

## ANNUAL REPORT OF KVK, MAMIT DISTRICT, 2014-15

### 1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
KVK, Mamit District, Lengpui, Mizoram PIN-796421	0389-2573352, 2573337	0389-2573338	kvkmamit@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 (Research & Education) Aizawl, Mizoram	0389-2319025	0389-2315784	mizagri@gmail.com

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. Samuel Lalliansanga	0389-2324565	9436147625	samuelpachuau10@gmail.com

#### 1.4. Year of sanction:2005

#### 1.5. Staff Position **(As on 31<sup>st</sup> March, 2015)**

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	Dr. Samuel Lalliansanga	Programme Coordinator	Plant pathology	15600+8000	25140	6.1.15	Temporary	ST
2	Subject Matter Specialist	Henry Saplalrinliana	S.M.S.	Soil Science	15600+5400	17550	22.4.08	Permanent	ST
3	Subject Matter Specialist	Md.Mintul Ali	S.M.S.	Fishery	15600+5400	17550	22.4.08	Permanent	Other
4	Subject Matter Specialist	Lalrinsangi	S.M.S.	Agro-forestry	15600+5400	17550	22.4.08	Permanent	ST
5	Subject Matter Specialist	Dr. C. Rinawma	S.M.S.	Animal Science	15600+5400	18060	22.4.08	Permanent	ST

6	Subject Matter Specialist	Dr.Rohit Shukla	S.M.S.	Horticulture	15600+5400	17550	22.4.08	Permanent	Other
7	Subject Matter Specialist	Vanlalhruaia	S.M.S.	Plant Protection	15600+5400	17550	22.4.08	Permanent	ST
8	Farm Manager	K. Zohmingliani	Farm Manager	Agriculture	9300+4200	11580	22.4.08	Permanent	ST
9	Programme Assistant	Biakhlupuii Chenkual	Prog. Assistant	Home Science	9300+4200	11120	9.11.09	Permanent	ST
10	Computer Programmer	C. Ramdinsanga	Computer Programmer	Computer Science	9300+4200	11580	22.4.08	Permanent	ST
11	Accountant / Superintendent	Lalrinchhana	Accountant / Superintendent	Commerce	9300+4200	11580	22.4.08	Permanent	ST
12	Stenographer	B.Laldinpuii	Stenographer	N.A.	5200+2400	8420	29.2.08	Permanent	ST
13	Driver	Lalchungnunga	Driver	N.A.	5200+1900	6610	29.2.08	Permanent	ST
14	Driver	Lalchualova	Driver	N.A.	5200+1900	6610	29.2.08	Permanent	ST
15	Supporting staff	Lallawmkima	Supporting staff	N.A.	4440+1900	5330	10.7.08	Permanent	ST
16	Supporting staff	P.C.Lalthanpuii	Supporting staff	N.A.	4440+1900	5330	10.7.08	Permanent	ST
	<b>Total</b>	<b>16</b>							

- 1.6. a. Total land with KVK (in ha) : 12.5ha
- b. Total cultivable land with KVK (in ha):10.5ha
- c. Total cultivated land (in ha): 8.5ha

S. No.	Item	Area (ha)
1	Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters)	2.0
2.	Under Demonstration Units	2.5
3.	Under Crops (Cereals, pulses, oilseeds etc.)	2.5
4.	Under vegetables	1.0
5.	Orchard/Agro-forestry	2.5
6.	Others (specify)	2.0

## 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	8.3.10	550	54,22,000.00	NA	NA	NA
2.	Farmers Hostel	ICAR	10.3.08	297.87	35,86,756.00	NA	NA	NA
3.	Staff Quarters (9)	ICAR for 6 Quarters and State Govt. for 3 quarters	1.6.08	400	39,00,000.00	NA	NA	NA
4.	Demonstration Units (2)	ICAR	1.6.08	-	NA	NA	NA	NA
5	Fencing	-	-	-	-	-	-	-

## B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Maruti Gypsy (Hard Top)	MZ-01/ C-0759	2005	4,50,000.00	1,15,512	Running Condition but need replacement
Tractor	MZ-01/D-2245 (Head)	2007	Purchased by Directorate of Agriculture (R&E), Govt. of Mizoram	65,321	Running condition

## C) Equipments &amp; AV aids

Name of the equipment	Year of purchase	Cost (₹)	Present status
Ricoh Aficio MP 1600LC	2012	1,54,000.00	Good Condition
Laser Printer (HP Laser Jet-1020+ Sl. No. VNC3760857)	2008	45,00.00	Good Condition
Speaker UMAX Model-UPB-1400FM	2008	1,500.00	Good Condition
CPU 55274-692-4406923-23495	2008	14,000.00	Good Condition
LCD Monitor BenQ G 700AD Model ET-0005-B	2008	8,800.00	Good Condition
UPS Supercomp SEV Fortune 600 B080515-10307	2008	2,000.00	Good Condition
V-SAT (HCIL)	2009	1,00,000	Good condition
BSNL Broad band	2010	NA	Good condition
Projector Vivek (DLP Projector) Model.D325MX Sl.No.WD325MX7520162	2008	87,000.00	Not in good condition, need replacement
Handy Video Camera Sony 4.0MP Model No.HDR-SRIOEN50, 799807	2008	75,000.00	Good Condition

UPS Supercomp No.B080603-7519	2008	1,800.00	Good Condition
Plain Paper Fax with Copier Panasonic Model No.KX-FP701CX, KX-FP702CX	2008	9,996.00	Not in good condition, need replacement
Wireless Amplifier AHUJA WA-320 No.08011080	2008	12,600.00	Good Condition
Dynamic Wireless Microphone, AHUJA AWM-322	2008	460.00	Good Condition
Samsung ML-1640 Series Printer	2010	5,000.00	Good Condition
QS250 Speakers	2010	15,500.00	Good Condition
AC Voltage Stabilizer Model: VR45, Sr No. : 17569	2010	4,000.00	Good Condition
HP Office jet 3608 All-in-One (Fax-Print-Scan-Copy)	2010	NA	Good Condition
EPSON Stylus Office T1100, Model No: B322A	2010	20,000.00	Good condition
Amplifier Proton Power Mixer POD 650	2010	2,214.00	Good Condition
Microphone ,SHURE PG48-XLR-B	2010	6,000.00	Good Condition
Microphone Professional, MIPRO M7-103, MR-515, MH-202, Wireless.	2010	NA	Good Condition
Assemble Computer, Pentium(R) Intel Dualcore CPU-E5200 2.49ghz, 0.99GB of RAM, Frontech LCD Monitor	2008	NA	Not in good condition
Assemble Computer, Pentium(R) Intel Dualcore CPU-E5200 2.70ghz, 2GB of RAM, HP LCD Monitor	2010	NA	Good Condition
Lenovo branded Computer , 1GB RAM,2.7ghz	2008	NA	Not in good condition, needs upgradation/ replacement
Assemble Computer Pentium(R) Intel Dualcore CPU-E5200 2.50ghz, 1.99GB of RAM, Benq LCD Monitor	2010	NA	Not in good condition, needs upgradation/ replacement
HP branded Computer, 2.50ghz, 1.99GB of RAM, Benq LCD Monitor	2010	21,500	Good Condition
Speaker Stand QSSAL, No.: 080819011, S.No.: 409 & 420	2010	3,500	Good Condition
Microphone Stand AHUJA BMS – 101, Made in India	2010	1,200	Good Condition
Television Panasonic 29"	2010	NA	Need to repair
Advanced DVD Player with 5.1 ch Samsung DVD- C460	2010	NA	Good Condition
Automatic weather station	2008	NA	Not in working condition

## 1.8. A). Details SAC meeting\* conducted in the year 2014-15

Sl. No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken on last SAC recommendation
1.	3.3.2015	1. Shri R.L Thanzuala, Chairman SAC and Dy. Dir (F&QS), Directorate of Agri (R&E), Aizawl, Mizoram 2. Dr. Samuel Lalliansanga, Member Secretary SAC and Programme Coordinator, KVK, Mamit District 3. Shri C. Lalkima, Sub Divisional Horticulture Officer, Mamit division, Government of Mizoram 4. Shri H.K. Rokima, i/c Range Officer, Environment & Forest Department, Lengpui 5. Zothankima, Range Officer, Soil & Water Conservation Department, Lengpui 6. Shri Vanlalkunga, Farmers representative, Lengte	1. Reviewing of activities & progress of KVK. 2. Presentation and approval of Action Plan 2015-16. Some changes were made in the OFTs. 3. Made suggestion for overall improvement of KVK	All actions were taken.

\* 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.	Jhum
2.	Wet Rice Cultivation (Paddy)
3.	Cole crop farming
4.	Banana plantation
5.	Ginger / turmeric production system
6.	Orange production
7.	Areca nut plantation
8.	Fish farming
9.	Fish seed production
10.	Integrated backyard livestock farming

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

Sl. No	Agro-climatic Zone	Characteristics
Sl. No	Agro-climatic Zone	Characteristics
1.	Humid Sub-tropical hill zone	Soil moisture regime – Udic, hyperthermic prevalent on eastern parts of the district on higher altitudes

## 2.3 Soil type/s

Sl. No	Soil type	Characteristics	Area in ha
1.	Alluvial soils	Entisols and inceptisols, mixed, hyperthermic, very deep to deep brown, aquic/fluventicdystrochrypts, broad and narrow valley	32159
2.	Sandy soils	Entisols and inceptisols, mixed, hyperthermic, deep to dark yellowish brown, sandy loam, sandy clay, broad and narrow valley	47706
3.	Laterite soils	Ultisols, mixed, hyperthermic, dark brown to dark yellowish brown, sandy clay sub surface, well drained, hill side slopes and hill crest/top, moderate erosion, loamy skeletal texture	179606
4.	Acid soils	Ultisols, mixed, hyperthermic, strongly acidic horizons, hill side slopes, moderate to severe erosions, cutans are formed, fine loamy texture.	38146

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

Sl. No	Crop	Area (ha)	Production (ton)	Productivity (Qtl /ha)
1.	Rice	3138	4059	12.93
2.	Maize	770	1144	14.86
3.	Rice bean	55	83	15.09
4.	French bean	552	580	10.51
5.	Oil seed	110	116	10.55
6.	Tapioca	33	60	18.18
7.	Sugarcane	67	501	74.78
8.	Potato	49	432	88.16
9.	Oil Palm	7219	1650	100

## 2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
April 2014	59.50	34.00	19.30	60.60
May 2014	496.20	33.19	21.05	67.90
June 2014	251.60	31.98	22.98	76.83
July 2014	464.50	33.70	22.64	84.25
August 2014	230.30	30.93	22.22	82.64
September 2014	386.80	31.00	21.19	84.70
October 2014	86.60	30.69	19.95	86.30
November 2014	0.60	28.79	14.95	77.00
December 2014	0.00	26.38	10.58	81.22
January 2015	23.80	25.84	10.16	80.74
February 2015	20.70	27.76	9.34	64.82
March 2015	-	-	-	-

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

Category	Population	Production	Productivity
<b>Cattle</b>			
<i>Crossbred</i>	135	Milk-147 ton	7.323 lt/cow
<i>Indigenous</i>	1972	Milk-224 ton	1.01 lt/cow
<b>Buffalo</b>	208	Milk-16 ton	0.975 lt/buffalo
<b>Sheep</b>			
<i>Crossbred</i>	75	NA	NA
<i>Indigenous</i>	2	NA	NA
<b>Goats</b>	1780	5 ton of meat	8.651 kg/goat
<b>Pigs</b>			
<i>Crossbred</i>	17545	204 ton of meat	92.141 kg/ pig
<i>Indigenous</i>	5806	NA	NA
<b>Rabbits</b>	92	NA	Na
<b>Poultry</b>			
Hens	31233	NA	NA
<i>Desi</i>	50092	22 lakh egg produced	80 nos./hen/ season
<i>Improved</i>	14627	4 lakh egg produced	205 nos./hen/ season
Ducks	104	NA	NA
Turkey and others	4	NA	NA

Category	Area	Production	Productivity
Fish	828	6020q	7.27 q/ha
Marine	NA	NA	NA
Inland	NA	NA	NA
Prawn	NA	NA	NA
Scampi	NA	NA	NA
Shrimp	NA	NA	NA

Note: Pl. provide the appropriate unit against each enterprise

## 2.6 Details of Operational area / Villages (2014-15)

Sl. No.	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1	W.Phaileng	W.Phaileng, Chhippui, Lallen, Saithah, Phuldungsei, Pukzing, Marpara, Andermanik, Rajivnagar, Tuipuibari, Damparengpui, Teirei, Khawhnai, Parvatui, Tuirum	Paddy, Maize, Ginger, Turmeric, Khasi mandarin, Vegetable, Oil Palm, livestock, fishery, oilpalm	Scientific know how, quality breed, quality seeds and planting materials, feed, medicines, soil erosion, acidic soil, water scarcity, citrus decline, pests, paddy leaf roller, post harvest management and marketing problems, irrigation, communication problems.	Training on scientific agriculture and allied, introduction of quality seeds and planting materials, disease management, post harvest management, value addition, introduction of improved production technologies, integrated farming.
2	Reiek	Bawngthah, Kanghmun, Khawrihnim, W.Lungdar, Ailawng, Reiek, Rulpuihlum, Tuahzawl, Chungtlang, Rawpuichhip, Hmunpui, West Serzawl, Lengpui, Lengte, Nghalchawm	Paddy, Maize, Ginger, Turmeric, Vegetable, Jatropha, Khasi Mandarin, livestock, fishery	Scientific know how, quality breed, quality seeds and planting materials, feed, medicines, soil erosion, acidic soil, water scarcity, citrus decline, pests, paddy leaf roller, post harvest management and marketing problems, irrigation, communication problems.	Training on scientific agriculture and allied, introduction of quality seeds and planting materials, disease management, post harvest management, value addition, introduction of improved production technologies, integrated farming.



3	Zawlnuam	Kanhmun, Moraichera, Zamuang, Rengdil, Lushaicherra, Zawlpui, Hriphaw, Saikhawthlir, Chhuhvel, Zawlnuam, Bawrai, Mamit town, N.Sabual, Pathiantlang, Suarhliap, Nalzawl, Liandophai, Darlak, Kawrtethawveng, Tuidam, Kawrthah, Serhmun, Bunghmun	Paddy, Maize, Ginger, Turmeric, Vegeable, Oil Palm, Khasi mandarin, livestock, fishery	Scientific know how, quality breed, quality seeds and planting materials, feed, medicines, soil erosion, acidic soil, water scarcity, citrus decline, pests, paddy leaf roller, post harvest management and marketing problems, irrigation, communication problems.	Training on scientific agriculture and allied, introduction of quality seeds and planting materials, disease management, post harvest management, value addition, introduction of improved production technologies, integrated farming.
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### **3. TECHNICAL ACHIEVEMENTS**

#### **3. A. Details of target and achievements of mandatory activities by KVK during 2014-15**

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
Horticulture	5	5	11	11	2	2	35	35
Plant protection	2	2	6	6	1	1	40	40
Animal Science	3	3	9	9	1	1	3	3
Fishery	2	2	4	4	1	1	20	20
Agro forestry	3	3	4	4				
<b>Total</b>	<b>15</b>	<b>15</b>	<b>34</b>	<b>34</b>	<b>5</b>	<b>5</b>	<b>98</b>	<b>98</b>

Note: Target must be as set during last Action Plan Workshop

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Farmers	54	57	1735	1667	1055	1117	6940	3353

Rural youth	26	11	545	261				
Extn.  Functionaries	9	6	190	120				
Total	89	74	2470	2048				
Seed Production (ton.)					Planting material (Nos. in lakh)			
5					6			
	Target		Achievement		Target		Achievement	
CEREALS	1.0		0.80		0.125		0.205	
VEGETABLES	0.05		0.06					
TOTAL	1.05		0.86		0.125		0.205	

Note: Target must be as set during last Action Plan Workshop

### 3. B. Abstract of interventions undertaken during 2014-15

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 on personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	Varietal evaluation	Cowpea	No recommended bush type variety for the district	Varietal evaluation of Cowpea	-		-	-	Supply seeds and other inputs
2	Varietal evaluation	Okra	No recommended short duration variety for Mamit District	Varietal evaluation of Okra					Supply seeds and other inputs
3	Varietal evaluation	Garden pea	No recommended dual purpose whole-pod edible pea variety	Varietal evaluation of whole pod edible dual purpose pea					Supply seeds and other inputs
4	Protected cultivation	Capsicum	Throughout year cultivation not possible in open field condition	Protected cultivation of capsicum		Protected cultivation of vegetables			Supply seedlings and other inputs

5	Weed management	Pineapple	Weeds	Management of weed in pineapple by plastic mulch					Suckers and other inputs
6	Multipurpose tree based agroforestry system	<i>Parkia roxburgii</i> and pineapple	Low productivity of pineapple due to low soil fertility	Multipurpose tree based agroforestry system ( <i>Parkia roxburgii</i> with Pineapple)		Production technologies of MPT			Planting material and other inputs
7	Intercropping	Oil palm & Maize	Lack of technical knowhow on intercropping management	Oil palm based agroforestry system					Seeds & planting material
8	Secondary forestry diversification (Bamboo/Broom grass etc.)	Bamboo and pigeon-pea	Degraded <i>Jhum</i> land	Bamboo-based Agroforestry System					Sapling and seeds
9	Integrated Pest Management	Brinjal	Brinjal shoot and fruit borer	IPM in Brinjal					Planting material and other inputs
10	Integrated Disease Management	Brinjal	Bacterial wilt	IDM in Brinjal		IDM in tomato & brinjal			Planting material and other inputs
11	Integrated Disease Management	IDM in Tomato	Damping off, late & early blight and bacterial wilt infection	IDM in Tomato		IDM in tomato & brinjal			Planting material and other inputs
12	Feeding management	Poultry birds	Local myth towards layer farming to be expensive due to high cost of feed	Feeding management in poultry (Gramapriya)		Poultry Management			One week old chicks of dual purpose poultry

13	Fodder production and quality enhancement	Maize	Non availability of quality fodders	Fodder production and quality enhancement		Fodder production			Seeds and other inputs
14	Value addition	Milk	Not locally produced	Processing milk for Cheddar cheese					
15	IFS module	Common Carp <i>Cyprinus carpio</i>	Low income from monoculture of paddy	Paddy cum fish culture		Paddy cum fish culture			Fingerlings and lime
16	Feeding Management	Fish (Catla, Silver carp, Rohu, Mrigal, Grass carp and Common carp)	Low production due to poor feeding	Feeding carps with balanced diet		Feeding carps with balanced diet			Fish feed, fingerlings and lime
17	Varietal evaluation	French bean	Low yield of local variety		Varietal evaluation of French bean varieties Arka Anoop and Arka Komal	French bean cultivation			Seeds and other inputs
18	Protected cultivation	Tomato	Round the year cultivation is not possible in open field condition		Cultivation of tomato under poly house	Protected cultivation of tomato and capsicum			Seedlings and other inputs
19	Integrated Pest Management	Rice	Stem borer and leaf folder		IPM in Rice	IPM in Rice			Seeds and other inputs
20	Housing	Poultry	High unclean eggs with farmer practice		Housing	Poultry production			One week old chicks
21	Processing and value addition	Fish pickle	Spoilage of fish		Fish pickle	Fish pickle making			Fish and other inputs



Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Post Harvest Technology										
Integrated Pest Management										
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
<b>TOTAL</b>										

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

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitary	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management							1	1
Feed and Fodder	1	1						2
Small Scale income generating enterprises								
<b>TOTAL</b>	1	1					1	3

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

Thematic areas	Cattle	Poultry	Sheep	Goat	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds								
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management							1	1
Feed and Fodder								
Small Scale income generating enterprises								
<b>TOTAL</b>							1	1

## A.5. Results of On Farm Testing

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)
<b>1. HORTICULTURE</b>									
1	Varietal evaluation of Cowpea	No recommended bush type variety for the district	Cowpea varieties Arka Garima, Arka Suman, Local	Cowpea	3	<b>No of pod /plant</b> Arka Suman-39 Arka Garima-43 Local -35 <b>Pod length(cm.)</b> Arka Suman-17.15cm. Arka Garima -20.15cm. Local -16.45cm. <b>Fresh weight of pod(g.)</b> Arka Suman – 28.42g. Arka Garima-30.62 g. Local -27.25 g. <b>Yield (t/ha)</b> Arka Suman-10.7 t/ha Arka Garima-12.2t/ha Local- 9.6t/ha	Despite higher yield of improved varieties framers found local variety was tastier having higher organoleptic values.	More trials are required with bush type varieties.	Arka Suman-2.73:1 Arka Garima- 3.11:1 Local- 2.45:1

2	Varietal evaluation on Okra	No recommend short duration variety for Mamit District	Okra varieties Parbhani kranti, Arka Anmika, Kasi Unnati and Local	Okra	3	<b>Days to flowering</b> Parbhani Kranti -57 days Arka Anamika-49 days Kasi Unnati- 43 days Local- 69 days <b>Days to fruiting</b> Parbhani Kranti-62 days Arka Anamika – 54days Kasi Unnati-49days Local75 days <b>Fruit length (cm.)</b> Parbhani Kranti-13.2cm Arka Anamika -14.1 cm Kasi Unnati-13.6cm Local- 13.9 cm <b>Yield (t/ha)–</b> Parbhani Kranti-9.3 t/ha Arka Anamika 9.7t/ha Kasi Unnati-9.2 t/ha Local- 8.7t/ha	Farmers are willing to adopt the technology	This technology is suitable for Mamit District condition	Parbhani Kranti- 2.73:1 Arka Anmika- 2.85:1 Kasi Unnati -2.71:1 Local-2.59:1
3	Varietal evaluation of Pea	No recommended dual purpose whole-pod edible pea variety	Whole pod edible varieties Arka Apoorva and Arka Sampurna. Arkel used as local check	Garden pea	2	<b>Plant height (cm)</b> Arka Apoorva- 71 cm. Arka Sampoorna- 68cm. Arkel- 51 cm. <b>Pod length (cm)</b> Arka Apoorva- 7.8cm. Arka Sampoorna-8.2 cm. Arkel- 8.4 cm. <b>No. of seed per pod</b> Arka Apoorva- 6.03 Arka Sampoorna- 5.45 Arkel- 4.83 <b>Pod yield (t/ha) in 90 days</b> Arka Apoorva- 7.23t/ha Arka Sampoorna- 6.97t/ha Arkel- 6.84 t/ha	Farmers are interested to adopt these whole pod edible varieties	More trials are required under different condition of Mamit district	Arka Apoorva- 3.29:1 Arka Sampoorna- 3.14:1 Arkel- 3.11:1



4	Protected cultivation of capsicum	Round the year cultivation not possible in open field condition	Protected Cultivation under poly house condition and open-field condition	Capsicum (Arka Mohini)	2	<b>Fruit weight (g.)</b> Poly house 93.5g. Open field 73.5g. <b>Fruit Length (cm.)</b> Poly house 8.52cm Open field 7.35cm. <b>Fruit Diameter (cm.)</b> Poly house 7.76cm. Open field 6.12cm. <b>Yield (t/ha)</b> Poly house 8.2t/ha Open field 5.4t/ha	Due higher initial cost few progressive farmers are ready to adopt this technology	Limited availability of inputs on time. More trials are required with other varieties of capsicum	Poly house condition 3.03:1 Open field condition 2.04:1
5	Management of weed in pineapple by plastic mulch	Weeding	Plastic mulching	Pineapple	1	On going	-	-	-
<b>2. AGROFORESTRY</b>									
1.	Multipurpose tree based agroforestry	Low productivity of pineapple due low soil fertility	1. Farmers practice- Cultivation of pineapple  2. Cultivation	Pineapple & <i>Parkia roxburgii</i> intercropping	2	1 <sup>ST</sup> year: (2012-13) 1. yield of Pineapple= 120 qtl/ha 2. Farmers practice- yield 120 qtl/ha 3. <i>Parkia roxburgii</i>	Farmers are interested and willing to try out the technology	In the present study yield of Pineapple is not effected by <i>parkia</i>	ongoing

	system( <i>Parkia</i> <i>roxburg</i> <i>ii</i> with pineappl e)		of pineapple with <i>Parkia</i> <i>roxburgii</i>		<p>plant height was measured two times,first measurement was done in the month of june,2012 and second was done in the month of February,2013.In the first measurement plant mean height was 1.5feet and in the second measurement mean height was 3 feet. 2<sup>nd</sup> year:(2013-14)</p> <p>1, Yields of Pineapple= 124qt/ha 2. <i>Parkia roxburgii</i> height was measured in the month of june 2014 and the mean height was 6 feet</p>		<p><i>roxburgii</i> in the first year,from the second year it is observed that yield of Pineapple is increasing.To draw some concrete results a long term trials is needed.</p>	
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2	Oil palm based agroforestry system	Lack of technical knowhow on intercropping management	1.Farmers practice- Cultivation of oilpalm (monocrop) 2. Cultivation of oilpalm with Maize	Oilpalm & Maize	1	Exisisting oilpalm cultivation is selected and in between oilpalm trees Maize(local variety)is sown during April, 2014 and in june-july2014 maize is harvested. Yields of Maize = 16qt/ha	-	To draw some concrete results trial will be repeated .	On going
3	Bamboo -based Agro-forestry System	Degraded Jhum land	1.yield 2.Productivity 3.Farmers reaction	Bamboo & Pigeon Pea	1	Bamboo seedlings are planted 6mx6m spacing and in between the bamboo pigeon pea (local) is planted which is nitrogen fixing plants .Harvesting of pigeon pea is not yet done.	-	-	On going
<b>3. PLANT PROTECTION</b>									
1	IPM in Brinjal	Brinjal shoot and fruit borer	1) Removal of infested plants. 2) Use of lucilure sex pheromone traps @ 100 traps/ha. at 30 DAT 3) Release of <i>Trichogramma chilonis</i> @ 50000/release at weekly interval for	Brinjal	3	<b>Improved practice:</b>  1.Crop yield = 230 qtl/ha  2.No. of infested plant at 10 days interval ( 8 plants)  3.Farmers Reaction (good)	Farmers are interested and willing to adopt the new technology.	More trials are required to be taken up at different location	Improved practice = 3.96:1  Farmers practice(Control) = 3.36:1

			4-5 times. 4) Spraying 5% neem seed kernel extract to kill early stage larvae. 5) Spraying of Endosulphan@ 2ml/litre water.			<b>Farmers practice(Control) :</b> 1.Crop yield = 130 qtl/ha  2.No. of infested plant at 10 days interval ( 28 plants)			
2	IDM in Brinjal	Bacterial wilt	1)Seed Treatment with Biofor-Pf-2 @ 1gm/kg seeds, 2)Root drip treatment @ 1kg Biofor Pf2/2litre water/1000 seedlings, 3)Soil treatment @ 1 kg Biofor-Pf2 /10gm mixed with 100gm cow dung/ plant, Seed + soil treatment 4) Soil drenching with Metalaxyl and Bordeaux mixture 1%.	Brinjal (Muktakeshi & Pusa Purple long)	3	<b>Improved practice:</b> 1.Crop yield = 220 qtl/ha  2.No. of infected plant at 10 days interval ( 5 plants) 3.Farmers Reaction (good)  <b>Farmers practice(Control) :</b> 1.Crop yield = 115 qtl/ha  2.No. of infected plant at 10 days interval ( 34 plants)	Farmers are interested and willing to adopt the new technology.	More trials are required to be taken up at different soil conditions	Improved practice =3.1 Farmers practice(Control) = 2.97
3	IDM in Tomato	Damping off, late & early blight and bacterial wilt infection	1)Treating nursery bed with <i>Trichoderma</i> culture @ 2%. 2) Removal of infected plants. 3) For leaf curl, spraying of Malathion/ Dimethoate 1ml/litre water 3 weeks after transplanting and at 15 days interval.	Tomato	3	<b>Improved practice:</b> 1.No. of infected plant at 10 days interval ( 15 plants) 2 .Yield record (250 qtl./ha), 3.Farmers' reaction (good)  <b>Farmers practice:</b> No. of infected plant at 10 days interval ( 40 plants), yield record(125qtl/ha)	Farmers are interested and willing to adopt the new technology.	More trials are required to be taken up at different soil conditions	Improved practice = 2.65  Farmer's practice = 2.15

			4) For late blight, spraying of Metalaxyl and Mancozeb @ 2gm/litre water alternatively at the time of disease appearance. 5) For bacterial wilt, soil drenching with Bordeaux mixture 1%.						
<b>4. ANIMAL SCIENCE</b>									
1.	Feeding management in poultry (Gramapriya)	Local myth towards layer farming to be expensive due to high cost of feed	a. Analyse commercial available layer feeds per kilogram for Protein, calcium and zinc. b. Formulate a balanced feed trial	Intensive housing of layers	1	Protein content ranged from 12.2 to 13% Calcium content ranged from 0.02 to 0.04% Zinc content ranged from 150-348 mg zinc/kg dm (dry matter) Balanced feed trials were: Starter ration: 115 gm/day Finisher ration: 175 gm/day	Farmers are willing to adopt the technology	Further refinement is required with locally grown plants as supplements	Improved practice: 2.4:1 Farmers practice: 1.7:1
2.	Fodder production and quality enhancement	Non availability of quality fodders	a. Crop variety: Yellow Maize (African tall) b. Sowing time: Late March to mid April c. Land	Maize (African tall)	1	Dry Matter percentage: 13 Crude Protein percentage: 10.86 Crude fiber percentage: 25 Change in Milk yield:	Farmers are interested and willing to adopt the new technology after more trials	It is expensive for fodder since Lengpui area has abundant natural fodder	1.89:1

			preparation: Land prepared thoroughly d. Fertilization: 33.6 kg N, 11 Kg P and 3.6 Kg K in the form of Urea, SSP and MOP e. Pest and Disease: As per package of practices when necessary			Fat%: 3.97 SNF%: 8.94		available.	
3.	Value addition	Not locally produced	Processing milk for Cheddar cheese	Milk	1	Ongoing	Farmers are interested and willing to adopt the new technology	Outlet needs to be organised	
<b>5. FISHERY</b>									
1.	Paddy cum fish culture	Low income from monoculture of paddy	1. Species: <i>Cyprinus carpio</i> 2. Stocking density 10,000nos./ha 3. Liming 500 kg/ha/year 4. Cow dung 20 tons/ha/year 5. Feeding 2 % of fish body weight	IFS module	2	Productivity Fish: 594 kg/ha/5 months Rice: 28.35 q/ha Disease: Nil 2. Survivability of fish: 63% <b>Farmers practice</b> Rice: 29.62 q/ha Disease: Nil	Farmers are willing to adopt the technology	Further refinement is needed in types of trench systems, fish stocking density and species of fish.	1. Improved practices-2.02:1 2. Farmers practice-1.70:1
2.	Feeding carps with balanced diet	Low production due to poor feeding	a. Fish stocking density @ 10,000 kg/ha b. Stocking ratio: Catla -20%, Silver carp-20%, Rohu-	Fish (Catla, Silver carp, Rohu, Mrigal,	2	Ongoing	Ongoing	Ongoing	Ongoing

			20%, Mrigal-15%, Grass carp-10% and Common carp-15%. c. Lime is applied @ 500 kg/ha/yr d. Feed ingredients: rice bran and mustard oil cake-1:1, mixed with mineral mixture @ 1% on daily basis e. Followed by application of Raw cow dung, Urea and SSP @ 20,000/ha, 240 kg/ha and 300 kg/ha respectively. f. Feeding rate: 3 % of the total biomass per day.	Grass carp and Common carp)					
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***\*Field crops – ton/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 2014-15

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

List of technologies demonstrated during previous year and popularized during 2014-15 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 ha

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

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

Sl. No	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement	Farming situation (Rainfed/Irrigated, Soil type, altitude, etc)	Status of soil (Kg/ha)		
					Proposed	Actual	SC/ST	Others	Total			N	P	K
1.	French bean	Varietal evaluation	French bean varieties Arka Anoop and Arka Komal	Rabi 2014-15	2.0	2.0	20	-	20	-	Irrigated, Sandy loam soil	-	-	-



2.	Tomato	Protected cultivation	Cultivation of tomato under Poly house	2014-15	0.4	0.4	15	-	15	-	Irrigated , Sandy loam	-	-	-
3.	Rice	IPM	<p>1) Seedling root dip treatment in Chlorpyrifos 20 EC @ 10ml/10 litre water for overnight.</p> <p>2) 6-8 releases of <i>Trichogramma japonicum</i> &amp; <i>T.chilonis</i> @ 50,000/ha/week 30DAT</p> <p>3) Spraying of Monocrotophos 36 EC @ 2ml/litre water at 45 DAT</p>	Kharif , 2014	1.0	1.0	3	-	3	NA	Rainfed, Sandy loam 50m MSL	-	-	-

### c. Performance of FLD on Crops

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*			GC**	GR**	NR**	BC R**	GC	GR	NR	BCR
									Demo	Local								
1	French bean	Varietal evaluation	2.0	Akra Anoop 129 Arka komal 127	103	Akra Anoop 25.24 % Arka Komal 23.30 %	Akra Anoop 136 Arka Komal 139	Akra Anoop 122 Arka Komal 118	<b>Days to first picking</b> Arka Anoop 51 days Arka Komal 54 days <b>Pod length (cm.)</b> Arka Anoop -16.3 cm Arka Komal 15.4 cm	<b>Days to first picking</b> 65 days <b>Pod length (cm.)</b> 14.2 cm	Arka Anoop 59000  Arka Komal 59000	Arka Anoop 193500  Arka Komal 190500	Arka Anoop 124500  Arka Komal 131500	Arka Anoop 3.28 :1  Arka Komal 3.23 :1	59000	154500	95500	2.62:1
2	Tomato	Protected cultivation	0.4	372	238	56.30 %	415	340	<b>No of fruit/ plant - 25 nos</b> <b>Av. Fruit weight - 72g</b>	<b>No of fruit/ plant - 22 nos</b> <b>Av. Fruit weight - 56 g</b>	93000	372000	279000	4.0:1	93000	238000	145000	2.56:1
3	Rice	IPM	1.0	32	18	77.7%	32	18	1.Crop yield	1.Crop yield	25,400	48,000	22,600	1.8	16,800	27,000	10,200	1.6

									= 32 qtl/ha	= 18 qtl/ha				9				
									2.No. of infected plant at 10 days interval ( 15 plants)	2.No. of infected plant at 10 days interval ( 30 plants)								

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

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

Produce Sale Price must be as per MSP or Registered Marketing Society

Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC

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

**d. Extension and Training activities under FLD on Crops**

Sl.No.	Activity	No. of activities organised	Date	Number of participants			Remarks
				Gen	SC/ST	Total	
1	Field days	2	14.11.2014 5.3.2015	-	36 31	36 31	
2	Farmers Training	1	15.9.14	-	26	26	
3	Media coverage						
4	Training for extension functionaries						
5	Any other (Pl. specify)						
	<b>Total</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	Poultry	Housing	a. Semi-intensive housing with manually operated elevated nesting boxes b. Training the hens to climb over these boxes from 3rd month of age c. Collect clean eggs	2	1	33	86% clean eggs collected	70% clean eggs collected	16%	N/A	N/A	19000	33000	14000	1.73	13500	19500	6000	1.4	

**\*\* 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.**

## (iii) Fisheries

Sl. No.	Category, e.g. Common carp, ornamental fish etc.	The matic area	Name of Technology	No. of farmers	No. of units	No. of fish/fingerlings	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
							Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1	Fish pickle	Value addition	Fish pickle preparation	20	2	5kg fish/unit (10 farmer)	Profit - 115/kg	Profit - 0 (Fresh fish)	54%	-	-	215	330	115	154	150 (Fresh fish)	150	-	1	Fresh fish is taken as local check

\*\* 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.	The matic area	Name of Technology	No. of farmers	No. of units	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
						Demo	Check		Demo	Check	GC*	GR*	NR*	BCR*	GC	GR	NR	BCR	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

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

**(v) Farm Implements and Machinery**

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

**f. Performance of FLD on Crop Hybrids**

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

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

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

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

### 3.3. Achievements on Training

#### 3.3.1. Farmers and Farm Women in On Campus including Sponsored On Campus Training Programmes

(\*Sp. On means On Campus training programmes sponsored by external agencies)

Thematic area	No. of Courses/ prog			Participants																		
	On-Campus  (1)	Spon On*	Total  (1+2)	General						SC/ST						Total						Grand Total  (x + y)
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
				On	Sp. On	On	Sp. On	On	Sp. On	On	Sp. On	On	Sp. On	On	Sp. On	On	Sp. On	On	Sp. On	On	Sp. On	
	(2)	(1+2)	(4)	(5)	(6)	(7)	(a= 4+6 )	(b= 5+7 )	(8)	(9)	(10)	(11)	(c= 8+10 )	(d= 9+11 )	(4+8 )	(5+9 )	(6+10 )	(7+11 )	(x= a +c)	(y= b +d)		
I. Crop Production																						
Weed Management	1		1							17		9		26		17		9		26		26
Resource Conservation Technologies																						
Cropping Systems																						
Crop Diversification																						
Integrated Farming	1		1							18		6		24		18		6		24		24











### g) Medicinal and Aromatic Plants

[illegible]

soils																						
Micro nutrient deficiency in crops																						
Nutrient Use Efficiency																						
Soil and Water Testing																						
<b>IV Livestock Production and Management</b>																						
Dairy Management	1		1							15		10		25		15		10		25		25
Poultry Management	1	1	2							15	13	10	6	25	19	15	13	10	6	25	19	44
Piggery Management		1	1								40		20		60		40		20		60	60
Rabbit Management																						
Disease Management																						
Feed management	1		1							16		9		25		16		9		25		25
Production of quality animal products	1		1							19		8		27		19		8		27		27



Value addition	4		4									130		130				130		130		130
Income generation activities for empowerment of rural Women	1		1									30		30				30		30		30
Location specific drudgery reduction technologies																						
Rural Crafts																						
Women and child care																						
<b>VI Agril. Engineering</b>																						
Installation and maintenance of micro irrigation systems																						
Use of Plastics in farming practices	1		1							40		20		60		40		20		60		60





Production of bio control agents and bio pesticides																						
<b>VIII Fisheries</b>																						
Integrated fish farming	1	1	2							15	28	10	12	25	40	15	28	10	12	25	40	65
Carp breeding and hatchery management																						
Carp fry and fingerling rearing	1		1							12		10		22		12		10		22		22
Composite fish culture	1	1	2							15	25	10	16	25	41	15	25	10	16	25	41	66
Fish Health Management		1	1								20		10		30		20		10		30	30
Hatchery management and culture of freshwater prawn																						
Breeding and culture of ornamental fishes	1		1							15		10		25		15		10		25		25







**3.3.2. Achievements on Training of Farmers and Farm Women in Off Campus including Sponsored Off Campus Training Programmes** (\*Sp. Off means Off Campus training programmes sponsored by external agencies)

[illegible]









[illegible]

III Soil Health and Fertility Management																						
Soil fertility management																						
Soil and Water Conservation																						
Integrated Nutrient Management																						
Production and use of organic inputs																						
Management of Problematic soils																						
Micro nutrient deficiency in crops																						
Nutrient Use Efficiency																						
Soil and Water Testing																						
IV Livestock Production and Management																						
Dairy Management																						
Poultry Management	1		1							18		7		25		18		7		25		25
Piggery Management	1		1							20		6		26		20		6		26		26















(B) RURAL YOUTH																						
3.3.3. Achievements on Training Rural Youth in On Campus including Sponsored On Campus Training Programmes (*Sp. On means On Campus training programmes sponsored by external agencies)																						
Thematic area	No. of Courses/ Prog			Participants																	Grand Total (x + y)	
	On (1)	Sp On* (2)	Total (1+2)	General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
				On (4)	Sp. On (5)	On (6)	Sp. On (7)	On (a= 4+6 )	Sp. On (b= 5+7 )	On (8)	Sp. On (9)	On (10)	Sp. On (11)	On (c= 8+10 )	Sp. On (d= 9+11 )	On (4+8 )	Sp. On (5+9 )	On (6+10 )	Sp. On (7+11 )	On (x= a +c)		Sp. On (y= b +d)
Mushroom Production	1		1							9		14		23		9		14		23		23
Bee-keeping																						
Integrated farming	1		1							17		8		25		17		8		25		25
Seed production																						
Production of organic inputs																						
Integrated Farming																						
Planting material production																						
Vermi-culture																						
Sericulture																						
Protected cultivation of vegetable crops	1		1							15		9		24		15		9		24		24











Pearl culture																						
Cold water fisheries																						
Fish harvest and processing technology																						
Fry and fingerling rearing																						
Small scale processing																						
Post Harvest Technology																						
Tailoring and Stitching	1		1									20		20				20		20		20
Rural Crafts																						
TOTAL	5	0	5	0	0	0	0	0	0	65	0	60	0	125	0	65	0	60	0	125	0	125





building for ICT application																						
Care and maintenance of farm machinery and implements																						
WTO and IPR issues																						
Management in farm animals	1		1							11		7		18		11		7		18		18
Livestock feed and fodder production																						
Household food security																						
Women and Child care																						
Low cost and nutrient efficient diet designing																						
Production and use of organic inputs																						
Gender mainstreaming through SHGs																						
TOTAL	3	0	3	0	0	0	0	0	0	32	0	21	0	53	0	32	0	21	0	53	0	53

**3.3.6. Achievements on Training of Extension Personnel in Off Campus including Sponsored Off Campus Training Programmes**  
 (\*Sp. Off means Off Campus training programmes sponsored by external agencies)

[illegible]

Care and maintenance of farm machinery and implements																						
WTO and IPR issues																						
Management in farm animals	1		1							12		8		20		12		8		20		20
Livestock feed and fodder production	1		1							12		5		17		12		5		17		17
Household food security																						
Women and Child care																						
Low cost and nutrient efficient diet designing																						
Production and use of organic inputs	1		1							13		7		20		13		7		20		20
Gender mainstreaming through SHGs																						
<b>TOTAL</b>	3	0	3	0	0	0	0	0	0	37	0	20	0	57	0	37	0	20	0	57	0	57

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

**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
Crop Production	Weed Management	Weed Management in Rice	16.6.14	1	KVK Training hall	Farmer & Farm women	-	-	-	17	9	26	17	9	26
Crop Production	Integrated Farming	Integrated Farming System	12.9.14	1	KVK Training hall	Farmer & Farm women	-	-	-	18	6	24	18	6	24
Crop Production	Seed Production	Seed production of pea & French bean	15.10.14	1	KVK Training hall	Farmer & Farm women	-	-	-	19	10	29	19	10	29
Crop Production	Production of organic inputs	Production of Vermi compost & Vermi Wash	16.12.14	1	KVK Training hall	Farmer & Farm women				15	10	25	15	10	25
Horticulture	Nursery raising	Nursery management of winter vegetables	29.8.14	1	KVK Training hall	Farmer & Farm women				17	12	29	17	12	29
Horticulture	Protected cultivation	Cultivation of vegetables under poly house	27.6.14	1	KVK Training hall	Farmer & Farm women				39	21	60	39	21	60
Horticulture	Protected cultivation	Protected cultivation of tomato	12.12.14	1	KVK Training hall	Farmer & Farm women				16	9	25	16	9	25

		and capsicum													
Horticulture	Cultivation of Fruit	High density planting of pineapple	16.4.14	1	KVK Training hall	Farmers & Farm women				17	9	26	17	9	26
Horticulture	Rejuvenation of old orchards	Rejuvenation of old Khasi mandarin orchards	6.5.14	1	KVK training hall	Farmer & Farm women				15	4	19	15	4	19
Horticulture	Plant propagation techniques	Propagation techniques of fruit plants	10.12.14	1	KVK training hall	Farmer & Farm women				18	6	24	18	6	24
Animal Science	Dairy Management	Dairy Management	13.11.14	1	KVK training hall	Farmer & Farm women				15	10	25	15	10	25
Animal Science	Poultry Management	Poultry Management	6.5.14	1	KVK training hall	Farmer & Farm women				13	6	19	13	6	19
Animal Science	Poultry Management	Poultry Management	17.12.14	1	KVK training hall	Farmer & Farm women				15	10	25	15	10	25
Animal Science	Feed management	Feed management for pig	14.7.14	1	KVK training hall	Farmer & Farm women				16	9	25	16	9	25
Animal Science	Production of quality animal products	Training on cheese making	16.10.14	1	KVK training hall	Farmer & Farm women				19	8	27	19	8	27
Animal Science	Piggery Management	Piggery Management	27.6.14	1	KVK training hall	Farmer & Farm women				40	20	60	40	20	60
Home Science	Household food	kitchen gardening	27.2.15	1	KVK training	Farm women					30	30		30	30

	security by kitchen gardening and nutrition gardening				hall										
Home Science	Value addition	Pickle Making	9.7.14	1	KVK training hall	Farm women					30	30		30	30
Home Science	Value addition	Jam Making	19.11.14	1	KVK training hall	Farm women					30	30		30	30
Home Science	Value addition	Fish processing and value addition	9.12.14	1	KVK training hall	Farm women					30	30		30	30
Home Science	Value addition	Fish pickle making	10.12.14	1	KVK training hall	Farm women					40	40		40	40
Home Science	Income generation activities for empowerment of rural Women	Knitting	4.12.14	1	KVK training hall	Farm women					30	30		30	30
Agril. Engineering	Use of Plastics in farming practices	Uses of Agro Textile	27.6.14	1	KVK training hall	Farmer & Farm women				40	20	60	40	20	60
Plant Protection	IPM	IPM in Rice	9.7.14	1	KVK training hall	Farmer & Farm women				20	12	32	20	12	32
Plant Protection	IPM	IPM in rice & safe use of pesticides	19.8.14	1	KVK training hall	Farmer & Farm women				21	13	34	21	13	34

Plant Protection	Integrated Pest Management	IPM under poly house & net house	27.6.14	1	KVK training hall	Farmer & Farm women				40	20	60	40	20	60
Plant Protection	Integrated Disease Management	IDM in Cole crops	12.12.14	1	KVK training hall	Farmer & Farm women				15	10	25	15	10	25
Plant Protection	Integrated Disease Management	IDM in Tomato & Brinjal	10.12.14	1	KVK training hall	Farmer & Farm women				14	10	24	14	10	24
Plant Protection	Integrated Disease Management	IDM in Rice	6.5.14	1	KVK training hall	Farmer & Farm women				10	9	19	10	9	19
Fisheries	Integrated fish farming	Integrated fish farming	10.10.14	1	KVK training hall	Farmer & Farm women				15	10	25	15	10	25
Fisheries	Integrated fish farming	Integrated fish farming	7.7.14-11.7.14	5	KVK training hall	Farmer & Farm women				28	12	40	28	12	40
Fisheries	Composite fish culture	Composite fish culture	8.9.14-12.9.14	5	KVK training hall	Farmer & Farm women				25	16	41	25	16	41
Fisheries	Fish Health Management	Fish Health Management	1.12.14-5.12.14	5	KVK training hall	Farmer & Farm women				20	10	30	20	10	30
Fisheries	Carp fry and fingerling rearing	Common carp fry and fingerling rearing	8.5.14	1	KVK training hall	Farmer & Farm women				12	10	22	12	10	22
Fisheries	Composite fish culture	Composite fish culture	8.12.14	1	KVK training hall	Farmer & Farm women				15	10	25	15	10	25
Fisheries	Breeding	Ornamenta	7.11.14	1	KVK	Farmer & Farm women				15	10	25	15	10	25

	and culture of ornamental fishes	I fish culture			training hall										
Fisheries	Fish processing and value addition	Preparation of fish pickle	10.12.14	1	KVK training hall	Farm women					15	15		15	15
Crop production	Vermi-compost production	Vermi-compost production	7.10.14	1	KVK training hall	Farmer & Farm women				15	10	25	15	10	25
Agro-forestry	Production technologies	Production technologies of MPT	17.11.14	1	KVK training hall	Farmer & Farm women				13	10	23	13	10	23
Agro-forestry	Production technologies	Production technologies of MPT	6.5.14	1	KVK training hall	Farmer & Farm women				10	9	19	10	9	19
Agro-forestry	Integrated Farming Systems	Integrated Farming Systems	9.7.14	1	KVK training hall	Farmer & Farm women				25	15	40	25	15	40
Agro-forestry	Integrated Farming Systems	Integrated Farming Systems	12.12.14	1	KVK training hall	Farmer & Farm women				14	6	20	14	6	20
Agro-forestry	Nursery management	Nursery management of MTP under poly house condition	27.6.14	1	KVK training hall	Farmer & Farm women				45	15	60	45	15	60
Fishery	Fish harvest & processing technology	Processing and value addition of fish	13.10.14	1	KVK training hall	Rural Youth				11	6	17	11	6	17
Fishery	Composite fish culture	Composite fish culture	5.11.14	1	KVK training hall	Rural Youth				13	10	23	13	10	23



Animal Science	Piggery	Rearing and management of pig	19.8.14	1	KVK training hall	Rural Youth				16	8	24	16	8	24
Plant protection	Mushroom production	Mushroom production	24.7.14	1	KVK training hall	Rural Youth				9	14	23	9	14	23
Horticulture	Protected cultivation of vegetable crops	Protected cultivation of vegetable crops	6.6.14	1	KVK training hall	Rural Youth				15	9	24	15	9	24
Agro- forestry	Integrated farming	Integrated farming	4.4.14	1	KVK training hall	Rural Youth				17	8	25	17	8	25
Plant protection	Integrated Pest Management	IPM in rice	25.4.14	1	KVK training hall	Extension Personnel				12	8	20	12	8	20
Horticulture	Rejuvenation of old orchards	Rejuvenation of old Khasi Mandarin orchards	24.6.14	1	KVK training hall	Extension Personnel				9	6	15	9	6	15
Animal Science	Management in farm animals	Management in farm animals	7.10.14	1	KVK training hall	Extension Personnel				11	7	18	11	7	18

**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
Crop Production	Fodder production	Round the year fodder production	7.1.15	1	Hmunpui	Farmer & Farm women				17	11	28	17	11	28
Horticulture	Protective cultivation	Protected cultivation of tomato and capsicum	4.3.15	1	Dialdawk	Farmer & Farm women				15	10	25	15	10	25
Horticulture	Plant propagation techniques	Propagation techniques of fruit crops	11.7.14	1	Rawpuichhip	Farmer & Farm women				19	7	26	19	7	26
Animal Science	Poultry management	Backyard rearing of dual purpose poultry birds	3.11.14	1	Marpara,	Farmer & Farm women				18	7	25	18	7	25
Animal Science	Piggery Management	Rearing of improved pig breeds	5.11.14	1	Tuahza wl	Farmer & Farm women				20	6	26	20	6	26
Animal Science	Disease Management	Disease management of poultry birds and pigs.	28.11.14	1	Rulpuihlum	Farmer & Farm women				17	10	27	17	10	27
Home Science	Value addition	Preparation of jam and pickle	15.10.14	1	Lengte	Farmer & Farm women					30	30		30	30
Home Science	Income generation activities for empowerment of rural Women	Knitting	18.9.14	1	Mamit	Farmer & Farm women					30	30		30	30
Plant	Integrated Pest	IPM in Rice&	17.6.14	1	Dialdawk	Farmer & Farm				18	9	27	18	9	27

Protectio n	Management	Maize				women									
Plant Protectio n	Integrated Disease Management	IDM in Tomato	24.10.14	1	Dialdawk	Farmer & Farm women				9	5	14	9	5	14
Fishery	Integrated fish farming	Integrated fish farming	25.11.14	1	Darlak	Farmer & Farm women				15	9	24	15	9	24
Agro-Forestry	Production technologies	Production technology of MTP	13.8.14	1	West Phaileng	Farmer & Farm women				11	9	20	11	9	20
Agro-Forestry	Production technologies	Production technology of MTP	14.8.14	1	Kawnmawi	Farmer & Farm women				12	8	20	12	8	20
Agro-Forestry	Integrated farming System	Integrated farming System	17.11.14	1	Chungtlang	Farmer & Farm women				15	8	23	15	8	23
Crop Productio n	Production of organic inputs	Production of vermi compost	3.12.14	1	Lengte	Rural Youth				15	10	25	15	10	25
Plant Protectio n	Farm Mechanization	Farm Mechanization	14.11.14	1	Dialdawk	Rural Youth				20	10	30	20	10	30
Agro Forestry	Nursery Management of Horticulture crops	Nursery Management of Horticulture crops	22.4.14	1	Dialdawk	Rural Youth				14	11	25	14	11	25
Animal Science	Poultry Production	Backyard poultry production	29.9.14	1	Lengte	Rural Youth				16	9	25	16	9	25
Home Science	Tailoring and Stitching	Tailoring and Stitching	20.6.14	1	Rawpuichhip	Rural Youth					20	20		20	20
Animal Science	Management in farm animals	Management in farm animals	2.7.14	1	Mamit	Extension Personnel				12	8	20	12	8	20
Animal Science	Livestock feed and fodder production	Preparation of hay and silage	17.12.14	1	Mamit	Extension Personnel				12	5	17	12	5	17
Crop Productio n	Production and use of organic inputs	Production of different type of compost	7.5.14	1	Zamuang	Extension Personnel				13	7	20	13	7	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 Sponsore d by external funding agencies (Please Specify with amount of fund in Rs.)
					General			SC/ST			Total							
					M	F	T	M	F	T	M	F	T	Type of enterpr ise ventur ed into	Numb er of units	Number of persons employ ed	Avg. Annual income in Rs. generated through the enterprise	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\*training title should specify the major technology /skill transferred

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

On/ Off/ Vocational	Beneficiary group (F/ FW/ RY/ EP)	Date (From-To)	Duration (days)	Discipline	Area of training	Title	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
							General			SC/ST			Total				
							M	F	T	M	F	T	M	F	T		
ON	F&FW	27.6.14	1	Horticulture	Use of Agrotextile	Protective cultivation of Vegetables				40	20	60	39	21	60	SAS MIR A,	Provide training materials & inputs
ON	F&FW	6.5.14	1	Animal Science	Poultry Management	Poultry Management				13	6	19	13	6	19	IW MP, West Phaleng,	Provide training materials & inputs
ON	F&FW	27.6.14	1	Animal Science	Use of Agro textile	Use of Agro textile in field of livestock				40	20	60	40	20	60	SAS MIR A,	Provide training materials & inputs
ON	F&FW	27.6.14	1	Plant protection	Integrated Pest Management	IPM under poly house & net house				40	20	60	40	20	60	SAS MIR A,	Provide training materials & inputs

ON	F&FW	6.5.14	1	Plant protection	Integrated Disease Management	IDM in rice				13	6	19	13	6	19	IW MP, West Phalen g,	Provide training materials & inputs
ON	F&FW	7.7.14-11.7.14	5	Fishery	Integrated fish farming	Integrated fish farming				28	12	40	28	12	40	NF DB,	56,250.00
ON	F&FW	8.9.14-12.9.14	5	Fishery	Composite fish culture	Composite fish culture				25	16	41	25	16	41	NF DB	56,250.00
ON	F&FW	1.12.14-5.12.14	5	Fishery	Fish Health Management	Fish Health Management				20	10	30	20	10	30	NF DB	56,250.00
ON	F&FW	6.5.14	1	Agro - Forestry	Integrated Farming Systems	Integrated Farming Systems				13	6	19	13	6	19	IW MP, West Phalen g,	Provide training materials & inputs
ON	F&FW	27.6.14	1	Agro - Forestry	Nursery management of MTP under poly house condition	Nursery management of MTP under poly house condition				40	20	60	40	20	60	SAS MIR A,	Provide training materials & inputs
<b>Total</b>			<b>10</b>							<b>272</b>	<b>136</b>	<b>408</b>	<b>271</b>	<b>137</b>	<b>408</b>		<b>168,750.00</b>

**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 2014-15**

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.	Advisory services	On Fishery, Home Sc., Animal Sc., Horti., Plant Protection, Agro-Forestry	2014-15	609.00				329	253	582	17	10	27	346	263	609
2.	Diagnostic visit	On Fishery, Home Sc., Animal Sc., Horti., Plant Protection, Agro-Forestry	2014-15	191				119	72	191				119	72	191
3.	Field day	2	14.11.2014 5.3.2015	67				37	21	58	6	3	9	43	24	67
4.	Group Discussion															
5.	Kishan Gosthi															
	Kishan Mela															
6.	Film show	On Fishery, Animal Sc., Horti., Plant Protection, Agro -Forestry	2014-15	5				96	53	149				96	53	149
7.	SHG formation	Fishery farmers SHG	9.12.14	1				14	6	20				14	6	20
8.	Exhibition															
9.	Scientists visit to farmers fields	On Fishery, Animal Sc., Horti., Plant Protection,	2014-15	191				114	77	191				114	77	191





26.	Lecture delivered as resource person	On Fishery, Home Sc., Animal Sc., Horti., Soil Sc., n Agro-Forestry	2014-15	6												
27.	PRA															
28.	Farmer-Scientist interaction															
29.	Soil test campaign															
30.	Mahila Mandal Convener meet															
31.	Any other (Please specify)															
32.	Mass vaccination	Against swine fever and Rabies	14.6.14, 23.1.15	2				78	72	150				78	72	150
Grand Total				1117				1957	1358	3317	23	13	36	1980	1371	3380

### 3.5 Production and supply of Technological products during 2014-15

#### A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries		
					General	SC/ST	Total
<b>CEREALS</b>	Rice	CAUR-1 Chhimgtung	5qt. 3qt.	7500 4500		20 13	20 13
<b>OILSEEDS</b>							
<b>PULSES</b>							
<b>VEGETABLES</b>	Okra	Parbhani Kranti	0.2qt.	800		5	5

	Pea	Arkel	0.2qt.	800		5	5
	French bean	Arka komal	0.2qt.	800		5	5
<b>FLOWER CROPS</b>							
<b>OTHERS (Specify)</b>							

#### A1. SUMMARY of Production and supply of Seed Materials during 2014-15

Sl. No.	Major group/class	Quantity (ton.)	Value (Rs.)	Number of recipient/ beneficiaries		
				General	SC/ST	Total
1	CEREALS	0.80	12000	-	33	33
2	OILSEEDS	-	-	-	-	-
3	PULSES	-	-	-	-	-
4	VEGETABLES	0.06	2400	-	15	15
5	FLOWER CROPS	-	-	-	-	-
6	OTHERS	-	-	-	-	-
<b>TOTAL</b>		<b>0.86</b>	<b>14400</b>	<b>-</b>	<b>48</b>	<b>48</b>

#### B. Production of Planting Materials (Nos. in lakh)

Major group/class	Crop	Variety	Numbers (In Lakh)	Value (Rs.)	Number of recipient beneficiaries		
					General	SC/ST	Total
<b>Fruits</b>	<b>Mandarin</b>	<b>Khasi Mandarin</b>	<b>0.01</b>	<b>-</b>			
<b>Spices</b>							
<b>Ornamental Plants</b>							
<b>VEGETABLES</b>	<b>Cabbage</b>	<b>Bahar,Pragati</b>	<b>0.05</b>	<b>500</b>		<b>50</b>	<b>50</b>

	<b>Tomato</b>	NP5024	<b>0.05</b>	<b>500</b>		<b>50</b>	<b>50</b>
	<b>Broccoli</b>	Kendi	<b>0.03</b>	<b>300</b>		<b>32</b>	<b>32</b>
	<b>Brinjal</b>	Mukta keshi. Pusa Purple Long	<b>0.03</b>	<b>300</b>		<b>35</b>	<b>35</b>
	<b>Chilli</b>	Soldier	<b>0.02</b>	<b>200</b>		<b>20</b>	<b>20</b>
	<b>Capsicum</b>	Arka Mohani	<b>0.01</b>	<b>500</b>		<b>40</b>	<b>40</b>
<b>Forest Spp.</b>							
<b>Plantation crops</b>							
<b>Medicinal plants</b>	<b>Neem</b>	-	<b>0.005</b>	-	-	-	-
<b>OTHERS (Pl. Specify)</b>							
			<b>0.205</b>	<b>2300</b>		<b>227</b>	<b>227</b>

**B1. SUMMARY of Production and supply of Planting Materials (In Lakh) during 2014-15**

Sl. No.	Major group/class	Numbers (In Lakh)	Value (Rs.)	Number of recipient beneficiaries		
				General	SC/ST	Total
<b>1</b>	<b>Fruits</b>	<b>0.01</b>	-	-	-	-
<b>2</b>	<b>Spices</b>	-	-	-	-	-
<b>3</b>	<b>Ornamental Plants</b>	-	-	-	-	-
<b>4</b>	<b>VEGETABLES</b>	<b>0.19</b>	<b>2300</b>		<b>227</b>	<b>227</b>
<b>5</b>	<b>Forest Spp.</b>	-	-	-	-	-
<b>6</b>	<b>Medicinal plants</b>	<b>0.005</b>	-	-	-	-
<b>7</b>	<b>Plantation crops</b>	-	-	-	-	-
<b>8</b>	<b>OTHERS (Specify)</b>	-	-	-	-	-
<b>TOTAL</b>		<b>0.205</b>	<b>2300</b>	-	<b>227</b>	-

## C. Production of Bio-Products during 2014-15

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Number of Recipient /beneficiaries		
			No	(qt)		General	SC/ST	Total
<b>BIOAGENTS</b>								
<b>BIOFERTILIZERS</b>								
1. Vermicompost	Vermicompost	-		10	12000		10	10
2								
3								
4								
<b>BIO PESTICIDES</b>								
1								
2								
3								
4								

## C1. SUMMARY of production of bio-products during 2014-15

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Number of Recipient beneficiaries		Total number of Recipient beneficiaries
			Nos	(kg)		General	SC/ST	
1	BIOAGENTS							
2	BIO FERTILIZERS	Vermi compost		1000	1200		10	10
3	BIO PESTICIDE							
	<b>TOTAL</b>			1000	1200		10	10

**D. Production of livestock during 2014-15**

Sl. No.	Type of livestock	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries		
			(Nos)	Kgs		General	SC/ST	Total
	<b>Cattle/ Dairy</b>	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	<b>Goat</b>	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	<b>Piggery</b>	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	<b>Poultry</b>	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	<b>Fisheries</b>	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-
	<b>Others (Specify)</b>	-	-	-	-	-	-	-
		-	-	-	-	-	-	-
		-	-	-	-	-	-	-

**D1. SUMMARY of production of livestock during 2014-15**

Sl. No.	Livestock category	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries		Total number of Recipient beneficiaries
			Nos	(kg)		General	SC/ST	
1	CATTLE	-	-	-	-	-	-	-
2	SHEEP & GOAT	-	-	-	-	-	-	-

3	POULTRY	-	-	-	-	-	-	-
4.	PIGGERY	-	-	-	-	-	-	-
5	FISHERIES	-	-	-	-	-	-	-
6	OTHERS (Pl. specify)	-	-	-	-	-	-	-
	<b>TOTAL</b>	-	-	-	-	-	-	-

### 3.6. Literature Developed/Published (with full title, author & reference) during 2014-15

(A) KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.):2012 Mizoram Agriculture Research newsletter, half yearly,1000,

(B) Articles/ Literature developed/published

Item	Title /and Name of Journal	Authors name	Number of copies
Research papers			
1.			
2.			
3.			
Training manuals			
Technical Report			
1.			
2.			
3.			
Book/ Book Chapter	Effect of Foliar Application of Micro Nutrient on Growth and yield of Khasi mandarin, / Horticulture for Economic Prosperity and Nutritional Security in 21 <sup>st</sup> Century Edited by T.K Hazarika, B.P.Nautiyal	Rohit Shukla, K.A. pathak, Rinku Bharali,Santosh Kumar and Mintul Ali	-
Popular articles	Composite Fish Culture, Mizoram Agriculture	Md. Mintul Ali,	1000

	Research newsletter Zo huan Siam, MizoramAgriculture Research newsletter	Lalrinsangi	
Technical bulletins			
Extension bulletins			
Newsletter	Mizoram Agriculture Research newsletter,	Department of Agriculture (Research and Education),Mizoram	1000
Conference/ workshop proceedings			
Leaflets/folders	Nursery Management Polyhouse Chhunga Thlai Chin Dan Paddy cum fish culture IPM in Rice Swine fever Eisiamdan (Jam, pickle etc. preparation)	Rohit Shukla & K. Zohmingliani, Rohit Shukla, & K. Zohmingliani, Md. Mintul Ali & Lalrinsangi Vanlalhruaia C.Rinawma BiakhlupuiiChenkual	500 500 500 500 500 500
e-publications			
Any other (Pl. specify)			
<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 produced
1.	Video	Bordeaux mixture and its uses in citrus rejuvenation	1
2.	Video	Demonstration of methods of air layering	1
3.	Video	Activities under fishery of KVK	1
4.	Video	Activities under animal science of KVK	1
5	Video	Agroforestry	1
6	Video	Soil science	1

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

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

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

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

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

- Identification of courses for farmers/farm women- PRA, survey, questionnaire
- Rural Youth - PRA, survey, questionnaire
- Extension personnel- Survey, questionnaire

**3.11 Field activities**

- i. Number of villages adopted- 4
- ii. No. of farm families selected- 157
- iii. No. of survey /PRA conducted- 4

**3.12. Activities of Soil and Water Testing Laboratory**

Status of establishment of Lab : running

- 1. Year of establishment : 2014-15
- 2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Rotary Shaker	1	Supplied from Directorate of Agriculture (R&E) Mizoram
2	Vartex mixer	1	Supplied from Directorate of Agriculture(R&E)Mizoram
3	Laminar flow station	1	Supplied from Directorate of Agriculture(R&E)Mizoram
4	Digital flame photometer	1	Supplied from Directorate of Agriculture(R&E)Mizoram
5	Nuffed furnace	1	Supplied from Directorate of Agriculture(R&E)Mizoram
6	Soil sieve (0.5mm)	1	Supplied from Directorate of Agriculture(R&E)Mizoram
Total		6	



**3. Details of samples analyzed so far :**

Details	No. of Samples	No. of Farmers	No. of Villages	Amount ( In Rupees) realized
Soil Samples	14	14	3	Nil
Water Samples	-	-	-	-
Plant Samples	6	2	1	Nil
Petiole Samples				
Total	20	16	4	

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

Messa ge type	Crop		Livestock		Weather		Marketing		Awareness		Other Ent.		Total	
	No. of Messa ge	No. of Benefici ary	No. of Messa ge	No. of Benefici ary	No. of Messa ge	No. of Benefici ary	No. of Messa ge	No. of Benefi ciary	No. of Messa ge	No. of Ben ef iciar y	No. of Messa ge	No. of Ben ef iciar y	No. of Messa ge	No. of Benefici ary
Text only	105	105	225	225					120	120			450	450
Voice only	680	680	1152	1152					356	356			2188	2188
Voice and Text both														
Total	785	785	1377	1377					476	476			2638	2638

### 3.14 Contingency planning for 2015-16

#### 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
	<b>Introduction of new variety or crop</b>				
	Rice – Drought tolerant varieties	50ha		100	100
	Introduction of short duration drought tolerant Maize variety e.g. PAC-740	10 ha		50	50
	<b>Introduction of Resource Conservation Technologies</b>	50ha		100	100
	a. Water harvesting etc	15 ha		50	50
	b. Micro irrigation / pipes	15 ha		50	50
	<b>Distribution of seeds and planting materials</b>	50ha		100	100
	Rice CAUR-1/Soybean/ Vegetable	50ha		100	100
	Maize PAC-740	20 ha		50	50
	<b>Any other (Please specify)</b>				
	Custom hiring of farm equipments	50ha		100	100
	Community nursery raising for rice	50 ha		100	100

**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
	200	4	4	500		100	100
	200	4	4	500		100	100

**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)
Protected cultivation of tomato	12	66.66	22000	39500
SRI	30	67.85	18600	24900
Dual purpose poultry bird gramapriya	20	66.66	9600	14800
Paddy cum fish culture	40	62.50	18600	26400
IPM in Rice	40	61.11	18600	23300

**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**

<b>Name of organization</b>	<b>Nature of linkage</b>
1. ATMA	Farmers Scientists Interaction, Trainings, etc.
2. Agriculture Department, Mizoram.	Trainings
3. AH & Vety Deoartment, Mizoram	Vaccination Camp
4. Village Councils	Conducting trainings
5. IGNOU	Diploma courses in Poultry Farming
6. NFDB	Financial Assistance for Trainings
7. Synthetic and Art Silk Mills' Research Association	Training
8. ICAR (RC) Research Complex for NEH Region, Mizoram Centre, Kolasib, Mizoram	Technology backup

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 2014-15**

<b>Name of the scheme</b>	<b>Activity</b>	<b>Date/ Month of initiation</b>	<b>Funding agency</b>	<b>Amount (Rs.)</b>

### 5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

Sl. No.	Programme	Nature of linkage	Remarks
1	Technology Assessment and Refinement	Financial Assistance (Rs. 100000/-)	-
2	Farmers scientist interaction	Financial Assistance (Rs. 20000/-)	-
3	Diagnostic export Support		
4	Joint visit by Scientists and Extension workers		

### 5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
-	-	-	-
-	-	-	-

### 5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks
1.	Training	Financial Assistance (Rs.325000/-)	-

## 6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2014-15

### 6.1 Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of estd.	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1.	Dairy	2008	0.02	Cross	Milk	1176 lts	24,000	34,800	2 calves, 1 milking cow
2.	Piggery	2010	0.002	-	-	-	-	-	-
3.	Poultry	2010	0.002	Giriraja	Eggs & Chicks	-	-	-	Ongoing
4.	Fishery	2008	0.045	IMC & Exotic carp	Table fish	-	-	-	-

### 6.2 Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Rice	10.6.2014	8.11.2014	0.5	CAU-R1, Chhingtum	Seeds	8 q		12000	Distributed to 30 farmers
Wheat									
Maize	23.6.2014	03.10.2013	0.5	African tall	Fodder & Seed	10 q		15000	Distributed to 20 farmers

Any other									
<b>Pulses</b>									
Green gram									
Black gram									
Arhar									
Lentil									
Ay other									
<b>Oilseeds</b>									
Mustard									
Soy bean									
Groundnut									
Any other									
<b>Fibers</b>									
i.									
ii.									
<b>Spices &amp; Plantation crops</b>									
i.									
ii.									
<b>Floriculture</b>									
i.									
ii.									
<b>Fruits</b>									
i. Pineapple	15.6.13	ongoing	0.2	Kew	Fruits & suckers	-		-	-
ii.									
<b>Vegetables</b>									
i. Okra	23.5.14	2.9.14	0.05	Prabhani Kranti, VRO6, Arka Anamika	Fruit & Seed	2q & 0.2q seeds		5000	Distributed to 20 farmers
ii. Cow pea	28.5.14	15.9.14	0.05	Arka Suman, Arka Garima	Fruit	1.5 q		4000	Distributed to 30 farmers
iii. Garden pea	18.10.1	19.1.15	0.05	Arka	Pod and	1q &		5000	Distribute

	4			Apoorva, Arka Sampoorna	seed	Seed 0.2q			d to 30 farmers
<b>iv. French bean</b>	15.10.14	22.1.15	0.05	Arka Komal, Arka Anoop	Pod and seed	1q & Seed 0.2q		4500	Distribute d to 30 farmers
<b>v. Tomato</b>	5.9.14	22.1.15	0.06	NP5024, Avtar	Fruit	2q		4000	Distribute d to 30 farmers
<b>vi. Brinjal</b>	14.6.14	19.10.14	0.02	Pusa purple long, Mukta Kashi	Fruit	0.5q		1000	Distribute d to 20 farmers
<b>vii. Cabbage</b>	21.10.14	22.1.15	0.02	Bahar	Head	1q		1000	Distribute d to 30 farmers
<b>viii. Capsicum</b>	5.9.14	16.2.15	0.00 1	Arka Mohini	Fruit	0.4q		1200	Distribute d to 20 farmers
<b>ix.</b>									
<b>x.</b>									
<b>a. Others (specify)</b>									
<b>i.</b>									
<b>ii.</b>									

### 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. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed/ species	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	Dairy	Cross	Milk	1176 lts	24,000	34,800	2 calves, 1 milking cow
3.	Poultry	Giriraja	Eggs & Chicks	-	-	-	Ongoing
4.	Fishery	IMC & Exotic carp	Table fish	-	-	-	-

#### 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
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

#### 6.6. Utilization of hostel facilities (Month-Wise) during 2014-15

Accommodation available (No. of beds):

Months	Title of the training course/Purpose of stay	Duration of Training	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
July	Integrated fish farming	5	33	5	-
September	Composite fish culture	5	31	5	-
December	Fish Health Management	5	24	5	-
Total	3	15	88	15	-
<b>Grand total</b>		<b>15</b>	<b>88</b>	<b>15</b>	-

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
With Host Institute	-	-	-
With KVK	SBI	Lengpui Branch	11821318372
Revolving Fund	SBI	Lengpui Branch	30734028269

### 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, 2015
	Year	Year	Year	Year	
Inputs	NA	NA	NA	NA	NA
Extension activities	NA	NA	NA	NA	NA
TA/DA/POL etc.	NA	NA	NA	NA	NA
<b>TOTAL</b>	NA	NA	NA	NA	NA

### 7.3 Utilization of KVK funds during the year 2014 -15

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
<b>A. Recurring Contingencies</b>				
1	<b>Pay &amp; Allowances</b>			88.76
2	<b>Traveling allowances</b>			1,99,100
3	<b>Contingencies</b>			
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			
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 (minimum of 30 demonstration in a year)			

<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
<i>G</i>	Training of extension functionaries			
<i>H</i>	Maintenance of buildings			
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory			
<i>J</i>	Library			
<b>TOTAL (A)</b>				<b>96.76</b>
<b>B. Non-Recurring Contingencies</b>				
1	<b>Works</b>			
2	<b>Equipments including SWTL &amp; Furniture</b>			
3	<b>Vehicle</b> (Four wheeler/Two wheeler, please specify)			
4	<b>Library</b> (Purchase of assets like books & journals)			
<b>TOTAL (B)</b>				
<b>C. REVOLVING FUND</b>				
<b>GRAND TOTAL (A+B+C)</b>				<b>96.76</b>

#### 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 2012 to March 2013	1,18,292	18,429	Nil	1,36,541
April 2013 to March 2014	1,36,541	40,836	56,410	1,20,967
April 2014 to March 2015	1,20,967	8,303	Nil	1,29,270

**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

1. Vehicles for field inspectors: - The Kendra covers 86 villages located at remote and isolated places in the hills. The technical staff needs to visit the farmers and demonstration site quite often. One light vehicle is not sufficient for efficient monitoring of the going works. Therefore other vehicles may be provided for this KVK for better and efficient administration and monitoring of field works.
  2. Water problem: - There is water scarcity during the dry season even for drinking, therefore, could not meet the farm water requirements. More public water connection should be made and construction of water harvesting structures.
- a) Financial:
- Fund channeling is very slow and complicated which creates a lot of problems. Better and quicker ways may be sought. With the present limited fund allocation no much achievement can be expected. So, more funds may be allocated to the KVK.
- b) Technical:
1. Right technology for OFTs and FLDs.
  2. Training for KVK staff is needed.
  3. Laboratories need be set up in running conditions.
  4. A new tractor is required for farm works.

**(SAMUEL LALLIANSANGA)**

**Programme Coordinator**