#### PROFORMA FOR ANNUAL REPORT OF KVKS, 2016-17

#### 1. GENERAL INFORMATION ABOUT THE KVK

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

1.1. Name and address of NVN with phone, tax and c mail						
Address	Telep	phone	E mail			
	Office	FAX				
KrishiVigyan Kendra (KVK), Khawzawl, PO-khawzawl, DisttChamphai (MIZORAM)-796310	03831-261484, 261486	03831- 261485	kvkkhawzawl@gmail.com			

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

A ddroop	Tolon	hono	E mail
Address	i eiep	hone	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		
Shri Lalthansiama Director of Agriculture (R & E)		9436354893	mizagr@gmail.com		

1.4. Year of sanction: 2008

# 1.5. Staff Position (As on 31st March, 2017)

SI. 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	PC	Vacant	Sr Scientist & Head						
2	SMS	MALSAWMKIMI	Scientist	Horticulture	15,600-39,100+5,400	20,440/-	03.06.09	Permanent	ST
3	SMS	SYED KHALIDUDDIN AHMED	Scientist	Animal Science	15,600-39,100+5,400	21,220/-	26.4.08	Permanent	GENERAL
4	SMS	F. ZORAMTHARI	Scientist	Plant Protection	15,600-39,100+5,400	20,440/-	06.6.09	Permanent	ST
5	SMS	Dr. OM PRAKASH	Scientist	Agronomy	15,600-39,100+5,400	20,440/-	23.6.14	Permanent	General
6	SMS	ISRAEL LALREMRUATA	Scientist	Agro Forestry	15,600-39,100+5,400	20,440/-	09.03.12	Permanent	ST
7	SMS	VANLALDUATI	Scientist	Soil Science	15,600-39,100+5,400	18,240/-	09.02.15	Permanent	ST
8	Programme Asst	LALHRUAITLUANGI	PA (Home Sc)	Home Science	9,300-34,800+4200	14,120/-	1.7.08	Permanent	ST
9	Computer Programmer	SAMSON SAIRENGPUIA SAILO	PA (Computer)	Computer	9,300-34,800+4200	14,120/-	22.4.08	Permanent	ST
10	Farm Manager	PRAKASH THAPA	Farm Manager	B.Sc (Agri.)	9,300-34,800+4200	13,580/-	25.4.08	Permanent	GENERAL
11	Assistant	K.VANLALHMANGAIHI	Assistant	M.Com	9,300-34,800+4200	14,120/-	29.5.08	Permanent	ST
12	Stenographer	CRUSADE THANGPUII	Stenographer	B.A	5,200-20,200+2,400	10,170/-	29.2.08	Permanent	ST
13	Driver	LALNUNTLUANGA	Driver	-	5,200-20,200+1,900	8,250/-	29.2.08	Permanent	ST
14	Driver	R.DENGLIANA	Driver	-	5,200-20,200+1,900	8,250/-	9.2.08	Permanent	ST
15	Supporting staff	LALTANPUIA	Supporting staff	-	4,440-7,440+1,300	6,410/-	10.7.08	Permanent	ST
16	Supporting staff	LALVENHIMA	Supporting staff	-	4,440-7,440+1,300	6,410/-	24.7.08	Permanent	ST

1.6. a. Total land with KVK (in ha) :17.774 b. Total cultivable land with KVK (in ha) :12 c. Total cultivated land (in ha) :4

S. No.	Item	Area (ha)
1	Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters)	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)	0.75

# 1.7. Infrastructural Development:

# A) Buildings

		Source of	Stage						
S.		funding	Complete	Complete			Incomplete		
No.	Name of building	3	Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction	
1.	Administrative Building	ICAR	2007	-	-	-	-	Completed	
2.	Farmers Hostel	ICAR	2009	-	-	-	-	Completed	
3.	Staff Quarters (6)	ICAR	2007	-	-	-	-	Completed	
4.	Demonstration Units (2)	ICAR	2007	-	-	-	-	Completed	
5	Fencing	ICAR	2009	-	-	-	-	Completed	

## B) Vehicles

Type of vehicle	Regd. No.	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Gypsy	MZ-O1 D 4086	-	-	-	Running condition
Tractor	MZ-01 D 2246	-	-	-	Running condition

# C) Equipments& 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	-	NOT WORKING
Grinder	Sept,2008	-	Good
Laptop	Sept,2008	-	Good
T.V.	Sept,2008	-	Good
A.C.	Sept,2008	-	NOT WORKING

# 1.8. A). Details SAC meeting\* conducted in the year 2016-17

SI. No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken on last SAC recommendation
1.	22/02/2017	Shri. Lalthansiama, Director Of Agricuture, Research & Extension	<ol> <li>Suggest all the Scientist to go for publisizing through media.</li> <li>To simplify the presentations while presenting it and use local language</li> </ol>	
2.		Shri.P.VanlaIngheta,SMS(R & E)	when and wherever possible in view of the farmers	

3	Shri Lalhmangaiha, Divisional Horti Officer
4	Shri H.Malsawmkima, Wildlife
5	Shri.Vanlalchhuana , RO (Soil)
6	Shri James Vanlalluaia, District Agriculture Officer
7	Shri Lalthanzuala, District Fisheries Development Officer
8	Shri Rohmingthanga, FD (fishery)
9	Shri PC Lalzarliana, Block President, AMFU
10	Shri, P Lalbiakkima , SDO (minor Irrigation)
11	Shri Lalchharliana ,Sub Divisional Agriculture Officer
12	Dr.OM.Prakash, Scientist, Agro KVK
13	Smt F.Zoramthari, Scientist PP
14	Shri S.K.Ahmed, Scientist, Animal Sc
15	Smt Malsawmkimi, Scientist, Horti
16	Smt R.Vanlalduati, Scientist, SoilSc
17	Smt Remveli , Block president,MHIP
18	Smt K Vanlalhmangaihi,Assistant KVK
19	Smt Lalhruaitluangi ,Programme Assistant Homescience
20	Shri Samson S Sailo Programme Assistant Computer

<sup>\*</sup> 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)

SI. No	Farming system/enterprises			
1.	orticulture +Maize + Animal Husbandry- Highland (>1250m MSL)			
2.	hum 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)

SI. No	Agro-climatic Zone	Characteristics
1	Sub- tropical/ Sub- temperate/ Humid	Some parts of the district like Ngopa &Khawzawl block experience all the three seasons i.e. winter, summer and rains, while in the Champhai valley the temperature ranges from 1-7 <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

SI. 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

SI. 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	Broccolli	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

#### 2.5. Weather data

Month	Rainfall (mm)	Tem	perature <sup>0</sup> C	Relative Humidity (%)
April 2016	170	28	20.25	55
May	380	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 2017	Nil	20	12.95	46.5
February 2017	Nil	22.1	11.2	51
March 2017	130	24	18	-

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

Category	Population	Production	Productivity
Cattle			
Crossbred	346	560 tons	1.6

Indigenous	6663	788 tons	0.12
Buffalo	3053	14 tons	0.0045
Sheep	I		<u> </u>
Crossbred			
Indigenous	712 & 115	3 tons	
Goats			
Pigs	24186	437 tons	
Crossbred	6051	-	
Indigenous			
Rabbits			
Poultry	1		
Hens			
Desi			
Improved			
Ducks			
Turkey and others			

Note: PI. provide the appropriate Unit against each enterprise

SI. No.	Taluk/ Eleka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1.	Khawzawl	Khawzawl	Khawzawl	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries	<ul> <li>Improper nursery management in WRC.</li> <li>Improper nutrient management</li> <li>Infestation of insect pest and diseases.</li> <li>Lack of awareness toward s integrated farming</li> <li>Lack of knowledge and awareness on livestock management, feed and fodder production.</li> </ul>	<ul> <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	New Chalrang	Jhum paddy + Orange + Vegetables + Animal Husbandry	<ul> <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> <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> <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> <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> <li>Improper nursery management in WRC.</li> <li>Improper nutrient management</li> <li>Infestation of insect pest and diseases.</li> <li>Lack of awareness toward s integrated farming</li> <li>Lack of knowledge and awareness on livestock management, feed and fodder production.</li> </ul>	<ul> <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> <li>Improper nursery management in WRC.</li> <li>Improper nutrient management</li> <li>Infestation of insect pest and diseases.</li> <li>Lack of awareness toward s integrated farming</li> <li>Lack of knowledge and awareness on livestock management, feed and fodder production.</li> </ul>	<ul> <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> <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> <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> <li>Improper nursery management in WRC.</li> <li>Improper nutrient management</li> <li>Infestation of insect pest and diseases.</li> <li>Lack of awareness toward s integrated farming</li> <li>Lack of knowledge and awareness on livestock management, feed and fodder production.</li> </ul>	<ul> <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	Kawlkulh	Jhum paddy + Maize + Banana + Ginger + Animal Husbandry + orange	<ul> <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> <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> <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> <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 2016-17

Discipline		OFT (Technology	Assessment and Re	finement)		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	
Agonomy	3	3	9	6	2	2	20	20	
Horticulture	3	3	9	9	2	2	20	20	
Plant Protection	2	2	6	6	2	2	20	20	
Soil Science	3	3	9	9	2	2	20	20	
Animal Sc	2	2	7	7	1	1	40	40	
Total	13	13	40	40	9	9	120	120	

Note: Target set during last Action Plan Workshop

Training (in	cluding sponsored, v	ocational and other trainin	gs carried under Raii		Extension Activities					
		3			4					
	Number of Cou	urses	Nu	N	Number of activities Number of participants					
Clientele	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement		
Farmers	45	60	1282	1742	722	726	7398	8945		
Rural youth	13	13	349	380						
Extn.	4	3	70	40						
Functionaries										

Total	62	76	1701	216	2162 722 726 7398 8945						
	Sec	ed Production (ton.)			Planting material (Nos. in lakh)						
		5			6						
Т	Target Achievement						Target Achievement				
1.15		1.15		0.138		0.185					

Note: Target set during last Action Plan Workshop

# 3. B. Abstract of interventions undertaken during 2016-17

						Interventions	3		
SI. No	Thrust area	Crop/ Enterprise	Identified problems	Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
1	Varietal Evaluation	Paddy	Low yield with local variety & lack of Known variety	Varietal evaluation of Rice var. Samba Mahsuri(BPT- 5204), Jeera Phool .		-	-	Diagnostic visit,Field day,Palatability test of Rice varieties.	Seeds, Fertilizer etc.
2	Weed Management	Paddy	Low yield &higher cost of cultivation with manual weeding	Economic viability of herbicide on weed management in Rice.		Chemical weed mn in rice.	-	Diagnostic visit, Field day	Seeds, Fertilizer etc.
3	Integrated Nutrient Management	Field Pea	Lack of knowledge about seed treatment with biofertilizers		Popularization of Ap-3 with <i>Rhizobium</i> inoculation	Advantage of Rhizobium inoculation for Pulses		Diagnostic visit, Field day	Seeds, Bio- fertilizer etc.
4	Varietal Evaluation	Paddy	Lack of known improved variety		Popularization of paddy variety Gomati			Diagnostic visit, Field day	Seeds, Fertilizer etc.

5	Plant production	Garlic	New introduction	Performance of Garlic var. Agri Found Parvati under Champhai District		Scientific cultivation of Garlic	Diagnostic visit,Field day	Seeds , fertilizers etc
6	Plant production	Onion	No production during Kharif	Evaluation of Kharif Onion varieties in Champhai District			Diagnostic visit,field Days	Seeds etc
7	Varietal Evaluation	Tomato	Lack of multi resistant variety leading to low production and income	Introduction of Tomato var. Arka Rakshak		Scientific cultivation of Tomato	Diagnostic visit,field Days	Seeds , fertilizers etc
8	Varietal Evaluation	Onion	Lack of known high yielding variety		Popularization of Onion variety Agrifound Light Red		Diagnostic visit,	Seeds
9	Variatal evaluation	King Chilli	Lack of high yielding variety		Popularization of King chilli		Diagnostic visit, field day	Seeds
10	IPM	Tomato	Low yield due to infestation with white fly resulting in curling and drying of leaves and sometimes infected with virus	Integrated Pest Management of white fly in tomato		Integrated Pest Management of white fly in tomato	Diagnostic visit, field day	Seeds,pesticides,bio pesticides etc
11	IPM	Mustard	Low yield due to withering and stunting of plants due to secretion of honey dew by aphids,sooty molds grow and the infected plants look sickly and blighted in appearance	Integrated pest Management of Aphids (Lipaphis erysimi) in Mustard. (Brassica juncea var rugosa		Integrated pest Management of Aphids (Lipaphis erysimi) in Mustard.	Diagnostic visit, field day	Seeds,pesticides,bio pesticides etc

12	Soil Health		Nitrogenous fertilizer not affordable by the farmers	Effect of <i>Azolla</i> on the yield of Rice crop.		Advantages of Azolla on paddy Cultivation	Diagnostic visit,Field days	Azolla
13	Soil management		Low productivity due to traditional method of cultivation	Effects of micronutrients on growth, yield and quality of Chilli			Diagnostic visit,Field days	Seeds
14	Soil management		Low yield due to weed infestation	Effect of mulching method on the yield of Tomato var. Arka rakshak			Diagnostic visit,Field days	Seeds and polymulch
15	Soil Health		Lack of balance fertilization.		Popularisation of Chemical fertilizers on the yield of Brinjal		Diagnostic visit,Field days	Seeds,fertilizers
16	Soil management				Popularization of organic fertilizers on Growth and yield of Tomato		Diagnostic visit,Field days	Seeds,vermicompost
17	Breed Comparison	Piggery production	Non availability of prolific improved breeds	Evaluation and Comparison of Burmese local Sows with Improved Crossbreed (Hampshire cross) Sows with respect to Oestrus cycle, inter Furrowing Intervals & litter size			Diagnostic visit	Piglets & Mineral mixture
18	Feed and Fodder	Oat	Scarcity of green fodder during lean seasons	Introduction of oat varieties JHO-822 and Kent as Fodder crops			Diagnostic visits	seeds
17	Paddy cum fish culture	Paddy & fish			Integration of fish in Paddy fields	Paddy cum fish culture	Diagnostic visit	Fingerlings and seeds etc

# 3.1 Achievements on technologies assessed and refined during 2016-17

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	1				1					2
Seed / Plant production					2					2
Weed Management	1									1
Integrated Crop Management										
Integrated Nutrient Management	1				2					3
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management					2					2
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
Total	3				7					10

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

## 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					1			1
Nutrition Management								
Disease of Management								
Value Addition								
Production and Management								
Feed and Fodder	1							1
Small Scale income generating enterprises								
TOTAL	1				1			2

## 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								
TOTAL								

# A.5. Results of On Farm Testing

SI. No.	Title of OFT	Problem Diagnosed	Name of Technology Assessed	Crop/Cropping system/ Enterprise	No. of Trials	Results of Assessment/ Refined (Data on the parameter should be provided)	Feedback from the farmer	Feedback to the Researcher	B.C . Ratio (if applicable)
1	Varietal Evaluation of Rice variety Jeera Phool & Samba Mahsuri	Low productivity with the existing varieties	Varietal Evaluation var. Jeera Phool & Samba Mahsuri	Rice	3	No. of hills / sqm Jeera Phool: 16 Samba Mahsuri: 14 No. of tillers / sq m Jeera Phool – 224 Samba Mahsuri - 203 No. of effective tillers/ sq m Jeera Phool - 223 Samba Mahsuri – 198 No. of grains / panicle Jeera Phool – 238 Samba Mahsuri I – 216 Yield/ha Jeera Phool i– 3.78 t Samba Mahsuri – 3.06 t	It is good to enhance their income per unit area	Performance is up to the mark and less attack of insect pest & diseases but var. Jeera Phool was too late for further study will go for Refinement	1.69
2	Economic viability of herbicide on weed mngt in Rice	Severe weed infestation and cumbersome manual weeding compared to new generation broad	Weed Management Technology: Nominee Gold (Bispyribac	Rice	3	No. of weeds / sq m Treated – 16 Untreated -38  No. of hills / sq m Treated - 8	It's good to enhance their income & reducing cost of cultivation		2.02 1.56

	spectrum herbicide	sodium) @25g ai/ha at 15-25 DAT			Untreated -8 No. of tillers / hill Treated - 11 Untreated -9 No. of grains / panicle Treated - 561 Untreated -534 Yield/ha Treated - 3.78 t Untreated -3.32t		
Performan ce of king chilli under Champhai District.	Lack of Known variety	Introduction of King chilli	King chilli	2	Date of sowing:  1/may/1016  Average Fruit weight (g)  King chili: 11.5  Control: 13.5  Average Fruit length (cm):  King chili: 7.3 Control: 9.5  Average No of fruit /plant  King chili: 205  Control: 128  Average Yield:  King chilli: 31.5 q/ha  Control: 23q/ha	Farmers were motivated by seeing the Productivity and willing to continue for the next season.	King Chili : 3.1  Local: 2.7

5	Evaluation of Kharif Onion Variety Arka Kalyan	No production during Kharif Season	Introduction of Kharif Onion Productio	Onion	4	Technology: Time of sowing: 20.5.2015 Time of transplanting: 4/6/2015 Average weight of bulb (g): 150 Average height (cm): 42 Average yield: 335q/ha Farmers practice (Rabi) yield: 350q/ha	Farmers are willing to continue since there was production during November and fetched higher price in the market.	The technology needs large scale demonstration.	Technology: 2.7  Farmers practice: 2.4
3	Integrated Managem ent of bacterial wilt in tomato	Low yield due to wilting	Soil treatment with bleaching powder (15 kg/ha).  Seedling dip with Streptocycline  Spraying with Streptocycline/Ox ytetracycline 200ppm at 7 days interval	Tomato	2	No of infected plants at ten days interval-5%  Disease incidence (%)-17%  3) Yield qt/Ha-250.80 qt  Control  No of infected plants at ten days interval-30%  Disease incidence (%)-60%	The farmers were ready to adopt and continue with the technology by seeing the quantity and quality of the harvest.	Soil treatment and seedling dip treatment greatly influences the growth of timely monitoring and spraying the crop. And with bactericides greatly influences the overall health of the crop.	Treated-2.51 Control -1.89

						3) Yield qt/Ha-170.25 qt			
Soil science	Effect of Azolla on the yield of Rice crop.	Nitrogenous fertilizers not affordable by the farmers.	Popularization of biofertilizers-Azolla	Rice	3	i. No.ofgrains/panicle -258 ii. Yield (q/ha)- 39.87	Higher yield and more economic return	Proper Nutrient management response to higher productivity and more economic return	2.0
	Effect of Micronutri ents on yield of Chilli	Low productivity due to traditional method of cultivation.	Nutrientl management	Bird's Eye Chilli	3	i. Yield (q/ha)-26.3q/ha	Farmers are willing to adopt proper application micronutrients	Micronutrients is recommended to increase the crop productivity on acidic soils.	2.7
Animal	Evaluati on and Compari son of Burmese local Sows with Improve d Crossbre ed (Hamps hire cross) Sows	Non availability of prolific improved breed	Piggery Breed comparision	Piggery	4	Parameters: a) Age at first furrowing- b) Litters size at furrowing- c) Wt. of litter (weekly interval till weaning)- d) Mortality till weaning-	There is a sense of nervousness amongst the farmers as the burmese local pigs thrives good & are well adapted to the region	As of now the animals under observations have not come to heat	-
	Introduc tion of Oat	Scarcity of green fodder during lean	Cultivation of Oat Var: JHO - 822 and Kent	Oat as green	3	Observations: a)Duration of Cutting: 55 DAS	Farmers are getting	Many farmers are inclined	

varieties JHO- 822 and Kent as fodder crops	Year: 4 times c)Yield t/ha:35t/h as green fodder be dui	ware of the towards the cultivation of s fodder can to green uring lean eriod towards the cultivation of solutions to green to gr
---	---	--

<sup>\*</sup>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.

#### 3.2 Achievements of Frontline Demonstrations during 2016-17

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

List of technologies demonstrated during previous year and popularized during 2015-16 and recommended for large scale adoption in the district

SI. No	Crop/ Enterprise	Technology demonstrated	Horizontal spre	ad of technology	
			No of village	No of farmers	Area in ha
1	Paddy	Popularization of paddy variety Gomati	5	10	1
2	Field pea	Popularisation of AP- 3 with Rhizobium inoculation	3	10	2
3	King Chilli	Popularization of king Chilli	3	10	1
4	Onion	Popularization of Onion Var Agri Found Light Red	3	10	1

<sup>\*\*</sup> Give details of the technology assessed or refined and farmer's practice

Brinjal	Popularisation of Chemical fertilizers on the yield of Brinjal	2	10	1
	e;			
	NPK @ 120:100:50 kg/ha			
Tomato	Popularization of organic fertilizers on Growth and yield of Tomato	3	10	1
	Technology:			
	Vermicompost @ 10ton/ha			
	•	Technology: NPK @ 120:100:50 kg/ha  Tomato Popularization of organic fertilizers on Growth and yield of Tomato  Technology:	Technology: NPK @ 120:100:50 kg/ha  Tomato Popularization of organic fertilizers on Growth and yield of Tomato  Technology:  Technology:	Technology: NPK @ 120:100:50 kg/ha  Tomato Popularization of organic fertilizers on Growth and yield of Tomato 3 10  Technology:

<sup>\*</sup> 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.)

							No. of fa	ırmers/		Reasons for	Farming situation (Rainfed/	Statu	s of soil (Kg/	ha)
	No.	Thematic area	Technology Demonstrated	Season and year	Area (ha)		de	emonstration	on	shortfall in achievement	Irrigated, Soil type, altitude, etc)	N	Р	К
					Proposed	Actual	SC/ST	Others	Total					
1.	Paddy	Varietal Evaluation	Popularization of Rice variety Gomati	Kharif-2016	2	2	10	-	10	-	Rainfed	211	14	116

2.	Field Pea	INM	Popularization of AP-3 with Rhizobium inoculation	Rabi-2016-17	2	2	10	-	10	-	Rainfed, 800 M MSL	233	17	120
4	Onion	Weed managemen t	Weed management in Onion by Using Pendimethalii	Rabi, 2015-16	1	1	10		10		Irrigated	273.4	16.7	126
5	Garden pea	Variatal evaluation	Introduction promising variety of Garden Pea var. Arkel	Rabi, 2015-16	1	1	10		10		irrigated	281.1	15.78	129
6.	Ginger	Biological control	Application of 10 kg: 1 kg (Rhizome seed: Biofor Pf) and prepare paste @ 1kg in 2 ltr of water and dip the Rhizome in the paste for 15 minutes and dry shade for 1 hour.	April 2015- February 2016	2.02	2.02	10		10		Rainfed	245	17	136
8	Tomato	Soil health	Growth and yield of Tomato as influenced by organic fertilizers	Rabi 2016	1	1	10	-	10	-	Rainfed	298	9.6	220

9	Paddy cum Fish culture	IFS	Integration of Fish in paddy fields	Kharif-2016	16	16	40	-	40	Rainfed	-	-	-	
														ĺ

# c. Performance of FLD on Crops

SI. No.	Crop	Thematic area	Area (ha.)	Avg. yiel	d (Q/ha.) Check	% increas e in Avg. yield		al data on eld (Q/ha.) L*	parameters other		GC**	GR**	o. (Rs./ha.) NR**	BCR **	GC	con. of che	ck (Rs./Ha.	BCR
									Demo	Local								
1	Pad dy	Varietal Evaluation	2	36.20	30.62	18.22	38.45	32.60			41380	54300	12920	1.31	41380	55116	13736	1.33
2	Field Pea	INM	2	15.30	9.78	56.44	17.46	14.24	Rust	Rust	27480	61200	33720	1.81	27480	48900	21420	1.78
4	Onion	Weed managem	1	120	95	26.3	123	113	-	-	110000	240000	130000	2.1	155000	190000	35000	1.2

		en t																
5	Garden pea	Variatal evaluation	1	87.5	64.3	36.08	98	79	-	-	47454	104400	56945	2.2	55714	78000	22286	1.4
6	Ginger	Biological control	2.02	82 qt	65.3 qt	25.57%	83.9 qt	65.3 qt	30%	60%	84,250/-	1,88,60 0/-	1,04,35 0/-	2.23	79,000/-	1,50,19 0/-	71,190/-	1.90
7	Tomato	Soil health	1	91	<mark>67</mark>	<mark>26.3</mark>	<mark>110</mark>	<mark>72</mark>			95000	330000	235000	<mark>3.4</mark>	<mark>67000</mark>	201000	<mark>134000</mark>	<mark>3.1</mark>
8	Paddy cum Fish culture	IFS	16															

<sup>\*</sup>H-Highest recorded yield, L- Lowest recorded yield

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

SI.No.	Activity No. of activities organised		Date	Numl	per of particip	ants	Remarks
				Gen	SC/ST	Total	
1	Field days	5	220/10/16	-	110	110	
			5/11/2016				
			25/11/2016				

<sup>\*\*</sup> GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio

			18/1/2017			
			9/2/2016			
2	Farmers Training	1		32	32	
3	Media coverage	5				
4	Training for extension functionaries					
5	Any other (Pl. specify)					
	Total	11		142	142	

# 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  Demon. Local check		% change in the parameter	Remarks

<sup>\*</sup> Field efficiency, labour saving etc.

(ii) Livestock Enterprises

SI. No.	Enterpri se/ Categor	Thema tic	Name of	No. of farmer	No. of	No. of animals,		mance eters /	% chang e in the	parame	her eters (if ny)	E	con. o (Rs./		0.	Econ.	of chec	k (Rs./		Remarks
	y (e.g., Dairy, Poultry etc.)	area	Techn ology	S	units	poultry birds etc.	Demo	Check	param eter	Demo	Check	G	G R* *	N R* *	B C R* *	GC	GR	N R	BC R	
															·					

<sup>\*\*</sup> 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

SI. No.	Categor y, e.g. Commo n carp,	Thema tic area	Name of Techn	No. of farmer	No. of units	No. of fish/	Major Performa paramete indicator	ers /	% chang e in the param	Other parameter any)	ers (if	Ecoi (Rs./	n. of de Ha.)	emo.	В	Econ.	of check	(Rs./l	Ha.)	Remarks
	ornamen tal fish etc.		ology	S		go	Demo	Check	eter			C* *	R* *	R* *	C R* *			R	R	

<sup>\*\*</sup> 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

SI. No.	Category / Enterpris e, e.g.,	Themat ic area	Name	No. of	No. of	Major Performa paramete	rs /	% change in the parame	Other pa	rameters	Econ (Rs./I	ı. of de Ha.)	mo.		Econ.	of check	(Rs./Ha	a.)	Remarks
	mushroo m, vermico mpost, apicultur e etc.		of Techno logy	farmer s	units	Demo	Check	ter	Demo	Check	GC **	GR **	NR **	BC R**	GC	GR	NR	BC R	

<sup>\*\*</sup> 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

SI. No.	Name of implement		Name of Technology demonstrat ed	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

SI.	Cron	Name of hybrids	Area (ha.)	No. of farmers	Avg. yiel	d (Q/ha.)	% increase in Avg. yield	Addition data or demo. (Q/ha.)	n yield	Econ. of	demo. (Rs.	/Ha.)		Econ. of	check (Rs.	/Ha.)	
No.	Crop				Demo.	Check		H*	L*	GC**	GR**	NR**	BCR **	GC	GR	NR	BCR

<sup>\*</sup>H-Highest recorded yield, L- Lowest recorded yield

<sup>\*\*</sup> 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. <u>Farmers and Farm Women in On Campus including Sponsored On Campus Training Programmes</u> sponsored by external agencies)

(\*Sp. On means On Campus training programmes

	No. of C	Courses/	prog										Pa	articipan	ts							
		Spon	Total				neral						C/ST						otal			
Thematic area	On-	On*		N	lale	Fer	male	То	tal	M	ale	Fer	nale	То	tal	Ma	<mark>ale</mark>	Fer	<mark>nale</mark>	To	<mark>tal</mark>	Grand
Thematic area	Campus (1)	(2)	(1+2)	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)	Total (x + y)
I. Crop Product	ion																					
Weed Management	1	-	1	-	-	-	-	-	-	22	-	10	-	32	-	22	-	10	-	32	-	32
Resource	-	1	1	-	-	-	-	-	-	-	30	-	5	-	35	-	30	-	5	-	35	35

Conservation Technologies																						
Cropping Systems	-	1	1	-	-	-	-	-	-	-	20	-	4	-	24	-	20	-	4	-	24	24
Crop Diversification																						
Integrated Farming																						
Water management																						
Seed production	-	1	1	-	-	-	-	-	-		30	-	10	-	40	-	30	-	10	-	40	40
Protected cultivation of Tomato	1		1							20		10										30
Integrated Crop Management																						
Fodder production																						
Production of organic inputs																						
II. Horticulture						<u> </u>															<u> </u>	
a) Vegetable Cr	ops																					
Nursery raising		1	1								20		10				20		10		30	30
Curing and storage of	1		1							20		10				20		10		30		30
	1		1	1	1	1	1	1	1	l	l		1	1	1	1	L	l	l	l	1	L

onion													
Protected	1		1				20	10		20	10	30	30
cultivation of	'		'				20	10		20	10	50	JU
Tomato													İ
Tomato													İ
b) Fruits	ı	I											
Training and													
Pruning													
Layout and													
Management													İ
of Orchards													
Cultivation of													
Fruit													
Management													
of young													I
plants/orchards													1
Rejuvenation													
of old orchards													
Export													
potential fruits													
Micro irrigation													
systems of													İ
orchards													
Plant													
propagation													l
techniques													
c) Ornamental F	Plants		<u> </u>										
Nursery													
•													1

Management																					
Management of potted plants																					
Export potential of ornamental plants																					
Propagation techniques of Ornamental Plants																					
d) Plantation cro	pps	·		I	I	I	I		ı				I								
Integrated Pest Management	6	4	10						175	135	30	5	205	140	175	135	30	5	205	140	345
Processing and value addition																					
e) Tuber crops																					
Production and Management technology																					
Processing and value addition																					
f) Spices				l	<u> </u>	<u> </u>	<u> </u>					<u> </u>									
Production and Management technology																					

Processing		1	I			1							1	I			I			I	1	
and value																						
addition																						
addition																						
g) Medicinal an	d Aromatic	Plants		1	ı	1	I	1	1		l				1			1	1		ı	1
Nursery																						
management																						
Production and																						
management																						
technology																						
Post harvest				+																		
technology and																						
value addition																						
III Soil Health a	nd Fertility	Managen	nent				l															
Soil fertility	2	-	2							44	-	6	-	50	-	44	-	6	-	50	-	50
management																						
Soil and Water																						
Conservation																						
Integrated		1	1	-	-	-	-	-	-	-	46	-	5	-	51	-	46	-	5	-	51	51
Nutrient																						
Management																						
Production and																						
use of organic																						
inputs																						
Management		1	1	-	-	-	-	-	-	-	45	-	9	-	54	-	45	-	9	-	54	54
of Problematic soils																						
				1	1																	
Micro nutrient deficiency in																						

arana	1	I			1	1		1		1	1	1	1	1			
crops																	
Nutrient Use																	
Efficiency																	
Soil and Water																	
Testing																	
IV Livestock Pro	duction an	d Manage	ement														
Dairy Management		1	1				15								15		15
Poultry Management																	
Piggery Management	1	3	4				40	26	40	26					40	26	66
Rabbit Management																	
Disease																	
Management																	
Feed management	1		1				15								15		15
Production of																	
quality animal																	
products																	
V Home Science	e/Women ei	mpowerm	ent					<u> </u>									<u> </u>
Household																	
food security																	
by kitchen																	[
gardening and																	
nutrition																	

gardening											
Design and development of low/minimum cost diet											
Designing and development for high nutrient efficiency diet											
Minimization of nutrient loss in processing											
Gender mainstreaming through SHGs											
Storage loss minimization techniques											
Value addition											
Income generation activities for empowerment of rural Women											
Location specific drudgery reduction technologies											

Rural Crafts																				
Women and																				
child care																				
VI Agril. Engineer	ring		I	<u> </u>				l		l	l		1	1				1	1	1
Installation and																				
maintenance of																				
micro irrigation																				
systems																				
Use of Plastics																				
in farming																				
practices																				
Production of																				
small tools and																				
implements																				
Repair and																				
maintenance of																				
farm																				
machinery and																				
implements																				
Small scale																				
processing and																				
value addition																				
Post Harvest																				
Technology																				
VII Plant Protection	on		<u> </u>			1	1			<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	l	1	<u> </u>	<u> </u>	
Integrated Pest	•		40					175	135	30	5	205	140	175	135	30	5	205	140	345
Management	6	4	10																	
Integrated																				
Disease																				

	1	1	1									1	ı		1	1	I I	
Management																		
Bio-control of																		
pests and																		l
diseases																		l
4.004000																		
Production of																		
bio control																		l
agents and bio																		
pesticides																		l
pootioidoo																		
VIII Fisheries	I	I	I	I		I		I		I	I	I	I	I	l .			
Integrated fish							1											
farming																		
laming																		
Carp breeding																		
and hatchery																		
management																		
management																		
Carp fry and																		
fingerling																		l
rearing																		l
roamig																		
Composite fish																		
culture																		
Hatchery																		
management																		
and culture of																		l
freshwater																		
prawn																		
prawii																		
Breeding and																		
culture of	1																	
ornamental	]																	
fishes																		
1131163																		
Portable plastic																		
- 1.100.0 p.0000																		
	1	1				ı	1	ı	l)	ı	ı	1		ı				

Carp hatchery  Pen culture of fish and prawn  Shrimp farming	
fish and prawn	
Shrimp farming	
Edible oyster	
farming	
Pearl culture	
Fish I I I I I I I I I I I I I I I I I I I	
processing and	
value addition	
IX Production of Inputs at site	
Seed Seed	
Production	
Planting   Planting	
material	
production	
Bio-agents	
production	
Bio-pesticides Bio-pesticides	
production	
Bio-fertilizer	
production	
Vermi-compost	
production	
Organic	
manures	

production													
production													ĺ
Production of													1
fry and													I
fingerlings													
Production of													
Bee-colonies													I
and wax													I
sheets													
Small tools and													
implements													
Production of													
livestock feed													I
and fodder													
Production of													·
Fish feed													
X Capacity Buil	ding and G	oup Dyna	amics										
Leadership													
development													
Group													
dynamics													
Formation and													
Management													l
of SHGs													
Mobilization of													
social capital													
Entrepreneurial													
development of													İ
farmers/youths													l
													j

WTO and IPR													
issues													
XI Agro-forestry	<u> </u>	<u> </u>									<u> </u>		
Production													
technologies													
Nursery management													
Integrated Farming Systems													
TOTAL	20	18	38										

3.3.2. Achievements on Training of <u>Farmers and Farm Women</u> in <u>Off Campus</u> including <u>Sponsored Off Campus</u> Training Programmes programmes sponsored by external agencies)

(\*Sp. Off means Off Campus training

	No. of (	Courses/	prg.										Partici	pants								Grand Total
						Ge	neral					S	C/ST					То	tal			
Thematic area	Off	Sp Off*	Total	М	ale	Fer	male	То	tal	Ma	ale	Fen	nale	То	otal	Ma	ale	Fen	nale	То	tal	
				Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	

Weed Management	1	1	2	-	-	-	-	-	-	48	18	5	2	53	20	48	18	5	2	53	20	73
Resource Conservation Technologies																						
Cropping Systems																						
Crop Diversification																						
Integrated Farming																						
Water management																						
Seed production	-	9	9	-	-	-	-	-	-	-	190	-	48	-	238	-	190	-	48	-	238	238
Nursery management																						
Integrated Crop Management																						
Fodder production																						
Production of organic inputs																						
II. Horticulture	<u>I</u>		1	]	l	1	l		i .						l		l	l	<u> </u>		<u> </u>	<u> </u>

<b>D</b> 1 "	ı	1	1	 1	1	1	1	1		1	1	1		1	1	1		
Production of																		
low volume																		
and high value																		
crops																		
•																		
Off-season																		
vegetables																		
ŭ																		
Nursery raising		1	1						30	10		30	30		10			30
Exotic																		
vegetables like																		
Broccoli																		
Dioccoii																		
Export																		
potential																		
vegetables																		
vegetables																		
Grading and																		
standardization																		
Stariuaruization																		
Protective																		
cultivation																		
(Green																		
Houses, Shade																		
Net etc.)																		
b) Fruits																		
b) i iuits																		
Training and		1 1	T 1						30	20		50	30		20			50
Pruning		'	'						00	20		30	30		20			30
Fruilling																		
Layout and		1	1						30	30		60	30		30			60
Management		'	'						00	00			00		00			00
of Orchards																		
Scientific		1	1						45	15		55	45		15			55
cultivation of		'	1 '						40	10		33	40		10			55
M. Orange																		

Management		1	1 4	I				ı	50	40	1	90	1	50	l	40		90
		I							50	40		90		50		40		90
of young																		•
plants/orchards																		ì
Rejuvenation		1	1						40	30		70		40		30		70
of old orchards		'	<b>'</b>						40	30		70		40		30		70
of old ofchards																		•
Scientific		1	1						30	30		60		30		30		60
cultivation of																		•
Kiwi																		1
																		•
Scientific		1	1						30	30		60		30		30		60
cultivation of																		•
grape																		•
5 - 1																		•
c) Ornamental P	lants																	
Nursery																		
Management																		•
																		•
Management																		
of potted plants																		•
Export																		
potential of																		•
ornamental																		•
plants																		•
pianto																		
Propagation																		
techniques of																		•
Ornamental																		•
Plants																		•
d) Plantation cro	ps	•	•	•			•											
Production and				<u> </u>	1													
Management																		Ī
technology																		
Connology																		Ī
			1															

	1	1	1	1		1	1		1	ı			1		
Processing															
and value															
addition															
e) Tuber crops															
Production and															
Management															
technology															
Processing															
and value															
addition															
f) Spices															<u> </u>
Production		4	4					215	35		250				250
and															
Management															
technology of															
Ginger															
Processing															
and value															
addition															
g) Medicinal and	d Aromatic	Plants													
Nursery	1														
management															
Production and															
management															
technology															
Post harvest															
technology and	1														
value addition															

Soil fertility management		1	1	-	-	-	-	-	-	-	30	-	5	-	30	-	30	-	5	-	35	35
Soil and Water Conservation		1	1	-	-	-	-	-	-	-	58	-	12	-	70	-	58	-	12	-	70	70
Integrated Nutrient Management		1	1	-	-	-	-	-	-	-	10	-	3	-	13	-	10	-	3	-	13	13
Production and use of organic inputs		1	1	-	-	-	-	-	-	-	8	-	7	-	15	-	8	-	7	-	15	15
Management of Problematic soils																						
Micro nutrient deficiency in crops																						
Nutrient Use Efficiency		1	1	-	-	-	-	-	-	-	15	-	-	-	15	-	15	-	-	-	15	15
Soil and Water Testing	1	-	1	-	-	-	-	-	-	14	-	-	-	14	-	14	-	-	-	14	-	14
IV Livestock Pro	duction an	d Manag	ement													1	1					
Dairy Management		1	1						15											15		15
Poultry Management																						
Piggery	1	3	4						40	26		40	26			+	+	+	1	40	26	66

	1								•				
Management													
Rabbit Management													
Disease Management													
Feed management	1		1			15						15	15
Production of quality animal products		1	1			15						15	15
V Home Science	/Women ei	npowerm	ent							l			
Household food security by kitchen gardening and nutrition gardening													
Design and development of low/minimum cost diet													
Designing and development for high nutrient efficiency diet													
Minimization of nutrient loss in processing													

0 1	1	T .	1											
Gender														i
mainstreaming														
through SHGs														
· · · · <b>·</b>														
Storage loss														
minimization														i
														'n
techniques														•
Value addition														
Income														
generation														
activities for														
empowerment														
of rural Women														i
or raidi Womon														•
Location														
specific														
drudgery														
reduction														
														i
technologies														•
Rural Crafts														
Women and														
child care														
VI Agril. Engine	ering	<u> </u>			ļ			ļ					ļ	
Installation and														
maintenance of														
micro irrigation														
systems														
Use of Plastics														
in farming														
practices														

		1	1										
Production of													
small tools and													
implements													
implomonto													
Repair and													
maintenance of													
farm													
machinery and													
implements													
Small scale													
processing and													
value addition													
value addition													
Post Harvest													
Technology													
roomiology													
VII Plant Protec	tion	1	1								· · · · · · · · · · · · · · · · · · ·		
Integrated Pest													
Management													
Integrated													
Disease													
Management													
Bio-control of			]										
pests and													
diseases													
Production of													
bio control													
agents and bio													
pesticides													
pesticides													
VIII Fisheries													
Integrated fish												J	
farming													

	1		 -	-	1		-	-	1			,		
Carp breeding														
and hatchery														
management														
-														
Carp fry and														
fingerling														
rearing														
Touring														
Composite fish														
culture														
Culture														
Hatchery														
management														
and culture of														
freshwater														
prawn														
Breeding and														
culture of														
ornamental														
fishes														
1101100														
Portable plastic														
carp hatchery														
carp natoriory														
Pen culture of														
fish and prawn														
listi aliu piawii														
Shrimp farming														
Edible oyster														
farming														
Pearl culture														
Fish														
processing and														
value addition														
value addition														

IX Production of	f Inputs at	site													
	•		 1 1	1	T	T	1	T	T		T				
Seed Production															
Planting material production															
Bio-agents production															
Bio-pesticides production															
Bio-fertilizer production															
Vermi-compost production															
Organic manures production															
Production of fry and fingerlings															
Production of Bee-colonies and wax sheets															
Small tools and implements															
Production of livestock feed															

and fodder										I	I					
and louder																
Production of																
Fish feed																
X Capacity Build	ding and G	oup Dyna	amics			I	I			l	l	I	L	L		
Leadership development																
development																
Group																
dynamics																
Formation and																
Management																
of SHGs																
Mobilization of																
social capital																
Entrepreneurial																
development of																
farmers/youths																
WTO and IPR																
issues																
XI Agro-forestry																
Production																
technologies																
Nursery																
management																
Integrated																
Farming																
Systems																
																<u>I</u>

TOTAL											
											<u></u>
											1
											1

### (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)

	No. of (	Courses/	Prog										Partici	pants								Grand Total
			Total				neral						C/ST						otal			(x + y)
Thematic area				M	lale	Fer	nale	То	tal	M	ale	Fer	nale	Total		Male		Female		Total		
	On (1)	Sp On*		On	Sp. On	On	Sp. On	On (a=	Sp. On	On	Sp. On	On	Sp. On	On (c=	Sp. On	On	Sp. On	On	Sp. On	On (x= a	Sp. On	
		(2)	(1+2)	(4)	(5)	(6)	(7)	4+6)	(b= 5+7)	(8)	(9)	(10)	(11)	8+10)	(d= 9+11)	(4+8)	(5+9)	(6+10)	(7+11)	+c)	(y= b +d)	
Training and pruning of orchards		1	1								20		10				20		10		30	30
Mushroom Production	1		1							20				20		20				20		20
Integrated pest	1		1							40		9		49		40		9		49		49

, 1		ı	1	- 1	 1		-	 1			1	1	1	1	
management															
Planting															
material															l
production															
Vermi-culture															
Sericulture															
Protected															
cultivation of															l
vegetable															
crops															
Commercial															
fruit production															
Repair and															
maintenance of															
farm															l
machinery and															
implements															
Nursery															
Management															
of Horticulture															
crops															
Training and															
pruning of															
orchards															
Value addition															
Production of															
quality animal															l
products															

Dairying													
Sheep and													-
goat rearing													
Quail farming													
Piggery	1	1				20	6	26		20	6		26
Rabbit farming													
Poultry production													
Ornamental fisheries													
Para vets													
Para extension workers													
Composite fish culture													
Freshwater prawn culture													
Shrimp farming													
Pearl culture													
Cold water fisheries													
Fish harvest and processing technology													
Fry and													

fingerling																					
rearing																					
Small scale																					
processing																					
Post Harvest																					
Technology																					
Tailoring and																					
Stitching																					
Rural Crafts																					
Production of	1	1	-	-	-	-	-	-	-	14	-	-	-	14	-	-	14	-	-	14	14
organics input	1	'																			
TOTAL																					

## 3.3.4. Achievements on Training of Rural Youth in Off Campus including Sponsored Off Campus Training Programmes

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

	No. of C	ourses/ l	Prog.										Partici	pants								Grand Total
						Ge	neral					S	C/ST					To	otal			
Thematic area	Off	Sp Off	Total	M	lale	Fer	nale	То	tal	Ma	ale	Fen	nale	То	tal	Ma	ale	Fen	nale	То	tal	
		· · ·		Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	
Mushroom Production	1		1							20		2		22		20		2		22		22
Integrated pest management	1		1							10		10		20		10		10		20		20
Winter vegetable	1		1							20		10										30

III II	1		1	1	1		1	1	ı — —			1	ı		1	1	1	1	ı	1	
cultivation																					
Para extension workers																					
Composite fish																					
culture																					
Freshwater																					
prawn culture																					
Shrimp farming																					
Pearl culture																					
Cold water																					
fisheries																					
Macro & Micro			-	-	-	-	-	-	-	16	-	1	-	17		16	-	1	-	17	17
nutrient deficiency	1	1																			
symptoms																					
Soil and			-	-	-	-	-	-	-	13	-	3	-	16	-	13	-	3	-	16	16
moisture conservation	1	1																			
Fish harvest																					
and processing technology																					
Fry and																					
fingerling																					
rearing																					
	<u> </u>	l	<u> </u>		<u> </u>	<u> </u>	l	<u> </u>	l			l					l	l			

Small scale											
processing											
Post Harvest											
Technology											
Tailaring and											
Tailoring and											
Stitching											
Rural Crafts											
TOTAL											

### C. Extension Personnel

3.3.5. Achievements on Training of Extension Personnel in On Campus including Sponsored On Campus Training Programmes

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

	No. of C	Courses/	prog										Partici	pants								Grand Total
Thematic area			Total	Gen	eral					SC/S	Т					Total						(x + y)
	On	Sp		N	lale	Fer	nale	Total		Male		Fema	ile	Total		Male		Female		Total		(A. <b>)</b>
		On*	(1+2)	On	Sp.	On	Sp.	On	Sp.	On	Sp.	On	Sp.	On	Sp.	On	Sp.	On	Sp.	On	Sp.	

	(1)	(2)	(4)	On (5)	(6)	On (7)	(a= 4+6)	On (b= 5+7)	(8)	On (9)	(10)	On (11)	(c= 8+10)	On (d= 9+11)	(4+8)	On (5+9)	(6+10)	On (7+11)	(x= a +c)	On (y= b +d)	
Integrated Pest																					
Management Integrated																					
Nutrient management																					
Rejuvenation of old orchards																					
Protected cultivation technology																					
Formation and Management of SHGs																					
Group Dynamics and farmers organization																					
Information networking among farmers																					
Capacity building for ICT application																					

Care and											
maintenance of											
farm											
machinery and											
implements											
WTO and IPR											
issues											
Management											
in farm animals											
Livestock feed											
and fodder production											
											<u> </u>
Household food security											
Women and											
Child care											
Low cost and											
nutrient											
efficient diet designing											
Production and											
use of organic inputs											
Gender											
mainstreaming through SHGs											
unough SHGS											

## 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)

	No. of C	Courses/	prog.										Partici	pants								Grand Total
				Gene	eral					SC/S	Т					Total						
Thematic area	Off	Sp Off*	Total	M	lale	Fer	nale	То	otal	M	ale	Fen	nale	Total		Male		Female		Total		
		OII		Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	Off	Sp Off*	
Citrus decline and its management		1	1								15		5		20		15		5			20
Integrated Pest Management		1									19		1		20		19		1		20	20
Integrated Nutrient management		1	1	-	-	-	-	-	-	-	8	-	7	-	15	-	8	-	7	-	15	15
Rejuvenation of old orchards																						
Protected cultivation technology																						
Formation and Management of SHGs																						

C		1	1					1				
Group												,
Dynamics and												,
farmers												ı
organization												
Information												
networking												
among farmers												
among lamoro												
Capacity												
building for ICT												ı
application												ı
аррисации												
Care and												
maintenance of												1
farm												,
machinery and												
implements												
WTO and IPR												
												1
issues												1
Management												
in farm animals												
iii iaiiii aiiiiilais												
Livestock feed												
and fodder												
production												
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											

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 trainin	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 rticipant	s		SC/ST		Gı	and Tot	al
		programme	,			, , , , , , , , , , , , , , , , , , , ,	M	F	T	M	F	Т	М	F	Т
Agronomy	Weed Manag ement	Chemical weed management in rice	10.7.15	1	KVK Training Hall	Farmers & Farm women	-	-	-	22	3	25	22	3	25
	Seed Product ion	Seed production & storage of Rice and Field pea	10/4/15 & 13/11/15	1	KVK Training Hall	Farmers & Farm women	-	-	-	34	10	64	34	10	44
	Resour ce	Direct Seeded	6/6/15	1	KVK Training	Farmers & Farm women	-	-	-	30	5	35	30	5	35

	Conser vation Technol ogies	Rice			Hall										
Horticulture	Post harvest manag ement	Curing and Storage of Onion	29.4.2015	1	KVK, Training Hall	Farm and farm women				20	10	30	20	10	30
	Protect ed cultivati on	Protected cultivation of Tomato	6.5.2015	1	KVK, Training Hall	Farm and farm women				20	10	30	20	10	30
	Nursery manag ement	Nursery management of horticulture crops	21.5.2015	1	KVK, training Hall	RY				20	10	30	20	10	30
	Trainin g and pruning	Training and pruning of Young Orchard	4.2.2016	1	KVK, training Hall	RY				20	10	30	20	10	30
Plant protection	IPM	Pest and disease management of Ginger	22/7/15 11/8/15 9/2/16	1 day each ie 3 day	KVK,Trai ning Hall ,Khawza wl	Farmer & Farm women				13 2	30	162	132	30	162
Soil Science	Soil Health manag	Integrated Nutrient	10.04.201 5	1	KVK Training	Farmers & Farm women	-	-	-	23	2	25	23	2	25

	ement	Management			Hall										
	Soil manag ement	Soil fertility management in degraded jhumland	17.04.201 5	1	KVK Training Hall	Farmers & Farm women	-	-	-	21	4	25	21	4	25
	Nutrient manag ement	Balance fertilization	20.04.201	1	KVK Training Hall	Farmers & Farm women	-	-	-	46	5	51	46	5	51
	Soil amend ment	Management of acidic soils	22.04.201	1	KVK, Training Hall	Farm and farm women				45	9	54	45	9	54
	Soil health manag ement	Soil solarisation	28.04.201	1	KVK, Training Hall	Rural Youth				14	-	14	14	-	14
Animal Science	Scien tific Mana geme nt of pig	Piggery productio n	10/06/ 15, 18/6/1 5	2	KVK, Trainin g Hall	Farmers & farm women				3 4	7	34	7	-	41
	Padd y cum fish cultur e	Integratio n of fish in paddy fields	01/9/1 5 ;16/9/1 5& 06/10/ 15	3	Zotlan g & Khawz awl	As above				4 6	9	46	9		55

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

Discipline	Area of trainin	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 rticipant	s		SC/S1	Г	G	rand To	tal
	9	programme				NGO Fersonner)	M	F	T	M	F	Т	М	F	Т
Agronomy	Seed Product ion	Seed production of Rice, Maize and Field pea	17/4/15 – 10/11/15	1	YMA Hall etc.	Farmer & Farm women				19 0	48	238	190	48	238
	Integrat ed Crop Manag ement	Scientific use of Urea, DAP, MOP & Lime	03/03/201	1	Rabung Primary School	Farmer & Farm women				48	5	53	48	5	53
	Weed Mngt	Scientific use of herbicide in Rice & other crops	11/03/201 6	1	SDAO, Training Hall, Khawzaw	Farmer & Farm women				18	2	20	18	2	20
Horticulture	Nursery manag ement	Better nursery management	10.4.2015	1	Chawngtl ai	RY				20	10	30	20	10	30
	Trainin g and pruning	Training and pruning of major fruit crop	27.5.2015	1	Arro	Farm and farm women				30	20	50	30	20	50
	Lay out of orchard	Layout and management of orchard	29.5.2015	1	Hmunche ng	Farm and farm women				30	30	60	30	30	60
	Cultivati on practice	Scientific cultivation of M orange	10.6.2015	1	Vankal	Farm and farm women				45	15	55	45	15	55

	s												
	Manag ement of young plants	Canopy management in major fruit crop	26.6.2015, 7.7.2015.2 8.7.2015 and 3.3.2016	1	Hliappui	Farm and farm women		50	40	90	50	40	90
	Rejuve nation of Orchar d	Citrus rejuvenation	11.8.2015	1	New Chalrang	Farm and farm women		40	30	70	40		70
	Cultivati on practice s	Scientific cultivation of M orange -	21.8.2015	1	Ngaizawl	Farm and farm women		30	30	30	30	60	60
	Cultivati on practice s	Scientific cultivation of Kiwi -	3.9.2015	1	Tualpui	Farm and farm women		40	30	70	40	30	70
	Product ion technol ogy	Scientific cultivation of Ginger.	5.5.2015, 13.5.2015	4	Newchalr ang, Hliappui, Khawzaw I, Ngopa, rabung	Farm and farm women		26 5	55	250	265	35	320
	Product ion technol ogy	Winter vegetable scultivation	14.10.201 5	1	Khawzaw I	RY		20	10	20	10	30	30
Plant protection	IPM	IPM in Ginger : DDT banned in agriculture and IPM in	17/4/15 20/4/15	4	Neihdaw n Chawngtl	Farmer and farm women		12 5	20	145	125	20	145

	paddy	28/4/15		ai								
		1/5/15		Rabung								
				Chalrang								
IPM	IPM in paddy	11/9/15	2	Tuimuk	Farmer and farm women		50	10	60	50	10	60
		7/10/15										
				Phaisen								
IPM	Management	24/8/15	1 day each	Chawngtl	Farmer and Farm women		30		30	30		30
" "	of Insect pest	21/10/15	(ie 2 days)	ai	Tamerand ram women		00					
	and Diseases of Passion fruit	21/10/13		&			20			20		
				Ruantlan			30			30		
				g					30			30
IPM	IPM in paddy Ginger & cowpea	9/10/15	1	Puilo	Farmer and farm women		50		50	50		50
IPM	IPM in Ginger	8/12/15	1	Lungsum	Farmer and farm women		25	5	30	25	5	30
	, Parkia and Tomato	0,12,11		mual								
	IPM in winter	11/12/15	1	Phaizau,	Extension personnel		19	1	20	19	1	20
	vegetables			champha	·							
Mushro	Mushroom	15/12/15	1 day	Chhinga	Rural Youth		10	12	22	10	12	22
om	Cultivation			veng,kha wzawl								

	IPM	Management of Storage pest of Paddy	22/12/15	1 day	Vengthar ,khawza wl	Rural Youth		20		20	20		20
Soil Science	Nutrient Manag ement	Nutrient Management in Paddy	1.05.2015	1	New Chalrang	Farm and farm women		30	5	35	30	5	35
	Soil conserv ation	Different types of mulching methods	17.06.201 5	1	Tuipui	Farm and farm women		58	12	70	58	12	70
	Nutrient manag ement	Nutrient use efficiency	7.07.2015	1	Khualen	Farm and farm women		10	3	13	10	3	13
	Product ion of organic inputs	Methods of vermiculture construction	12.08.201 5	1	Neihdaw n	Farm and farm women		15	-	15	15	-	15
	Fertilize r use efficien cy	Methods of fertilizer applications	28.09.201 5	1	Rabung	Farm and farm women		15	-	15	15	-	15
	Soil testing	Importance of soil testing	1.10.2015	1	Chawngtl ai	Farm and farm women		14	-	14	14	-	14
	Manag ement of Agricult ural crops	Macro and micro deficiency symptoms in Agricultural crops	10.11.201	1	Khawhai	Rural Youth		16	1	17	16	1	17
	Mulchin g techniq	Importance and benefits of mulching	25.10.201 5	1	Ruantlan g	Rural Youth		13	3	16	13	3	16

	ue	methods											
	Foliar fertilizat ion	Foliar fertilization in fruit crops	16.02.201 6	1	Tualte	Extension Personnel		15	-	15	15	-	15
Animal sc	Padd y cum fish cultur e	Integratio n of fish in paddy fields	01/9/1 5 ;16/9/1 5& 06/10/ 15	3	Zotlan g & Khawz awl	As above		4 6	9	46	9		55

## (D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date Durati (From – on	Area of training	Training title*	١	No. of Participants		Impact of training in terms of Self employment after training	Whether Sponsored
	To) (days			General	SC/ST	Total		by external funding agencies (Please Specify with amount of fund in Rs.)

		M	F	T	M	F	T	M	F	Т	Type of enterp rise ventur ed into	Numb er of units	Number of persons employe d	Avg. Annual income in Rs. generated through the enterprise	

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

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

										No. of	f Partic	ipants	;			Spo	Amoun
On/ Off/ Vocational	Beneficiary group (F/ FW/ RY/ EP)	Date (From- To)	Duration (days)	Discipline	Area of training	Title		Gener	al		SC/S1	г		Total		nsor ing Age ncy	t of fund receive d (Rs.)
							M	F	T	M	F	T	M	F	T		

On	F/ FW	10.7.15	1	Agronomy	Weed Manageme nt	Chemical weed management in rice		22	3	25	22	3	25	RKV Y	
On	F/ FW	10/4/15 & 13/11/15	1	Agronomy	Seed Production	Seed production & storage of Rice and Field pea		34	10	64	34	10	64	RKV Y & NFS M	
On	F/ FW	6/6/15	1	Agronomy	Resource Conservati on Technologi es	Direct Seeded Rice		30	5	35	30	5	35	RKV Y	
Off	F/ FW	17/4/15 - 10/11/15	1	Agronomy	Seed Production	Seed production of Rice, Maize and Field pea		19 0	48	23 8	19 0	48	23 8	RKV Y	
Off	F/ FW	11/03/20 16	1	Agronomy	Weed Mngt	Scientific use of herbicide in Rice & other crops		18	2	20	18	2	20	ATM A	
On	F/FW	-	1	Horticuture	Nursery raising	Better nursery management		20	10	30	20	10	30	RKV Y	
off	F/FW	-	1	Horticuture	Nursery raising	Better nursery management		20	10	30	20	10	30	IWM P	
off	F/FW	-	1	Horticuture	Training and pruning	Training and pruning of major fruit crop		30	20	50	30	20	50	IWM P	
Off	F/FW	-	1	Horticultur e	Layout of orchard	Layout and management of orchard		30	30	60	30	30	60	IWM P	

Off	F/FW	-	1	Horticultur e	Cultivation practices	Scientific cultivation of M orange		45	15	55	45	15	55	IWM P	
Off	F/FW	-	1	Horticultur e	Manageme nt of young plants	Canopy management in major fruit crops		50	40	90	50	40	90	RKV Y	
Off	F/FW	-	1	Horticultur e	Rejuvenati on	Rejuvenation of declining orchard		50	40	30	40	30	70	RKV Y	
Off	F/FW	-	1	Horticultur e	Cultivation practices	Scientific cultivation of M orange		30	30	60	30	30	60	RKV Y	
Off	F/FW	-	1	Horticultur e	Cultivation practices	Scientific cultivation of Kiwi		40	30	70	40	30	70	RD , Kha wza wl	
Off	F/FW	-	4	Horticultur e	Cultivation practices	Scientific cultivation of Ginger		21 5	35	25 0	21 5	35	25 0	RKV Y, NAB ARD , ATM A	
Off	RY	-	1	Horticultur e	Production technolog y	Winter vegetable cultivation		20	10	30	20	10	30	RKV Y	
Off	EP	-	1	Horticultur e	Manageme nt of citrus	Horticulture		10	10	20	10	10	20	IWM P	

			1							30		30	30		30		
Off	F and FW	24/8/201 5		Plant protection	IPM	Management of Insect pest and Diseases of Passion fruit										RKV Y	10,00o/ -
Off	F and FW	9/10/15	1	Plant protection	IPM	IPM in paddy Ginger & cowpea				50		50	50		50	RKV Y	10,000/
Off	F and FW	21/10/15	1	Plant protection	IPM	Management of Insect pest and Diseases of Passion fruit				30		30	30		30	RKV Y	10,000/
Off	F and FW	8/12/15	1	Plant protection	IPM	IPM in Ginger , Parkia and Tomato				25	5	30	25	5	30	RKV Y	10,000/
off	EP	11/12/15	1	Plant protection	IPM	IPM in winter vegetables				19	1	20	19	1	20	RKV Y	20.000/
On	F/FW	20.04.20	1	Soil Science	Nutrient manageme nt	Balance fertilization	-	-	-	46	5	51	46	5	51	RKV Y	
On	F/FW	22.04.20 15	1	Soil Science	Soil amendment	Management of acidic soils				45	9	54	45	9	54	RKV Y	
Off	F/FW	1.05.201 5	1	Soil Science	Nutrient Manageme nt	Nutrient Management in Paddy				30	5	35	30	5	35	RKV Y	

Off	F/FW	17.06.20 15	1	Soil Science	Soil conservatio	Different types of mulching methods		58	12	70	58	12	70	RKV Y	
Off	F/FW	7.07.201 5	1	Soil Science	Nutrient manageme nt	Nutrient use efficiency		10	3	13	10	3	13	RKV Y	
Off	F/FW	12.08.20 15	1	Soil Science	Production of organic inputs	Methods of vermiculture construction		15	-	15	15	-	15	RKV Y	
Off	F/FW	28.09.20 15	1	Soil Science	Fertilizer use efficiency	Methods of fertilizer applications		15	-	15	15	-	15	RKV Y	
Off	F/FW	1.10.201 5	1	Soil Science	Soil testing	Importance of soil testing		14	-	14	14	-	14	RKV Y	
On	RY	28.04.20 15	1	Soil Science	Soil health manageme nt	Soil solarisation		14	-	14	14	-	14	RKV Y	
Off	RY	10.11.20 15	1	Soil Science	Manageme nt of Agricultural crops	Macro and micro deficiency symptoms in Agricultural crops		16	1	17	16	1	17	RKV Y	
Off	RY	25.10.20 15	1	Soil Science	Mulching technique	Importance and benefits of mulching methods		13	3	16	13	3	16	RD	
Off	EP	16.02.20 15	1	Soil Science	Foliar fertilization	Foliar fertilization in fruit crops		15	-	15	15	-	15	RKV Y	

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 2016-17

									P	articipa	nts					
Sl. No.	Extension Activity	Topic	Date and	No. of activities	C	General			SC/ST			ensio ficial		Gr	and To	tal
			duration			(1)			(2)			(3)			(1+2)	
					M	F	Т	M	F	T	M	F	T	M	F	T
1.	Advisory services	Agriculture and allied subject	April 2015-16	165				100	65	165				100	65	165
2.	Diagnostic visit	Agriculture and allied subject		45				30	15	45				30	15	45
3.	Field day	Paddy. Onion, Garden pea		7				280	60	340				280	60	340
4.	Group Discussion	Agriculture and allied subject		12				190	50	240				190	50	240
5.	Kishan Gosthi	-		2				40	20	60				40	20	60
6	Kishan Mela	-		1				190	46	236				190	46	236
6.	Film show	Post harvest management on Onion and weed management		2				50	40	90				50	40	90

		on Maize									
7.	SHG formation		-								
8.	Exhibition	Pre Kharif Awareness Campaign, Pre-Rabi Awareness Campaign and PMFBY	3		600	300	900		600	300	900
9.	Scientists visit to farmers fields	Agriculture and allied subject	25		45	15	60		45	15	60
10.	Plant/ Animal Health camp		1		200	20	220		200	20	220
11.	Farm science club		-								
12.	Ex-trainee Sammelan		-								
13.	Farmers seminar/ workshop		-								
14.	Method demonstration	Agriculture and allied subject	20		70	30	100		70	30	100
15.	Celebration of important days		5		30	20	50		30	20	50
16.	Exposure visits		-								
17.	Electronic media (CD/DVD)										
18.	Extension literature		3								
19.	Newspaper coverage		50								
20.	Popular articles		-								
21.	Radio talk		1								
22.	TV talk		-								

23.	Training manual												
24.	Soil health camp			2									
25.	Awareness camp			4									
26.	Lecture delivered as resource person			15									
27.	PRA			-									
28.	Farmer-Scientist interaction												
29.	Soil test campaign	Importance of soil testing	1 day	5		280	80	360		2	80 8	0	360
30.	Mahila Mandal Convener meet												
31.	Any other (Please specify)												
32.													
	Grand Total					2205	761	2866		22	205 70	51 2	2866

# 3.5 Production and supply of Technological products during 2016-17

## A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Numbe	er of recipient/ ben	eficiaries
					General	SC/ST	Total

Maize	RCM 76	2	10,000/-		<mark>20</mark>	<mark>20</mark>
<mark>Paddy</mark>	Gomati	2	6,000/-		<mark>20</mark>	<mark>20</mark>
	Sambha Mahshuri	2	8,000/-		<mark>20</mark>	<mark>20</mark>
Craundaut	CC 20	0 E	2.000/		10	40
Groundhut	GG 20	<mark>0.0</mark>	3, <del>000/-</del>		IU	<mark>10</mark>
Field pea	AP-3	<mark>5</mark>	50,000/-		<mark>50</mark>	<mark>50</mark>
	Paddy	Paddy Gomati Sambha Mahshuri  Groundnut GG 20	Paddy Gomati 2 Sambha Mahshuri 2 Groundnut GG 20 0.5	Paddy Gomati 2 6,000/- Sambha Mahshuri 2 8,000/- Groundnut GG 20 0.5 3,000/-	Paddy Gomati 2 6,000/- Sambha Mahshuri 2 8,000/- Groundnut GG 20 0.5 3,000/-	Paddy Gomati 2 6,000/- 20 Sambha Mahshuri 2 8,000/- 20 Groundnut GG 20 0.5 3,000/- 10

# A1. SUMMARY of Production and supply of Seed Materials during 2016-17

SI. No.	Major group/class	Quantity (ton.)	Value (Rs.)	Number of recipient/ beneficiaries			
				General	SC/ST	Total	
1	CEREALS	0.6	24,000/-		60	60	
2	OILSEEDS	0.05	3,000/-		10	10	
3	PULSES	0.5	50,000/-		50	50	
	TOTAL	1.15	77,000/-		120	120	

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

Major group/class	Сгор	Variety	Numbers (In Lakh)	Value (Rs.)	Number of recip	ient beneficiaries	
					General	SC/ST	Total
Fruits	Pineapple	Kew	0.005	2,500/-		5	5
Spices	Chilli	King Chilli	0.03	6,000/-		60	60
	Onion		0.1	20,000/-		10	10
VEGETABLES	Tomato		0.04	4000/-		10	10
	Cabbage		0.01	1000/-		7	7

# B1. SUMMARY of Production and supply of Planting Materials (In Lakh) during 2016-17

SI. No.	lo. Major group/class Numbers (In Lakh) Value (Rs.)	Value (Rs.)	Number of recipient beneficiaries				
				General	SC/ST	Total	
1	Fruits	0.005	2,500/-		5	5	
2	Spices	0.13	26,000/-		70	70	
3	VEGETABLES	0.05	5000		17	17	
TOTAL	1	0.185	56,000/-		92	92	

# C. Production of Bio-Products during 2016-17

Major group/class	Product Name	Species	Q	uantity	Value (Rs.)	Number of Recipient /beneficiaries		
			No	(qt)				
						General	SC/ST	Total
BIOAGENTS								
BIOFERTILIZERS								
1 Azolla	Azolla	Azolla spp		2			20	20
2 Vermi	Vermcompost	Eisenia foetida		5	6000		50	50

# C1. SUMMARY of production of bio-products during 2016-17

SI. No.	Product Name	Species	Quantity		Value (Rs.)	Number of Recip	ient beneficiaries	Total number of Recipient	
			Nos	(kg)		General	SC/ST	beneficiaries	
1	BIOAGENTS								

2	BIO FERTILIZERS	Azolla pinnata	200		20	20
		Eisenia foetida	500	6000/-	50	50
3	BIO PESTICIDE					
	TOTAL		700	6000/-	70	70

# D. Production of livestock during 2016-17

SI. No.	Type of livestock	Breed	Quan	tity	Value (Rs.)	Number of Recipient beneficiaries		
			(Nos)	Kgs				
						General	SC/ST	Total
	Cattle/ Dairy							
	Goat							
	Piggery							
	Poultry							
	Fisheries							

Others (Specify)				

# D1. SUMMARY of production of livestock during 2016-17

SI. No.	Livestock category	Breed	Qua	ntity	Value (Rs.)	Number of Recip	Total number of Recipient	
	,		Nos	(kg)		General	SC/ST	beneficiaries
1	CATTLE							
2	SHEEP & GOAT							
3	POULTRY							
4.	PIGGERY							
5	FISHERIES							
6	OTHERS (Pl. specify)							
	TOTAL							

3.6.	Literature Developed/Published (with full title, author & reference) during 2016-17
------	---

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

(B) Articles/ Literature developed/published

Item	Title /and Name of Journal	Authors name	Number of copies
Research papers			
1.			
2.			
3.			
Training manuals			
Technical Report			
1.			
2.			
3.			
Book/ Book Chapter			
Popular articles			
Technical bulletins			
Extension bulletins			
Newsletter			
Conference/ workshop proceedings			
Leaflets/folders	<ol> <li>Paddy cultivation in Top soil bedded terrace</li> <li>Cultivation of French bean Var. Arka Anoop</li> </ol>	R. Vanlalduati  Malsawmkimi	100
	3. Economic viability of herbicide on weed management on maize	Dr. OP singh	100
	4. Fodder management Co1 & Co2	S.K ahmed	100

	5. Chinese method of Mushroom cultivation	F. Zoramthari	100
e-publications			
Any other (Pl. specify)			
TOTAL			

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

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

# **Success story on Onion Cultivation**

Name of Farmer : Tawklinga

Village: Khawzawl

Shri Tawklinga, 70 years of age is a farmer of Khawzawl who has a farm quite near from the town. He even has a Dairy unit in his farm and has purchased Pick-up vehicle from his earning. With the help of KVK by lending him power tiller he has recently constructed a big fish pond

for which he is very grateful. He has been Onion grower but he grows it as per his knowledge without adopting any scientific method of cultivation. He attended training on 'Scientific method of Onion Cultivation' conducted by KVK Champhai District during October 2015, and received 400 gram seeds of Onion variety Agri Found Light Red and Pendimethalin weedicide. With this seed, he adopted the knowledge he gained from the training right from nursery raising and used Pendimethalin as weed control in his plot saving lots of labour needed for manual weeding. He is amazed with the result of following the Package of Practice taught in the training. He stated that earlier he used to just broadcast the seeds on ploughed soil and covered it with sack, resulting in poor germination percentage as lots of seeds stick to the sack, etc. But after he adopted the right Package of Practices, germination percentage has been satisfactory with better and faster growth of the plants. He also incorporated slaked lime and Vermicompost in the soil in addition to Cowdung manure from his Dairy unit. His plot has been visited by KVK Scientists at various growth stages, which is just beautiful and appreciable. He is a happy man, expecting to harvest around 20 quintals, and he will harvesting from the last week of April. It is expected that he will earn about Rs 60,000 by selling his produce in the local market itself @ Rs 30/kg.



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
1	Mandarin Orange	Injecting smoked tobacco juice in the holes of stem and sealing with mud	To kill and control stem borer

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

- Identification of courses for farmers/farm women
- Rural Youth
- Extension 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 :2015

2. List of equipments purchased with amount:

SI. No	Name of the Equipment	Qty.	Cost
1	Side table	1	8500
2	Steel rack	3	26700
3	Book case	3	
			51000
4	USDV 8	3	75231
4	Stool	2	2622
5	MRIDAPARIKSHAK	1	7500
TOTAL			1,71,553

## 3. Details of samples analyzed so far

Details Amount (In Rupees) realized No. of Samples No. of Farmers No. of Villages 350 350 Soil Samples 5 Plant Samples 250 250 10 15 600 Total

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

Message	Crop		Livestock		Weather		Marketing		Awareness		Other Ent.		Total	
type	No. of	No. of	No. of	No. of	No. of	No. of	No. of	No. of	No. of	No. of	No. of	No. of	No. of	No. of
	Message	Ben	Message	Benef	Message	Benef	Message	Benefi	Message	Benef	Message	Benef	Message	Benefi
		eficiary		iciary		iciary		ciary		iciary		iciary		ciary
Text only	94	94	30	30			10	10	8	8	18	18	160	160

Voice only	136	136	12	12		5	5	4	4	8	8	165	165
Voice and Text both													
Total												325	325

<sup>3.14</sup> 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		
	Introduction of new variety or crop						
	Introduction of Resource Conservation Technologies						
	Distribution of seeds and planting materials						
	Any other (Please specify)						

# a. Livestock based Contingency planning

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

#### 4.0. IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Chinese method of Mushroom cultivation	25	100	40500	70000
Pest and diseases management in M orange	10	100	30000	55800

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

Name of organization	Nature of linkage
State Department of Horticulture	Supply of subsidized inputs like HDPE pipes, Chemicals etc

State Department of Agriculture	Implementation of RKVY, NFSM, supply of subsidized inputs like chemicals, farm machinery etc
NABARD	Promoter in formation of Farmers Clubs - Zotlang & Hliappui
ATMA	Training and technical advice as Resource person
IWMP	Training and technical advice as Resource person
Block Development Office	Training and technical advice as Resource person
NGOs AMFU, YMA etc	Technology transfer, Awareness programme, Celebration of important days

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 2015-16

Name of the scheme	Activity	Date/ Month of initiation	Funding agency	Amount (Rs.)
RKVY schemes	Training, Demonstration, diagnostic visits	29.4.2015	RKVY	72, 27,637 lakhs
NFSM on rice and pulses	Training, Demonstration, diagnostic visits	30.7.2014	NFSM	3.7125lakhs

Demonstration on Integration of Fish on Paddy field for Sustainable Agriculture	Training , Demonstration, , Diagnostic visits	11. 6 2015	NABARD	10 lakhs
National Mission for Sustainable Agriculture	Training , Demonstration, , Diagnostic visits	11.11.2015	NMSA	0.65 lakh

# 5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district

Yes

SI. No.	Programme	Nature of linkage	Remarks
1.	Joint visits	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

S. No.	Programme	Nature of linkage	Remarks

## 6. PERFORMANCE OF INFRASTRUCTURE IN KVK DURING 2015-16

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

SI. No.	Demo Unit	t Year of estd.		Year of estd.	Year of estd.	Year of estd.	Year of estd.	Area	Details	of production		Amour	it (Rs.)	Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income						

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

Name	Data of a suda s	Data of homosof	(ha)	Details of p	production		Amoun	t (Rs.)	Damada
of the crop	Date of sowing	Date of harvest	Area (	Variety	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks
Cereals									
Rice	20/05/2015	02/11/2015	0.25	1) Bhalum-3 2) Gomati	Seed	3Qtls 5Qtls	14,500	19650	
Wheat									
Maize	26/05/2015	14/09/2015	0.1	RCM-76	Seed	4Qtls	4200	7600	

Any othe									
Pulses			_1		<u> </u>	<u>I</u>	1	<u>l</u>	
Green gram									
Black gram									
Arhar									
Lentil									
Field pea	26.11.2015	2. 2.2016	0.005	Rachna	Seed	1q	6000	12000	
Oilseeds						·			
Mustard			1	T	1	1	1	1	
Soy bean									
Groundnut									
Any other									
Fibers				1					
i.									
ii.									
Spices & Plantation	on crops								
Ginger			1	1	<u> </u>		1		T
Olligei									
i.	8.4 .2015	13.4.2016	0.75	Thinglaidum	Rhizome	15q	21000	31500	
Floriculture				1	<u> </u>	l		<u> </u>	<u> </u>
i.									
					]	1		I	

ii.												
Fruits												
i.												
Vegetables		1	1	1		I	ı					
King Chilli	1.4.2015	18.11,2015	0.005	King chilli	Seeds	50g	750	3000				
Cabbage	23.10.2015	29.11`.2015	0.004	Improved Bahar	Seedlings	500	1500	3500				
Onion	14.10.2015	6.11.2015	0.015	Agri Found Light Red	Seedlings	3500	2500	17500				
Tomato	2.10.2015	30.10.2015	0.015	Arka Rakshak	Seedlings	2000	5000	10000				
a. Others (specify)		l		<u> </u>								
i.												
ii.												

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

SI.	Name of the Product	Qty	Атог	int (Rs.)	Remarks
No.		·	Cost of inputs	Gross income	

SI.	Name	Details of production			Amou		
No	of the animal / bird / aquatics	Breed/ species	Type of Produce	Qty.	Cost of inputs	Gross income	Remarks

# 6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit

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

## 6.6. Utilization of hostel facilities (Month-Wise) during 2015-16

Accommodation available (No. of beds):

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

	stay		stayed)	
Total				
Grand total				

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			
Revolving Fund			

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

Item	Released by ICAR/ZPD		Expenditure		Unspent balance as on 31st March, 2015
	Year	Year	Year	Year	
Inputs					
Extension activities					

TA/DA/POL etc.			
TOTAL			

# 7.3 Utilization of KVK funds during the year 2015 -16

S.	Particulars Particulars	Sanctioned (in	Released	Expenditure	
No.	Particulars	Lakh)	(in Lakh)	(in Lakh)	
A. Recu	urring Contingencies				
1	Pay & Allowances	84.242		84.062	
2	Traveling allowances	1		1	
3	Contingencies			_L	
А	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)				
В	POL, repair of vehicles, tractor and equipments				
С	Meals/refreshment for trainees				
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)				
Е	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)				
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)				
G	Training of extension functionaries				
Н	Maintenance of buildings				

1	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
	TOTAL (A)	10	10	
B. Non	-Recurring Contingencies	1	<u>l</u>	
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
	TOTAL (B)			
C. REV	OLVING FUND			
	GRAND TOTAL (A+B+C)	10	10	

## 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 2013 to March 2014	63,084	91,345	1,04,731	49,648
April 2014 to March 2015	49,648	2,55,399	2,07,733	47,666
April 2015 to March 2016	47,666	65,360	61,560	3800

Note: No KVK must leave this table blank

#### (Write in detail)

#### 8.1 Constraints

- (a) Administrative:
- (i) Electrification is needed in the KVK Farm.
- (ii) Two four wheel vehicles-One in the name of Programme Co-ordinator and one for Office use/ technical staff is needed. Moreover two wheeler is needed for dak, etc.
- (b) Financial:
- (i) Irregular salary is a major constraint.
- (ii) TE bills get accumulated for many months together causing great problem.
- (c) Technical
- (i) Technology Inventory issued for Zone III during 2008-2009 needs to be updated.
- (ii) Refreshment course for Scientists/SMS's may be conducted from time to time at Zonal level.
- (iii) Need, for strengthening of infrastructure for Plant Health Clinic and Soil Lab. Etc.

(Signature) Programme Coordinator