agril Extension	Others	Program evaluation and review technique & Critical path management for farming	26-05-2023	1	Mapulumi	RY	0	0	0	10	18	28	10	18	28
Planrt protection	Others	IPM on jhum paddy and FAW	11-05-2023	1	Sutemi, Alaphumi, Lotisa Old, Lotisa New, Mapulumi, Naghuto New	RY	0	0	0	28	30	58	28	30	58
Planrt	Others	Mushroom	11-05-2023	1	Sutemi, Alaphumi,	RY	0	0	0	28	30	58	28	30	58

protection		cultivation			Lotisa Old, Lotisa New, Mapulumi, Naghuto New										
Agronomy	Others	Package and practices of foxtail millet	02-02-2023	1	Naghuto New	PF	0	0	0	2	12	14	2	12	14
Agronomy	Others	Scope and opportunity on foxtail millet production	17-02-2023	1	Keltomi	PF	0	0	0	21	14	35	21	14	35
Agronomy	Others	Package and practices of foxtail millet, and importance of millet	22-02-2023	1	Shichimi	PF	0	0	0	3	12	15	3	12	15
Agronomy	Others	Package and practices of foxtail millet and Ragi	18-03-2023	1	Sumi settsu	PF	0	0	0	21	16	37	21	16	37
Agronomy	Others	Package and practices of maize	27-04-2023	1	Lotisa Old	PF	0	0	0	18	0	18	18	0	18
Agronomy	Others	Package and practices of soybean	27-04-2023	1	Lotisa Old	PF	0	0	0	18	0	18	18	0	18

Agronomy	Others	Importance of nurti millets in human diet	01-06-2023	1	Naghutomi new	FW	0	0	0	0	10	10	0	10	10
Agronomy	Others	Training on post harvest management of foxtail millet	11-07-2023	1	Naghuto Old	PF	0	0	0	0	15	15	0	15	15
Agronomy	Others	Training on package and practices of lentil	09-08-2023	1	Naghuto New	FW	0	0	0	0	15	15	0	15	15
Agronomy	Production of organic inputs	Weed management practices (Organic farming)	01-06-2023	1	Mapulumi	PF	0	0	0	12	7	19	12	7	19
Horticulture	Protected cultivation	Protected cultivation for kiwi production	17-02-2023	1	Keltomi	PF	0	0	0	21	14	35	21	14	35
Horticulture	Others	Organic kiwi production	02-02-2023	1	Naghuto New	PF	0	0	0	2	12	14	2	12	14
Horticulture	Others	Organic cultivation of khasi mandarin	22-02-2023	1	Shichimi	PF	0	0	0	3	12	15	3	12	15

Horticulture	Others	Training on application of organic nutrients on fruit crops. (Organic farming)	10-06-2023	1	Naghuto New	PF	0	0	0	2	13	15	2	13	15
Horticulture	Others	Production of kharif vegetables (French beans)	17-02-2023	1	Keltomi	PF	0	0	0	21	14	35	21	14	35
Horticulture	Others	Preservation and drying techniques of ornamental crops	10-05-2023	1	Mapulumi	PF	0	0	0	0	10	10	0	10	10
Horticulture	Others	Package and practices of litchi	10-05-2023	1	Lotisa Old	PF	0	0	0	10	0	10	10	0	10
Horticulture	Others	Package and practices of litchi	10-05-2023	1	Lotisa new	PF	0	0	0	10	0	10	10	0	10
Horticulture	Others	Production technology of HYV of Tomato	01-05-2023	1	Sutemi	PF	0	0	0	11	0	11	11	0	11
Horticulture	Others	Training on IISR micronutrient	20-09-2023	1	Phushumi	PF	0	0	0	14	16	30	14	16	30

		mixture for ginger													
Horticultur e	Others	Training on production technology of winter vegetables	31-08-2023	1	Khrimtomi	PF	0	0	0	8	17	25	8	17	25
Horticultur e	Others	Trainig on post harvest management of orange	11-12-2023	1	Alaphumi	PF	0	0	0	11	8	19	11	8	19
Agril Extension	Group dynamics	Group dynamics (Leadership)	01-06-2023	1	Lotisa New	PF	0	0	0	15	9	24	15	9	24
Agril Extension	Group dynamics	Group dynamics (Leadership)	01-06-2023	1	Lotisa Old	PF	0	0	0	13	5	18	13	5	18
Agril. Extension	Group dynamics	Training on Group Dynamics	07-12-2023	1	Surumi village	PF	0	0	0	12	0	12	12	0	12
Agril Extension	SHG	Training on concept of Self Help Group	01-09-2023	1	Naghuto Old	PF	0	0	0	12	20	32	12	20	32
Agril. Extension	Others	PRA	27-04-2023	1	Lotisa Old	PF	0	0	0	18	0	18	18	0	18
Agril. Extension	Others	Sociometry	27-04-2023	1	Lotisa Old	PF	0	0	0	18	0	18	18	0	18

Agril Extension	Others	PRA	01-05-2023	1	Sutemi	PF	0	0	0	10	10	20	10	10	20
Agril Extension	Others	Sociometry	01-05-2023	1	Sutemi	PF	0	0	0	10	10	20	10	10	20
Agril Extension	Others	Training on process for formation and promotion of FPO	01-09-2023	1	Naghuto Old	PF	0	0	0	12	20	32	12	20	32
Agril extension	Others	Training cum awareness programme	26-10-2023	1	Lumithsami	PF	0	0	0	1	15	16	1	15	16
Agril extension	Others	Training programme on importance of cleanliness	31-10-2023	1	Lumithsami	PF	0	0	0	12	11	23	12	11	23
Agril. Extension	Others	Training on concept of kitchen gardening	09-12-2023	1	Philimi village	FW	0	0	0	20	10	30	20	10	30
Home Science	Value addition	Preparation of Millet cake	11-07-2023	1	Naghuto Old	PF	0	0	0	0	15	15	0	15	15
Home Science	Value addition	Preparation of Millet	11-07-2023	1	Naghuto Old	PF	0	0	0	0	15	15	0	15	15

		pakora													
Home Science	Value addition	Training on preparation of jackfruit chips	31-08-2023	1	Khrimtomi	PF	0	0	0	8	17	25	8	17	25
Home Science	Value addition	Training on preparation of bamboo shoot pickle	31-08-2023	1	Khrimtomi	PF	0	0	0	8	17	25	8	17	25
Home Science	Value addition	Training on preparation bamboo shoot pickle	09-08-2023	1	Naghuto New	FW	0	0	0	0	15	15	0	15	15
Home Science	Value addition	Training on preparation of jackfruit chips	09-08-2023	1	Naghuto New	FW	0	0	0	0	15	15	0	15	15
Soil Science	Others	Crop residue managemen t	17-02-2023	1	Zaphumi	PF	0	0	0	4	24	28	4	24	28
Soil Conservati on	Others	Trainining on Natural farming and distribution of seedlings	28-11-2023	1	Naghuto Village	PF	0	0	0	2	9	11	2	9	11
Soil conservatio	Others	Trainining on Natural farming and	23-11-2023	1	Alaphumi village	PF	0	0	0	10	15	25	10	15	25

n		demonstration on preparation of Jeevamrut													
Soil conservation	Others	Trainining on Natural farming and demonstration on preparation of Jeevamrut	30-11-2023	1	Sumi settsu	PF	0	0	0	10	20	30	10	20	30
Animal Science	Piggery	Piggery disease control	18-03-2023	1	Sumi settsu	PF	0	0	0	21	16	37	21	16	37
Animal Science	Poultry	Management practices for economic poultry production	05-10-2023	1	Zaphumi	PF	0	0	0	10	15	25	10	15	25
Plant protection	IPM	IPM on king chilly	21-04-2023	1	Litta New	PF	0	0	0	0	15	15	0	15	15
Plant protection	IPM	IPM for FAW on maize (Sponsored programme, NCIPM, New Delhi)	21-04-2023	1	Litta New	PF	0	0	0	15	10	25	15	10	25
Plant	IPM	IPM on	02-06-2023	1	Alaphumi	PF	0	0	0	14	1	15	14	1	15

protection		FAW													
Plant protection	IPM	IPM on Jhum rice	02-06-2023	1	Sutemi	PF	0	0	0	10	0	10	10	0	10
Plant protection	IPM	Training on IPM on arecanut	11-08-2023	1	Lotsu	PF	0	0	0	37	48	85	37	48	85
Plant Protection	IPM	IPM on winter vegetables	22-11-2923	1	Beisampuikam Village	PF	0	0	0	10	8	18	10	8	18
Plant Protection	IPM	IPM on winter vegetables	22-11-2023	1	Lotsu village	PF	0	0	0	8	10	18	8	10	18
Plant Protection	IPM	IPM on winter vegetables	22-11-2023	1	Renthan Village	PF	0	0	0	30	10	40	30	10	40
Plant protection	Others	Safe and judicious use of glyphosate	13-15/11/2023	1	Zaphumi village	PF	0	0	0	10	22	32	10	22	32

(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 (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	
Mushroom	28-30/11/2023	Mushroom	Mushroom Cultivation					7	8	15	7	8	15					
Maize	28-30/11/2023	Crop production	Crop production					0	28	28	0	28	28					
Fruits	21-23/11/2023	Value addition	Value addition					15	10	25	15	10	25					
Vegerables	21-23/11/2023	High value vegetable crops	Others (High value vegetable crops)					15	10	25	15	10	25					

*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		

OFF	PF	11-08-2023	1	Plant protection	Arecanut	Training on IPM on arecanut				37	48	85	37	48	85	ICAR, New Delhi	
OFF	PF	22-11-2023	1	Plant Protection	Vegetables	IPM on winter vegetables				8	10	18	8	10	18		
OFF	PF	22-11-2023	1	Plant Protection	Vegetables	IPM on winter vegetables				30	10	40	30	10	40		
OFF	PF	22-11-2923	1	Plant Protection	Vegetables	IPM on winter vegetables				10	8	18	10	8	18		

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

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
Method demonstration on preparation of Orange squash			30				130	316	446				130	316	446
Scientist visit to farmers field			20				109	79	188				109	79	188
Distribution of inputs			25				245	183	428				245	183	428
Farmers scientist interaction			3				18	50	68				18	50	68
Animal Health Camp			2				39	78	117				39	78	117
Awaeness campaign			4				105	98	203				105	98	203
Celebration of International year of millets			1				21	16	37				21	16	37
Animal Treatment (T treat pigs and poultry for diseases)			1				4	0	4				4	0	4
TV talk on Bio gas slurry on crops			1												
Maan ki baad			1				50	75	125				50	75	125
Advisory service on FAW			1				1	0	1				1	0	1

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	
Cereals	Maize	HQPM5	1.5	39000			9	9	18
Oilseeds	Soybean	JS9650	4	104000			39	41	80
Vegetables	Tomato	Arka Rakshak	0.0015	3000			11	0	11
	Tomato	Arka Samrat	0.002	4000			10	4	14
	Tomato	Arka abhed	0.001	2000			0	10	10
	Broccoli	Green star	0.001	550			1	0	1
	Broccoli	Tahore	0.002	1100			1	0	1
	Cabbage	Rare ball	0.0009	3150			10	10	20
	Cabbage	Golden acre	0.001	250			10	10	20
	Garden pea	KPS 110	0.15	5250			15	10	25
	Garden pea	UK 10	0.1	4000			15	10	25
Rhizome	Turmeric	Megha-1	2.5	5000			5	5	10
	Ginger	Nadia	1.5	7500			4	4	8
	Colocasia	Local	0.7	2800			3	2	5

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	Cereals		1.5	39000			9	9	18
2	Oilseeds		4	104000			39	41	80
3	Tomato		0.0015	3000			11	0	11
4	Tomato		0.002	4000			10	4	14
5	Tomato		0.001	2000			0	10	10
6	Broccoli		0.001	550			1	0	1
7	Broccoli		0.002	1100			1	0	1
8	Cabbage		0.0009	3150			10	10	20
9	Cabbage		0.001	250			10	10	20
10	Garden pea		0.15	5250			15	10	25
11	Garden pea		0.1	4000			15	10	25
12	Turmeric	2.5	2.5	5000			5	5	10
13	Ginger	1.5	1.5	7500			4	4	8
14	Colocasia	0.7	0.7	2800			3	2	5
TOTAL		4.7	10.4594	181600			133	115	248

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

Major group/class	Crop	Variety	Quantity (In No.) produced	Quantity (In No.) supplied	Value (Rs.) of quantity produced	Number of recipient/ beneficiaries				
						General		SC/ST		Grand Total
						M	F	M	F	
Fruits	Dragon fruit	White	100	100	15000			1	1	2
	Passionfruit	Yellow	200	200	10000			1	1	2
	Banana	Grand naine	200	200	600			1	1	2
	Pineapple	Kew	1000	1000	1000			6	4	10
Vegetables	King chilli	Local	500	500	7500			12	8	20
	Broccoli	Green magic	1000	1000	2000			12	8	20
	Pokchoy	Choko	1000	1000	1000			8	12	20
	Chinese cabbage	Victoria -60	500	500	500			6	4	10
	Tomato	Rocky	500	500	500			5	5	10
	Cabbage	Rareball	1000	1000	1000			15	5	20

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										
BIO PESTICIDES										
VERMICOMPOST	Vermicompost	Eisenia fetida		750	22500.00			12	8	20

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.): KVK Newsletter Vol 3, Issue 10 : 200 copies distributed

(B) Articles/ Literature developed/published

Item	Title /and Name of Journal	Authors name	Number of copies	
			Produced/ published	Supplied/ distributed
Research	Effect of IPM practices for Fall	Rakesh Kumar Chaurasia, Wapangtoshi Longkumer and	J Krishi Vigyan	

paper	Army Worm management in Zunheboto district	Mukesh Shegal	.(11)PP.255-257	
	A study of interspecies Transmission and reassortment events in rotaviruses from cattle in Pant Nagar, Uttarkhand, India	Nongothung Z Ezung1 , Rashmi Singh2 , Bupesh Giridharan3*, Konda Mani Saravanan4 , Vellingiri Balachandar5 , Mayur Mausoom Phukan3 ,Vijayan Senthilkumar6 , Rengasamy Nandhakumar7 and Kishore Kumar Meenakshi Sundaram8*	Int J Hum Genet, 23(2-3): 131-139	
	Nutritional and health benefits of millets: A review.	Dr. Rakesh Kumar Chaurasia, Narola Anichari	The Pharma Innovation Journal. 12(6):3360-3363	

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.			

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

A. Successful Mushroom cultivation for livelihood Generation

- **Profile of the farmers**

Name of the growers	:	Mrs. Viboli, Mrs. Vilibo& Mrs. Inashi
Village	:	Asukhomi village
Block	:	Atoizu
District	:	Zunheboto

Enterprise : Mushroom cultivation

Name of the Centre : KVK, Zunheboto

- **Background information of the grower:** People of the district depends on agriculture and jhuming is the main agriculture practice in the district. The selected farm women help their male partners in farming but only in certain activities. Most of their time is spent in household chores and other domestic works.

- **Technology/process intervened:** Considering the vast scope for mushroom cultivation at Asukhomi village under Atoizu block, trainings and FLDs on mushroom cultivations were conducted by KVK. Altogether 3 farm women were selected to be involved in this cultivation. With the guidance of KVK scientists each farm women made 90 polybags of mushroom.

- **Effect of the technology /process:** An average yield of 121kgs Mushroom/90 bags was obtained by each farmer and generated a net profit of about Rs.14150.00 with a B.C. ratio of 4.2.The average yield per bag was recorded to be 1.3kg.

- **Suitability and adaptability in the existing farming systems:** Mushroom cultivation is found to be negligible at Zunheboto district, though the demand is high. Farmers collect different types of wild edible mushrooms from forest to fulfill the demand but is not sufficient. Moreover, the local mushrooms are limited to a specific period of a year. The climatic condition of the district is very much suitable for the cultivation of mushroom.

- **Acceptance of technology/process in terms of views of the farmers:** The farmers are satisfied with the cultivation technology as it requires less inputs and labour where they can see the outcome within 1-2 months by selling the products along the road side of the village. The cultivation can also be made in their leisure time.The profit obtained by the ladies helped in generating additional income for their household.

- **Out scaling of technology (Horizontal spread):** The success of cultivation of oyster mushroom has not only encouraged their own villagers but also to other neighboring villages.
- **Substitution or replacement of commodities :NA**
- **Socio-economic impact:** The yield of the muhroom was very good and farmers were able to sold all the mushroom produced leading to a net profit of Rs.14150.00 in one season. The profit obtained had a positive impact on the farmers involved in the programme. They were able to fulfill the demands of their children and were able to contribute in increasing the family income.
- **Marketing network established:** There is no local facility for the farmers to sell off their farm products. But the state highway for the district passes through the villages, which helps them to sell their products by the road side.

- **Establishment of process/ units:** Farmers are producing mushroom in the own abandoned/newly created mushroom house, however no processing units were established**.**
- **Linkage with technology/ development organizations :** The KVK is in linkage with School of Agricultural Science, Medziphema for obtaining the spawn.

B. Khasi Mandarin (Citrus reticulata) an Income generation crop

- **Profile of the farmer/ group**

Name of the grower/group	:	Mr. Yeska Chishi
Village	:	Shichimi
Block	:	Akuluto
District	:	Zunheboto
Enterprise	:	Khasi mandarin orange
Name of the Centre	:	KVK, Zunheboto

- **Background information of the grower:** Mr. Yeska Chishi is an educated person (Graduate)who has so much interest in farming. He is categorized under big farmer due to large land holding size (more than 20 ha). He does business and farming to support his family with Orange farm as his main income crop. At the beginning he started his orange farm in an area of 1.5 ha but gradually decreased to 1 ha due to rapid decline of plant population. It was observed that the problem was due to insect pest attack and poor management of orchard.
- **Technology/process intervened:** KVK Zunheboto under the program of OFT intervened and adopted his field for demonstration. Training and demonstration was conducted on Organic nutrients management. Inputs were provided to him like bio-fertilizers, neem cake, Neem oil, Bordeaux paste materials, organic manures and sprayer.

- **Effect of the technology /process:** The farmer showed keen interest in taking up this activity for improvement of his orchard. The activities of management was started in the month of February 2022,by starting with removal of unwanted branches, painting of tree trunk with Bordeaux paste, soil application of manures and bio products and spraying of neem oil on tender shoots and leaves. After intervention of this technology, the farmer was able to produce more 5197 kg fruit/ha than his old farmers practice 2624kg/ha. Oranges were sold at Rs. 80/kg and he could fetch a good amount of Rs.415760.00/ha with net profit of 266120. BC ratio of 2.79 was recorded.
- **Suitability and adaptability in the existing farming systems:** The technology on Organic nutrient management on orange was successful so it can be adopted for large cultivation.
- **Acceptance of technology/process in terms of views of the farmers:** The farmer was very much satisfied with the technology provide. He expressed his happiness on the yield of fruits and good fruit quality (thin rind and sweet). So this technology can be adopted in large scale.
- **Out scaling of technology (Horizontal spread):** The achievement and success story of Mr. Yeska made an excellent impact to other farmers and around15 orange farmers have adopted and more are coming forward to KVK for technical support and inputs.
- **Substitution or replacement of commodities:**
- **Socio-economic impact:** The farmer is contented with his harvest as his income status was increased. He is now planning to expand more of his area for orange cultivation.
- **Marketing network established:** Local market
- **Establishment of process/ units :** NA
- **Linkage with technology/ development organizations:** The source of this technology is from CAU, Pasighat.

C. Organic King Chilli cultivation boosted the income of farmers

- **Profile of the farmer/ group**

Name of the grower/group : Mrs. Inali Sumi

Village : Sukhai

Block : Satakha

District : Zunheboto

Enterprise : King Chilli

Name of the Centre: : KVK, Zunheboto

- **Background information of the grower:** Mrs. Inali Sumi is a small farmer from Sukhai village. She is enthusiastic and hard working farmer.She and her family solely depends on agriculture for their livelihood. She grows paddy as a major crop along with some seasonal vegetables but this could not meet her family needs financially.
- **Technology/process intervened :** KVK, Zunheboto identified Mrs. Inali as an active participant during our training program at her village. She shared her interest with KVK subject expert of farming any crop which can generate income for her family. Basing on suitable climatic conditions of the village, KVK intervened and initiated Organic King Chilli cultivation under FLD program in the year 2022. King chilli or Raja mircha is considered as one of the most important spice crop of the district due to its taste, aroma and high pungency which fetches good price in the market.KVK provided her quality planting materials, organic manures, biofertilizer and Trichoderma with technical support for demonstration in an area of 0.5 acre.
- **Technology Process:** The details of the technology demonstrated was application of FYM 6t/ha, seed treatment with trichoderma and biofertilizers@200g/300ml water. Seedlings were dipped before transplanting in biofertilizers @250g in 25 lit.water for 30 min. By adopting all these scientific methods she could harvest her crop @ 995kg in an area of 0.5 acre which is 429kg higher as compared to traditional practice 566kg. With her hard work and improved technology provided by KVK she could earned a gross income of Rs. 1,49,250.00 with cultivation cost of Rs. 40,000.00/0.5acre. Cost benefit ratio (BC) was 3.7.
- **Suitability and adaptability in the existing farming systems:** The technology on Organic cultivation of king chilli was a successful demonstration initiated by KVK and this technology can be adopted in different locations at large scale.
- **Acceptance of technology/process in terms of views of the farmers:** The technology provided to farmers was satisfactory and acceptable as it performed better than the farmers traditional practice and the incidence of disease and pest attack was also negligible .So it can be taken up in large scale.
- **Out scaling of technology (Horizontal spread):** The technology provided increased the yield of the crop which lead to increase in the income of farmer for livelihood. The improvement in financial status of Mrs. Inali motivated around 25 farmers from her village and neighboring villages.
- **Substitution or replacement of commodities:** Chilli/Tomato

- **Socio-economic impact:** The farmer sold her fresh king chilli in local market and post harvest technology and value addition training was also imparted by KVK and this fetched her additional income. Through this income generating crop she could earned money and could manage her family and children school fees. So, from this result more number of farmers (25) has been motivated and taken up cultivation of this crop.
- **Marketing network established:** Local market
- **Establishment of process/ units:** The farmer has been successful in making different kind of value added products of king chilli by herself but no processing units has been installed.
- **Linkage with technology/ development organizations:** CIH, Nagaland.

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

ii. No. of farm families selected

iii. No. of survey/PRA conducted

3.12. Activities of Soil and Water Testing

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

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

3. Details of samples analyzed (2023) :

Details	No. of Samples analysed	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples	26	40	10	
Water Samples				
Plant Samples				
Petiole Samples				
Total	**26**	**40**	**10**	

1. Details of Soil Health Cards (SHCs) (2023)
   a. No. of SHCs prepared: 35
   b. No. of farmers to whom SHCs were distributed: 35
   c. Name of the Major and Minor nutrients analysed: Organic carbon, pH, EC, N, P and K
   d. No. of villages covered: 10

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 Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary
Text	6	4087	4	346					8	3516	6	2896	24	10845
Voice only														
Voice and														

Text both														
Total	**6**	**4087**	**4**	**346**					**8**	**3516**	**6**	**2896**	**24**	**10845**

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
	Introduction of new variety or crop			77	77
	Introduction of Resource Conservation Technologies				
Drought	Distribution of seeds and planting materials	100		200	200
Insects infestation outbreak	Distribution of pesticides & IPM kits	100		200	200

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
Poultry	500	1	2	500		10	10
Piggery	30	1	2	30		15	15

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 2023

Name of organization	Nature of linkage
1.Nagaland University	Scientific & Administrative
2. ATMA, DAO, DVO, DHO, DRDA, DFO, DSCO, DPO	Scientific, participation in meeting,Administrative and financial
3. NABARD	Scientific, participation in meeting,Administrative and financial
4. IARI, New Delhi	Scientific joint implementation
5. NCIPM	Scientific, financial
6. ICAR New Delhi	Scientific, financial

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 (Rupees in Lakhs)
Project Tribal Community Development	a) Distribution of farm tools & and implements, seeds, sapling, poultry chicks, piglets, bio-pesticides b) Training c) Demonstrations d) Farmers Exposure tour	January to December 2023	ICAR, New Delhi	100.00

Validation and promotion of IPM	a) Distribution of farm tools & and implements, seeds, sapling, bio-pesticides b) Training c) Demonstrations	January to December 2023	NCIPM, New Delhi	2.50
Out Scaling of Natural Farming through Krishi Vigyan Kendras				5.02
Knowledge System and Homestead Agriculture Management in Tribal Areas (KSHAMTA)	a) Distribution of poultry chicks b) Training c) Demonstrations			0.80
.Nutri- Sensitive Agricultural Research Innovation (NARI)				0.80
NEH Programme			ICAR, New Delhi	
Promoting Sustainable Livelihood and Nutritional Security of Women SHG's through Low Cost egg incubator and backyard Poultry Production			NABARD, Dimapur	2.44

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district : Yes

Sl. No.	Programme	Nature of linkage	Remarks
1	Farmers scientist interaxtion	Scientific	

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
7	569		26	471		8	98		Nil	-	-

.7 Natural Farmingduring 2023

No. of demonstrations conducted	Participants		No. Trainings	Participants		No. of Awareness Programs	Participants	
	SC/ST	Others		SC/ST	Others		SC/ST	Others
10	**212**		**2**	**55**		**3**	**198**	

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)
Zaphumi A	Zaphumi A	Khrimtomi		0.00743	1	French beans	Anupama			French beans	Anupama	410kg/unit/year			
Khrimtomi				0.02972	4	Cow pea	Kashi nidi	45.2	363kg/unit	Cow pea	Kashi nidi				
						Brinjal	Pusa purple round			Brinjal	Pusa purple round				

						Bittergourd	Bipasa			Bittergourd	Bipasa				
						Chilli	Local			Chilli	Local				
						Colocasia	Local			Colocasia	Local				
						Ginger	Local			Ginger	Local				
						Pumpkin	Local			Pumpkin	Local				
						Tomato	Arka samrat			Tomato	Arka samrat				
						Okra	Arka Anamika			Okra	Arka Anamika				
						Raddish	Pusa chetki			Raddish	Pusa chetki				
						Cabbage	Rare ball			Cabbage	Rare ball				
						Pakchoy	Choko			Pakchoy	Choko				
						Chinese cabbage	melody			Chinese cabbage	melody				

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	IFS	2018	1 ha	1. Broiler chicken 2. HF cow	Meat Manure Fruits	1300 kg 200 qt	2,07,6550.00 - 2000.00	2,56,400.00 10,000.00 3000.00	

				3. Mango var. Amrapalli		50 kg			
2	Natural Farming	2023	1 ha	Vegetables	Fresh fruits	250 kgs	7000.00	10,000.00	

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	

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.	Vermicompost	500 kgs	5000.00	10,150.00	

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	
1.	Cattle	HF cross	Manure	200 qt	-	10,000.00	
2.	Chicken	Broiler	Meat	1300 kgs	2,07,655.00	2,56,400.00	

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 KVK	SBI	Lumami	32196734473
Revolving fund	SBI	Lumami	31674931931

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, 2024
	Amount	Amount	Amount	Amount	
Oilseeds	0.61867		0.61867		NIL
Pulses	0.15836		NIL		0.15836
TOTAL	**0.77703**		**0.61867**		**0.15836**

8.3 Utilization of KVK funds during the year 2023 (2023-2024)

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	Pay & Allowances	256.89135	256.89135	255.73047
2	Travelling allowances	1.27185	1.27185	1.27185
3	Contingencies	36.22815	36.22815	36.22815
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	0.8	0.8	0.8
L	NARI	0.8	0.8	0.8
M	HRD	0.5	0.5	0.5
TOTAL (A)		**296.49135**	**296.49135**	**295.33047**
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)				

C. REVOLVING FUND			
GRAND TOTAL (A+B+C)	**296.49135**	**296.49135**	**295.33047**

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)
2021-2022	3.85	2.27	0.83	5.29
2022-2023	5.29	3.74	2.56	6.47
2023-24	6.78	2.91	2.07	7.80

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

(b) Financial

(c) Technical

(Signature)
Sr. Scientist cum Head