

# PROFORMA FOR ANNUAL REPORT OF KVKs, 2013-14

## 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	
KrishiVigyan Kendra (KVK), Khawzawl, PO- khawzawl, Distt.-Champhai (MIZORAM)-796310	Office 03831-261484, 261486	03831- 261485	<a href="mailto:kvkshawzawl@gmail.com">kvkshawzawl@gmail.com</a> <a href="http://www.kvkkhawzawl.com">www.kvkkhawzawl.com</a>

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

Address	Telephone		E mail
	Office	FAX	
Directorate of Agriculture (R&E) Aizawl, Mizoram- 796 001	0389-2319025	0389-2315784	mizagr@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
LalrinawmiRenthlei	03831-261484	9436159788 9856229907	kvkshawzawl@gmail.com

### 1.4. Year of sanction:

### 1.5. Staff Position (As on 31<sup>st</sup> March, 2014)

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	Programme Coordinator	LALRINAWMI RENTHLEI	PC	Horticulture	15,600-39,100+8,000	24,170	1.7.11	Temporary	ST
2	Subject Matter Specialist	MALSAWMKIMI	SMS	Horticulture	15,600-39,100+5,400	18,240	03.06.09	Permanent	ST
3	Subject Matter Specialist	SAYED KHALIDUDDIN AHMED	SMS	Animal Science	15,600-39,100+5,400	18,950	26.4.08	Permanent	GENERAL

4	Subject Matter Specialist	F. ZORAMTHARI	SMS	Plant Protection	15,600-39,100+5,400	18,240	06.6.09	Permanent	ST
5	Subject Matter Specialist	LALRAMENGI	SMS	Agronomy	15,600-39,100+5,400	16,880	28.4.11	Permanent	ST
6	Subject Matter Specialist	J.VANLALHLUZUALI	SMS	Agril. Extension	15,600-39,100+5,400	16,230	09.03.12	Permanent	ST
7	Subject Matter Specialist	VANLALMUANSANGI	SMS	Soil Science	15,600-39,100+5,400	16,230	07.12.12	Permanent	ST
8	Programme Assistant	LALHRUAILUANGI	Programme Assistant	Home Science	9,300-34,800+4200	12,550	1.7.08	Permanent	ST
9	Computer Programmer	SAMSON SAIRENGPUIA SAILO	Computer Programmer	Computer	9,300-34,800+4200	12,550	22.4.08	Permanent	ST
10	Farm Manager	PRAKASH THAPA	Farm Manager	B.Sc (Agri.)	9,300-34,800+4200	12,550	25.4.08	Permanent	GENERAL
11	Accountant / Superintendent	K.VANLALHMANG AIHI	Accountant / Superintendent	-	9,300-34,800+4200	12,550	29.5.08	Permanent	ST
12	Stenographer	CRUSADE THANGPUII	Stenographer	-	5,200-20,200+2,400	9,040	29.2.08	Permanent	ST
13	Driver	LALNUNTLUANGA	Driver	-	5,200-20,200+1,900	7,370	29.2.08	Permanent	ST
14	Driver	R.DENGLIANA	Driver	-	5,200-20,200+1,900	7,370	9.2.08	Permanent	ST
15	Supporting staff	LALTANPUIA	Supporting staff	-	4,440-7,440+1,300	5,740	10.7.08	Permanent	ST
16	Supporting staff	LALVENHIMA	Supporting staff	-	4,440-7,440+1,300	5,740	24.7.08	Permanent	ST
	<b>Total</b>								

a. Total land with KVK (in ha):17.774

b. Total cultivable land with KVK (in ha): 12.464

c. Total cultivated land (in ha): 4

S. No.	Item	Area (ha)
1	Under Buildings	1.31
2.	Under Demonstration Units	12.464
3.	Under Crops (Cereals, pulses, oilseeds etc.)	1.5
4.	Under vegetables	1.25
5.	Orchard/Agro-forestry	0.5
6.	Others (specify)Parkia, sugarcane etc.	0.75

Infrastructural Development:

A) Buildings

Sno		Nos	Remarks
1	Admin Building	1	
2	Staff Quarter	8	
3	Laboratory	1	
4	Mushroom Unit	2	
5	Onion Structure	1	
6	Training Extension	1	
7	Farmer Hostel	1	
8	Cow Shed	1	
9			

## B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Gypsy	MZ-01 D 4086	-	-	-	Running condition
Tractor	MZ-01 D 2246	-	-	-	Running condition

## C) Equipments &amp; AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
LCD projector	Sept,2008	-	Good
Xerox machine	Sept,2011	-	Good
Computer	Sept,2008/2011	-	Good
Seed analyzer	Sept,2008	-	Good
Refrigerator	Sept,2008	-	Good
Incubator	Sept,2008	-	Good
Oven	Sept,2008	-	Good
Grinder	Sept,2008	-	Good
Laptop	Sept,2008	-	Good
T.V.	Sept,2008	-	Good
A.C.	Sept,2008	-	Good

## 1.8. A). Details SAC meeting\* conducted in the year 2013-14

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken on last SAC recommendation

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

## 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 + Hybrid 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 & major agro-ecological situations (based on soil and topography)

Sl. No	Agro-climatic Zone	Characteristics
	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 <sup>0</sup> 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 type/s

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 Chilli	1250	6875	0.18
24	Jathropha	300	4600	0.06

## 2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 2013	nil	28	20.25	55
May	-	29.3	23.95	71.6
June	1250	31.8	22.9	81
July	2200	29	23.1	86.8
August	6400	26.25	20.1	94.25
September	3200	28.85	20.9	83.2
October	500	25.65	19.95	74.2
November	nil	23.8	14	65.4
December	nil	19.4	10.1	69.83
January	nil	20	12.95	46.5
February	nil	22.1	11.2	51
March	290	25.55	18.2	38.71

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

Category	Population	Production	Productivity
<b>Cattle</b>			
<i>Crossbred</i>	346	560 tons	1.6
<i>Indigenous</i>	6663	788 tons	0.12
<b>Buffalo</b>	3053	14 tons	0.0045
<b>Sheep</b>			
<i>Crossbred</i>			
<i>Indigenous</i>	712 & 115	3 tons	-
<b>Goats</b>			
<b>Pigs</b>	24186	437 tons	-
<i>Crossbred</i>	6051	-	-

<i>Indigenous</i>			
<b>Rabbits</b>			
<b>Poultry</b>			
Hens	151607	99 tons	-
<i>Desi</i>	44430		-
<i>Improved</i>	430	-	-
Ducks	346	560 tons	1.6
Turkey and others	6663	788 tons	0.12

<b>Category</b>	<b>Area</b>	<b>Production</b>	<b>Productivity</b>
Fish			
<i>Marine</i>			
<i>Inland</i>			
Prawn			
Scampi			
Shrimp			

## 2.6 Details of Operational area / Villages (2013-14)

<b>Sl. No.</b>	<b>Taluk</b>	<b>Name of the block</b>	<b>Name of the village</b>	<b>Major crops &amp; enterprises</b>	<b>Major problem identified</b>	<b>Identified thrust area</b>
1.	Khawzawl	Khawzawl	Khawzawl	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries	<ul style="list-style-type: none"> <li>• Improper nursery management in WRC.</li> <li>• Improper nutrient management</li> <li>• Infestation of insect pest and diseases.</li> <li>• Lack of awareness towards integrated farming</li> <li>• Lack of knowledge and awareness on livestock management, feed and fodder production.</li> </ul>	<ul style="list-style-type: none"> <li>• Nursery management</li> <li>• Integrated nutrient management</li> <li>• Integrated pest management</li> <li>• Creating awareness for adoption of integrated farming.</li> <li>• Creating awareness for livestock management and feed and fodder production.</li> </ul>

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>	<ul style="list-style-type: none"> <li>• Creating awareness on crop rotation and integrated farming</li> <li>• Training on post harvest management in tea.</li> <li>• Creating awareness for the use of quality seeds in different vegetables.</li> <li>• Rejuvenation of old citrus orchards.</li> <li>• 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>• Lack of Training and Pruning of Passion Fruit &amp; Grapes</li> <li>• Improper nursery management in WRC.</li> <li>• Improper nutrient management</li> <li>• Infestation of insect pest and diseases.</li> </ul>	<ul style="list-style-type: none"> <li>• Cultivation practices of Grapes and Passion fruit</li> <li>• IDM on Ginger</li> <li>• Integrated nutrient management</li> <li>• Integrated pest management</li> <li>• Creating awareness for livestock management and feed and fodder production</li> </ul>
4.	Champhai	Champhai	Champhai	WRC + Maize + Winter vegetables + Animal Husbandry and Fisheries	<ul style="list-style-type: none"> <li>• Improper nursery management in WRC.</li> <li>• Improper nutrient management</li> <li>• Infestation of insect pest and diseases.</li> <li>• Lack of awareness towards integrated farming</li> <li>• Lack of knowledge and awareness on livestock management, feed and fodder production.</li> </ul>	<ul style="list-style-type: none"> <li>• Nursery management</li> <li>• Integrated nutrient management</li> <li>• Integrated pest management</li> <li>• Creating awareness for adoption of integrated farming.</li> <li>• Creating awareness for livestock management and feed and fodder production.</li> </ul>



5.	Champhai	Champhai	Zotlang	WRC + Jhum paddy + Potato + Winter vegetables + Animal Husbandry	<ul style="list-style-type: none"> <li>• Improper nursery management in WRC.</li> <li>• Improper nutrient management</li> <li>• Infestation of insect pest and diseases.</li> <li>• Lack of awareness towards integrated farming</li> <li>• Lack of knowledge and awareness on livestock management, feed and fodder production.</li> </ul>	<ul style="list-style-type: none"> <li>• Nursery management</li> <li>• Integrated nutrient management</li> <li>• Integrated pest management</li> <li>• Creating awareness for adoption of integrated farming.</li> <li>• Creating awareness for livestock management and feed and fodder production</li> </ul>
6.	Champhai	Champhai	Hmunhmeltha	Jhum paddy + Vegetables + Animal Husbandry	<ul style="list-style-type: none"> <li>• Lack of knowledge on crop rotation</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>	<ul style="list-style-type: none"> <li>• Creating awareness on crop rotation and integrated farming</li> <li>• Creating awareness for the use of quality seeds in different vegetables.</li> <li>• Creating awareness for livestock management and feed and fodder production</li> </ul>
7.	Champhai	Champhai	Tuipui	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries	<ul style="list-style-type: none"> <li>• Improper nursery management in WRC.</li> <li>• Improper nutrient management</li> <li>• Infestation of insect pest and diseases.</li> <li>• Lack of awareness towards integrated farming</li> <li>• Lack of knowledge and awareness on livestock management, feed and fodder production.</li> </ul>	<ul style="list-style-type: none"> <li>• Nursery management</li> <li>• Integrated nutrient management</li> <li>• Integrated pest management</li> <li>• Creating awareness for adoption of integrated farming.</li> <li>• Creating awareness for livestock management and feed and fodder production.</li> </ul>

8.	Khawzawl	Khawzawl	Kawkulh	Jhum paddy + Maize + Banana + Ginger + Animal Husbandry + orange	<ul style="list-style-type: none"> <li>Lack of awareness towards integrated farming.</li> <li>Improper nutrient management.</li> <li>Citrus declining.</li> <li>Lack of Orchard management</li> </ul>	<ul style="list-style-type: none"> <li>Creating awareness for adoption of integrated farming.</li> <li>Rejuvenation of old citrus orchards.</li> <li>Creating awareness for livestock management</li> </ul>
9.	Khawzawl	Khawzawl	Dulte	Jhum paddy + Banana + Maize + Ginger + Vegetables	<ul style="list-style-type: none"> <li>Lack of Orchard management.</li> <li>Improper nutrient management.</li> <li>Lack of Disease and Pest management.</li> <li>Lack of awareness towards integrated farming.</li> </ul>	<ul style="list-style-type: none"> <li>Training on Orchard management.</li> <li>Integrated nutrient &amp; Pest management.</li> <li>Creating awareness for adoption of integrated farming.</li> </ul>

### 3. TECHNICAL ACHIEVEMENTS

#### 3. A. Details of target and achievements of mandatory activities by KVK during 2013-14

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	7	6	12	14	2	2	2	8
Horticulture	8	3	21	8	2	2	7	7
Animal science	4	1	6	2	1	1	5	5
Plant Protection	2	1	4	2	-	-	-	-
Soil Science	3	3	9	9	-	-	-	-
Agril. Extn.	4	3	315	250	-	-	-	-







## 11). Results of On Farm Testing

Title of OFT	Problem Diagnosed	Technology Assessed	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)Varietal evaluation of paddy	Low yield with local variety	Yield performance of paddy variety B 3, Shhsarang as check variety under rainfed lowland condition	4	<p>1.Avg. Plant height = i) 3.64 ft ii) 3.4 ft</p> <p>2.Avg. no. of Tiller/ Hill =i) 27.3 ii) 25.4</p> <p>3.Effective Tillers=i) 21.2 ii) 20.7</p> <p>4. Avg. length of Panicle=i) 7.8 inch ii) 8.1 inch</p> <p>5) Avg. no of grains/panicle=i) 330 Nos ii) 232 Nos</p> <p>6) Yield =i) 47.73qtl ii) 44.75qtl</p>	The tested variety performed well and the farmers like to continue for the coming year.	Since the farmers were not aware of HYV ,now they can achieve higher production per unit through this variety rather than growing local variety.It is proposed to be taken up for FLD next year.	B-3 1:1.65 Shhsarang 1:1.40

2)Varietal evaluation of paddy	Low yield with local variety	Yield performance of paddy variety B 4, Shhsarang as check variety under rainfed lowland condition	2	<p>1.Avg. Plant height = i)3.8 ft ii) 3.4 ft</p> <p>2.Avg. no. of Tiller/ Hill = i) 23.8 ii) 25.4</p> <p>5. Effective Tillers=i) 18.6 ii) 20.7</p> <p>6. Avg. length of Panicle=i) 9.2 inch ii) 8.1 inch</p> <p>5) Avg. no of grains/panicle= i) 287 Nos ii) 232Nos</p> <p>6) Yield = i)43.28 qtl ii) 44.75qtl</p>	The tested variety performed well and the farmers like to continue for the coming year.	Since the farmers were not aware of HYV ,now they can achieve higher production per unit through this variety rather than growing local variety.It is proposed to be taken up for FLD next year.	B-4 1:1.40 Shhsarang 1:1.40
3)Varietal evaluation of Maize	Lack of awareness on improve cultivation packages and improved seeds	Maize varRCM-75 was selected and spacing of 25X60cm was adopted	2	<p>1) Avg. Plant height=i)8.8ft ii)6.54ft</p> <p>2) Avg. length of Cob=i)7.8inch ii)6.72inch</p> <p>3) Avg. diameter of Cob</p>	The farmers were convinced with the performance and are encouraged to take up cultivation on	Since maize is the secondary cereal crop among the mizo tribe, there has not been scientific management, but after introduction of scientific	Mimpui 1:1.13 RCM 75 1:1.51

				=i) 5.56 inch ii)5.65 inch 4) Avg. no of Grains/ Cob = i)427 ii)422 5) Date of Harvesting =i)90-95 DAS ii) 6) Yield =i)48.62 qts/ha ii)41.3 qts/ha	large scale	management method they were really inspired by it and moreover the variety suits well with the area.	
4)Varietal evaluation of Maize	Lack of awareness on improve cultivation packages and improved seeds	Maize varRCM-76 was selected and spacing of 25X60cm was adopted	2	1) Avg. Plant height=i)9.7ft ii) 6.54ft 2) Avg. length of Cob=i)7.93inch ii)6.72inch 3) Avg. diameter of Cob =i) 5.82inch ii) 5.65 inch 4) Avg. no of Grains/ Cob = i)451 ii)422 5) Date of Harvesting =i)90-95 DAS ii) 90-95 DAS 6) Yield =i)49.76qts/ha ii) 41.3 qts/ha	The farmers were convinced with the performance and are encouraged to take up cultivation on large scale	Since maize is the secondary cereal crop among the mizo tribe, there has not been scientific management, but after introduction of scientific management method they were really inspired by it and moreover the variety suits well with the area, it will be taken for FLD	RCM 76 1:1.57 Mimpui1:1.13
5) Varietal evaluation of	Low yield with	Yield performance of soyabean variety	2	1) Avg. Plant	The farmers were	Since the farmers use only local	i) 1:1.12



soyabean	local variety	RCS – 1 –9		<p>height=i)3.58ft ii)3.17ft</p> <p>2) Avg. no of branches/plant =i)6.2 ii)6.5</p> <p>3) Avg. no of pods/plant =i)78 ii) 65</p> <p>4) Avg. no of seeds/ pod =i) 2.6 ii)2.3</p> <p>5) Yield qts/ha=i)14.12 ii) 11.72</p>	convinced with its performance and are encouraged to take up the trial again.	variety the yield of which is very low but after adopting new variety they can achieve good yield, it will be taken for FLD	ii)1:0.76
6)Varietal evaluation of soyabean	Low yield with local variety	Yield performance of soyabean variety RCS – 1 – 10, Local variety	2	<p>1) Avg. Plant height=i)3.24ft ii)3.17ft</p> <p>2) Avg. no of branches/plant =i)7.2 ii)6.5</p> <p>3) Avg. no of pods/plant =i)72 ii) 65</p> <p>4) Avg. no of seeds/ pod =i)2.4 ii)2.3</p> <p>5) Yield qts/ha=i)14.03 ii) 11.72</p>	The farmers were convinced with the performance and are encouraged to take up the trial again.	Since the farmers use only local variety the yield of which is very low but after adopting new variety they can achieve good yield.	i)1:1.11 ii) 1:0.76
7)Pulse base	Lack of awareness on	Cultivation of Mungbean followed	2	On going			

Cropping system	cropping system	by Toria and Ladys finger					
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<b>Title of OFT</b>	<b>Problem Diagnosed</b>	<b>Technology Assessed</b>	<b>No. of Trials</b>	<b>Results of Assessment/ Refined (Data on the parameter should be provided)</b>	<b>Feedback from the farmer</b>	<b>Feedback to the Researcher</b>	<b>B.C . Ratio (if applicable)</b>
1.Varietal evaluation of French bean Var. ArkaSharat	Low yield with local variety	Introduction of French bean var. ArkaSharat	3	No of pods /ha a)41(ArkaSharat) b)30(Local)  Average Plant height (cm) a)43 b)44  Averageweight of pods(g) a)13.45 b)15  Average length of pods(cm)	The farmers were motivated on seeing the performance of the variety due to its productivity and easy management. Staking is not required. The variety is free from pests and diseases and	The variety is free from pests and diseases and cooking quality is good	<b>B.C . Ratio</b>  1.46:1  1:20:1

				a)17.5 b)19 Yield/ha(q) a)79 b)65.2	cooking quality is good		
2) High Density Planting	Lack of awareness on High Density planting	High Density Planting of pineapple var. Kew Spacing: HDP 30 cm x 60 cm x 90 cm Normal: 60cm x 60 cm	3	Average fruit weight(kg) a)1.1 (HDP) b) 1.26(Normal) Average fruit length(cm): a) 20.3 b)21 Yield/ha(q) a)66.6 b)52	The farmers were convinced with respect to the productivity	The farmers like to continue for the coming year.	<b>B.C . Ratio</b> <b>1: 1.57</b> <b>1: 1:22</b>

3)Curing and storage of Onion	Lack of awareness on Post Harvest management in onion	Awareness on Curing and storage of Onion	2	Shelf life a)6 months ( Under Panipat Type Low Cost Structure) b)2 months ( Farmers practice)	Extended shelf life was 6 monthsunder Panipat storage structure	The farmers like to continue for the coming year	
4) Varietal evaluation of Tomato Var, Megha T3	Low yield with local variety	Introduction of Tomato Var. Megha T3	3	On going			
5) Citrus rejuvenation	Lack of awareness on Citrus rejuvenation	Citrus rejuvenation on M orange ( ICAR module):  <b>December- January:</b> 1)Pruning of diseased and dead twigs, wound dressing with Bordeaux pate  2)Scarifications of gum oozing wounds and dressing with Bordeaux paint. Prophylactic spray with Bordeaux mixture (1 %) or	3	On going			

		<p>Blitox (0.2%).</p> <p><b>March-April:</b> Application of Bordeaux paste on three trunks. (upto 60cm height from ground level). Single spray of Bavistin (1g/1) + monocrotophos (1ml/1) or endosulpan (2ml/1) on new flushes. After fifteen days spray with Bordeaux mixture (1%) or Blitox (0.2%)</p> <p><b>May:</b> Pasting of trunk up to 2m with 1% carbaryl 50 wp (20g/lt) Collection and destruction of trunk borer adults by shaking the branches 2-3 times at 10 days interval.</p> <p><b>June-July:</b> Single spray of Bavistin (1g/1) + monocrotophos (1ml/1) or endosulpan (2ml/1) on new flushes.</p>					
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		<p>After fifteen days spray with Bordeaux mixture (1%) or Blitox (0.2%)</p> <p><b>August-September:</b></p> <p>Application of Bordeaux paste on tree trunks (upto 60 cm height). To kill the trunk borer grubs, clean the bored holes of the infested trunk with iron wire and insert a cotton swab soaked in dichlorvos/petrol or inject 5 ml of monocrotophos 0.05% (1.4ml/lt) or dichlorvos 0.2 % (2.6ml/lt) and plug with mud</p>					
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Title of OFT	Problem Diagnosed	Technology Assessed	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.Inoculation of Azolla in Paddy Cultivation  <b>Paddy Variety: CAU R1</b>	Lack of awareness on the utilization of biofertilizer	Introduction of biofertilizerAzolla  Azolla is inoculated into the rice field when permanent standing water is available . It cannot withstand any drying so standing water is always required.  DOT of paddy: 18.6.13  DOI of azolla: 8.7.13  Dose of biofertilizer(Azolla): 5kgs/sq m  Phosphate:20-30 kg P <sub>2</sub> O <sub>5</sub> /ha  MOP: 20-40kg K <sub>2</sub> O	3	<table border="1" data-bbox="932 370 1398 659"> <thead> <tr> <th data-bbox="932 370 1121 529">Nutrient content before sowing(Kg/ha)</th> <th data-bbox="1121 370 1276 529">Biofertilizer treated (T1)</th> <th data-bbox="1276 370 1398 529">Control (T2)</th> </tr> </thead> <tbody> <tr> <td data-bbox="932 529 1121 591">N</td> <td data-bbox="1121 529 1276 591">289</td> <td data-bbox="1276 529 1398 591">282</td> </tr> <tr> <td data-bbox="932 591 1121 626">P</td> <td data-bbox="1121 591 1276 626">14.7</td> <td data-bbox="1276 591 1398 626">15.1</td> </tr> <tr> <td data-bbox="932 626 1121 659">K</td> <td data-bbox="1121 626 1276 659">138</td> <td data-bbox="1276 626 1398 659">112</td> </tr> </tbody> </table> <table border="1" data-bbox="932 721 1398 1003"> <thead> <tr> <th data-bbox="932 721 1121 847">Nutrient content after harvesting (kg/ha)</th> <th data-bbox="1121 721 1276 847">Biofertilizer treated (T1)</th> <th data-bbox="1276 721 1398 847">Control (T2)</th> </tr> </thead> <tbody> <tr> <td data-bbox="932 847 1121 883">N</td> <td data-bbox="1121 847 1276 883">380</td> <td data-bbox="1276 847 1398 883">330</td> </tr> <tr> <td data-bbox="932 883 1121 938">P</td> <td data-bbox="1121 883 1276 938">16.5</td> <td data-bbox="1276 883 1398 938">16.9</td> </tr> <tr> <td data-bbox="932 938 1121 1003">K</td> <td data-bbox="1121 938 1276 1003">250</td> <td data-bbox="1276 938 1398 1003">180</td> </tr> </tbody> </table> Yield  Biofertilizer treated-37qtls/ha  Control-23qtls/ha			Nutrient content before sowing(Kg/ha)	Biofertilizer treated (T1)	Control (T2)	N	289	282	P	14.7	15.1	K	138	112	Nutrient content after harvesting (kg/ha)	Biofertilizer treated (T1)	Control (T2)	N	380	330	P	16.5	16.9	K	250	180	The farmers were glad to practice this new technology but unfortunately due to blast incidence in this particular variety productivity was not up to the mark	The farmers like to continue in the coming year.	T1-1.02:1  T2-1.64:1
Nutrient content before sowing(Kg/ha)	Biofertilizer treated (T1)	Control (T2)																															
N	289	282																															
P	14.7	15.1																															
K	138	112																															
Nutrient content after harvesting (kg/ha)	Biofertilizer treated (T1)	Control (T2)																															
N	380	330																															
P	16.5	16.9																															
K	250	180																															
2. Nutrient management	Lack of proper	Nutrients:N:P:K=15:35:15 Kg/ha	3	<table border="1" data-bbox="932 1276 1398 1341"> <thead> <tr> <th data-bbox="932 1276 1121 1341">Nutrient content before</th> <th data-bbox="1121 1276 1276 1341">Treated (T1)</th> <th data-bbox="1276 1276 1398 1341">Control (T2)</th> </tr> </thead> <tbody> <tr> <td data-bbox="932 1276 1121 1341"></td> <td data-bbox="1121 1276 1276 1341"></td> <td data-bbox="1276 1276 1398 1341"></td> </tr> </tbody> </table>			Nutrient content before	Treated (T1)	Control (T2)				The farmers were	The farmers like to	T1-1.77:1																		
Nutrient content before	Treated (T1)	Control (T2)																															

<p>in Lentil</p> <p><b>Lentil variety:K-75</b></p>	<p>management of soils</p>	<p>PSB application-Seed Treatment</p> <p>DOS of Lentil- 4.12.13</p>		<table border="1"> <thead> <tr> <th>sowing(Kg/ha)</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>N</td> <td>280</td> <td>225</td> </tr> <tr> <td>P</td> <td>17</td> <td>12.5</td> </tr> <tr> <td>K</td> <td>130</td> <td>110</td> </tr> </tbody> </table>	sowing(Kg/ha)			N	280	225	P	17	12.5	K	130	110		<p>interested to practice this new technology but unfortunately due to blast incidence in this particular variety productivity was not up to the mark.</p>	<p>continue in the coming year.</p>	<p>T2-1.28:1</p>
sowing(Kg/ha)																				
N	280	225																		
P	17	12.5																		
K	130	110																		
<p>3. Cultivation of Green gram as green manure followed by Mustard</p> <p><b>Green Gram variety:K-</b></p>	<p>Lack of awareness for improving soil health</p>	<p>Cultivation of Green gram as green manure followed by Mustard-</p> <p>Sowing of green gram as green manure crops and incorporated into the soil after 2-3 months. Then broadcasting of mustard seeds.</p> <p>Fertilization:-</p>	<p>3</p>	<table border="1"> <thead> <tr> <th>Nutrient content before sowing(Kg/ha)</th> <th>Treated (T1)</th> <th>Control (T2)</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>280</td> <td>208</td> </tr> <tr> <td>P</td> <td>13.5</td> <td>11.5</td> </tr> <tr> <td>K</td> <td>138</td> <td>118</td> </tr> </tbody> </table>	Nutrient content before sowing(Kg/ha)	Treated (T1)	Control (T2)	N	280	208	P	13.5	11.5	K	138	118		<p>Farmers are now aware of the importance of green manures and their utilization in their farms. They responded quiet well to</p>	<p>The farmers like to continue for the coming year.</p>	<p>T1- 2:1</p> <p>T2-2.5:1</p>
Nutrient content before sowing(Kg/ha)	Treated (T1)	Control (T2)																		
N	280	208																		
P	13.5	11.5																		
K	138	118																		
				<table border="1"> <thead> <tr> <th>Nutrient content after</th> <th>Treated (T1)</th> <th>Control (T2)</th> </tr> </thead> <tbody> <tr> <td>N</td> <td>350</td> <td>300</td> </tr> <tr> <td>P</td> <td>20</td> <td>16</td> </tr> <tr> <td>K</td> <td>200</td> <td>160</td> </tr> </tbody> </table>	Nutrient content after	Treated (T1)	Control (T2)	N	350	300	P	20	16	K	200	160		<p>Yield:-</p> <p>T1-9qtls/ha</p> <p>T2-6.5qtls/ha</p>		
Nutrient content after	Treated (T1)	Control (T2)																		
N	350	300																		
P	20	16																		
K	200	160																		



<b>851</b> <b>Mustard</b> <b>variety:TS-46</b>	Green Gram:10:35:10 as basal application Mustard: 60:40:40 and Borax 10 kg/ha as basal application  DOS of Green gram:11.10.13  DOS of Mustard: 9.12.13	harvesting(Kg/ha)			the introduction of this technology		
		N	350	190			
		P	17.5	15.5			
		K	200	170			
		Yield:- T1- 6.2qtls/ha T2- 4.9qtls/ha					

Title of OFT	Problem Diagnosed	Technology Assessed	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)
Management of bacterial wilt of tomato using Bioforpf	Reduction in yield due to bacterial wilt of tomato	1)Root treatment with Bioforpf(1kg in 2 litre of water for 1000 seedlings)  2)Soil application with Bioforpf(10gm mixed with 100 gm dried cowdung/plant)	2	Ongoing			

<b>Title of OFT</b>	<b>Problem Diagnosed</b>	<b>Technology Assessed</b>	<b>No. of Trials</b>	<b>Results of Assessment/ Refined (Data on the parameter should be provided)</b>	<b>Feedback from the farmer</b>	<b>Feedback to the Researcher</b>
Cultivation of maize as fodder	Lack of awareness on quality fodder production	Cultivation of maize variety DMH 849 with a spacing of 30x 60cm	2	DOS – 20.5.2013 Date of cuttings- 60-75 DAS Yield/Ha – 30 t/ha	The farmers were interested as maize can be grown successfully in the district.	The farmers like to continue in the ensuing year.

<b>Title of OFT</b>	<b>Problem Diagnosed</b>	<b>Technology Assessed</b>	<b>No. of Trials</b>	<b>Results of Assessment/ Refined (Data on the parameter should be provided)</b>	<b>Feedback from the farmer</b>	<b>Feedback to the Researcher</b>
1)Adoption assessment on i) SRI  ii) cultivation of mushroom	Lack of awareness in the technology  Lack of awareness mushroom cultivation.	SRI	9  3	1)9 Out of 15 trainees have adopted the technology.  2) 3 out of 20 farmers have adopted the technology.	Farmers are interested and find it worth to practice the technology.  Farmers are interested in the cultivation.	Farmers will continue to practice the technology .
1) Technology backstopping on cultivation of Onion .	Lack of awareness in onion cultivation.	Scientific cultivation of onion.	1	Scientific cultivation technology has been adopted by two farmers under the guidance of our kendra.	Farmers were interested and reported that they would like to continue practicing the technology.	Farmers will continue to practice the technology.
PRA a) Neihdawn  b)Rabung  c)Chhungte		i)Data collection ii)Social mapping. iii)interaction with farmers	3	Socio-economic condition and Training needs were identified.	Farmers were interested.	Farmers actively participated.

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

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

### 3.2 Achievements of Frontline Demonstrations during 2013-14

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

List of technologies demonstrated during previous year and popularized during 2012-13 and recommended for large scale adoption in the district

Sl. No	Crop/ Enterprise	Technology demonstrated	Horizontal spread of technology		
			No. of villages	No. of farmers	Area in acre
	Paddy	1	1	2	2
	French bean	1	1	4	8
	Field Pea	1	1	3	6
	Napier grass	1	1	5	2

**\* 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 (Rf/ Irrigated, Soil type, altitude, etc)	Status of soil (Kg/ha)		
					Proposed	Actual	SC/ST	Others	Total			N	P	K
1	Paddy	Cultivation of Paddy variety Manipur and Shabsarang through SRI	SRI	Kharif 2013	2	2	2		2		Rainfed	310.2	15.35	137.63
2.	Hybrid Napier Grass	Fodder crop Production	Cultivation of fodder crop	All the year round	0.2	0.2	5		5		Rainfed and irrigated	291.4	14.23	138.55
3.	Arka Anoop	Varietal evaluation	Cultivation of French	Kharif 2013	3.2	3.2	4		4		Rainfed	319.47	16.6	133.48

			bean											
4	VL Matar 42	Varietal evaluaion	Cultiv aition of Field pea	Rabi  2013- 2014	2.4	2.4	3		4		Irrigat ed	289. 72.	15.6 1	134.2 3

## Performance of FLD

Sl. No.	Crop	Demo. Yield Qtl/ha			Yield of local Check Qtl./ ha	Data on parameter in relation to technology demonstrated  (Yield, Disease incidence, etc. as specified in FLD Programme)	Economic Impact				Technical Feedback on the Demonstrated Technology	Farmers' Reaction on specific Technologies		
							Average Net Return (Profit) (Rs./ha)		B.C. Ratio					
		H	L	A			Demo	Local Check	Demo	Local Check				
1	Field Pea	88.5			65.3	i)Average plant height(cm)  156 ii)Average no of pod/plant	Demo  38  10	Local	50,700	37,180	1: 1.95	1: 1.43	The variety is performing well and the farmers like to continue for the coming year.	Farmers were encouraged to adopt the variety as green pods and seed yield are much higher as compared to local

					12							
					iii)Average no of seed/pod	<b>6</b>						
					7							
					iv)Yield (q/ha)	<b>65.3</b>						
					a)Green pod:	<b>6.3</b>						
					88.5							
					b)Seed yield	<b>6.3</b>						
					8.1							
<b>2</b>	<b>French Bean</b>				i)No of pods/ha	<b>30</b>	<b>55500</b>	<b>39960</b>	<b>1: 1.50</b>	<b>1: 1.08</b>	The variety is performing well and the farmers like to continue for the coming year.	The farmers were motivated on seeing the performance of the variety due to its productivity and easy to manage as it does not required staking. Cooking quality is good
					46.8	<b>16</b>						
					ii)Average weight of pods	<b>31.3</b>						
					15.5							
					iii)Average no							

						of pods/plant													
						46.8													
						iv)Yield/hac(q)													
						81													

Sl. No.	Crop	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Data on parameter in relation to technology demonstrated (Yield, Disease incidence, etc. as specified in FLD Programme)		Economic Impact				Technical Feedback on the Demonstrated Technology	Farmers' Reaction on specific Technologies
		H	L	A				Average Net Return (Profit) (Rs./ha)		B.C. Ratio			
								Demo	Local Check	Demo	Local Check		
1	2	7	8	9	10	12	13						
1	Paddy (Manipur)	44.73			38.92	1.Avg. Plant height =4.54 2.Avg. no. of Tiller/Hill =40.3 3.Effective Tillers=32 4.Avg. length of Panicle=10 5) Avg. no of	1.Avg. Plant height =4.75 2.Avg. no. of Tiller/Hill = 29.4 3.Effective Tillers=21.6 4.Avg. length of Panicle=9	14025	12580	1:1.48	1:1.23	This system of rice cultivation gives much higher yield as compare to conventional method but labour intensive	As most of the farmers cultivate Manipur variety SRI method was conducted which gives much higher yield than conventional method and the farmers like to

					grains/panicle=194.6 6) Yield = 44.73qts/ha	5) Avg. no of grains/panicle=154.2 6) Yield=38.92 qts/ha							continue this system.
2	Paddy (Shahsarang)	45.52		43.7	1.Avg. Plant height =3 2.Avg. no. of Tiller/ Hill = 3.Effective Tillers=22.6 4.Avg. length of Panicle=8.2 5) Avg. no of grains/panicle= 230.24 6) Yield =45.52	1.Avg. Plant height =3.43 2.Avg. no. of Tiller/ Hill = 3.Effective Tillers=20.72 4.Avg. length of Panicle=9.8 5) Avg. no of grains/panicle= 221.65 6) Yield=43.7	15200	13667	1:1.52	1:1.47	This system of rice cultivation gives much higher yield as compare to conventional method but labour intensive.	The varieties were performing well and the farmers were interested in practicing the system as its gives higher yield comparing to conventional method	

Sl.	Crop	Demo. Yield	Yield of	Data on parameter in relation to	Economic Impact	Technical Feedback on the Demonstrated	Farmers' Reaction on specific
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No.		Qtl./ha			local Check Qtl./ha	technology demonstrated (Yield, Disease incidence, etc. as specified in FLD Programme)	Average Net Return (Profit) (Rs./ha)		B.C. Ratio		Technology	Technologies
		H	L	A			Demo	Local Check	Demo	Local Check		
		7	8	9			10	12	13			
1.	Hybrid Napier grass  CO 2 & CO 3					<b>CO 2</b>  Cutting interval  a.First cutting -60-75 DAT  b.2 <sup>nd</sup> to 6 <sup>th</sup> cutting-45- 50 after the first cut  yield/ha/year=350 Mt  <b>CO 3</b>  Cutting interval  a.First cutting -60-75 DAT  b.2 <sup>nd</sup> to 6 <sup>th</sup> cutting-45- 50 after the first cut  yield/ha/year=376 Mt					As the fodder can be grown successfully in the District the farmers like to continue in the ensuing year	The variety is performing well and the farmers were interested to take up this technology as it can be propagated easily, more over gives yield as they expected.

**NB: Attach few good action photographs with title at the back with pencil**





**3.4. Achievements on Training both On and Off Campus (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit):**

Thematic area	No. of courses			Participants																		Grand Total
	On	Of	Total	Others						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
				On	Of	On	Of	On	Of	On	Of	On	Of	On	Of	On	Of	On	Of	On	Off	
<b>(A) FARMERS &amp; FARM WOMEN</b>																						
<b>I. Crop Production</b>																						
Cropping Systems	1	5	6							15	42		22	15	64	15	42		22	15	64	79
<b>II. Horticulture</b>																						
<b>a) Vegetable Crops</b>																						
Off-season vegetables		1	1							15		5		20			15	5				20
Nursery raising	1	1	2						5	15	5	10	10	25								35
Exotic vegetables like Broccoli		1	1							15		10		25								25
<b>b) Fruits</b>																						

Training and Pruning	1		1							15		15		30		15		15		30		30
Management of young plants/orchards		1	1								35		21		56		35		21			56
Rejuvenation of old orchards		1	1								10		10		20		10		10			20
<b>(B) RURAL YOUTH</b>																						
Training and Pruning		1	1								40		40		40		40		40			80
<b>III Soil Health and Fertility Management</b>																						
<b>IV Livestock Production and Management</b>																						
Poultry Management	1		1									35		35		35					35	35
Piggery Management	1		1									35		35				35		35		35
Paddy cum fish culture	1	1	2							15	20			15	20	15	20			15	20	35
<b>V Home Science/Women empowerment</b>																						
Value addition	1		1									5		5				5		5		5
<b>VII Plant Protection</b>																						
Integrated Pest Management	1	3	4							17	75	6	5	23	80	17	75	6	5	23	80	103

Note: Please furnish the details of above training programmes as Annexure in the proforma given below

Date	Client ele	Title of the training programme	Discipline	Thematic area	Dura tion in days	Venue (Off / On Campu s)	Number of other participants			Number of SC/ST			Total number of participants		
							Mal e	Femal e	Tot al	Mal e	Femal e	Tot al	Mal e	Femal e	Tot al
14.10.13	PF	Scientific Cultivation of Mustard	Agronomy	Crop Production	1	Off				5	5	10	5	5	10
10.12.13	PF	Scientific Cultivation of wheat	Agril.Extn	Crop Production	1	Off				10	8	18	10	8	18
11.12.13	PF	Scientific Cultivation of Rapeseed and mustard	Agronomy	Crop Production	1	Off				18	4	22	18	4	22
12.12.13	PF	Scientific Cultivation of Lentil	Agronomy	Crop Production	1	Off				5	7	12	5	7	12
11.4.13	PF	Paddy cum Fish farming	Agronomy	Paddy cum fish farming	1	On				15		15	15		15
1.12.13	PF	Cultivation of Field pea	Horticul ture	Awareness on cultivation of field pea	1	Off				15	5	20	15	5	20

30.9.13	PF	Nursery raising of onion	Horticulture	Better Nursery Management	1	On				5	5	10	5	5	10
7.10.13	PF	Nursery raising of cabbage	Horticulture	Better Nursery Management	1	Off				15	10	25	15	10	25
22.10.2013	PF	Cultivation of Broccoli	Horticulture	Scientific cultivation of Broccoli	1	Off				15	10	25	15	10	25
17.7.13	PF	Scientific cultivation of M. orange	Horticulture	Awareness on Scientific cultivation of M. orange	1	On				15	15	30	15	15	30
12.8.13	PF	Management of young orchard	Horticulture	Awareness on management of young orchard	1	Off				35	21	56	35	21	56
8.10.13	PF	Rejuvenation of M. orange orchard	Horticulture	Awareness on rejuvenation	1	Off				10	10	20	10	10	20
22.10.13	RY	Management of young orchard	Horticulture	Awareness on young orchard management	1	Off				40	40	80	40	40	80
30.1.13	PF	Paddy cum fish culture	Ani.science	Awareness on Paddy cum fish culture	1	Off				15		15	15		15





1	11-12.7.13	IPM orientation training	Agronomy	IPM	2	PF	1				17	6	23	17	6	23	RKVY	
2.	15.7.13	IPM orientation training	Agronomy	IPM	1	PF	1	-	-	-	15	-	15	15	-	15	RKVY	
3.	1.8.13	IPM orientation training	AgriL. Extn	IPM	1	PF	1	-	-	-	28	5	33	28	5	33	RKVY	
4.	12.8.13	IPM orientation training	Agronomy	IPM	1	PF	1	-	-	-	32	-	32	32	-	32	RKVY	
5	8.10.13	Lime application of acid soil sample	Soil science	Soil Health	1	PF	1	-	-	-	20	8	28	20	8	28	RKVY	

6.	11.2 12.1 3	Integ rated nutrie nt mana geme nt in rapes eed and must ard	Soil science	INM	1	PF	1	-	-	-	18	5	23	18	5	23	RKVY	
7.	12.1 2.13	Integ rated nutrie nt mana geme nt in rapes eed and must ard	Soil science	INM	1	PF	1	-	-		6	2	8	6	2	8	RKVY	
<b>Tota l</b>											<b>136</b>	<b>26</b>	<b>162</b>	<b>136</b>	<b>26</b>	<b>162</b>		



6.	TV programme		2			mass									
7.	Article on local Newspaper	1)Herebicides application and safe use of pesticides. 2)Neem seed kernel extract.	2			mass									
8.	Demonstration on mushroom cultivation.														
9.	Exhibition						200	50	20						270
10.	Farmers-scientists interaction.		2				40								40
11.	Exposure visit		1				35								35
12.	Celeberation of important Days	Republic Day,IndependenceDay,World Environment Day, Green Mizoram Day, Christmas and New Year &Chapcharkut.	7												7
13.															
14.															
15.															
<b>Grand Total</b>			<b>173</b>												<b>555</b>

\* Example for guidance only

### 3.5 Production and supply of Technological products during 2013-14

#### a. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Provided to No. of Farmers/Other Agencies
<b>CEREALS</b>					
	Maize	RCM 75	0.018	1440	3
		RCM 76	0.025	2000	5
	Paddy	Shahsarang	0.35	7000	10
		B-3	0.5	10000	12
		CAU R 1	0.15	3000	4
<b>OILSEEDS</b>					
	Mustard	TS 46	0.01	800	4
<b>PULSES</b>					
	Lentil	K-75	0.01	1200	4
<b>Spices</b>	Turmeric	PADNA	0.2	14000	4

#### SUMMARY

Sl. No.	Major group/class	Quantity (ton.)	Value (Rs.)	Provided to No. of Farmers/Other Agencies
1	CEREALS	1.043	23440	34

2	OILSEEDS	0.01	800	4
3	PULSES	0.01	1200	4
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS			
<b>TOTAL</b>		<b>1.063</b>	<b>25440</b>	<b>42</b>

**b. PLANTING MATERIALS (Nos. in lakh)**

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
SPICES	Turmeric	PADNA	20 qts	8600	5
VEGETABLES					
	i. Cabbage	Improved Bahar	10,000	1250	10
	ii. Broccoli	Aishwarya	10,000	1250	10
	iii. Tomato	Avtar	5,000	1250	10
	TOTAL		15,000	2,500	35

**SUMMARY**

Sl. No.	Major group/class	Quantity (Nos. in lakh)	Value (Rs.)	Provided to No. of Farmers
1	VEGETABLES	25,000	3750	35
2	SPICES	20 qts	8600	5
	<b>TOTAL</b>		<b>12,350</b>	<b>40</b>

**c. BIO PRODUCTS**

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(qt)		

**SUMMARY**

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1	BIOAGENTS					

	TOTAL					
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**d. LIVESTOCK**

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		

**3.6. Literature Developed/Published (with full title, author & reference) during 2013-14**

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

(B) Literature developed/published

Item	Title	Authors name	Number of copies
Research papers			
1.			
Training manuals			
Technical reports			
1.			
Book/ Book Chapter			
Popular articles	i)Herbicides application and safe use of pesticides, ii)Neem seed kernel extract	Lalramengi,SMS(Agron) Malsawmkimi SMS (Hort.)	
Technical bulletins			
Extension bulletins			



Newsletter	Mizoram Agriculture Research Newsletter ISSUE NO 3 &4 i)Dual purpose breed'Vanaraja' ii)Short duration and high yielding var.Shahsharang, iii)Soyabean var.RCS1-10 iv)French bean var.ArkaAnoop v) I went to KVK Tour	Sayed Khalid Ahmed,SMS(An. Sc.) PrakashThapa (Farm Manager), Lalramengi,SMS(Agron) , Malsawmkimi SMS (Hort.) B.Zaliana (farmer)	
<b>TOTAL</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

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

- 1.Name of farmers: CC.Rohmingliana
- 2.Location: Tuisenphai, Khawzawl
- 3.Thematic Area: WRC

Farmers of the district mainly cultivate Paddy as their main crop by traditional method without employing proper scientific management. From survey and Diagnostic visits conducted by KVK, Khawzawl, it is felt necessary to transfer to the farmers improved packages of practices and the need to identify varieties conducive to the climate of the District, having better productivity and able to

provide solutions to lodging of their preferred local variety. Thus, KVK, Khawzawl, recognizing the needs of the farmers took, initiative by conducting Trainings, Demonstrations and providing varieties with better yielding potential and solutions to the lodging problem through SRI.

After the intervention of KVK, Khawzawl, he started adopting scientific management and selected varieties which are more productive (such as Shahsarang, B-3 etc.) and adopted SRI to control lodging of the local var Manipur. He also started management practices of Pests, diseases and weeds under the technical guidance of KVK thereby being able to combat the problem which used to be one of the major cause of reduction in yield.

As stated before the intervention of KVK, the crop yielded him 32 qts/ha with a gross return of Rs 80,000 whereas with the adoption of proper management practices the yield came up to 52 qts/Ha with the gross return of Rs 1,30,000 from the same piece of land.

He feels that better cooperation between the farmers and KVK and other allied Departments in disseminating the technology needed by the farmers could lead to self sufficiency in the district and Mizoram as a whole.



Pu CC. Rohmingliana's Paddy Field at TuisenphaiKhawzawl

2. **Name of Farmer: Pi Lalpianthangi (Onion grower)**

**Location : Phaisenhnar, Khawzawl**

Pi Lalpianthangi has been growing Rabi Onion for the last three years. Due to lack of knowledge on Curing and Storage of Onion and adoption of traditional practices at her farm, she was not getting good return from her investment in 2012. She attended the training on increasing the post-harvest life/shelf life of onion organised, by KVK, Khawzawl where the growers were taught to spray Bavistin 0.2% 15 days before harvest, and leave the onion in the field with intact leaves in order to reduce field heat. Low cost Panipat Onion Storage structure was constructed in her field under the technical advice, supervision and financial assistance of KVK. Due to the intervention of KVK, she has been able to store the harvested produce 4 months longer than her usual practised earlier, which enabled her to sell the onions when price started rising, so that she could earn an income of Rs 60,000/- from an area of 150 sqm, twice the amount she earned in the previous year. Seeing her success and achievement, fellow-farmers growing onion in that compact area are motivated to adopt the practice adopted by her under the technical of KVK.



Low cost onion storage structure at Lalpianthangi's field, Phaisen, Khawzawl

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

- Identification of courses for farmers/farm women
- Rural Youth
- Inservice personnel

**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 Laboratory**

Status of establishment of Lab :

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

Sl. No	Name of the Equipment	Qty.	Cost
1			

2			
3			
Total			

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples				
Petiole Samples				
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)
SRI	9	60	60,000	1,00,000

**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

Name of specific technology/skill	No. of	% of adoption	Change in income (Rs.)

<b>transferred</b>	<b>participants</b>		<b>Before (Rs./Unit)</b>	<b>After (Rs./Unit)</b>
SRI	9	60	60,000	1,00,000

## 5.0. LINKAGES

### 5.1 Functional linkage with different organizations

<b>Name of organization</b>	<b>Nature of linkage</b>
1. State department of Agriculture	For technological transfer , skill upgradation and biodata of the district
2. State department of Horticulture	For technological transfer , skill upgradation and biodata of the district
3. State department of AH &Vety	For technological transfer , skill upgradation and biodata of the district
4. All Mizoram Farmers Union (AMFU)	For training & formation of SHGS
5. NGOs working in the area	For training & transfer of technology

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 2013-14**

Name of the scheme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
RKVY	IPM,FFS and Quality Seed Production etc	December ,2012	CSS	9,95,000
ATMA	Farmers scientists interaction, Designate technical expert support, Refinement, Assessment of technology.	March,2014	CSS	1.44,000

**5.3 Details of linkage with ATMA**

a) Is ATMA implemented in your district : Yes

Sl. No.	Programme	Nature of linkage	Remarks
1.	Training and demonstration	Financial support	

**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**





<b>Pulses</b>									
Green gram									
Black gram									
Arhar									
Lentil	9.12.13	25.3.14	0.006	K-75	Seed	0.1 qts	500	800	
Ay other									
<b>Oilseeds</b>									
Mustard	11.10.13	21.2.14	0.008	TS-46	Seed	0.1 qts	500	1200	
Any other									
<b>Fibers</b>									
i.									
ii.									
<b>Spices &amp; Plantation crops</b>									
i. Turmeric	22.5.13	26.11.13	0.2	PADNA	Planting materials	20 qts	8600	14,000	
ii.									
<b>Floriculture</b>									
<b>Vegetables</b>									

<b>iv. Cabbage</b>	1.11.13	11.3.14	0.004	Improved Bahar	Seedlings	10,000	1250	5000	
<b>v. Broccoli</b>	1.11.13	12.3.14	0.004	Aishwarya	Seedlings	10,000	1250	5000	
<b>vi. Tomato</b>	1.11.13	24.3.14	0.004	Avtaar	Seedlings	5,000	1250	2500	
<b>a. Others (specify)</b>									
i.									

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	

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

Sl.	Name	Details of production	Amount (Rs.)	Remarks

No	of the animal / bird / aquatics	Breed/ species	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	Cow	Jersey	Milk	2	32610	23400	

### 6.5 Rainwater Harvesting

#### Training programmes conducted by using Rainwater Harvesting Demonstration Unit

Date	Title of the training course	Client (PF/RV/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total
1.	Soil and water conservation under IWMP	PF	1	20	10	30			

### 6.5 Utilization of hostel facilities (Month-Wise) during 2013-14

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)
February	Scientific management of piggery and poultry	2 days	10	20days	-
Total					

<b>Grand total</b>					
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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	Account Number
With Host Institute			
With KVK	MIZORAM RURAL BANK(MRB)	Khawzawl	25016045564

### 7.2 Utilization of funds under FLD on Maize (Rs. In Lakhs) if applicable

Item	Released by ICAR/ZPD		Expenditure		Unspent balance as on 31 <sup>st</sup> March, 2014
	2010-11	2011-12	2012-13	2013-14	
<b>TOTAL</b>					

### 7.3 Utilization of KVK funds during the year 2013 -14

S.No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
<b>A. Recurring Contingencies</b>				
1	Pay & Allowances		78.7	78.64

2	Traveling allowances		2.00	2.00
3	Contingencies	10.03		10.03
TOTAL (A)				
<b>B. Non-Recurring Contingencies</b>				
1	Works			
TOTAL (B)				
<b>C. REVOLVING FUND</b>				
GRAND TOTAL (A+B+C)				

#### 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 in hand as on 1 <sup>st</sup> April of each year
April 2011 to March 2012	Nil	7,780	Nil	7,780
April 2012 to March 2013	7,780	75,664	20,360	63,084
April 2013 to March 2014	63,084	91,345	1,04,731	49,648

**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

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

**(Signature)**

**Programme Coordinator**