

PROFORMA FOR ANNUAL REPORT OF KVKs 2021 (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	
Krishi Vigyan Kendra (KVK), Khawzawl, PO- Khawzawl, Dist.- Champhai (MIZORAM)-796310	9436190701	Nil	Kvkkhawzawl@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
Directorate of Agriculture , Aizawl, Mizoram- 796 001	9436190701	0389-2315784	mizagri@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Henry Saplalrinliana	KVK, Complex, Kawnzar Veng, Khawzawl	9436190701	henry_sapa@yahoo.com

1.4. Year of sanction: 2008

## 1.5. Staff Position

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	Sr Scientist & Head	Dr. Henry Saplahrinliana	Sr Scientist & Head	Soil Science	15,600-39,100+8,000	82,200	04.03.19	Permanent	ST
2	SMS	Dr. Malsawmkimi	SMS	Horticulture	15,600-39,100+5,400	73200	03.06.09	Permanent	ST
3	SMS	Syed Khaliduddin Ahmed (study leave )	SMS	Animal Science	15,600-39,100+5,400	75400	26.04.08	Permanent	GENERAL
4	SMS	F.Zoramthari	SMS	Plant Protection	15,600-39,100+5,400	73200	06.06.09	Permanent	ST
5	SMS	Dr. Om.Prakash	SMS	Agronomy	15,600-39,100+5,400	73200	16.06.09	Permanent	General
6	SMS	Israel Lalremruata	SMS	Agro Forestry	15,600-39,100+5,400	73200	03.06.09	Permanent	ST
7	SMS	R.Vanlalduati	SMS	Soil Science	15,600-39,100+5,400	67000	12.03.12	Permanent	ST
8	Farm Manager	PrakashThapa	Farm Manager	M.Sc (Horti.)	9,300-34,800+4200	52,000	21.04.08	Permanent	GENERAL
9	Prog Asst (Computer/IT)	Samson Sairengpuia Sailo	Prog Asst (Computer/IT)	Computer/IT	9,300-34,800+4200	52,000	22.04.08	Permanent	ST
10	Prog Asst (Home Science)	Lalhrualtuangi	Prog Asst (Home Science)	Home Science	9,300-34,800+4200	52,000	1.07.08	Permanent	ST
11	Assistant	K. Vanlalhmangaihi	Assistant	M.Com	9,300-34,800+4200	52,000	29.05.08	Permanent	ST
12	Jr.Stenographer cum Computer Operator	Crusade Thangpuii	Jr. Stenographer cum Computer Operator	B.A	5,200-20,200+2,400	35300	29.02.08	Permanent	ST
13	Driver cum Mechanic	Lalnuntluanga	Driver cum Mechanic	-	5,200-20,200+1,900	29300	29.02.08	Permanent	ST

14	Driver cum Mechanic	R.Dengliana	Driver cum Mechanic	-	5,200-20,200+1,900	29300	29.02.08	Permanent	ST
15	Skill Supporting staff	Vanlalvenhima	Skill Supporting staff	-	4,440-7,440+1,800	24200	24.07.08	Permanent	ST
16	Skill Supporting staff	Vacant	-	-	-	-	-	-	-

Note: No column in the table must be left blank

1.6. a. Total land with KVK (in ha) : 12.774

b. Total cultivable land with KVK (in ha): 8.464

c. Total cultivated land (in ha): 4.217

S. No.	Item	Area (ha)
1	Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters)	1.31
2.	Under Demonstration Units (pl. specify the name) i. Instructional Farm ii. Vermi Compost Unit iii. Poultry Unit iv. Azolla Unit	i. 11.464 ii. 0.0045 iii. 0.0040 iv. 0.0015
3.	Under Crops (Cereals, pulses, oilseeds etc.) (Pl. specify separately) i. Cereals ii. Pulses iii. Oil Seeds	i. 0.6 ii. 0.8 iii. 0.3

4.	Under vegetables (Pl. specify separately)	i. 0.04
	i. Brinjal	ii. 0.018
	ii. Pumpkin	iii. 0.015
	iii. Bottlegourd	iv. 0.04
	iv. Ladies finger	v. 0.06
	v. Chilli	vi. 0.002
	vi. Cucumber	vii. 0.04
	vii. F.Bean	viii. 0.002
	viii. Zucchini	
5.	Orchard/Agro-forestry	1.3
6.	Others (specify) : Indigenous Nutritional garden	1.0

## 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	2007					Completed
2.	Farmers Hostel	ICAR	2009					Needs major repair
3.	Staff Quarters (6)	ICAR	2007					Completed but needs Repair
4.	Demonstration Units (2)	ICAR	2007					Completed but needs repair
5	Fencing	ICAR	2009					
	Rain Water harvesting system							
	Threshing floor							
	Farm godown							

## B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Gypsy	MZ-01 D 4086	-	-	-	Processed for auction
	MZ-01 8633	-	-	-	Processed for auction
Tractor	MZ-01 D 2246	-	-	-	Major repair required
	MZ-01P0211	2016	-	-	Running condition
Bolero	MZ-01 N 9053	2018	-	-	Running condition

## C) Equipments &amp; AV Aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
LCD projector	Sept,2008	-	Replacement required
Xerox machine	Sept,2011	-	Good
Computer	Sept,2008/2011	-	Need upgradation
Seed analyzer	Sept,2008	-	NOT WORKING
Refrigerator	Sept,2008	-	Good
BOD Incubator	Sept,2008	-	NOT WORKING
Hot Air Oven	Sept,2008	-	NOT WORKING
Grinder	Sept,2008	-	Good
Laptop	Sept,2008	-	Good

T.V.	Sept,2008	-	Good
A.C.	Sept,2008	-	NOT WORKING
Water Pump (5 hp)	2008	-	Good
Paddy Thresher	2009	-	Good
Power Tiller (Mitshubishi Shakti)	2008	-	Good
Power Tiller (Greaves.GS15DILS)	2014	-	Good
Solar Dryer	2012	-	NEED REPAIR
Chaff Cutter	2014	-	Good
Mini Rice Mill cum Oil Expeller	2015	-	Good
Mini Dal Mill	2012	-	Good
Rice Mill(Polisher + winnower)	2017	-	Good

1.8. A). Details SAC meeting\* conducted in 2021

Date	Name and Designation of Participants	Salient Recommendations	Action taken on last SAC recommendation
22.01.2021	District Agriculture Officer, Khawzawl	1)SAC Chairman stresses the importance of popularization and awareness of Lentil cultivation in the District.  2)Suggestion for Training programme for FOCUS staff under SALT Technique	Action taken as per recommendation

		topic was requested	
	District Horticulture Officer, Khawzawl		
	District Forest Officer, Khawzawl		
	Executive Engineer, (MI) Champhai District		
	District Officer Land Resources Soil and Water Conservation, Khawzawl		
	District Fisheries Development Officer		
	District Forest Officer (Wild Life), Khawzawl		
	District Veterinary Officer, Khawzawl	Dr. Phillip, member SAC suggested to stress their expertise on animal feeds and feed supplements using Azolla and Moringa.	
	Sericulture Promotion Officer, Khawzawl		
	Representative of AMFU, Khawzawl		

\* Attach a copy of SAC proceedings along with list of participants Representative of MHIP Khawzawl

## 2. DETAILS OF DISTRICT

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

Sl. No	Farming system/enterprises
1.	Horticulture + Maize + Animal Husbandry - Highland (>1250m MSL)
2.	Jhum Paddy + Vegetable + Animal Husbandry - Midland (900- 1250 m MSL)
3.	Wetland Rice + Fish + Winter Vegetables - Low land (< 900 m MSL)

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

Sl. No	Agro-climatic Zone	Characteristics
1	Sub- tropical/ Sub- temperate/ Humid	Some parts of the district like Ngopa & Khawzawl block experience all the three seasons i.e. winter, summer and rains, while in the Champhai valley the temperature ranges from 1-7°C for a longer period during winter, severely affecting the crops because of frosty weather. The relative humidity of the region is higher due to heavy rains (2500 mm annually).

## 2.3 Soil types

Sl. No	Soil type	Characteristics	Area in ha
1	Black Soils	-	36550 ha
2	Red Soils	-	89600 ha
3	Alluvial Soils	-	31000 ha
4	Sandy soil	-	3600 ha
5	Acid Soils	-	89600 ha

## 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	4350	4431	0.982



2	Paddy (WRC)	3750	8148	0.460
3	Maize	1660	2345	0.708
4	Rice bean	83	104	0.80
5	Arhar	20	17	1.18
6	Field pea	295	425	0.694
7	Cow Pea	210	231	0.909
8	French Bean	193	401	0.481
9	Soyabean	205	196	1.05
10	Potato	205	2057	0.099
11	Onion	6	34	0.18
12	Brinjal	365	2355	0.154
13	Cauliflower	75	745	0.10
14	Pea	35	150	0.23
15	Carrot	55	393	0.14
16	Cabbage	175	2363	0.07
17	Tomato	31	292	0.11
18	Okra	279	1861.3	0.15
19	Capsicum	25	331.5	0.07
20	Broccoli	16	100.1	0.16

21	Ginger	1008	4969	0.20
22	Turmeric	555	2784	0.20
23	Bird Eye Chilly	1250	6875	0.18

## 2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
Jan	9	18.7	8.4	76.5
Feb	21	20.5	10.1	74.1
Mar	43	24.4	13.5	68.4
Apr	96	26.2	15.7	79.4
May	186	26	16.6	78.3
Jun	416	24.4	17.7	88.4
Jul	358	24	18	82.5
Aug	370	23.8	17.9	81.6
Sep	285	23.7	17.4	79.9
Oct	214	23.2	15.9	77.1
Nov	47	21	12.6	74.7
Dec	17	19	9.3	64.2

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

Category	Population	Production	Productivity

Note: Pl. provide the appropriate Unit against each enterprise

## 2.7 Details of Operational area / Villages (2021)

Sl. No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprises	Major problem Identified	Identified thrust area
1	Khawzawl	Khawzawl	Khawzawl	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries	Improper nursery management in WRC. • Improper nutrient management • Infestation of insect pest and diseases. • Lack of awareness toward s integrated farming • Lack of knowledge and awareness on livestock management, feed and fodder production	Nursery management <input type="checkbox"/> Integrated nutrient management <input type="checkbox"/> Integrated pest management <input type="checkbox"/> Creating awareness for adoption of integrated farming. <input type="checkbox"/> Creating awareness for livestock management and feed and fodder production.

2	Khawzawl	Khawzawl	Biate	Jhum paddy + Tea + Orange + Vegetables + Animal Husbandry	<ul style="list-style-type: none"> <li>• Lack of knowledge on crop rotation</li> <li>• No proper post harvest management in tea.</li> <li>• Lack of quality seed of different vegetables</li> <li>• Citrus declining</li> <li>• Lack of knowledge and awareness on livestock management, feed and fodder production</li> </ul>	<p>Creating awareness on crop rotation and integrated farming</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Training on post harvest management in tea.</li> <li><input type="checkbox"/> Creating awareness for the use of quality seeds in different vegetables.</li> <li><input type="checkbox"/> Rejuvenation of old citrus orchards.</li> <li><input type="checkbox"/> Creating awareness for livestock management and feed and fodder production</li> </ul>
3	Khawzawl	Khawzawl	Chawngtlai	WRC+Jhum Paddy Grapes + Ginger Passion fruit + Animal Husbandry	<ul style="list-style-type: none"> <li><input type="checkbox"/> Lack of Training and Pruning of Passion Fruit &amp; Grapes</li> <li><input type="checkbox"/> Improper nursery management in WRC.</li> <li><input type="checkbox"/> Improper nutrient management</li> <li><input type="checkbox"/> Infestation of insect pest and diseases.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Cultivation practices of Grapes and Passion fruit</li> <li><input type="checkbox"/> IDM on Ginger</li> <li><input type="checkbox"/> Integrated nutrient management</li> <li><input type="checkbox"/> Integrated pest management</li> <li><input type="checkbox"/> Creating awareness for livestock management and feed and fodder production</li> </ul>
4	Khawzawl	Khawzawl	Kawlkulh	Jhum paddy + Maize + Banana + Ginger + Animal Husbandry + orange	<p>Lack of awareness towards integrated farming.</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Improper nutrient management.</li> <li><input checked="" type="checkbox"/> Citrus declining.</li> <li><input checked="" type="checkbox"/> Lack of Orchard</li> </ul>	<p>Creating awareness for adoption of integrated farming.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Rejuvenation of old citrus orchards.</li> <li><input type="checkbox"/> Creating awareness for livestock management</li> </ul>

5	Khawzawl	Khawzawl	Dulte	Jhum paddy + Banana + Maize + Ginger + Vegetables	<input type="checkbox"/> Lack of Orchard management. <input type="checkbox"/> Improper nutrient management. <input type="checkbox"/> Lack of Disease and Pest management. <input type="checkbox"/> Lack of awareness towards integrated farming.	<p>Training on Orchard management.</p> <input type="checkbox"/> Integrated nutrient & Pest management. <input type="checkbox"/> Creating awareness for adoption of integrated farming.
6	Khawzawl	Khawzawl	Rabung	Jhum paddy + Maize + Ginger + Vegetables	<input type="checkbox"/> Lack of Orchard management. <input type="checkbox"/> Improper nutrient management. <input type="checkbox"/> Lack of Disease and Pest management. <input type="checkbox"/> Lack of awareness towards integrated farming	<p>Training on Orchard management.</p> <input type="checkbox"/> Integrated nutrient & Pest management. <input type="checkbox"/> Creating awareness for adoption of integrated farming.
7	Khawzawl	Khawzawl	Khawhai	Jhum paddy + Maize + Ginger + Vegetables+ Citrus+Pineapple	<input type="checkbox"/> Lack of Orchard management. <input type="checkbox"/> Improper nutrient management. <input type="checkbox"/> Lack of Disease and Pest management. <input type="checkbox"/> Lack of awareness towards integrated farming.	<input type="checkbox"/> Training on Orchard management. <input type="checkbox"/> Integrated nutrient & Pest management. <input type="checkbox"/> Creating awareness for adoption of integrated farming

8	Champhai	Champhai	Champhai	WRC + Maize + Winter vegetables + Animal Husbandry and Fisheries	<input type="checkbox"/> Improper nursery management in WRC. <input type="checkbox"/> Improper nutrient management <input type="checkbox"/> Infestation of insect pest and diseases. <input type="checkbox"/> Lack of awareness towards integrated farming <input type="checkbox"/> Lack of knowledge and awareness on livestock management, feed and fodder production.	Nursery management <input type="checkbox"/> Integrated nutrient management <input type="checkbox"/> Integrated pest management <input type="checkbox"/> Creating awareness for adoption of integrated farming.  Creating awareness for livestock management and feed and fodder production
9	Champhai	Champhai	Zotlang	WRC + Jhum paddy + Potato + Winter vegetables + Animal Husbandry	Improper nursery management in WRC. <input type="checkbox"/> Improper nutrient management <input type="checkbox"/> Infestation of insect pest and diseases. <input type="checkbox"/> Lack of awareness towards integrated farming <input type="checkbox"/> Lack of knowledge and awareness on livestock management, feed and fodder production.	Nursery management <input type="checkbox"/> Integrated nutrient management <input type="checkbox"/> Integrated pest management <input type="checkbox"/> Creating awareness for adoption of integrated farming. <input type="checkbox"/> Creating awareness for livestock management and feed and fodder production

10	Champhai	Champhai	Hmunhmeltha	Jhum paddy + Vegetables + Animal Husbandry	Lack of knowledge on crop rotation <input type="checkbox"/> Lack of quality seed of different vegetables <input type="checkbox"/> Citrus declining <input type="checkbox"/> Lack of knowledge and awareness on livestock management, feed and fodder production.	Creating awareness on crop rotation and integrated farming <input type="checkbox"/> Creating awareness for the use of quality seeds in different vegetables. <input type="checkbox"/> Creating awareness for livestock management and feed and fodder production
11	Champhai	Champhai	Tuipui	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries	Improper nursery management in WRC. <input type="checkbox"/> Improper nutrient management <input type="checkbox"/> Infestation of insect pest and diseases. <input type="checkbox"/> Lack of awareness towards integrated farming <input type="checkbox"/> Lack of knowledge and awareness on livestock management, feed and fodder production.	Nursery management <input type="checkbox"/> Integrated nutrient management <input type="checkbox"/> Integrated pest management <input type="checkbox"/> Creating awareness for adoption of integrated farming. <input type="checkbox"/> Creating awareness for livestock management and feed and fodder production.
12	Champhai	Champhai	Khawbung	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries	Improper nursery management in WRC. <input type="checkbox"/> Improper nutrient management <input type="checkbox"/> Infestation of insect pest and diseases. <input type="checkbox"/> Lack of awareness towards integrated farming <input type="checkbox"/> Lack of knowledge and awareness on livestock management, feed and fodder production.	Nursery management <input type="checkbox"/> Integrated nutrient management <input type="checkbox"/> Integrated pest management <input type="checkbox"/> Creating awareness for adoption of integrated farming. <input type="checkbox"/> Creating awareness for livestock management and feed and fodder production.

13	Champhai	Champhai	Hnahlan	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries + Grapes	Improper nursery management in WRC. <input type="checkbox"/> Improper nutrient management <input type="checkbox"/> Infestation of insect pest and diseases. <input type="checkbox"/> Lack of awareness towards integrated farming <input type="checkbox"/> Lack of knowledge and awareness on livestock management, feed and fodder production.	Nursery management <input type="checkbox"/> Integrated nutrient management <input type="checkbox"/> Integrated pest management <input type="checkbox"/> Creating awareness for adoption of integrated farming. <input type="checkbox"/> Creating awareness for livestock management and feed and fodder production
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### 3. TECHNICAL ACHIEVEMENTS

#### 3. A. Details of target and achievements of mandatory activities by KVK during 2021-22

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	6	3	2	2	10	10
Horticulture	2	2	6	6	1	1	15	15
Agro-forestry	2	1	6	3	2	1	20	10
Home Science	-	-	-	-	-	-	-	-
PP	-	-	-	-	-	-	-	-
A.Sc	-	-	-	-	-	-	-	-
<b>Total</b>	<b>6</b>	<b>5</b>	<b>18</b>	<b>12</b>	<b>5</b>	<b>4</b>	<b>45</b>	<b>35</b>





Farmers	-	-	-	-	10	8	240	194
Rural youth					4	4	80	80
Extn. Functionaries					1	1	10	10
<b>Total</b>					<b>31</b>	<b>32</b>	<b>588</b>	<b>805</b>
Seed Production (ton.)					Planting material (Nos. in lakh)			
Target		Achievement			Target		Achievement	
4.1		6.0			<b>0.34</b>		0.54	

Note: Target set during last Annual Zonal Workshop

## 3. B. Abstract of interventions undertaken during 2021

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.
	ICM	Soyabean	Low yield due to late sowing & nutrition	Effect of sowing dates and mulching on productivity of Soyabean		Scientific Cultivation of Soyabean	-	Field Vist, Training	Seeds
		Maize+Bean	-	-	-	-	-	-	-
	Varietal Evaluation	Water Melon	Use of traditional varieties with low yield and bush type watermelon not yet identified in the District	Popularization of Water melon variety Arka Muthu		Scientific Cultivation of improved variety of Water Melon	-	Field Vist, Training	Seeds
	Varietal Evaluation	Brinjal	Lack of high yielding variety with bacterial wilt resistant variety	Introduction of Brinjal variety Arka Harshita		Package and practices of brinjal cultivation	-	Field Vist, Training	Seeds
	Soil Health Management	Lentil	Improper Nutrient Management	Enhancing Lentil Productivity through Sustainable Nutrient Management Practices		Nutrient management		Field Vist, Training	Seeds, Fertilizer







## 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	Effect of sowing dates and mulching on productivity of Soyabean	Low yield due to late sowing & nutrition	TO-1 Sowing on 15 May with Mulching TO-2 Sowing after 30 <sup>th</sup> May	Soyabean	3	Yield : NR :	11.50 30500			Farmers are happy with mulching approach & sowing on 15 May	Should develop small seeded improved varieties	1.79 1.60
2	Maize + Beans - Vegetable pea cropping system for rainfed conditions under organic management system	Lack of cropping system to accommodate more crops for better yield & income	Technology Option-1: Maize + Bean-V. Pea Technology Option-2: Farmers practice	Maize + Bean+ Vegetable Pea	3	-	-	-	-	-	-	<i>Could not be initiated due to lockdown and other related issues</i>
3	Popularization of Water melon variety Arka Muthu	Use of traditional varieties with low yield and bush type watermelon	TO-1-Arka Muthu TO-2 Farmer Practice	Water Melon	3	<b>Technology</b> T1 -(Arka Muthu)  T2 (Farmers practice)  <b>Yield /ha (qtl)-320qtl /ha</b>				Farmers are very happy with the performance of Arka		BCR-3.95

		not yet identified in the District.					Muthu		
4	Introduction of Brinjal variety Arka Harshita	Lack of high yielding variety with bacterial wilt resistant variety	TO-1 Arka Hashita TO-2 Farmer Practice	Brinjal	3	Technology T1 (Arka Harshita)- T2 (farmers practice)  <b>Yield /ha (qtl)- 220</b>	Ideal for off-season crop		BCR -2.75
5	Enhancing Lentil Productivity through Sustainable Nutrient Management Practices	Improper Nutrient Management	TO-1 NPK-10:18:33 Kg/ha+ 200 kg lime/ha+ 3 times foliar spray of 2% urea+0.5% ZnSo4+0.2% borax  TO2-Farmer Practice(No treatment)  Spacing : 20cm X 20 cm	Lentil	3	<b>Soil fertility status</b>  1.Av.N-351.0  2.Av.P-9.7  3.Av.K-285.0  <b>Techn</b> <b>ology</b> <b>Pod/Pl</b> <b>ant</b> <b>Yield(kg/h</b> <b>a)</b> TO-1 127.3 1250 TO-2 105.7 990	Faremers are encouraged to adopt the technology	Farmers are ready to adopt in large scale	<b>B:C</b>  3.1



6	Root-dipping in SSP-MC Slurry method of P management in lowland Paddy	Production of rice is mainly constrained by iron (Fe) induced phosphorus deficiencies	<p>Technology</p> <p>TO1-</p> <p>Step-I</p> <p>A mud slurry bed (45 sq.m) is prepared 7.0 kg SSP is to be mixed thoroughly with mud. Roots of uprooted rice seedling bundles need to be washed free of adhered mud and then roots are to be dipped in the SSP amended mud slurry bed for over-night.</p> <p>Step-II</p> <p>5 kg finely grounded dry compost along with 500ml liquid MC biofertilizer are to be mixed thoroughly with mud in the slurry bed. The SSP slurry treated roots of rice seedling bundles are to be dipped in to MC amended mud slurry bed and incubated for 2 h.</p> <p>TO2-Farmer Practice(No treatment)</p>	Rice	3	OFT could not be taken up due to non-availability of Microbial Consortium at the right time
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7	Modelling agro-forestry system in jhum field for permanent agriculture	No scientific agro-forestry model for converting jhum field to settled farming	(i) Two rows of banana & pineapple – 1.5x1.5m & 30x60cm (ii) Uncleared patch of 7m at regular interval (iii) Bee box – 7m apart  Growing of flowering trees/shurbs along the periphery of the farm	Pineapple, Banana etc.	3	On-going							
8	Potato based Hegderows farming system	Poor nutrient management in <i>jhum</i> field	TO1 : Contour cropping of Tephrosia & Potato  TO2 : Sole Potato  Spacing (potato) 50 - 60cmx20 - 25cm, Tephrosia - 15cmx5m	Tephrosia, Potato	2	This OFT could not be taken up due to Covid-19 pandemic which result in late arrival of potato seeds at propose location.							

\*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 2021

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

List of technologies demonstrated during previous years and popularized during 2017-18 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	Field Pea	Popularization of Var. Aman with Rhizobium inoculation	5	40	10
2	Tomato	Promotion on precision farming package for tomato variety Arka Abhed	5	60	5
3	Lentil	Popularization of Lentil Productivity through Sustainable Nutrient Management Practices	4	20	5
4	Groundnut	Popularization of Groundnut Variety: ICGV 91114	3	20	6

\* 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.	Crop	Thematic area	Technology Demonstrated	Season and	Area (ha)	No. of farmers/	Reasons for shortfall in	Farming situation	Status of soil (Kg/ha)
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No.				year			demonstration			achievement	(Rainfed/ Irrigated, Soil type, altitude, etc)	N	P	K
					Proposed	Actual	SC/ST	Others	Total					
1.	Field Pea	ICM	Technology Popularization of Field Pea Variety: Pusa Pragati	Sep 2021	2	2	10	-	10	-	Rainfed			
2.	Potato	Varietal Evaluation	Performance of Potato variety Kufri Jyoti	Oct 2021	2	2	40	-	40	-	Rainfed			
3	Tomato	Varietal Evaluation	Popularisation of Tomato variety Arka Abhed	April 2021	2	2	15	-	15	-	Rainfed	236	26	198
4	Compost	Production of inputs	Rural Composting for improvement of soil health & sustainable agriculture	June 2021	0.2	0.2	10	-	10	-	Rainfed	377.2	19.7	271

5	Potato	Nutrient management	To1 NPK-150:100:120 Kg/ha  Vermicompost-2.5t/ha  TO2-Farmer Practice(No treatment)  Spacing : 30cm X 30 cm	March 2021	2	2	10	-	10	-	Rainfed	278	11.6	192.3
6	Arhar, Ginger	Integrated crop management	1. Planting of Arhar at 15cmx5m & ginger at 30x60cm  Maintaining of Arhar, Tephrosia candida 1m height above ground level. Arhar Tephrosia candida	Kharif 2021	5	Due to Covid-19 pandemic this FLT could not be taken up.								
7	Tephrosia candida Pineapple	Integrated crop management		Kharif - 2021	5	5	5	-	5	-	Rainfed	198	17.6	151

## c. Performance of FLD on Crops during 2021

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	Field Pea	ICM	5	21.80	14.50	50.34	22.50	16.80	Nil	NIL	36280	68570	32290	1.89	32520	47154	14634	1.45
2	Potato	Varietal Evaluation	2	80	65	23.08	84	72	Nil	NIL	19050	32060	13010	1.68	16000	24000	80000	1.5
3	-	Compost	0.2	7	6	16.7	8	6	-	-	4280	14,000	9720	3.2	3780	9,000	5220	2.3
4	Potato	Nutrient Management	5	168.5	151	11	172	165	-	-	1,33,064	4,12,500	2,79,436	3.1	1,09,856	3,02,000	1,92,144	2.7
5	Tomato	Varietal Evaluation	5	420	320	31.25	435	395	-	-	1,73,195	8,40,000	6,66,805	4.8	1,44,230	3,75,000	2,30,770	2.6
6	Pineapple (Kew), Tephrosia candida	IFS	2	On-Going														
7	Arhar (	Resource	2	This OFT could not be taken up due to Covid-19 pandemic														

local variety), Ginger (local variety)	Conservation Technology		
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\*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	4	12.03.2021 11.06.2021 3.06.2021 10.12.2021		52	52	
2	Farmers Training	4	22.01.2021 24.03.2021 14.04.2021 24.09.2021		40	40	
3	Media coverage	4	5.05.2021 15.07.2021 17.09.2021 23.12.2021	-	-	-	-
4	Training for extension functionaries	2	17.02.2021 20.05.2021	-	30	30	-
5	Any other (Pl. specify)						
	<b>Total</b>	<b>14</b>			<b>122</b>	<b>122</b>	-

## 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		GC	GR	NR	BCR	GC	GR	NR	BCR			
																		*	*	
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 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		GC	GR	NR	BCR	GC	GR	NR	BCR				
																	*	*		*

\*\* 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**	BC R**	GC	GR	NR	BCR
1	Tomato	Arka Abhed	4	15	320	250	28	350	243	206451	640000	433549	3.1	206451	500000	206451	2.4

\*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 2021

\*\**(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
Soil Science	Nutrient Management	Integrated Nutrient Management	17.02.2021	2	KVK Training Hall	Farmer & Farm women	-	-	-	12	11	23	12	11	23
	Soil Management	Soil fertility management in degraded jhumland	10.03.2021	2	KVK Training Hall	Farmer & Farm women	-	-	-	17	9	26	17	9	26
	Nutrient Management	Balance fertilization	24.03.2021	2	KVK Training Hall	Farmer & Farm women	-	-	-	12	7	19	12	7	19

	Soil Management	Management of acidic soils	13.04.2021	2	KVK Training Hall	Farmer & Farm women	-	-	-	17	5	22	17	5	22
	Nutrient Management	Nutrient use efficiency	28.04.2021	2	KVK Training Hall	Farmer & Farm women	-	-	-	21	3	24	21	3	24
	Management of Agricultural crops	Macro and micro deficiency symptoms in Agricultural crops	6.05.2021	2	KVK Training Hall	Farmer & Farm women	-	-	-	18	11	29	18	11	29
	Organic Farming	Vermicomposting	10.09.2021	2	KVK Training Hall	Rural Youth	-	-	-	18	3	21	18	3	21
	Conservation Technology	Soil Conservation Measures	15.10.2021	2	KVK Training Hall	Extension Personnel	-	-	-	11	3	14	11	3	14

Agro-forestry	(1) Bee keeping	An introduction to bee keeping	15 – 16.02.2021	2	KVK Campus	Farmer & Farm women	-	-	-	20	10	30	20	10	30
	(2) Importance of nitrogen fixing trees	Role of nitrogen fixing trees for crop production	22.02.2021	1	KVK Campus	Farmer & Farm women	-	-	-	27	12	39	27	12	39
	(3) Integrated farming	Concept of sloping agriculture land technology	30 – 31.03.2021	2	KVK Campus	Rural youth	-	-	-	27	12	39	27	12	39
	(4) Hedgerows management	Management of hedgerows in agro-forestry model	22 – 23.04.2021	2	KVK Campus	Farmer & Farm women	-	-	-	30	5	35	30	5	35
	(5) Integrated farming	Concept of agriculture land technology	12.5.2021	1	Khawzawl	Extension personnel	-	-	-	6	4	10	6	4	10

	(6) Beekeeping	An introduction to bee keeping	16-17.6.2021	2	KVK Campus	Rural youth	-	-	-	33	8	41	33	8	41
	(7) Importance of Nitrogen fixing trees	Role of nitrogen fixing trees in crop production	7-8.7.2021	1	KVK Campus	Farmer & farm women	-	-	-	30	6	36	30	6	36
	(8) Integrated farming	Beneficial effect of tree crops combination	23.10.2021	1	KVK Campus	Farmer & farm women	-	-	-	26	14	40	26	14	40
Plant Protection	Mushroom Cultivation	Mushroom Cultivation	24.03.2021	1	KVK Campus	Rural Youth	-	-	-	7	23	30	7	23	30
Agro nomy	Rice	Advantage of chemical weed mngt. in Rice	25/6/2021	1	KVK Campus	F & FW				22	10	32	22	10	32
	Soyabean	Scientific cultivation of Soyabean	30/6/2021	1	KVK Campus	F & FW				15	8	23	15	8	23
	Field pea	Scientific cultivation of Field pea & benefits of <i>Rhizobium</i> inoculation	14/10/2021	1	KVK Campus	F & FW				10	5	15	10	5	15

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	Production of organic inputs	Methods of vermiculture construction	26.02.2021	2	Ruantlang	Rural Youth	-	-	-	13	7	20	13	7	20
	Mulching Technique	Importance and benefits of mulching methods	18.03.2021	2	Tualte	Farmer & Farm women	-	-	-	16	5	21	16	5	21
	Conservation Technique	Soil Conservation Measures	29.03.2021	2	Sialhauk	Farmer & Farm women	-	-	-	12	3	15	12	3	15
	Foliar fertilization	Foliar fertilization in fruit crops	28.05.2021	2	Biate	Farmer & Farm women	-	-	-	17	8	25	17	8	25
Agronomy	Field pea	Scientific cultivation of Field pea	8/10/2021	1	Tualte	F & FW				12	6	18	12	6	18

	Field pea	Scientific cultivation of Field pea	9/10/2021	1	Zotlang	F & FW				10	5	15	10	5	15
	Field pea	Scientific cultivation of Field pea	11/10/2021	1	Neihdawn	F & FW				14	6	20	14	6	20
	Field pea	Scientific cultivation of Field pea	15/10/2021	1	Tuipui					7	6	13	7	6	13
	Field pea	Scientific cultivation of Field pea	18/10/2021	1	Ruantlang					6	4	10	6	4	10
Plant protection	Mushroom Cultivation	Mushroom Cultivation	29.08.2021	1	Hermon	Farm women					20	20		20	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			Type of enterprise ventured into	Number of units	Number of persons employed	Avg. Annual income in Rs. generated through the enterprise	
					M	F	T	M	F	T	M	F	T					
-	14-19.06.2021	6	Organic Farming	Vermicompos	-	-	-	6	6	12	6	6	12	Vermicomposting	1	12	1,80,000/-	42,000/-
-	23-28.08.2021	6	Soil Conservation	Soil Conservation measures	-	-	-	12	3	15	12	3	15	-	-	-	-	42,000/-
Bee keeping	16 – 17.06.2021	2	Bee keeping	An introduction to bee keeping														
Mushroom Cultivation			Income generation Activities	Mushroom Spawn Production				3	12	15	3	12	15	Spawn production	1	15	100000	No

\*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									Sponsori ng Agency	Amount of fund received (Rs.)
							General			SC/ST			Total				
							M	F	T	M	F	T	M	F	T		
Off	F/FW	7.04.2021	1	Soil Science	Productio n of organic inputs	Nutrient Enriched Compost	-	-	-	17	4	21	17	4	21	ATMA	3,000
On	F/FW	19- 20.07.20 21	2	Soil Science	Organic Farming	Vermicompost ing										NABAR D	12,000/-

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 2021

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.	Diagnostic visits			56	-	-	-	106	90	196	-	-	-	106	90	196
2.	Advisory Services			550	-	-	-	400	150	550	-	-	-	400	150	550
3.	Animal Health Camp			-	-	-	-	-	-	-	-	-	-	-	-	-
4.	Plant health camp			-	-	-	-	-	-	-	-	-	-	-	-	-
5.	Training/ practical manual			-	-	-	-	-	-	-	-	-	-	-	-	-
6.	Celebration of important days			5	-	-	-	180	50	230	-	-	-	180	50	230
7.	Exhibition			1	-	-	-	276	189	465	-	-	-	276	189	465
8.	Exposure visits			1	-	-	-	13	5	18	-	-	-	13	5	18
9.	Farm Science Club Conveners meet			-	-	-	-	-	-	-	-	-	-	-	-	-
10.	Farmers Seminar/ workshop			1	-	-	-	40	20	60	-	-	-	40	20	60
11.	Farmers Visit to KVK			-	-	-	-	280	302	582	-	-	-	280	302	582
12.	Field Day			2	-	-	-	30	22	52	-	-	-	30	22	52

13	Group meetings/ Discussion			6	-	-	-	61	86	147	-	-	-	61	86	147
14	Awareness Camp			1	-	-	-	21	27	48	-	-	-	21	27	48
15	Kisan Gosthi			-	-	-	-	-	-	-	-	-	-	-	-	-
16	Kisan Mela			1	-	-	-	155	208	363	-	-	-	155	208	363
17	Mahila Mandal Conveners' meetings			-	-	-	-	-	-	-	-	-	-	-	-	-
18	Method Demonstrations			2	-	-	-	22	13	35	-	-	-	22	13	35
19	Scientists visit to farmers field			35	-	-	-	331	212	543	-	-	-	331	212	543
20	Self Help Group Conveners meetings			2	-	-	-	27	60	87	-	-	-	27	60	87
21	Soil health/ testing Campaigns			1	-	-	-	42	23	65	-	-	-	42	23	65
22	Film show			2	-	-	-	127	238	365	-	-	-	127	238	365

### 3.5 Production and supply of Technological products during 2021

#### 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	
1. Cereals	a. Paddy	Manipur (local)	10	50,000	-	-	18	7	25
	b. Maize	Mimpui (local)	5	40,000	-	-	15	12	27
2. Oil seeds	a. Groundnut	GPBD-5	5	60,000	-	-	11	22	33

1. Pulses	a. Field Pea	Pusa Pragati	10	80,000	-	-	25	15	40
2. Vegetables	a. Bean	Zorin Bean	25	1,50,000	-	-	43	24	67
3. Spices	a. Chilli	Mizo chilli (local)	5	1,25,000	-	-	33	17	50

A1. SUMMARY of Production and supply of Seed Materials during 2021

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	15	15	90,000	-	-	33	19	52
2	Oil seeds	5	5	60,000	-	-	11	22	33
3	Pulses	10	10	80,000	-	-	25	15	40
4	Vegetables	25	25	1,50,000	-	-	43	24	67
5	Spices	5	5	1,25,000	-	-	33	17	50
TOTAL		60	60	5,05,000	-	-	145	97	242

B. Production and supply of Planting Materials (Nos. in No.) during 2021

Major group/class	Crop	Variety	Quantity (In	Quantity (In	Value (Rs.) of	Number of recipient/ beneficiaries
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			No.) produced	No.) supplied	quantity produced	General		SC/ST		Grand Total
						M	F	M	F	
Fruits	Jackfruit	Local	4,000	4,000	40,000	-	-	15	5	20
Tree species/Vegetables	Drumstick	PKM-1	6,000	6,000	60,000	-	-	27	3	30
	Tree Bean	talim (local)	1245	1245	49,800	-	-	13	23	36
	Tomato	Arka Rakshak & Arka Samrat	12000	12000	6000	-	-	10	14	24
	Broccoli	Green Magic	17000	17000	8500	-	-	26	12	38
	Cabbage	Ryozeki	8300	8300	4150	-	-	6	11	17
	Chilli	Mizo chilli (local)	5400	5400	2700	-	-	15	6	21

## C. Production of Bio-Products during 2021

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.Vermi compost	<i>Eudrilus eugeniae</i>		15000	3,00,000	-	-	41	33	74
	2. Vermi wash	<i>Eudrilus eugeniae</i>		120 ltr	6000	-	-	46	14	60
	3. Azolla	<i>Azolla</i>		200	16000	-	-	25	23	48

		<i>coroliliana</i>								
BIO PESTICIDES										
1										

## D. Production of livestock during 2021

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 &amp; reference) during 2021

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

(B) Articles/ Literature developed/published

Item	Literature Developed	Authors name	Number of copies	
			Produced/ published	Supplied/ distributed
1.	Package and Practices of Moringa	Dr.Om Praksh		80

2.	Nutrient Enriched Compost	R.Vanlalduati		50
3.	Rural Composting (Indore method)	R.Vanlalduati		50
4.	Vermicomposting	R.Vanlalduati		120
5.	Mushroom Cultivation (Chinese and Conventional method)	F.Zoramthari		150
6.	Package and Practices of Tomato	Dr.Malsawmkimi		200
7.	Package and Practices of Cabbage	Dr.Malsawmkimi		90
8.	Package and Practices of Potatot	Dr.Om Praksh		120
<b>TOTAL</b>				<b>860</b>

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.	Nil	Nil	Nil

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

### **SUCCESS STORY OF HAWILO SHG ON VERMICOMPOSTING**

#### **Introduction**

Hawilo Self Help Group is one of the SHG formed under NABARD in the year 2019 which comprises 12 members from Ruantlang Village, Champhai District. They started doing monthly contribution from each member @ Rs 100 per month. Their main aim is to encourage self-



employment and enhance the member's financial security. They opened joint account under Farming Cooperative Society Bank Ruantlang and depositing contribution from each member every month.

### **KVK Intervention**

Krishi Vigyan Kendra, Champhai District organised hands on training on Vermicomposting under the sponsorship of NABARD for SHGs which was formed under NABARD. Hawilo SHG first came to know about vermicomposting while attending the training. This training had aroused an interest in them to take up Vermicomposting. Initially they had started Vermicomposting with four Vermibed provided by KVK. Each bed was 12x3 feet size in which cow dung, agricultural waste and earthworm were used. They started selling both the earthworms and vermicompost from 2019 @ Rs 300/kg and Rs 30/kg respectively. In the year 2020, KVK had given more number of Vermibed and they started looking out for more crop residues and agricultural wastes. In the month of November 2021, they started to make Vermiwash with the help of Krishi Vigyan Kendra, Champhai District to earn more income.

### **Impact/Outcome**

They are satisfied with the Vermicompost technology because they are not only securing their livelihood but also sets an example for coming generation as well as for farmers' community of Ruantlang Village. They had already inspired many farmers in and around the village to try out alternative farming practices in general and take up Vermicomposting in particular. Within a short period of time they had achieved marvelous success in Vermicomposting. Because of the growing demand and acceptance of Vermicompost in farming community, Vermicomposting has become quite popular and profitable enterprise.

### **Achievements**

1. The group has continued this activity to generate employment for themselves. They have already sold around 10-13 tonnes of Vermicompost costing Rs 30/Kg.
2. Village Council of Ruantlang had given land and constructed compost pit for Hawilo SHG under MNREGS.
3. They bought secondhand Mahindra by they own income to make easier their works for collecting agricultural wastes and cow dung etc.



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
	Nil		

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

3.11 Field activities

- i. Number of villages adopted-39
- ii. No. of farm families selected-195
- iii. No. of survey/PRA conducted- 20

## 3.12. Activities of Soil and Water Testing

Status of establishment of Lab :  
 1. Year of establishment : 2015

2. List of equipments purchased with amount :

Sl. No	Name of the Equipment			Qty.	Cost
	S&WT lab	Mini lab/ Mridaparikshak	Manufacturer		
1	Side Table			1	8500
2	Steel Rack			3	26700
3	Book Case			3	51000
4	USDV			3	75231
5	Stool			2	2622
		MRIDAPARIKSHAK		1	86000
<b>Total</b>					<b>2,50,053</b>

## 3. Details of samples analyzed (2021) :

Details	No. of Samples analysed	No. of Farmers	No. of Villages	Amount ( In Rupees) realized
Soil Samples	370	521	14	-
Water Samples				
Plant Samples				
Petiole Samples				
<b>Total</b>	<b>370</b>	<b>521</b>	<b>14</b>	<b>-</b>

## 1. Details of Soil Health Cards (SHCs) (2021)

- a. No. of SHCs prepared: 370  
 b. No. of farmers to whom SHCs were distributed: 370  
 c. Name of the Major and Minor nutrients analysed: pH,OC,Avail.N,P &K  
 d. No. of villages covered: 14

### 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 only	100	34	-	-	6	-	9	-	14	14	-	-	120	48
Voice only	150	56	-	-	10	-	-	-	21	21	-	-	181	58
Voice and Text both	76	29	-	-	20	-	-	-	-	-	-	-	96	29
<b>Total</b>	<b>326</b>	<b>119</b>	<b>-</b>	<b>-</b>	<b>36</b>	<b>-</b>	<b>9</b>	<b>-</b>	<b>35</b>	<b>35</b>	<b>-</b>	<b>-</b>	<b>397</b>	<b>135</b>

### 3.14 Contingency planning for 2021

#### 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

Climate change	Introduction of new variety or crop	13	-	22	22
Soil Erosion	Introduction of Resource Conservation Technologies	12	-	15	15
Scarcity of Water/ Late Monsoon	Water used efficiency through drip and Rain Water Harvesting Structure	12 Units	-	10	10

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
State Department of Agriculture/Horticulture/ AH&VETY/ Fishery/ Forestry/ Soil & Water Conservation/ Minor Irrigation/ Sericulture of Champhai District and Khawzawl District.	Implementation of RKVY, NFSM, supply of subsidized inputs like chemicals, farm machinery, Project, Training, Technical Advices, etc
NABARD	Implementation of Project and Trainings
ATMA	Training and technical advice as Resource person
IWMP	Training and technical advice as Resource person
Block Development Office	Training and technical advice as Resource person
NGOs AMFU, YMA etc	Technology transfer, Awareness programme, Celebration of important days
IFAD FOCUS(Fostering Climate Resilient Upland Farming System)	Training and technical advice as Resource person and as National Representative
District Commissioner of Champhai District and Khawzawl District.	Member-District level committee on providing irrigation facilities to farmers.

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 2021

Name of the scheme/ special programme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
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Poshan Abhiyan and Tree Plantation under IFFCO, Guwahati	1)Seed packets distributed to farmers	17/09/2021	ICAR-ATARI,Zone VII	7000.00
TSP Network Project	Awareness	16/02/2022	ICAR-ATARI, Zone VII	10,000.00
Capacity Building of Farmers through Training Programme on Profitable Dairy Farming & Livestock Management	Care and management of layer Poultry farm with emphasis on vaccination, breed selection and feeding schedules	23-25/02/2022	ICAR-ATARI, Zone VII	2,00,000.00
Swachhta Action Plan	Awareness Campaign,Cleanliness drive		ICAR-ATARI, Zone VII	41,400.00
Cluster Frontline Demonstration of Pulses under NFSM	Demonstration, Field and Exposure visit	September- 2021	ICAR-ATARI, Zone VII	38,850.00
Orientation Training Programme and Farmer Field School	Training, Field Visit, Farmers Field School	7-11/02/2022	Directorate of Agriculture, Mizoram	2,05,500.00
Farmers outreach Programme on Natural Farming	Awareness and Training	2.08.2021	ICAR-ATARI, Zone VII	14,104.31
Skill Training for Rural Youth	Training	26.01.2021 & 28.04.2021	MAMETI	84,000.00

### 5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

Sl. No.	Programme	Nature of linkage	Remarks
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## 6.2 Performance of instructional farm (Crops) including seed production during 2021

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty. (qtl)	Cost of inputs	Gross income	
Maize	16.04.2021	12.07.2021	0.25	Mimpui	seed	5	23,700	40,000	
Field pea	19.05.2021	04.09.2021	0.8	Pusa pragati	seed	10	33,000	80,000	
Chilli	22.05.2021	08.09.2021	0.5	Mizo chilli	Dry chilli	5	64,750	1,25,000	
Beans	26.05.2021	11.08.2021	1.0	Zorin bean	seed	25	69,400	1,50,000	
Ground nut	23.06.2021	19.11.2021	0.18	GPBD 5	seed	5	26,086	60,000	
Paddy	11.07.2021	04.12.2021	0.5	Manipur buh	seed	10	37,850	50,000	

## 6.3 Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.) during 2021

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
1	Vermi compost	150 qtl	113750	300000	
2	Vermi wash	120 ltr	1900	6000	
3	Azolla	2 qtl	4890	16000	

## 6.4 Performance of instructional farm (livestock and fisheries production) during 2021

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	

## 6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Unit/ structure during 2021

Date	Title of the training course	Client (PF/RV/EF)	No. of Courses	No. of Participants including SC/ST		
				Male	Female	Total
09.06.2021	Training on Rain water harvesting and water conservation	PF	1	17	11	28

## 6.6 Utilization of hostel facilities (Month-Wise) during 2021

Accommodation available (No. of beds):13 nos.

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)
Farmers Hostel has been used for Covid Care Centre					

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

## 7. FINANCIAL PERFORMANCE

### 7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location/ Branch	Account Number
KvK Khawzawl(PFMS)	State Bank of India	Khawzawl	37041217638
KVK Khawzawl (Revolving Fund)	State Bank of India	Khawzawl	37958564078

### 7.2 Utilization of funds under CFLD on Oilseeds and Pulses (Rs. In Lakhs) if applicable during 2021

Item	Released by ICAR/ATARI (in lakh)		Expenditure (in lakh)		Unspent balance as on 31 <sup>st</sup> March, 2018
	Amount	Amount	Amount	Amount	
CFLD Pulses (Field Pea)	90000	38850	90000	-	We have spent Rs 51150/ from our contingency budget because ATARI did not released the II <sup>nd</sup> instalment as per their sanction amount
<b>TOTAL</b>					

### 7.3 Utilization of KVK funds during the year 2021

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
<b>A. Recurring Contingencies</b>				
1	Pay & Allowances	169.89	169.89	167.34313

2	Traveling allowances	2.25	2.25	2.25
3	Contingencies	17.65	17.65	17.65
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	Hydroponics	0.50	0.50	0.50
K	KSHAMTA	0.25	0.25	0.25
L	NARI	0.25	0.25	0.25
M	HRD	0.50	0.50	0.50
TOTAL (A)				188.74313
<b>B. Non-Recurring Contingencies</b>				
1	Works	5.00	5.00	5.00
2	Equipments including SWTL & Furniture	3.50	3.50	3.50
3	Vehicle (Four wheeler, please specify)			
4	IT equipment	2.00	2.00	2.00
TOTAL (B)		10.50	10.50	10.50
<b>C. REVOLVING FUND</b>				
GRAND TOTAL (A+B+C)		201.79	201.79	199.24313

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

Year	Opening balance as on 1 <sup>st</sup> April	Income during the year	Expenditure during the year	Net balance with KVK (in lakh)
April 2020 to (till date)2021	1,40,015/-	84,381/-	68,000/-	2,24,396/-
April 2019 to March 2020	87,625/-	54,190/-	5,000/-	1,36,815/-
April 2018 to March 2019	48,625/-	42,680/-	3,680/-	87,625/-

Note: No KVK must leave this table blank

## 8.0 Please include information which has not been reflected above.

(Write in detail)

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

- (a) Administrative
- (b) Financial
- (c) Technical

(Signature)  
Sr. Scientist cum Head