PROFORMA FOR ANNUAL REPORT OF KVKS, 2015-16

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
KVK, East Khasi Hills, Upper Shillong, Meghalaya-793009	0364-2560132	0364-2560132	kvkekhup@gmail.com Website: www.kvkeastkhasihills.nic.in

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

Address	Telephone		E mail
	Office	FAX	
Directorate of Agriculture, Cleve Colony, Shillong, Meghalaya-793003	0364-2222460	0364-2222460	agri-meg@nic.in

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Smt. Iadahunlang Kharkongor	-	9436118346	iadakharkongor@gmail.com

1.4. Year of sanction: 2010

1.5. Staff Position **(As on 31st March, 2016)**

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	Smt. Iadahunlang Kharkongor	Programme Coordinator	Horticulture					
2	Subject Matter Specialist	Shri.Shanmebansan Marbaniang	SMS (Extension)	Education Extension	PB-3 (15600-39100) with grade pay of Rs.5400	22947	26-6-2012	Contractual	ST
3	Subject Matter Specialist	Shri. Rike Chelchak A. Sangma	SMS (Agronomy)	Agronomy	PB-3 (15600-39100) with grade pay of Rs.5400	22279	01-10-2013	Contractual	ST
4	Subject Matter Specialist	Smt. Aibanrihun Lyngdoh	SMS(Horti)	Horticulture	PB-3 (15600-39100) with grade pay of Rs.5400	22947	26-6-2012	Contractual	ST
5	Subject Matter Specialist	Smt. Bakordalin Chyne	SMS(Plant Protection)	Entomology	PB-3 (15600-39100) with grade pay of Rs.5400	22279	7-7-2012	Contractual	ST
6	Subject Matter Specialist	Shri. Samborlang Malngiang	SMS(Fisheries)	Fisheries	PB-3 (15600-39100) with grade pay of Rs.5400	22279	13-5-2013	Contractual	ST
7	Subject Matter Specialist	-	-	-	-	-	-	-	-
8	Programme Assistant	Mr. Koles A. Muktieh	Programme Assistant (Computer)	Computer Application	PB-2 (9300-34800) with grade pay of Rs.4200	14322	3-12-2012	Contractual	ST
9	Computer Programmer								
10	Farm Manager	Mr. Baiaishahlang Syiemlieh	Farm Manager	BSc. Agri	PB-2 (9300-34800) with grade pay of Rs.4200	14752	29-7-2012	Contractual	ST
11	Accountant /	-	-	-	-	-	-	-	-

	Superintendent								
12	Stenographer	-	-	-	-	-	-	-	-
13	Driver	Shri. Friday Ramde	Driver	Under matriculation	PB-1 (5200-20200) with grade pay of Rs.2000	7416	1-9-2012	Contractual	ST
14	Driver	-	-	-	-	-	-	-	-
15	Supporting staff	-	-	-	-	-	-	-	-
16	Supporting staff	-	-	-	-	-	-	-	-
	Total	**9**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

1.6. a. Total land with KVK (in ha) : 10.2

b. Total cultivable land with KVK (in ha): 6.00 (approx)

c. Total cultivated land (in ha): 0.75 ha (approx)

S. No.	**Item**	**Area (ha)**
1	Under Buildings (Administrative building+ Farmers' Hostel+ Staff Quarters)	--
2.	Under Demonstration Units	0.07
3.	Under Crops (Cereals, pulses, oilseeds etc.)	-
4.	Under vegetables	0.25
5.	Orchard/Agro-forestry	-
6.	Others (specify)	-

1.7. Infrastructural Development:

A) Buildings

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

B) Vehicles

Type of vehicle	**Regd. No.**	**Year of purchase**	**Cost (Rs.)**	**Total kms. Run**	**Present status**
Mahindra Bolero	ML 05 G-9672	2010	6.00 lakhs	86197.7	Excellent

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
LCD Projector	2010	97,000.00	Good

White board	2010	1800.00	Good
Computer and accessories (2 No.)	2010, 2013	91942.00	Good
Photocopier	2010	1,07,000	Good Funded by Host institute
Laptop Computer	2010	45,700.00	Good, funded by Host institute
Digital camera	2011	20,450.00	Good
Electronic weighing Balance	2012	7650.00	Good
Colour printer, Scanner & Fax (All in one)	2012	25000.00	Good
Internet Connectivity (Through telephone line)	2010	1454.00	Good
Sprayer	2011	1800.00	Good
Paddy weeder (3 No.)	2011	3000.00	Good
SRI row maker (3 No.)	2011	1500.00	Good
Adjustable row maker (2 No.)	2013	1260.00	Good
HP Desktop (4nos)	2016	183064.00	Excellent
HP Printer (1no.)	2016	72500.00	Excellent
HP Officejet Pro 6830 All in one Printer	2016	12095.00	Excellent
Projector (1 no.)	2016	72510.00	Excellent
Ahuja PA Systems	2016	50000.00	Excellent

1.8. A). Details SAC meeting* conducted in the year 2015-16

Sl. No.	**Date**	**Name and Designation of Participants**		**Salient Recommendations**	**Action taken on last SAC recommendation**
1.	26th February 2016	Shri. N.S. Nongbri	Joint Director (R&T) cum State Nodal Officer KVK under Directorate of Agriculture,	-Chaired the meeting -Farmers in remote villages are	

			Meghalaya	lacking knowledge in the advancement of latest technology in agriculture and allied sciences. Hence for effective dissemination of the latest technologies, a tie up between the KVKs and Farmers groups at village level is important to improve the livelihood of the farmers.	
2.		Dr. R. Bordoloi	Principal Scientist, ATARI, Zone-III, ICAR Umiam	- format for presentation of achievements of KVK should be more technical consisting of all parameters so that the house would have a better understanding of the activities of the KVK. He further pointed out that the Completed trials and On-going trials too should be projected to know the progress of all the OFTs and FLDs. -stressed upon the importance of targeting at least one training from each discipline for the Entrepreneurs development. He also stress of training of extension personnel which may comprise of Aganwadi or BFAs or Gram Sevaks etc -also suggested that the SMSs should try to initiate more radio talks and T.V. talks so as to reach out to more farmers and farming communities. - suggested that standardisation of only one media should be done for growing of gerbera as FLD under	

				Horticulture discipline -organising meetings for ex-trainees to keep track of the progress of farmers that have undergone trainings at the centre. He also suggested more involvement of progressive farmers in KVK activities for better achievement of the plans and programmes of KVKs in different villages technical parameters should be added in FLD of Jhalkund during the presentation on the action plan of SMS (Extension) directed the SMS to change the title of OFT to include technology gaps analyze in Lentil and Capsicum.	
		Shri. R. Suchiang	J.E (WR) o/o EEWR Division		
		Smt. R.M. Majaw	Research Officer, Shillong		
		Dr. (Mrs) O.M. Kharkongor	A.H & V.O (L.I)	suggested for more production of Maize to contribute to the production of feed for livestock and she also suggested linking the maize growers with mills in the state. This suggestion was accepted by SMS (Agronomy), whereby he suggested that introduction of HQPM and formation of Maize cluster and identification of Maize village can be done jointly	
		Smti. M. Dkhar	Assistant Director, Horticulture, East Khasi Hills	-appreciated the efforts of the KVK,EKH for the cooperation given by the KVK in terms of providing	

				Resource persons for various training programmes. She also highlighted the problem of Citrus Decline in the state and suggested for joint efforts to come up with a solution for the problem. -Adoption in IDM, IPM, INM is required to improve the productivity of crops in the district.	
		Smti. I. Rynjah	DSWO, SHG (CC) Dir, Soil &Water Conservation Deptt	enquired whether Agroforestry can also be adopted in the AAP of the coming year. This query was met with a satisfactory answer given by S. Malniang, SMS (Fishery). He informed the house that Agroforestry trees have been tried at Wahlyngkhat village under Pynursla C & RD Block.	
		Miss. N. CH. Marak	Farm Manager, Sericulture Department		
		Shri. A. Nongbri	ADA (Agro) D.A.O Office Shillong		
		Shri. J.H. Suchiang	Superintendent of Fisheries East Khasi Hills District	FLD on Composite fish culture in the Achievement presentation should be mentioned specifically whether it is Duck-cum-Fish Culture or Pig-cum-Fish Culture to better understand the benefits derived from each. He also suggested to focus more on Pig-cum-Fish Culture as he has found from his experience to be more beneficial	

		Shri. R. K. Bhattacharjee	CM, SBI Shillong		
		Shri. N.J.J. Nongkhlaw	Programme Executive DDK, Shillong	requested for scripts of any programme done by the KVK in collaboration with the Doordarshan	
		Shri. P.R. Lyngdoh	Fishery Officer East Khasi Hills District, Shillong		
		Smti. I. Kharkongor	Programme Coordinator, KVK, East Khasi Hills		
		Smti. B. Chyne	SMS (Plant Protection) KVK, East Khasi Hills District		
		Smti. A. Lyngdoh	SMS (Horticulture) KVK, East Khasi Hills District		
		Shri. S. Marbaniang	SMS (Agril. Extension) KVK, East Khasi Hills District		
		Shri. R.C.A. Sangma	SMS (Agronomy) KVK, East Khasi Hills District		
		Shri. S. Malngiang	SMS (Fisheries) KVK, East Khasi Hills District		
		Shri. A. Kynter	Progressive Farmer, Mawklot	inform the house that he has been associated with KVK for the last four years and has benefited alot. He has also stated that he has gain lots of knowledge regarding use of pesticides and about require dose of fertilizer application. However in the years to come he stressed more on the knowledge of the uses of biofertilizers and biopesticides	

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

2. DETAILS OF DISTRICT

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

Sl. No	Farming system/enterprises
1.	Agri + Hort + AH+ Fishery
2.	Agri + Hort+ AH
3.	Agri + Hort
	Enterprises 1. Agri –Paddy, Maize, Soybean 2. Hort- Tomato, Ginger, Turmeric, Cabbage, Cauliflower, Chillies, Beans, Peas, Beat root, Carrot, Radish, Potato ,Garlic , Lettuce, Gerbera, Lilium, Khasi Mandarin ,Plum, Pear, Peach, Papaya, Banana, Passion fruit. 3. AH and Vety – Poultry, Piggery, Cattle, Goatery, Sheep. 4. Fishery – Common carp, Grass Carp, Silver Carp, Cattla and Rohu.

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

Sl. No	Agro-climatic Zone	Characteristics
1	**Temperate Sub-Alpine zone**	**N.A.**
2	**Subtropical**	**N.A**

No. of Name of A.E.S	**Blocks**	**% of geographical area in the district**
A.E.S.I: 61997 ha. **Altitude: 1490m-1800m** **Soil type: Sandy clay loam** **ACZ: Seep- Hills & Northern slopes plateau**	**Mylliem Dev. Block** **Mawphlang** **Laitkroh**	**22.6**

A.E.S.II – 64800 ha. **Altitude: 1610m-1780m** **Soil type: Loamy, Sandy clay loam** **ACZ: Seep- Hills & Northern slopes plateau**	**Mawryngkneng** **Mawkynrew**	**23.6**
A.E.S.III -148003 **Altitude: 1110m -1300m** **Soil type: sandy clay loam** **ACZ: Seep- : Southern slopes & valleys**	**Shella Bholaghanj** **Pynursla** **Mawsynram**	**53.8**

2.3 Soil type/s

Sl. No	Soil type	Characteristics	Area in ha
1.		Deep, excessively drained, fine soils on moderately sloping side-slopes of hills having loamy surface with moderate erosion hazard associated with: Moderately deep, excessively drained, coarse-loamy soils on gently sloping hill tops with very severe erosion hazard and strong stoniness.	
2.		Deep, excessively drained, fine soils on gently sloping side-slopes of hills having loamy surface with moderate erosion hazard associated with: Deep, poorly drained, fine-loamy soils on very gently sloping valleys with very slight erosion hazard and ground water table below one metre depth of the surface.	
3.		Deep, excessively drained, fine soils on moderately sloping side slopes of hills having loamy surface with moderate erosion hazard & slight stoniness associated with: Moderately deep, excessively drained, loamy-skeletal soils on gently sloping hill tops with very severe erosion hazard and strong stoniness.	
4.		Deep, excessively drained, fine soils on moderately steep side-slopes of hills having	

		loamy surface with moderate erosion hazard and strong stoniness associated with: Moderately deep, excessively drained, loamy-skeletal soils on very gently sloping hill tops with severe erosion hazard and strong stoniness	
5.		Deep, excessively drained, fine soils on moderately sloping side-slopes of hills having loamy surface with moderate erosion hazard associated with: Moderately deep, excessively drained ,fine-loamy soils on gently sloping hill tops with very severe erosion hazard and strong stoniness	
6.		Moderately shallow, excessively drained, fine-loamy soils on moderately steep side slopes of hills having loamy surface with severe erosion hazard and strong stoniness associated with: Moderately Shallow, excessively drained, loamy-skeletal soils on gently sloping hill tops with very severe erosion hazard and slight stoniness.	
7.		Moderately deep, excessively drained, coarse-loamy soils on very steeply sloping hill escarpment having sandy surface with very severe erosion hazard and strong stoniness associated with: Deep, excessively drained, coarse-loamy soils on steeply sloping hill tops with severe erosion hazard and strong stoniness	
8.		Moderately deep, excessively drained, loamy-skeletal soils on moderately steep side-slopes of hills having sandy surface with very severe erosion hazard and strong stoniness associated with: Shallow, excessively drained, loamy-skeletal soils on moderately steep side-slopes of hills with very severe erosion hazard and strong stoniness	
9.		Deep, excessively drained, fine-loamy soils on moderately sloping side-slopes of hills having loamy surface with moderate erosion hazard associated with: deep excessively drained, fine soils on moderately sloping side-slopes of hills with moderate erosion	

		hazard.	
10.		Deep, moderately well drained, fine soils on very gently sloping upland having loamy surface with slight erosion and slight flood hazards associated with: Deep, well drained, fine soils on moderately sloping side slopes of hills with moderate erosion hazard.	
11.		Deep, excessively drained, loamy-skeletal soils on steeply sloping side-slopes of hills having loamy surface with severe erosion hazard and strong stoniness associated with: Deep, excessively drained, coarse-loamy, soils on steeply sloping side-slopes of hills with severe erosion hazard and moderate stoniness.	
12.		Moderately deep, excessively drained, fine-loamy soils on steeply sloping side-slopes of hills having loamy surface with severe erosion hazard and moderate stoniness associated with: Deep, excessively drained fine soils on steeply sloping side-slopes of hills with severe erosion hazard and strong stoniness.	
13.		Moderately deep, excessively drained coarse loamy soils on moderately steep side-slopes of hills having loamy surface with moderate erosion hazard and slight stoniness associated with: Moderately deep, excessively drained, fine soils on moderately, sloping side-slopes of hills with severe erosion hazard and slight stoniness	
14.		Moderately deep, excessively drained loamy-skeletal soils on moderately steep side-slopes of hills having loamy surface with very severe erosion hazard and strong stoniness associated with: Moderately shallow, excessively drained, coarse loamy soils on moderately steep side-slopes of hills with very severe erosion hazard and strong stoniness.	

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

S. No	Crop	Area (ha)	Production (in Metric Tons)	Productivity (Kg /ha)	Year
1	**Rice**				
a)	Autumn	279	790	2832	2012-2013
b)	Winter	5422	12187	2248	2012-2013
c)	Spring	114	226	1982	2012-2013
2	**Maize**	2091	6578	3146	2012-2013
3	**Millets**				
a)	Other Cereals and Small Millets	246	341	1386	2012-2013
4	**Pulses**				
a)	Pea	293	820	2799	2011-2012
b)	Cow Pea	1	1	1000	2011-2012
c)	Lentil	6	4	667	2011-2012
d)	Others Pulses	645	2261	3505	2012-2013
5	**Oil Seeds**				
a)	Sesamum	78	96	1231	2012-2013
b)	Rape & Mustard	91	78	857	2012-2013
c)	Soya bean	405	541	1336	2012-2013
6	**Tuber Crops**				
a)	Potato	11273	110971	9844	2011-2012
b)	Sweet Potato	664	2626	3955	2011-2012
c)	Tapioca	428	2260	5280	2011-2012
7	**Citrus fruits**				
a)	Khasi Mandrin	3893	18135	4658	2011-2012
b)	Assam Lemon	370	1684	4551	2011-2012
8	**Fruits Crops**				
a)	Pine Apple	887	6386	7200	2011-2012

b)	Banana	760	7870	10355	2011-2012
c)	Papaya	95	663	6979	2011-2012
9	**Spices Crops**				
a)	Ginger	476	3891	8174	2011-2012
b)	Turmeric	90	457	5078	2011-2012
c)	Chillies	116	244	2103	2011-2012
10	**Plantation Crops**				
a)	Tea	72	6	83	2011-2012
b)	Arecanut	4521	4824	1067	2011-2012

2.5. Weather data

Month	Rainfall (mm)	Temperature ^{0} C		Relative Humidity (%)
		Maximum	Minimum	
January	48.20	19.07	3.05	NA
February	0.00	22.93	6.17	NA
March	177.90	27.22	5.70	NA
April	1395.20	28.20	8.10	NA
May	291.30	30.39	10.01	NA
June	368.90	30.20	14.27	NA
July	368.10	29.02	18.35	NA
August	588.00	28.02	18.07	NA
September	328.80	27.60	17.00	NA
October	218.00	26.35	16.01	NA
November	12.60	23.46	6.50	NA
December	0.00	21.03	4.07	NA

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

Category	Population	Production (in Tons)	Cow's Milk in Litter	Egg in '000 in No.	Productivity
Cattle					
Crossbred	9268	12288.364	21,270	-	-
Indigenous	99919			-	-
Buffalo	626	49.074	-	-	-
Sheep					
Crossbred		597.296	-	-	-
Indigenous	8957		-	-	-
Goats	56632		-	-	-
Pigs			-	-	-
Crossbred		4944.062	-	-	-
Indigenous	11,9357		-	-	-
Rabbits		-	-	-	-
Poultry					
Hens	4,75,253	2640.921	-	11578.5	-
Desi	-	-	-	-	-
Improved	-	-	-	-	-
Ducks	-	-	-	-	-
Others (Horse/Mule/Donkey)	48	-	-	-	-

Category	Water spread Area (ha)	Production ('000 tons)	Productivity (tons/ha)
Fresh Water	254.94	382	1.5
Marine	-	-	-
Inland	-	-	-
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

Note: Pl. provide the appropriate Unit against each enterprise

2.6 Details of Operational area / Villages (2015-16)

Sl. No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified thrust area
1		Mylliem	Mylliem	Paddy, Maize, Pea, Cabbage, Frenchbean, Radish, Turnip, Cauliflower, Potato, Plum, Pear, Peach, Poultry, Piggery Cattle.	• Lack of knowledge of good quality seeds. • Lack of knowledge on water management • Lack of knowledge on pest and disease management • Blast and brown spot of rice • Diseases of poultry and pigs • Feed management • Lack of knowledge on livestock management • Lack of marketing Facilities • Lack of knowledge of scientific method of cultivation	• Introduction and popularization of HYV for agril. & hort. crops • Resource conservation technologies • Integrated pest and disease management • Feed and health management of livestock • Introduction of improved package of practices

			Baniun	Paddy, Maize, Pea, Cabbage, Frenchbean, Radish, Turnip, Cauliflower, Potato, Plum, Pear, Peach, Apple, Poultry, Goatery, Piggery, Cattle.	• Lack of knowledge of good quality seeds. • Lack of knowledge for improved package and practices of both agril. -hort. Crops • Lack of knowledge on pest and disease management • Diseases of poultry and pigs • Feed management • Lack of knowledge of scientific method of cultivation	• Introduction and popularization of HYV for agril. & hort. crops • Integrated farming system • Integrated pest and disease management • Feed and health management of livestock • Resource conservation technologies • Soil health and fertility management • Introduction of improved package of practices management
			Nongpiur	Paddy, Maize, Potato, Cabbage, Beetroot Mustard, Lettuce Pea, Cauliflower, Carrot, Tomato, Bean, Chilli, Ginger, Plum, Pear, Cattle, Piggery, Poultry	• Lack of knowledge on pest and disease management • Lack of knowledge on water management of agril. & hort. crops • Diseases of livestock • Feed management • Birth problems in livestock	• Integrated pest and disease management • Resource conservation technologies • Introduction and popularization of HYV for agril. & hort. crops • Feed and health management of livestock

			Sadew	Paddy, Maize, Potato, Cabbage, Mustard, Pea, Cauliflower, FrenchBean, Radish, pumkin, Squash, Colocasia, Plum, Pear, Peach Chestnut, Cattle, Piggery, Poutry	• Lack of knowledge of good quality seeds. • Lack of knowledge on water management • Lack of knowledge on pest and disease management • Diseases of poultry and pigs • Feed management • Lack of knowledge on livestock management • Lack of marketing Facilities	• Introduction and popularization of HYV for agril. & hort. crops • Resource conservation technologies • Integrated pest and disease management • Integrated farming system • Feed and health management of livestock
			Mawklot	Potato, Cabbage, Cauliflower, Frenchbean, Pea, Maize, Radish, Mustard, Beetroot, Pear, Plum	• Soil Health • Low yield of potato • Disease of and pests of vegetables • Lack of market facility • Feed management • Diseases of livestock	• Soil health and fertility management • Introduction and popularization of HYV and disease resistant variety of potato • Integrated pest and disease management • Feed and health management of livestock
			Sanmer	Potato, Cabbage, Cauliflower, Frenchbean, Pea, Maize, Radish, Mustard, Beetroot, Pear, Plum	• Soil Health • Disease of and pests of vegetables • Lack of market facility • Feed management • Diseases of livestock	• Soil health and fertility management • Introduction and popularization of HYV and disease resistant variety • Integrated pest and disease management • Feed and health management of livestock

2		Mawphlang	Mawphlang	Paddy, Maize, Potato, Pea, Beans, Radish, Mustard, Turmeric, Beat root, Sesamum, frenchbean, Cabbage, Chilli, Peach, Plum, *Prunisnepalensis,* Poultry, Goatery, Piggery, Cattle, Sheep.	• Lack of knowledge for improved package and practices of both agril. -hort. Crops • Lack of knowledge of good quality seeds. • Lack of knowledge on water management of agril. & hort. crops • Lack of knowledge on pest and disease management • Lack of knowledge on use of pesticides and Fertilizers • Lack of knowledge on post harvest management of Potato	• Introduction of improved package of practices • Integrated farming system • Introduction and popularization of HYV for agril. & hort. crops • Resource conservation technologies • Integrated pest and disease management • Nutrient management • Post harvest technology of Potato.
			Lyngkhoi	Potato, rice, maize, cole crops, livestock, fishery, pea, pumpkin,	• Irrigation during winter • Diseases occurrence • Frost • Transportation • Lack of knowledge of new varieties and strains of crops and livestock • Lack of knowledge of scientific practices of cultivation	• Introduction of improved package of practices • Introduction and popularization of HYV for agril. & hort. crops • Integrated pest and disease management • Post harvest technology of Potato. • Resource conservation technologies • Feed and health management of livestock • Introduction of IFS

			Mawreng	Potato, maize, cole crops, livestock, f, pea, pumpkin, Floriculture	• Irrigation during winter • Diseases occurrence • Frost • Transportation • Lack of knowledge of new varieties and strains of crops and livestock • Lack of knowledge of scientific practices of cultivation	• Introduction of improved package of practices • Introduction and popularization of HYV for agril. & hort. crops • Integrated pest and disease management • Post harvest technology of Potato. • Feed and health management of livestock • Introduction of IFS
3		Shella- Bholaganj	Laitkynsew	Tomato, Potato, Pea, Beans, Radish, Mustard, Beat root, frenchbean, Cabbage, turnip lettuce, Carrot, Chilli ,Black pepper, bay leaf , Arecanut, betel leaf, Tapioca, Khasi mandarin, Jack fruit, Banana, Pineapple, Passion Fruit and minor fruits. Poultry, Goatery, Piggery, Cattle,	• Lack of knowledge for improved package and practices of both agril. -hort. Crops • Pest and diseases of Tomato, Potato. • Lack of irrigation facilities • Soil erosion problem • Lack of knowledge of nursery raising • Diseases of livestock • Feed management • Crown rot of Arecanut	• Introduction and popularization of HYV for agril. & hort. crops • Integrated pest and disease management • Resource conservation technologies • Soil fertility management • Nursery management • Feed and health management of livestock

4		Mawsynram	Tyrsad	Paddy, Maize, Potato, Pea, FrenchBeans, Radish, Mustard, Cabbage, Cauliflower, turnip, , Chilli, SweetPotato, SquashPumki, Sesamum, Peach, Pear, Plum, Papaya, Passion Fruit, *Prunusnepalensis* and Some minor fruits. Poultry, Goatery, Piggery, Cattle,	• Lack of knowledge for improved package and practices of both agril. -hort. Crops • Pest and diseases of Potato • Lack of knowledge on post harvest management of potato • Lack of irrigation facilities • Diseases of poultry and pigs • Feed management • Lack of knowledge on livestock management	• Introduction of improved package of practices • Introduction and popularization of HYV for agril. & hort. crops • Integrated pest and disease management • Post harvest technology of Potato. • Resource conservation technologies • Feed and health management of livestock
			Dangar	Paddy, Maize, tomato, carrot, brinjal, lady's finger, Pea, FrenchBeans, Radish, Mustard, Cabbage, Chilli, Arecanut, BlackPepper, Betelvine, Lettuce, Greengram, Papaya, Banana, Mango, Jackfruit Poultry, Goatery, Piggery, Cattle	• Low cropping intensity • Lack of knowledge of scientific method of cultivation • Lack of irrigation facilities • Pest and diseases of tomato, cabbage • Diseases of poultry and pigs • Feed management • Lack of knowledge on livestock management	• Increasing the cropping intensity by introducing a second crop • Introduction of improved package of practices • Resource conservation technologies • Integrated pest and disease management • Feed and health management of livestock

5		Mawkynrew	Thangsning	Maize, Potato, Soyabean Pea, French Beans, Radish, Mustard, Cabbage, Chilli, Cucumber, Carrot , Onion Lettuce, Pumkin, Pear, Plum, Lemon, Flamengia sp and Some minor fruits. Poultry, Goatery, Piggery ,Cattle	• Lack of irrigation facilities • Lack of knowledge for improved package and practices of both agril. -hort. Crops • Lack of knowledge of good quality seeds. • Lack of knowledge on use of pesticides and Fertilizers • Pest and diseases of Potato and cabbage • Diseases of poultry and pigs • Feed management • Lack of knowledge on livestock management • Leaching loss of soil nutrient	• Resource conservation technologies • Introduction and popularization of HYV for agril. & hort. crops • Integrated pest and disease management • Feed and health management of livestock • Soil health and fertility management
6		Mawryngkneng	Diengpasoh	Paddy, Maize, Soyaben, Tomato, Pea, French Beans, Mustard, Cabbage, Cauliflower, Chilli, Ginger , Cucumber , Carrot, Pumkin, Bottle Gourd, Egg - plant, Pear, Papaya, Mango, Passion Fruit Assam Lemon Banana, Jack fruit Guava, P. nepalensis, valencia Poultry, Piggery, Cattle.	• Lack of knowledge on use of pesticides and Fertilizer • Pest and diseases of Tomato and Paddy and Ginger • Lack of irrigation facilities • Lack of knowledge of good quality seeds. • Diseases of poultry and pigs • Feed management • Lack of knowledge on livestock management • Fluctuation on market price • Lack of knowledge of fish rearing	• Integrated pest ,disease and nutrient management • Resource conservation technologies • Introduction and popularization of HYV for agril. & hort. crops • Feed and health management of livestock • Composit fish culture

7		Khatarshnong-Laitkroh	Mawbeh	Maize, Soyaben, Potato, Pea, French Beans, Mustard, Cabbage, Chilli, Turnip, Colocasia, Pumkin, Gourd, Egg-plant , Pear, Plum, Papaya, , Passion Fruit Assam Lemon, Peach, Banana, *Prunus. nepalensis*, Mulberry, Poultry, Piggery, Cattle, Goatery	• Pest and diseases of Vegetables • Lack of knowledge on use of pesticides and Fertilizers • Lack of knowledge for improved package and practices of both agril. -hort. Crops • Lack of knowledge of good quality seeds. • Diseases of poultry and pigs • Feed management • Lack of knowledge on livestock management	• Introduction of improved package of practices • Integrated pest ,disease and nutrient management • Resource conservation technologies • Introduction and popularization of HYV for agril. & hort. crops • Feed and health management of livestock

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2015-16

Discipline	OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Maize, Other Crops/Enterprises)			
	Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
	Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
Agronomy	2	2	48	48	2	2	45	45
Horticulture	2	2	69	75	3	3	72	85
Plant protection	3	3	105	114	3	3	150	235
Fisheries	3	3	15	15	2	3	20	20

Agril. Extension	3	3	300	300	2	2	-	-
Total	**13**	**13**	**537**	**552**	**12**	**12**	**287**	**385**

Note: Target set during last Action Plan Workshop

Training (including sponsored, vocational and other trainings carried under Rainwater Harvesting Unit)					**Extension Activities**			
3					**4**			
Number of Courses			**Number of Participants**		**Number of activities**		**Number of participants**	
Clientele	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**	**Targets**	**Achievement**
Farmers	67	72	1814	2033	284	495	6083	9954
Rural youth	13	16	390	541	-	-	-	-
Extn. Functionaries	2	4	65	85	-	-	-	-
Total	82	92	2269	2659	284	495	6083	9954

Seed Production (ton.)		**Planting material (Nos. in lakh)**	
5		**6**	
Target	**Achievement**	**Target**	**Achievement**
Potato (1.5)	2 tons	Tomato (0.05)	0.1
		Broccoli (0.02)	0.05
		King Chilli (0.01)	0.02

		Capsicum (0.04)	0.06
		Gerbera (0.03)	0.05

Note: Target set during last Action Plan Workshop

3. B. Abstract of interventions undertaken during 2015-16

Sl. No	Thrust area	Crop/ Enterprise	Identified problems	Interventions					
				Title of OFT if any	Title of FLD if any	Title of Training if any	Title of training for extension personnel if any	Extension activities	Supply of seeds, planting materials etc.
	Varietal Performance	Baby corn	Non-availability of fresh babycorn and locally processed babycorn.	Introduction and scientific package of practices of babycorn var RCM 1-1, *RCM* 1-3		Package of practises of babycorn.			Seeds and fertilizer
	Varietal Performance	Soybean	Low Cropping intensity and absence of leguminous crop in cropping system.	Introduction and Varietal performance of Soybean var. JS 335		Package of practises of soybean			Seeds and fertilizer

	Climate Resilient Ageicultur e	Rice	Unavailability and high cost of labour for land preparation in rice field, poor soil fertility, degradation of soil properties, etc..		Resource Conservation Technology	Resource Conservation Technology in rice based cropping system.	Resource Conservation Technology		Seeds and fertilizer
	Varietal evaluation	Maize	Poor yield of local varieties of maize and unscientific method of cultivation		Introduction and varietal performance of DA 61-A	Nutritional importance of Quality Protein Maize (QPM) varieties			Seeds and fertilizer
	Exotic vegetables	Broccoli	Low income	-	Scientific Package of practices of Broccoli var. 'Solan Green Head'	Exotic vegetables production	-	Trainings, method demonstrations.	Vermicompost,FYM,seeds,bio-fungicide,bio-pesticide.
	Nutrient Management	Gerbera	Degradation of soil health due to injudicious use of chemical fertilizers	-	Use of organic substrate media for growing gerbera. (leafmould,fym,vermicompost)	Production of export potential ornamental plants	-	Trainings,Method demonstrations.	Vermicompost,FYM,Seedlings,bio-pesticides,bio-fungicides

	Varietal Evaluation	Tomato	Late Blight	-	Scientific package of practices of tomato var. Megha Tomato 3 (MT 3)	Production of export potential vegetables	-	Trainings, Method demonstrations.	Vermicompost,FYM,Seeds,bio-pesticides,bio-fungicides
	Seed production	Broccoli	Non availability of open pollinated seeds	Seed production of Broccoli	-	Seed production of vegetable crops	-	Trainings, method demonstrations.	Vermicompost,FYM,Seedlings,bio-pesticides,bio-fungicides
	Varietal Evaluation	Capsicum	High infestation of Anthracnose fruit rot	Scientific package of practices of Capsicum var. 'California Wonder	-	Production of low volume and high value crops	-	Trainings, method demonstrations.	Vermicompost,FYM,Seeds,bio-pesticides,bio-fungicides
	Biological control	Potato	High incidence of late blight in potato	Use of *Trichoderma viridae* for management of late blight in potato	NIL	Use of bio agents and bio pesticides for management of insect pests in potato	NIL	**Training, Method demonstration**	FYM , Vermicompost, potato tuber, *Trichoderma viridae*

	Biological control	Tomato	Fruit and shoot borer infestation (*Helicoverpa armigera*)	Use of *Beauveria bassiana f*or management of *Helicoverpa armigera* in tomato	NIL	Use of bio agents and bio pesticides for management of insect pests in tomato	NIL	**Training, Method demonstration**	FYM, *Trichoderma viridae*, *Beauveria bassiana*, Nimbecidine
	Mushroom cultivation	Mushroom	Farmers income is not sufficient enough to meet their needs	Cultivation of mushroom (Oyster mushroom)	NIL	Low cost production of oyster mushroom	NIL	**Training, Method demonstration**	Oyster spawn , Nimbecidine , straw
	Product performance	Ginger	Occurrence of soft rot in ginger	NIL	Product performance (GF 1) for controlling soft rot of ginger.	Spice production and management of ginger	Nil	Training, Method demonstration	GF 1, FYM
	Biological control	Cabbage	Cabbage butterfly (*Pieris brassicae*) infestation	NIL	Use of Trichocards (*Trichogramma brassicae*) for controlling Cabbage butterfly	Biological control of insect pest in cabbage	NIL	Training, Method demonstration	FYM, *Trichoderma viridae*, *Beauveria bassiana*, Nimbecidine

	Biological control	Pea	Occurrence of *Rhizoctonia* rot	NIL	Use of *Trichoderma viridae* for management of *Rhizoctonia* rot of pea	Use of bio-pesticides for management of insect pests in pea	NIL	Training, Method demonstration	Seeds, FYM, *Trichoderma viridae*
	Dissemination time/ Loss of technologies	-	Lack of information about the marketing efficiency of various marketing channels in the district	Study on the Marketing efficiency of various marketing channels of cole crops in East Khasi Hills District	-	-	-	PRA, Diagnostic Visits, Group Discussion, Interview	-
	Impact Assessment	-	Lack of information on the extension contacts used by farmer of the district	Study on the level of extension contacts used by the farmers of East Khasi Hills District	-	-	-	PRA, Diagnostic Visits, Group Discussion, Interview	-

	Dissemination time/ Loss of technologies	-	Lack of information on the best combination of training aids for farmer training	Action Mode Study on the effect of the combination of Extension Training aids on the knowledge gain in training on Production of low volume high value crops in East Khasi Hills	-	-	-	PRA, Diagnostic Visits, Group Discussion, Interview	-
	Impact Assessment	-	-	**-**	Impact assessment on cultivation of off season vegetables in east Khasi Hills	-	-	PRA, Diagnostic Visits, Group Discussion, Interview	-

	Others	-	-	-	Participatory Video Production	-	-	PRA, Diagnostic Visits, Group Discussion, Interview	-
	Seed Production	Fish	Unavailability of fingerlings	Controlled Breeding of common carp		Common carp breeding wild and happa breeding	-	Method Demonstration., Diagnostic visits, Group Discussion	
	Seed Production	Fish	Unavailability of fingerlings	Induced breeding of carps in FRP hatchery		Carp breeding in eco and FRP hatchery		Method Demonstration., Diagnostic visits, Group Discussion	

	Ornamental fisheries	Fish	Low income of the farmers	Ornamental fish Breeding		Culture and breeding of ornamental fishes		Method Demonstration, Diagnostic visits, Group Discussion	
	Pond management	Fish	Unmanaged fish ponds		Composite fish culture	Composite fish culture		Method Demonstration., Diagnostic visits, Group Discussion	Fingerlings, lime, Feed
	IFS Modules	Fish Pig	Under fertilized fish ponds		Fish cum pig culture	Composite fish culture, Pond based integrate farming system		Method Demonstration., Diagnostic visits, Group Discussion	Fingerlings, lime, Feed, Piglets, Ducklings

	IFS Modules	Fish Duck	Under fertilized fish ponds		Fish cum duck culture	Composite fish culture, Pond based integrate farming system		Method Demonstration., Diagnostic visits, Group Discussion	Fingerlings, lime, Feed, Ducklings

3.1 Achievements on technologies assessed and refined during 2015-16

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	2	-	1	-	2	-	-	-	-	5
Seed / Plant production	-	-	-	-	1	-	-	-	-	1
Weed Management	-	-	-	-	-	-	-	-	-	-
Integrated Crop Management	-	--		-	--		-	-	-	-
Integrated Nutrient Management	-	-	-	-	-	-	-	-	-	-
Integrated Farming System	-	-	-	-	-	-	-	-	-	-
Mushroom	-	-	-	-	1	-	-	-	-	1

cultivation										
Drudgery reduction	-	-	-	-		-	-	-	-	
Farm machineries	-	-	-	-		-	-	-	-	
Value addition	-	-	-	-		-	-	-	-	
Integrated Pest Management	-	-	-	-		-	-	-	-	
Integrated Disease Management	-	-	-	-		-	-	-	-	
Resource conservation technology	1	-	-	-	-	-	-	-	-	1
Small Scale income generating enterprises		-	-	-	-					
Biological control of insect pests and diseases	-	-	-	-	2	-	-	-	-	2
TOTAL	3	-	1	-	6	-	-	-	-	10

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

A.2. Abstract of the number of technologies **refined*** in respect of crops/enterprises

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	-	-	-	-	-	-	-		-	-
Seed / Plant production	-	-	-	-	-	-	-		-	-
Weed Management	-	-	-	-	-	-	-		-	-
Integrated Crop Management	-	-	-	-	-	-	-		-	-
Integrated Nutrient Management	-	-	-	-	-	-	-		-	-
Integrated Farming System	-	-	-	-	-	-	-		-	-
Mushroom cultivation	-	-	-	-	-	-	-		-	-
Drudgery reduction	-	-	-	-	-	-	-		-	-
Farm machineries	-	-	-	-	-	-	-		-	-
Post Harvest Technology	-	-	-	-	-	-	-		-	-
Integrated Pest Management	-	-	-	-	-	-	-		-	-
Integrated Disease Management	-	-	-	-	-	-	-		-	-
Resource conservation technology	-	-	-	-	-	-	-		-	-

Small Scale income generating enterprises	-	-	-	-	-	-	-		-	-
TOTAL	-	-	-	-	-	-	-		-	-

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

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

Thematic areas	**Cattle**	**Poultry**	**Sheep**	**Goat**	**Piggery**	**Rabbitary**	**Fisheries**	**TOTAL**
Evaluation of Breeds	-	-	-	-	-	-	-	
Nutrition Management	-	-	-	-	-	-	-	
Disease of Management	-	-	-	-	-	-	-	
Value Addition	-	-	-	-	-	-	-	
Production and Management	-	-	-	-	-	-	4	4
Feed and Fodder	-	-	-	-	-	-	-	
Small Scale income generating enterprises	-	-	-	-	-	-	-	
TOTAL	-	-	-	-	-	-	4	4

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

Thematic areas	**Cattle**	**Poultry**	**Sheep**	**Goat**	**Piggery**	**Rabbitry**	**Fisheries**	**TOTAL**
Evaluation of Breeds	-	-	-	-	-	-	-	

Nutrition Management	-	-	-	-	-	-	-	
Disease of Management	-	-	-	-	-	-	-	
Value Addition	-	-	-	-	-	-	-	
Production and Management	-	-	-	-	-	-	-	
Feed and Fodder	-	-	-	-	-	-	-	
Small Scale income generating enterprises	-	-	-	-	-	-	-	

A.5. Results of On Farm Testing

Sl. No.	Title of OFT	Problem Diagnosed	Name of Technology Assessed	Crop/Cropping system/ Enterprise	No. of Trials	Results of Assessment/ Refined (Data on the parameter should be provided)	Feedback from the farmer	Feedback to the Researcher	B.C . Ratio (if applicable)
1.	Introduction and scientific package of practices of babycorn var RCM 1-1, RCM 1-3	Non-availability of fresh babycorn and locally processed babycorn.	Introduction and scientific package of practices of babycorn var RCM 1-1, RCM 1-3	Babycorn/ Babycorn-Cabbage	4	Yield: 1.2 t/ha Avg Plant ht: 155.9 cm Average No. of cobs per plant: 4	Good yield obtained and impressed from the returns which was more than he could get from maize	Late sowing gave good results in mid altitude whereas in higher altitude both vegetative	3.70

							grain.	and reproductive growth is restricted	
2.	Introduction and scientific package of practices of soybean var. JS-336	Low Cropping intensity and absence of leguminous crop in cropping system.	Introduction and scientific package of practices of soybean var. JS-336	Soybean/ Soybean-Maize	7	Average pod Yield: 2.5 t/ha Average straw yield:9.77	Good yield obtained and impressed from the returns.	Duration of crop is more in higher altitude compared to mid altitude.	4.03
3.	Scientific package of practices of Capsicum var. 'California Wonder'	Low income	Production of low volume, high value crops	Capsicum/Mono-cropping	5	Avg. Yield: 16q/ha No. of fruits/ plant : 6 nos. Wt. of 6 fruits: 1.12kg	The variety gives an average yield with minimum two pickings/plant. The incidence of Anthracnose is very less.	The variety does well in East Khasi Hills of Meghalya. Farmers are happy with the performance and it fetches a good price in the market.	2.7
4.	Seed production of Broccoli	Non availability of open pollinated	Seed Production	Broccoli/Mono-cropping	4	Avg. Yield: 0.0018q/100 m^2 100 m^2 = 140 nos. of plants.	The amount of seeds produced is not	The performance of seed production in Broccoli is	2.9

		seeds				Avg. Yield from one head= 10 gms	satisfactory.	not very good.	
5.	Use of *Trichoderma viridae* for management of late blight in potato	High incidence of late blight in potato	Use of *Trichoderma viridae* for management of late blight in potato	Potato	10	Yield (treated)- 7.2 t/ha Gross return- Rs. 144000 Disease incidence- For 10,000 m^2- 20-30% For 25m^2- 15% Yield (control) – 5/ha Gross return- Rs. 100000 Disease incidence- For 10000m^2- 50-60% For 25 m^2- 30-40%	The farmers expressed that the used of *Trichoderma viridae* is safe and found to be effective, it is eco-friendly, reduce health risks, costs and environmental damage. The farmers are willing to use again for the next coming year.		1.28
6.	Use of *Beauveria bassiana f*or	Fruit and shoot borer infestation	Use of *Beauveria bassiana f*or	Tomato	15	Yield (treated)- 12 t/ha	The used of *Beauveria bassiana* is		3.4

	management of *Helicoverpa armigera* in tomato	(*Helicoverpa armigera*)	management of *Helicoverpa armigera* in tomato			Gross return- Rs.2,16,000 Disease incidence- For 10,000 m^2- 9.6% For 25m^2-7.7 % Yield (control) - 6t/ha Gross return- Rs. 108000 Disease incidence- For 10000m^2- 21% For 25 m^{2-} 11%	found to be effective against fruit and shoot borer in tomato. The farmer's feels that the use of bio agents has reduced the use of chemical pesticides and help to produce chemical free agricultural products which do not pose any health hazards to human being. The farmers are willing to use again for the next coming year.		
7.	Cultivation of mushroom (Oyster mushroom)	Insufficient income of the farmer	Cultivation of mushroom (Oyster mushroom)	Mushroom	20	Yield – 1200kg/6months Gross income - 300000 Net income- 2,25,840	The farmers feel that the cultivation of oyster mushroom was much easier and it is less time consuming. Cultivation of oyster mushroom has		4.04

							increased their income, since it fetches a good price in the market. The farmers are willing to cultivate again and increase their mushroom units.		
8.	Study on the level of extension contacts used by the farmers of East Khasi Hills District	Lack of information on the extension contacts used by farmer of the district	Level of extension contact	-	3	a. Extent of Extension contact b. Source of Input c. Source of finance d. Level of aspiration	Majority of farmers gets information on types of inputs from the input dealers. KVK are sources for knowledge of new technologies for a majority of farmers	-	-
9.	Study on the Marketing efficiency of various marketing	Lack of information about the marketing efficiency of various	Marketing efficiency of marketing channels	-	3	a. Risk Bearing ability b. Farmers share in	Majority of farmers does not have a say on the price of the product.	-	-

	channels of cole crops in East Khasi Hills District	marketing channels in the district				consumer money c. Adoption d. Socio-personal characteristics e. Income earned from during the previous year	Majority of the farmers sell the produce directly to the wholeseller at the market		
10.	Action Mode Study on the effect of the combination of Extension Training aids on the knowledge gain in training on Production of low volume high value crops in East Khasi Hills	Lack of information on the best combination of training aids for farmer training	Extension Training aids	-	3	a.Level of knowledge enhanced b. Achievement Motivation	A combination of a number of extension training aids gives more knowledge	-	-
11	Evaluation of	Enhancin	Evaluation of Amur Common	Fish/	3	-	-	-	-

	Amur Common carp in rice fish systems	g farmer income	carp in rice fish systems	Rice						
12	Breeding of Common carp	Unavailability of fingerlings	Breeding of Common carp	Fish	3	Avg. Fish Weight (Kg)	F=4.5 M=4.2	Survivability and production of fingerlings is more with this technology		-40.0
						Latency time (h)	16 hrs			
						Survival (%)	65.00			
13	Ornamental fish breeding	Enhancing farmer income	breeding of Ornamental fish	Fish	2	Avg. Fish Weight (g)	F=300 M=280	Farmers are keen to take up this technology provided a proper market is available.		-65.7
						Hormone Dose (ml/Kg body Wt)	F=0.2-0.3 M=0.1-0.2			
						Survival (%)	70.00			
14	Induced breeding of carps using Gonopro-FH	Unavailability of fingerlings	Induced breeding of Silver carp using Gonopro-FH	Fish	3	Avg. Fish Weight (Kg)	F=4.5 M=4.2	It is a new venture for him, more training and demonstration is required		-95.00
						Hormone Dose (ml/Kg body Wt)	F=0.4-0.5 M=0.1-0.2			

						Spawning result	Complete			
						Response time	9-10 hours			
						Fertilization (%)	79.00			
						Hatching (%)	65.00			
			Induced breeding of Catla using Gonopro-FH			Avg. Fish Weight (Kg)	F = 2.5 M = 2.0			-81.0
						Hormone Dose (ml/Kg body Wt)	F= 0.3-0.4 M=0.1=0.2			
						Spawning result	Complete			
						Response time	9-10 hours			
						Fertilization (%)	80.00			
						Hatching (%)	65.00			

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

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

3.2 Achievements of Frontline Demonstrations during 2015-16

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

List of technologies demonstrated during previous year and popularized during 2014-15 and recommended for large scale adoption in the district

Sl. No	Crop/ Enterprise	Technology demonstrated	Horizontal spread of technology		
			No. of villages	No. of farmers	Area in ha
	Maize	Introduction and varietal performance of Maize var. DA 61A	3	35	2.5
	Rice	Resource conservation Technology in rice-based cropping system	3	20	2.5
1	Pea	Use of *Trichoderma viridae* for management of *Rhizoctonia* rot of pea	20	1500	5
	Broccoli	Scientific package of practices	7	45	2.5
	Fish	Composite fish culture	4	10	1
	Fish/Pig	Fish cum Pig culture	2	5	0.2
	Fish/Duck	Fish cum Duck culture	1	5	0.1

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

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

Sl.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)	No. of farmers/	Reasons for shortfall in	Farming situation	Status of soil (Kg/ha)

No.							demonstration			achievement	(Rainfed/ Irrigated, Soil type, altitude, etc)	N	P	K
					Proposed	Actual	SC/ST	Others	Total					
1.	Maize	Varietal evaluation	Introduction and varietal performance of Maize var.DA 61A	May-August 4 months	2.5	2.5	35		35		Rainfed	451.2	50.5	140.4
	Rice	Climate Resilient Agriculture	Resource conservation Technology in rice-based cropping system	July-November 5months	2.5	2.5	20		20		Rainfed	422.6	56.5	166.8
2.	Broccoli	Exotic vegetable production	Scientific package of practices of Broccoli var. 'Solan Green Head'	Rabi 2015	1	1	30	-	30	-	RF Sandy clay loam, Alti.- 1240-1300 m	H 560	H 56	M 218.4
	Gerbera	Nutrient management	Use of organic substrate media for growing gerbera. (leafmould, fym,	Zaid 2015	0.05	0.05	22	-	22	-	RF Sandy clay loam, Alti.- 1200 m	H 564.1	H 54.88	M 268

			vermicompost)								H			
	Tomato	Varietal evaluation	Scientific package of practices of tomato var. Megha Tomato 3 (MT 3)	Rabi 2015	1	1	20	-	20	-	RF Sandy clay loam, Alti.- 1240-1300 m	H 561.2	H 56	L 76.16
	Pea	Biological control	Use of *Trichoderma viridae* for management of *Rhizoctonia* rot of pea	August, 2015	1	1	100		100		Rainfed Sandy loam to clay loam, Alti.- 1500 m	L 52.4	H 54.88	M 268
	Cabbage	Biological control	Use of Trichocards (*Trichogramma brassicae*) for controlling Cabbage butterfly	June - July,2015	1	1	90		90		Rainfed Sandy loam to clay loam, Alti.- 1500 m	H 568.03	H 205.18	L 98.56
	Ginger	Product performance	Product performance (GF 1) for	March, 2015	1	1	45		45		RF Sandy loam to clay	H 575.1	H 213.1	L 85.7

			controlling soft rot of ginger.								loam, Alti.-1100-1200 m	9	0	0
	-	Impact Assessment	Impact assessment on cultivation of off season vegetables in east Khasi Hills	-	-	-	-	-	-	-	-	-	-	-
	-	Others	Participatory video production	-	-	-	-	-	-	-	-	-	-	-

c. Performance of FLD on Crops

Sl. No.	Crop	Thematic area	Area (ha.)	Avg. yield (Q/ha.)		% increase in Avg. yield	Additional data on demo. yield (Q/ha.)		Data on parameters other than yield, e.g., disease incidence, pest incidence etc.		Econ. of demo. (Rs./ha.)				Econ. of check (Rs./Ha.)			
				Demo.	Check		H*	L*	Demo	Local	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR

	Maize	Varietal evaluation	2.5	61.0	32.0	47.54	63.0	59.0			38604.14	91500	52895.86	2.37	36027	44625	8600	1.46
	Rice	Climate Resilient Agriculture	2.5	29.8	26.6	10.73	30.0	26.4			32584.57	76650	44065.42	2.35	31429	68500	37017	2.17
	Broccoli	Exotic vegetable production	1	40	30	25	41	37	Comparatively less incidence of pest and diseases	Incidence of Aphidsand Cabbage butterfly	72074.69	280000	207925.31	3.8	59643.37	210000	150356.63	3.5
	Gerbera	Nutrient management	0.05	3500 nos. seedlings + 500 suckers	2800 nos. seedlings + 400 suckers	20	3800 nos. seedlings	3200 nos. seedlings	Infestation of cutworms and whiteflies. Presence of viral disease.	Infestation of cutworms,whiteflies. Presence of Powdery Mildew and viral disease.	12380.77	30500.00	18199.23	2.4	13858.44	24400.00	10541.56	1.7
	Tomato	Varietal evaluation	1	33.2	28	4.98	34	30	Infestation of Late blight.	Damping off,Infestation of Late blight and Tomato fruit and shoot borer.	32718.95	99600.00	66881.05	3.0	34328.25	84000.00	49671.75	2.4
	Pea	Biological control	**1**	**60**	**28**	**53.4**	**60**	**26**	Yield (treated)-6t/ha	Yield (control) – 2.8t/ha	**73650**	**240000**	**166350**	**3.3**	**50104**	**112000**	**61896**	**2.2**

									Gross return- Rs. 240000 Disease incidence - For 10,000 m^2- NIL For 25m^2- NIL	Gross return- Rs. 112000 Disease incidence- For 10000m^2- 20 % For 25 m^2- 16%								
	Cabbage	Biological control	1	220	120	27.27	220	180	Yield (treated)- 22t/ha Gross return- Rs. 4,40,000 Disease incidence - For 10,000 m^2- 8.5%	Yield (control) – 12t/ha Gross return- Rs. Disease incidence-For 10000m^2- 20% For 25 m^2- 10%	**115241**	**4,40,000**	**324758**	**3.8**	**110385**	**300000**	**189614**	**2.7**

									For 25m^2-5%									
	Ginger	Biological control	1						Yield (treated)-10 t /ha Gross return-Rs. 200000 Disease incidence - For 10,000 m^2-7.5 % For 25m^2-5.6 %	Yield (control) 7t /ha Gross return-Rs.140000 Disease incidence- For 10000m^2-20 % For 25 m^2-10%	**5749 2**	**20000 0**	**14250 8**	**3.5**	**5136 6**	**1400 00**	**88633**	**2.7**

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

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

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

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

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

d. Extension and Training activities under FLD on Crops

Sl.No.	Activity	No. of activities organised	Date	Number of participants			Remarks
				Gen	SC/ST	Total	
1	Field days	21	28th July'15, 29th July'15, 3rd Aug'15, 19th Oct'15, 10/9/15, 20/10/15, 10/11/15,20/11/15,17/12/15, 15.06.15,16.06.2015,01.09.2015, 02.09.2015, 12.09.2015, 13.09.2015, 03.11.2015, 04.11.2015		539	529	
2	Farmers Training	39	6th April '15, 12th April '15,3rd May'15, 4th May'15,12th Aug'15, 22/5/15, 2/6/15, 21/7/15, 3/8/15, 15/10/15, 16/10/15, 26/11/16, 7/12/15, 28/1/16, 23/2/16, 18/3/16, 1st, 13th, 20th, 27th April, 2015; 20th 27th May, 2015; 25th, 26th June, 2015; 21st, 30th July, 2015; 3rd Aug.,2015; 2nd, 27th Sept. 2015; 6th, 27th Oct. 2015; 18th Nov. 2015; 8th Dec. 2015; 14th Jan.2016; 3rd Feb.2016; 3rd March,2016		1093	1093	
3	Media coverage	6	22/6/15, 16/7/15, 24/7/15,30/10/5, 6th April, 1st June.,22nd Sept., 2015; 5th Oct.,2015,				
4	Training for extension functionaries	2	22nd March'16, 22/3/16		40	40	
5	Any other (Pl. specify)	7	6th April '15, 12th April '15,3rd May'15, 4th May'15,12th Aug'15, 5/12/15, 18/3/16		265	265	
	Total						

e. Details of FLD on Enterprises

(i) Farm Implements

Name of the implement	Crop	No. of farmers	Area (ha)	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
-	-	-	-	-	-		-	-

**** Field efficiency, labour saving etc.***

(ii) Livestock Enterprises

Sl. No.	Enterprise/ Category (e.g., Dairy, Poultry etc.)	Thematic area	Name of Technology	No. of farmers	No. of units	No. of animals, poultry birds etc.	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)				Econ. of check (Rs./Ha.)				Remarks
							Demo	Check		Demo	Check	GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**** GC- Gross Cost, GR- Gross Return, NR- Net Return, BCR- Benefit-Cost Ratio**
Produce Sale Price must be as per MSP or Registered Marketing Society
Pl. apply the formula: Net Return= Gross Return-Gross Cost, BCR= GR/GC

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

(iii) Fisheries

Sl. No.	Category, e.g. Common carp, ornamental fish etc.	Thematic area	Name of Technology	No. of farmers	No. of units	No. of fish/ fingerlings	Major Performance parameters / indicators		% change in the parameter	Other parameters (if any)		Econ. of demo. (Rs./Ha.)					Econ. of check (Rs./Ha.)				Remarks
							Demo (B:C ratio)	Check (B:C ratio)		Demo	Check		GC**	GR**	NR**	BCR**	GC	GR	NR	BCR	
1	IMC & Exotic Carps	Pond Management	Composite fish culture	10	10	Fish - 10000	1.5	1.2	125	-			21500	31500	10000	1.5	11400	13500	2100	1.2	

2	IMC & Exotic Carps /Pig	IFS Modules	Fish cum pig culture	4	2	Fish – 2000 Pig - 2	1.7	1.2	141	-		Fish	21500	37500	16000	1.7	11400	13500	2100	1.2	
												Meat	15000	36000	21000	2.4	-	-	-	-	
												Total	36500	73500	37000	2.0	11400	13500	2100	1.2	
3	IMC & Exotic Carps /Duck	IFS Modules	Fish cum Duck culture	1	1	Fish – 1000 Duck - 10	1.7	1.2	141	-		Fish	21500	36000	14500	1.7	11400	13500	2100	1.2	
												meat	2500	3600	1100	1.4	-	-	-	-	
												Eggs	-	2700	-	1.8	-	-	-	1.2	
												Total	**24000**	**42300**	**15600**		**1.8**			**1.2**	
												Total									

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

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

(iv) Other enterprises

Sl. No.	**Category/ Enterprise, e.g., mushroom, vermicompost,**	**Thematic area**	**Name of Technology**	**No. of farmers**	**No. of units**	**Major Performance parameters / indicators**		**% change in the parameter**	**Other parameters (if any)**		**Econ. of demo. (Rs./Ha.)**				**Econ. of check (Rs./Ha.)**				**Remarks**
						Demo	**Check**		**Demo**	**Check**	**GC****	**GR****	**NR****	**BCR***	**GC**	**GR**	**NR**	**BCR**	

	apiculture etc.													*					
	Mushroom	**Cultivation of mushroom**	**Low cost production of oyster mushroom**	30	10	Yield 1200kg/6months					**74160.45**	**3000000**	**225840**	**4.04**					

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

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

(v) Farm Implements and Machinery

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

f. Performance of FLD on Crop Hybrids

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

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

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

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

3.3. Achievements on Training

3.3.1. Farmers and Farm Women in On Campus including Sponsored On Campus Training Programmes (*Sp. On means On Campus training programmes sponsored by external agencies)

Thematic area	No. of Courses/ prog			Participants																		
				General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	On-Campus (1)	Spon On* (2)	Total (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)	Grand Total (x + y)
I. Crop Production																						
Weed																						

Management																						
Resource Conservation Technologies	1	-	1	-	-	-	-	-	-	10	-	12	-	22	-	10	-	12	-	22	-	22
Cropping Systems	1	-	1	-	-	-	-	-	-	9	-	11	-	20	-	9	-	11	-	20	-	20
Crop Diversification	4	-	4	-	-	-	-	-		69	-	54	-	123	-	69	-	54	-	123	-	123
Integrated Farming																						
Water management	1	-	1	-	-	-	-	-	-	10	-	14	-	24	-	10	-	14	-	24	-	24
Seed production	1	-	1	-	-	-	-	-	-	16	-	16	-	32	-	16	-	16	-	32	-	32
Nursery management																						
Integrated Crop Management	1	-	1	-	-	-	-	-	-	10	-	6	-	16	-	10	-	6	-	16	-	16
Fodder production	1	-	1	-	-	-	-	-	-	5	-	7	-	12	-	5	-	7	-	12	-	12
Production of organic inputs	1	-	1	-	-	-	-	-	-	20	-	6	-	26	-	20	-	6	-	26	-	26
II. Horticulture																						
a) Vegetable Crops																						
Production of low volume and high value crops	1		1							8		19		27		8		19		27		27
Off-season vegetables																						
Nursery raising																						

Exotic vegetables like Broccoli	2		2							27		20		47		27		20		47		47
Export potential vegetables	1		1							10		16		26		10		16		26		26
Grading and standardization																						
Protective cultivation (Green Houses, Shade Net etc.)																						
b) Fruits																						
Training and Pruning																						
Layout and Management of Orchards																						
Cultivation of Fruit	1		1							13		15		28		13		15		28		28
Management of young plants/orchards																						
Rejuvenation of old orchards																						
Export potential fruits																						
Micro irrigation systems of orchards																						
Plant																						

propagation techniques																						
c) Ornamental Plants																						
Nursery Management																						
Management of potted plants																						
Export potential of ornamental plants																						
Propagation techniques of Ornamental Plants																						
d) Plantation crops																						
Production and Management technology	1		1							44		68		112		44		68		112		112
Processing and value addition																						
e) Tuber crops																						
Production and Management technology																						
Processing and value addition																						
f) Spices																						
Production and Management technology	1		1							14		7		21		14		7		21		21
Processing and																						

value addition																						
g) Medicinal and Aromatic Plants																						
Nursery management																						
Production and management technology																						
Post harvest technology and value addition																						
III Soil Health and Fertility Management																						
Soil fertility management	1	-	1	-	-	-	-	-	-	10	-	10	-	20	-	10	-	10	-	20	-	20
Soil and Water Conservation																						
Integrated Nutrient Management	1	-	1	-	-	-	-	-	-	10	-	14	-	24	-	10	-	14	-	24	-	24
Production and use of organic inputs																						
Management of Problematic soils	1	-	1	-	-	-	-	-	-	5	-	7	-	12	-	5	-	7	-	12	-	12
Micro nutrient deficiency in crops	1	-	1	-	-	-	-	-	-	14	-	11	-	25	-	14	-	11	-	25	-	25
Nutrient Use Efficiency																						
Soil and Water Testing																						
IV Livestock Production and Management																						
Dairy																						

Management																						
Poultry Management																						
Piggery Management																						
Rabbit Management																						
Disease Management																						
Feed management																						
Production of quality animal products																						
V Home Science/Women empowerment																						
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	1	-	1	-	-	-	-	-	-	10	-	15	-	25	-	10	-	15	-	25	-	25
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. Engineering																						
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																						
Integrated Pest Management	1	-	1		-	-	-	-	-	44	-	68		112		44		68		112		112
Integrated Disease Management																						
Bio-control of pests and diseases	3		3							26		81		107		26		81		107		107
Production of bio control agents and bio pesticides																						
VIII Fisheries																						
Integrated fish farming	2		2	14		32		46								14		32		46		46
Carp breeding and hatchery management	2		2	10		5		15								10		5		15		15
Carp fry and fingerling																						

rearing																						
Composite fish culture																						
Hatchery management and culture of freshwater prawn																						
Breeding and culture of ornamental fishes	1		1	5		10		15									5		10		15	15
Portable plastic carp hatchery																						
Pen culture of fish and prawn																						
Shrimp farming																						
Edible oyster farming																						
Pearl culture																						
Fish processing and value addition																						
IX Production of Inputs at site																						
Seed Production	1	-	1	-	-	-	-	-	-	16	-	16	-	32	-	16	-	16	-	32	-	32
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																						
Production of Fish feed																						
X Capacity Building and Group Dynamics																						
Leadership development	1	-	1	-	-	-	-	-	-	12	-	15	-	27	-	12	-	15	-	27	-	27
Group dynamics																						
Formation and Management of SHGs	1	-	1	-	-	-	-	-	-	9	-	15	-	24	-	9	-	15	-	24	-	24
Mobilization	2	0	2	-	-	-	-	-	-	25	-	29	-	54	-	25	-	29	-	54	-	54

of social capital																						
Entrepreneurial development of farmers/youths																						
WTO and IPR issues	1	0	1	-	-	-	-	-	-	12	-	15	-	27	-	12	-	15	-	27	-	27
XI Agro-forestry																						
Production technologies																						
Nursery management																						
Integrated Farming Systems																						
TOTAL																						

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

Thematic area	No. of Courses/ prg.			Participants																		Grand Total
				General						SC/ST						Total						
	Off	Sp Off*	Total	Male		Female		Total		Male		Female		Total		Male		Female		Total		
				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*	
I. Crop Production																						
Weed Management																						
Resource Conservation	1	-	1	-	-	-	-	-	-	10	-	5	-	15	-	10	-	5	-	15	-	15

Technologies																						
Cropping Systems																						
Crop Diversification																						
Integrated Farming																						
Water management	3	-	3	-	-	-	-	-	-	31	-	25	-	56	-	31	-	25	-	56	-	56
Seed production																						
Nursery management																						
Integrated Crop Management																						
Fodder production																						
Production of organic inputs	2	-	2	-	-	-	-	-	-	16	-	21	-	37	-	16	-	21	-	37	-	37
Tillage Management	1	-	1	-	-	-	-	-	-	7	-	10	-	17	-	7	-	10	-	17	-	17
II. Horticulture																						
a) Vegetable Crops																						
Production of low volume and high value crops																						
Off-season vegetables																						

Nursery raising																						
Exotic vegetables like Broccoli																						
Export potential vegetables																						
Grading and standardization																						
Protective cultivation (Green Houses, Shade Net etc.)																						
b) Fruits																						
Training and Pruning	1									9		13		22		9		13		22		22
Layout and Management of Orchards																						
Cultivation of Fruit	1									9		13		22		9		13		22		22
Management of young plants/orchards																						
Rejuvenation of old orchards	1									9		13		22		9		13		22		22
Export potential fruits																						
Micro irrigation																						

systems of orchards																						
Plant propagation techniques																						
c) Ornamental Plants																						
Nursery Management																						
Management of potted plants																						
Export potential of ornamental plants																						
Propagation techniques of Ornamental Plants																						
d) Plantation crops																						
Production and Management technology	1		1							17		6		23		17		6		23		23
Processing and value addition																						
e) Tuber crops																						
Production and Management technology	1		1							17		6		23		17		6		23		23
Processing and																						

value addition																						
f) Spices																						
Production and Management technology	1		1							15		9		24		15		9		24		24
Processing and value addition																						
g) Medicinal and Aromatic Plants																						
Nursery management																						
Production and management technology																						
Post harvest technology and value addition																						
III Soil Health and Fertility Management																						
Soil fertility management	1	-	1	-	-	-	-	-	-	22	-	18	-	40	-	22	-	18	-	40	-	40
Soil and Water Conservation																						
Integrated Nutrient Management	3	-	3	-	-	-	-	-	-	35	-	33	-	68	-	35	-	33	-	68	-	68
Production and use of organic inputs																						
Management of Problematic soils																						

Micro nutrient deficiency in crops																						
Nutrient Use Efficiency																						
Soil and Water Testing																						
IV Livestock Production and Management																						
Dairy Management																						
Poultry Management																						
Piggery Management																						
Rabbit Management																						
Disease Management																						
Feed management																						
Production of quality animal products																						
V Home Science/Women empowerment																						
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. Engineering																						
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																						
Integrated Pest Management	2		2							36		17		53		36		17		53		53
Integrated Disease Management	1	-	1	-	-	-	-	-	-	11		19	-	30	-	11	-	19	-	30		30

Bio-control of pests and diseases	4		4							155		99		254		155		99		254		254
Production of bio control agents and bio pesticides																						
VIII Fisheries																						
Integrated fish farming	3		3	40		25		65								40		25		65		65
Carp breeding and hatchery management	2		2	5		0		5								5		0		5		5
Carp fry and fingerling rearing																						
Composite fish culture	5		5	27		19		46								27		19		46		46
Hatchery management and culture of freshwater prawn																						
Breeding and culture of ornamental fishes																						
Portable plastic carp hatchery																						
Pen culture of fish and prawn																						

Shrimp farming																						
Edible oyster farming																						
Pearl culture																						
Fish processing and value addition																						
IX Production of Inputs at site																						
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																						
Production of Fish feed																						
X Capacity Building and Group Dynamics																						
Leadership development																						
Group dynamics	3	0	3	-	-	-	-	-	-	25	-	26	-	51	-	25	-	26	-	51	-	51
Formation and Management of SHGs	1	0	1	-	-	-	-	-	-	10	-	12	-	22	-	10	-	12	-	22	-	22
Mobilization of social capital	1	0	1	-	-	-	-	-	-	6	-	14	-	20	-	6	-	14	-	20	-	20
Entrepreneurial development of farmers/youths																						
WTO and IPR issues	2	0	2	-	-	-	-	-	-	23	-	28	-	51	-	23	-	28	-	51	-	51
XI Agro-forestry																						
Production technologies																						
Nursery																						

management																						
Integrated Farming Systems																						
TOTAL																						

(B) RURAL YOUTH

3.3.3. Achievements on Training Rural Youth in On Campus including Sponsored On Campus Training Programmes
(*Sp. On means On Campus training programmes sponsored by external agencies)

Thematic area	No. of Courses/ Prog			Participants																		Grand Total (x + y)
				General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	On (1)	Sp On* (2)	Total (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)	
Mushroom Production																						
Bee-keeping																						
Crop Diversification	2	-	2	-	-	-	-	-	-	35	-	33	-	70	-	35	-	33	-	70	-	70
Seed production																						
Production of organic inputs	3		3							69		76		145		69		76		145		145
Integrated Farming																						
Planting material production																						
Vermi-culture	1	-	1	-	-	-	-	-	-	28	-	52	-	80	-	28	-	52	-	80	-	80
Sericulture																						

Protected cultivation of vegetable crops																						
Commercial fruit production																						
Repair and maintenance of farm machinery and implements																						
Nursery Management of Horticulture crops																						
Training and pruning of orchards																						
Value addition																						
Production of quality animal products																						
Dairying																						
Sheep and goat rearing																						
Quail farming																						
Piggery																						
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/ Entrepreneurial development of youths/ Change Management	2	-	2	-	-	-	-	-	-	27	-	31	-	58	-	27	-	31	-	58	-	58
TOTAL																						
3.3.4. Achievements on Training of <u>Rural Youth</u> in <u>Off Campus</u> including <u>Sponsored Off Campus</u> Training Programmes (*Sp. Off means Off Campus training programmes sponsored by external agencies)																						

Thematic area	No. of Courses/ Prog.			Participants																				Grand Total
				General						SC/ST						Total								
				Male		Female		Total		Male		Female		Total		Male		Female		Total			
	Off	Sp Off	Total	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																								
Bee-keeping																								
Integrated farming	**1**		**1**		**15**		**15**		**30**								**15**		**15**		**30**		**30**	**30**
Seed production	**1**		**1**		**19**		**11**		**30**								**19**		**11**		**30**		**30**	**30**
Production of organic inputs																								
Integrated Farming																								
Planting material production																								
Vermi-culture																								
Sericulture																								
Protected cultivation of vegetable crops	1		1							10		10		20		10		10		20		20		20
Commercial fruit production																								
Repair and maintenance of farm machinery and implements																								

Nursery Management of Horticulture crops	1		1							5		15		20		5		15		20		20
Training and pruning of orchards																						
Value addition																						
Production of quality animal products																						
Dairying																						
Sheep and goat rearing																						
Quail farming																						
Piggery																						
Rabbit farming																						
Poultry production																						
Ornamental fisheries	1		1		13		17		30								13		17		30	30
Para vets																						
Para extension workers																						
Composite fish culture	1		1		14		16		30								14		16		30	30
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/ ICTs in Agriculture	1	-	1	-	-	-	-	-	-	13	-	15	-	28	-	13	-	15	-	28	-	28
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)

Thematic area	No. of Courses/ prog			Participants																		Grand Total (x + y)
				General						SC/ST						Total						
				Male		Female		Total		Male		Female		Total		Male		Female		Total		
	On (1)	Sp On* (2)	Total (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)	
Productivity enhancement in field crops																						
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																						

Household food security																						
Women and Child care																						
Climate Resilient Agriculture	1	-	1	-	-	-	-	-	-	10	-	10	-	20	-	10	-	10	-	20	-	20
Production and use of organic inputs																						
Gender mainstreaming through SHGs																						
Kitchen Garden in rural and urban areas	1		1							15		5		20		15		5		20		20
Biopesticides	1		1							15		5		20		15		5		20		20

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

Thematic area	**No. of Courses/ prog.**			**Participants**																		**Grand Total**
				General						**SC/ST**						**Total**						
				Male		**Female**		**Total**		**Male**		**Female**		**Total**		**Male**		**Female**		**Total**		
	Off	**Sp Off ***	**Total**	**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 ***	
Productivity enhancement in field crops																						
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																						
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 <u>Annexure</u> in the proforma given below

Annexure 1: Details of Training Programme (On Campus including Sponsored On Campus) for Farmers, Farm Women, Rural Youth and Extension Personnel

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue	Please specify Beneficiary group (Farmer & Farm women/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Agronomy	Crop diversification	Package of practises of groundnut cultivation	27th April, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	15	20	35	15	20	35
	Cropping System	Importance of cereal legume Inter-cropping for increasing cropping intensity, fertility build-up and raising	20th April, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	9	11	20	9	11	20

		farmers' income.														
	Crop diversification	Package of practises of upland rice.	25th June, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	10	6	16	10	6	16
	Integrated nutrient management	Nutrient Management	2nd May, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	10	14	24	10	14	24
	Management of problematic soils	Lime application to amend acidic soil.			KVK Centre	Farmer and Farm Women	-	-	-	10	10	20	10	10	20
	Fodder Production	Fodder production	21st July, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	5	7	12	5	7	12
	Production of Organic intputs	Organic Farming	15th May, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	20	6	26	20	6	26
	Integrated Water Management	Integrated Water Management	2nd Sept., 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	10	14	24	10	14	24
	Crop Diversification	Package of practices of babycorn	1st April, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	12	8	20	12	8	20
	Seed production	Seed production	8th Dec., 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	16	16	32	16	16	32
	Crop diversification	Nutritional importance of Quality Protein Maize (QPM) varieties	6th Oct., 2015	1	KVK Centre	Rural youth	-	-	-	30	15	45	30	15	45
	Micro nutrient deficiency in crops	Micro nutrient deficiency	18th November, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	14	11	25	14	11	25
	Climate Resilient Agriculture	Resource Conservation Technology	16th May, 2015	1	KVK Centre	Farmer and Farm Women	-	-	-	10	12	22	10	12	22
	Crop Diversification	Nutritional importance of	4th March, 2016	1	KVK Centre	Farmer and Farm Women	-	-	-	12	11	23	12	11	23

		Quality Protein Maize (QPM) varieties														
	Production of organic inputs	Vermicomposting	7th Oct., 2015	1	KVK Centre	Rural youth	-	-	-	20	15	35	20	15	35
	Crop diversificaion	Package of practices of babycorn	8th Oct., 2015	1	KVK Centre	Rural youth	-	-	-	30	45	75	30	45	75
Horticulture	Exotic Vegetable Production	Exotic Vegetable production like Broccoli	22nd May ‘15	2	KVK,EKH	Farmer & Farm Women				27	20	47	27	20	47
	Production of low volume,high value crops	Production of low volume, high value crops	22nd May ‘15	1	KVK,EKH	Farmer & Farm Women				8	19	27	8	19	27
	Export potential vegetables	Export potential vegetables	22nd May ‘15	1	KVK,EKH	Farmer & Farm Women				10	6	16	10	6	16
	Training and Pruning	Training and Pruning	12th June’15	1	KVK,EKH	Farmer & Farm Women				12	11	23	12	11	23
	Cultivation of fruit crops	Cultivation of fruit crops	12th June’15	1	KVK,EKH	Farmer & Farm Women				13	15	28	13	15	28
	Production & Management of tuber crops	Production & Management of tuber crops	12th June’15	1	KVK,EKH	Farmer & Farm Women				44	68	112	44	68	112
	Production & Management of Spices	Production & Management of Spices	3rd April’15	1	KVK,EKH	Farmer & Farm Women				14	7	21	14	7	21
	Production & Management of plantation crops	Production & Management of plantation crops	17th Feb’16	1	KVK,EKH	Farmer & Farm Women				44	68	112	44	68	112
	Nutritional gardening	Kitchen Garden in rural and urban areas	22nd March’16	1	KVK,EKH	Extension Personnel				15	5	20	15	5	20

Plant Protection	Integrated Pest management	Pest management in protected cultivation	23.2.16	1	KVK office	Farmer and farm women				44	68	112	44	68	112
	Biological control	1.Role of bio pesticides in management of Insect pest in vegetables 2. Bio rational management of Insect pest in rice 3. Role of bio pesticides in management of Insect pest 4.Biopesticides and its uses	22.5.15 21.7.15 15.10.15 22.3.16	1	KVK office	Farmer and farm women, Extension personnel				41	86	127	41	86	127
	Production of bio agents	1.On farm production of *Trichoderma* spp 2. On farm production of *Pseudomonas* spp 3. On farm production of *Trichogramma* 4. Cultivation of oyster mushroom	29.7.15, 24.9.15, 16.9.15 30.10.15	1	KVK office	Farmer and farm women, Rural Youth				69	76	145	69	76	145
Fisheries	Ornamental fisheries	Ornamental fish culture and breeding	08-01-16		KVK Centre	Farmer & Farm women				5	10	15	5	10	15
	Seed Production	Breeding of common carp wild and happa breeding	07-03-15		KVK Centre	Farmer & Farm women				10	5	15	10	5	15
	IFS Modules	Pond based	18-11-5		KVK	Farmer & Farm women				18	14	32	18	14	32

		integrated farming system			Centre											
	IFS Modules	Pond based integrated farming system			KVK Centre											
Agril. Extension	Capacity Building and Group Dynamics	Mobilisation of social capital in villages	15th July 2015, 15th February 2016	1 day	On Campus	Farmer & Farm Women	-	-	-	25	29	54	25	29	54
	Capacity Building and Group Dynamics	Formation and management of SHGs	13th November 2015	1 day	On Campus	Farmer & Farm Women	-	-	-	9	15	24	9	15	24
	Capacity Building and Group Dynamics	Change Management	16th December 2015	1 day	On Campus	Farmer & Farm Women	-	-	-	12	15	27	12	15	27
	Capacity Building and Group Dynamics	Leader ship development in villages	18th December 2015	1 day	On Campus	Farmer & Farm Women	-	-	-	12	15	27	12	15	27
	Women Empowerment	Gender mainstreaming through SHGs	6th January 2016	1 day	On Campus	Farmer & Farm Women	-	-	-	10	15	25	10	15	25
	Capacity Building and Group Dynamics	Entrepreneurial development of farmer/ rural youths	18th August 2015	1 day	On Campus	Rural Youth	-	-	-	15	15	30	15	15	30
	Capacity Building and Group Dynamics	Change Management	16th October 2015	1 day	On Campus	Rural Youth	-	-	-	12	16	28	12	16	28

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

Discipline	Area of training	Title of the training programme	Date (From – to)	Duration in days	Venue	Please specify Beneficiary group (Farmer & Farm women/ RY/ EP and NGO Personnel)	General participants			SC/ST			Grand Total		
							M	F	T	M	F	T	M	F	T
Agronomy	Integrated Water Management	Jalkund	13th April, 2015	1	Jaroit	Farmer and farm women	-	-	-	20	10	30	20	10	30
	Water MAnagement	System of Rice Intensification	26th June, 2015	2	Jaroit	Farmer and farm women	-	-	-	11	15	26	11	15	26
	Climate Resilient Agriculture	Resource Conservation Technology	27th May, 2015	1	Mawsiatkhnam	Farmer and farm women	-	-	-	10	5	15	10	5	15
	Production of organic inputs	Organic Farming	3rd February, 2015	1	Myliem	Farmer and farm women	-	-	-	6	11	17	6	11	17
	Production of organic inputs	Vermicomposting	30th July, 2015	1	Tynring	Farmer and farm women	-	-	-	10	10	20	10	10	20
	Soil fertility Management	Soil fertility Management	13th April, 2015	1	Jaroit	Farmer and farm women	-	-	-	22	18	40	22	18	40
	Soil fertility Management	Nutrient Management	20th May, 2015	1	Mawsiatkhnam	Farmer and farm women	-	-	-	6	5	11	6	5	11
	Soil fertility Management	Micro Nutrient Management	3rd Aug., 2015	1	Tynring	Farmer and farm women	-	-	-	22	18	40	22	18	40
	Integrated Nutrient Management	Nutrient Management in Rice	14th Jan., 2015	1	Mawsiatkhnam	Farmer and farm women	-	-	-	7	10	17	7	10	17
	Tillage Management	Zero tillage	27th Oct., 2015	1	Mawsiatkhnam	Farmer and farm women	-	-	-	7	10	17	7	10	17
Horticulture	Training and	Training and	6th	1	Sohryngkham	Farmer &				9	13	22	9	13	22

	Pruning	Pruning	April'15			Farm Women									
	Cultivation of fruit crops	Cultivation of fruit crops	6th April'15	1	Lyngkhoi	Farmer & Farm Women				9	13	22	9	13	22
	Orchard Management	Rejuvenationof old orchards	6th April'15	1	Lyngkhoi	Farmer & Farm Women				9	13	22	9	13	22
	Production &Management technology of tuber crops	Production &Management technology of tuber crops	17th Feb,16	1	Mylliem	Farmer & Farm Women				17	6	23	17	6	23
	Production &Management technology of spices	Production &Management technology of spices	23th Feb'16	1	Mawiong	Farmer & Farm Women				15	19	34	15	19	34
	Production &Management technology of plantation crops	Production &Management technology of plantation crops	23th Feb'16	1	Mawiong	Farmer & Farm Women				17	6	23	17	6	23
Plant Protection	Integrated Pest management	1.Integrated pest Management of spices and plantation crops 2. Integrated pest Management of fruit crops and flowers	3.8.15 26.11.15	1	Lulong and Mawdieja	Farmer and farm women				41	48	89	41	48	89
	Integrated Disease management	Identification of rice diseases and their management through IDM and IPM	16.10.15	1	Mawbeh	Farmer and farm women				12	20	32	12	20	32
	Biological control	1. organic management of rice 2. biological control of insect pest and diseases in citrus	25.6.15 7.12.15 28.1.16 18.3.16 24.7.15	1	12th mer, Mawpdai, Smit, Tynring Liarkhla	Farmer and farm women, rural youth				155	99	254	155	99	254

		3. Role of bio pesticides and their uses in vegetable crops. 4. Advantages of biopesticides over chemical pesticides 5. organic manage met of tomato														
Fisheries	IFS Modules	Pond based integrated farming system	5-5-15	1	Pynursla	Farmer & Farm women				10	6	16	10	6	
	IFS Modules	Pond based integrated farming system	12-2-16	1	Mawpun	Farmer & Farm women				21	14	16	21	14	
	IFS Modules	Pond based integrated farming system	17-3-16		Pynursla	Farmer & Farm women				9	5	14	9	5	
	Carp breeding and hatchery management	Breeding of carps in Chinese eco hatchery	2-6-15	1	Shella	Farmer & Farm women				5	0	5	5	0	
	Pond management	Composite fish culture in hills	8-7-15	1	Pynursla	Farmer & Farm women				5	0	5	5	0	
	Pond management	Composite fish culture in hills	8-8-15	1	Shella	Farmer & Farm women				10	5	15	10	5	
		Introduction to fish culture	3-9-15	1	MAMETI	Rural Youth				**15**	**15**	**30**	**15**	**15**	
	Pond management	Composite fish culture	3-9-15	1	MAMETI	Rural Youth				**19**	**11**	**30**	**19**	**11**	
	IFS Modules	Pond based integrated farming system	10-9-15	1	MAMETI	Rural Youth				13	17	30	13	17	
	Carp breeding and hatchery management	Broodstock management and breeding of commonly cultivable fish	10-9-15	1	MAMETI	Rural Youth				14	16	30	14	16	

		species													
Agril. Extension	Capacity Building and Group Dynamics	Managing Group Dynamics	22nd June 2016	1 day	Jaroit	Farmer & Farm Women	-	-	-	7	8	15	7	8	15
	Capacity Building and Group Dynamics	Resource Mobilisation in villages	14th September 2015	1 day	Mawlynggad	Farmer & Farm Women	-	-	-	6	14	20	6	14	20
	Capacity Building and Group Dynamics	Group Formation	16th September 2015	1 day	Tynring	Farmer & Farm Women	-	-	-	8	8	16	8	8	16
	Capacity Building and Group Dynamics	Formation and management of SHGs	14th December 2015	1 day	12th Mile	Farmer & Farm Women	-	-	-	10	12	22	10	12	22
	Capacity Building and Group Dynamics	Change Management	17th February 2016	1 day	Mawsynram	Farmer & Farm Women	-	-	-	15	19	34	15	19	34
	Capacity Building and Group Dynamics	Change Management	8th April 2015	1 day	Jaroit	Farmer & Farm Women	-	-	-	8	9	15	8	9	15
	Capacity Building and Group Dynamics	Group Formation	22th May 2015	1 day	Mawryngkneng	Farmer & Farm Women	-	-	-	10	10	20	10	10	20
	Capacity Building	ICTs in Agriculture	14th January 2016	1 day	Mawiong	Rural Youth	-	-	-	13	15	28	13	15	28

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date (From – To)	Duration (days	Area of training	Training title*	No. of Participants									Impact of training in terms of Self employment after training				Whether Sponsored by external funding agencies (Please Specify with amount of fund in Rs.)
					General			SC/ST			Total							
					M	F	T	M	F	T	M	F	T	Type of enterprise ventured into	Number of units	Number of persons employed	Avg. Annual income in Rs. generated through the enterprise	

*training title should specify the major technology /skill transferred

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

On/ Off/ Vocational	Beneficiary group (F/ FW/ RY/ EP)	Date (From-To)	Duration (days)	Discipline	Area of training	Title	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
							General			SC/ST			Total				
							M	F	T	M	F	T	M	F	T		
Total																	

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 2015-16

Sl. No.	Extension Activity	Topic	Date and duration	No. of activities	Participants											
					General (1)			SC/ST (2)			Extension Officials (3)			Grand Total (1+2)		
					M	F	T	M	F	T	M	F	T	M	F	T
1.	Advisory services	Preparation of nursery bed, Nursery raising of vegetables, Transplanting of vegetables, propagation of ornamentals, Seed Production, Biological control of insect pest and diseases in vegetable and fruit crops	7th April'15, 21st April'15, 10th May'15, 19th May'15,15th June'15, 21st June'15, 5th Jan'16,29th Jan'16, 1st Feb'16, 25/6/15, 1/7/15, 28/8/15, 9/9/15,15/9/15, 24/9/15, 20/10/15,12/11/15,17/11/15,23/3/16	30				920	1080	2080	100	100	200	1020	1180	2280
2.	Diagnostic visit	Bacterial blight in tomato, Powdery mildew in Gerbera, Cabbage butterfly in Broccoli, Anthracnose in Capsicum	8thApril'15, 22ndApril'15, 4thMay'15, 17th May'15,14th June'15, 24th June'15, 8th July'15,11th July'15, 25/3/15,30/4/15,12/5/15,13/5/15,22/5/15, 25/5/15,31/7/15,11/8/15,19/8/15,4/9/15, 11/9/15,20/10/15,5/11/15,17/11/15,9/12/15, 22/1/16, 19/2/16, 8/3/16, 18/3/16, **22/5, 23/8, 8.4.15, 17.4.5,5.5.15,3.6.15,5.6.15,16.6.15, 17.6.15, 8.7.15, 15.7.15, 30.7.15, 8.8.15, 15.8.15, 30.8.15, 8.9.15, 22.9.15, 24.9.15, 2.10.15, 16.10.15, 28.10.15, 30.10.15, 13.11.15, 27.11.15, 2.12.15, 7.12.15, 10.12.15, 4.1.16, 6.1.16, 19.2.16, 22.2.16, 13.3.16, 28.3.16, 20th ,13thApril, 2015; 25th, 26th, 28th, May, 2015; 15th 30th June, 2015; 21st 30th July, 2015; 3rd Aug., 2015; 3rd Sept., 2015; 6th 15th Oct.,2015; 7th Dec., 2015**	78				268	291	559	10	20	30	278	311	589
3.	Field day	Scientific package of	28th July'15, 29th July'15, 3rd Aug'15,	18				136	196	332	-	20	20	136	216	332

		practices of broccoli, Scientific package of practices of capsicum, Scientific package of practices of tomato,Use of organic media substrate for growing gerbera., Mushroom, tomato, cabbage, pea, potato	19th Oct'15, 20/10/15,10/11/15,20/11/15,17/12/15, 10/9/15, **20th 21st July, 2015; 1st 9th Oct., 2015; 16th 19th 20th November, 2015, 8th May 2015, 17 May 2015.**														
4.	Group Discussion	Preparation of nursery bed, line sowing in nursery bed, field preparation for transplanting vegetables, citrus decline, Training and pruning of fruit trees. Kitchen Garden. Organic farming	7th April'15, 21st April'15, 10th May'15, 19th May'15,15th June'15, 21st June'15, 8th July'15,11th July'15,3rd Aug'15,5th Jan'16,29th Jan'16, 1st Feb'16., 25/4/15,22/5/15,11/6/15,22/6/15,24/6/15, 25/6/15,1/7/15,6/7/15,29/7/15,11/7/15, 4/8/15, 1/9/15, 4/9/15, 13/10/15, 12/11/15, **11/6, 22/6, 16/7, 16/8, 12/9, 14/12, 12/1, 16/2, 19/2, 10.4.15, 24.4.15, 26.05.15, 8.7.15, 8.8.15, 24.2.16, 13th April, 2015; 13th May 2015; 15th June, 2015; 6th Oct., 2015; 7th Dec., 2015; 14th Jan., 2016, 22nd Feb., 2016.**	90				387	475	862	30	40	70	417	515	932
5.	Kishan Gosthi																
	Kishan Mela		16th July '15,23rd Feb'16	2				130	170	300	20	40	60	150	210	360	
6.	Film show	Khasi Documentary on soil testing, Seeds of Hope, Construction and environment control of greenhouses, Honey Production for additional employment and income generation, Production of Quality Vegetable Seedlings.	7th April'15, 21st April'15, 10th May'15, 19th May'15,15th June'15, 31/3/13, 26/6/15, 7/12/15, 17.3.16, 12th May, 2015; 10th Dec., 2015	8				258	195	453	-	50	50	258	245	503	
7.	SHG formation																

8.	Exhibition		16th July'15,28th-30th Jan'16,23rd Feb'16,15th-16th March'16,	4300				200	250	450						450
9.	Scientists visit to farmers fields		8thApril'15, 22ndApril'15, 4thMay'15, 17th May'15,14th June'15, 24th June'15, 8th July'15,11th July'15, 25/4/15, 30/4/15, 12/5/15, 13/5/15, 22/5/15, 25/5/15, 11/6/15, 22/6/15, 7/7/15, 10/7/15, 4/8/15, 5/8/15, 11/8/15, 28/8/15, 4/9/15, 9/9/15, 11/9/15, 15/9/15, 13/10/15, 20/10/15, 5/11/15,12/11/15,17/11/15, 9/12/15,15/12/15, 22/1/16, 19/2/16, 8.4.15, 17.4.5, 5.5.15, 3.6.15, 5.6.15, 16.6.15, 17.6.15, 8.7.15, 15.7.15, 30.7.15, 8.8.15, 15.8.15, 30.8.15, 8.9.15, 22.9.15, 24.9.15, 2.10.15, 16.10.15, 28.10.15, 30.10.15, 13.11.15, 27.11.15, 2.12.15, 7.12.15, 10.12.15, 4.1.16, 6.1.16, 19.2.16, 22.2.16, 13.3.16, 13th 20th April,2015; 13th 25th 26th 28th May2015; 15th June, 2015; 21st July, 2015 6th Oct., 2015; 20th Nov.,2015 7th Dec.,2015; 14th Jan., 2016; 22nd Feb., 2016	118				363	407	770	10	20	30	373	427	800
10.	Plant/ Animal Health camp																
11.	Farm science club																
12.	Ex-trainee Sammelan																
13.	Farmers seminar/ workshop	Usage of Agro textiles in protected cultivation and capacity building of the farmers, North east as an organic hub, post harvest handling and marketing of spice	4/11/15, 27/11/15, 15/3/16,	3				160	230	390	60	65	125	220	295	515
14.	Method	Nursery raising of	6th April '15, 12th April '15,3rd	53				251	392	643	10	30	40	261	422	683

	demonstration	vegetable, Nursery raising in pro-trays, Line sowing of vegetables, protective cultivation of gerbera, Kitchen Garden, seed production, Seed treatment and soil drenching with *Tichoderma viridae* for cabbage and pea, Use of Trichocards *Trichogramma brassicae* for cabbage, use of *Trichoderma viridae* for pea, use of bio organic GF 1 for ginger, *Beauveria bassiana*, and *Trichoderma viridae*, Seed treatment and seedling root treatment management with *Trichoderma viridae*, Use of Trichocards *Trichogramma brassicae* for cabbage, Mass production of *Trichoderma* spp, use of *Trichogramma brassicae* for management of cabbage butter fly, use of *Beauveria bassiana* for management of fruit and shoot bore in tomato, Use of trichocard *Trichogramma brassicae* for cabbage, use of *Trichoderma viridae* for pea, cultivation of oyster mushroom, soil drenching of *Trichoderma viridae* and use of yellow sticky trap on gerbera flowers, on	May'15, 4th May'15,12th Aug'15, 25/3/15, 12/5/15, 13/5/15, 22/5/15, 26/6/15, 31/7/15, 4/8/15, 5/8/15, 11/8/15, 12/8/15, 28/8/15,9/9/15,15/9/15,24/9/15, 20/10/15,12/11/15,17/11/15, 15/12/15, 19/2/16, 11/5, 15/7, 21/8, 28/9, 17.4.15, 18.4.15, 5.5.15, 5.6.15, 16.6.15, 30.7.15, 20.11.15, 22.2.16, 23.3.16, 25th 26th 28th May., 2015; 20th 23rd June, 2015; 3rd Aug., 2015													

		farm production of *Trichoderma viridae*, cultivation of oyster mushroom, use of baffle traps, Trichocards, seed treatment of pea with *T.viridae*, seed treatment of pea with *T.viridae*, Tuber treatment with *T.viridae*, Breeding of common carp, Importance of liming and fertilization in fish ponds, Importance of supplementary feeding for fishes, Breeding of carps in FRP hatchery, Methods of harvesting cultivable fishes from the pond														
15.	Celebration of important days	Soil health day "Soils a solid Ground for Life"	5th Dec'15	1				100	100	200	50	60	100	100	100	200
16.	Exposure visits			1	-	-	-	1	-	1	-	-	-	1	-	1
17.	Electronic media (CD/DVD)															
18.	Extension literature	Scientific Package of practices of Tomato Ka rukom Rep ia u Tit Oyster KI biopesticides /bio agents bad ka rukom pyndonkam Biofertilizers lane ki phngit jingim ba pynsboh ia la khyndew Ka Kalandar Ri		4												

		Dohkha (Fish farming calendar)															
19.	Newspaper coverage	Kisan Mela, Awareness programme, Soil health campaign	22nd June'15, 16th July,15,29th July'16,30th Oct'16	4													
20.	Popular articles																
21.	Radio talk	Composite fish culture	10.2.16	1													
22.	TV talk	Kitchen Garden, Nursery raising of Vegetables, Importance of Integrated Farming System	22nd April'15, 16.7.15	3													
23.	Training manual																
24.	Soil health camp		18th March'16	1				40	60	100				40	60	100	
25.	Awareness camp	Soil Health Card	18th March'16	1				40	60	100				40	60	100	
26.	Lecture delivered as resource person	Organic Farming, Cultivation of fruit crops, Rejuvenation of citrus orchard, Biocontrol of pest and diseases, use of *Trichoderma viridae* for management of diseases in tomato and ginger, Biological control of insect pests and diseases in citrus, Use of bio agents and bio pesticides in management of insect pest and diseases in vegetables , Use of bio agents and bio pesticides in management of insect pest and diseases in vegetables , use and benefits of bio pesticides and bio agents,	11th June'15,22nd June'15,1st July'15,12th July'15, 31/3/15, 25/4/15, 11/6/15, 22/6/15, 24/6/15, 25/6/15, 1/7/15, 6/7/15, 24/7/15, 29/7/15, 4/8/15, 18/8/15, 16/9/15, 24/9/15, 21/10/15, 30/10/15, 10.4.15, 24.4.15, 26.5.15 24.7.15, 24.8.15, 10.9.15, 15.9.15, 2.11.15 11.12.15	42				744	822	1566	40	23	63	784	845	1629	

		Application method and Uses of *Trichoderma viridae*, Organic management of tomato and ginger, Organic management of tomato, On farm production of *Trichogramma* sp., use of *Trichogramma brassicae* for management of cabbage butterfly, Biological control of insect pests and diseases in tomato, Application method and uses of *Trichoderma viridae*, On farm multiplication of *Pseudomonas* sp, Organic management of insect pest and diseases in rice, Role of bio pesticides for management of insect pests,															
27.	PRA	Marketing efficiency of various marketing channels, Extension contacts used by the farmers	12/4, 13/5, 21/6, 7/8,	5				80	120	200				80	120	200
28.	Farmer-Scientist interaction	Preparation of nursery bed, line sowing in nursery bed, field preparation for transplanting vegetables, citrus decline, Training and pruning of fruit trees. Kitchen Garden. Organic farming	7th April'15, 21st April'15, 10th May'15, 19th May'15,15th June'15, 21st June'15, 8th July'15,11th July'15,3rd Aug'15,5th Jan'16,29th Jan'16, 1st Feb'16. 31/7/15, 4/8/15, 5/8/15, 11/8/15, 12/8/15, 28/8/15,9/9/15,15/9/15,24/9/15, 20/10/15,12/11/15,17/11/15, 25/6/15, 1/7/15, 6/7/15, 24/7/15, 29/7/15, 4/8/15, 18/8/15, 16/9/15, 24/9/15, 21/10/15, 30/10/15,	110				316	338	654	30	80	110	346	418	764
29.	Soil test campaign			4	-	-	-	120	142	262	-	-	-	120	142	262

30.	Mahila Mandal Convener meet															
31.	Any other (Please specify)															
Grand Total				**579**	**-**	**-**	**-**	**4508**	**5323**	**9831**	**360**	**548**	**908**	**4868**	**5873**	**10739**

3.5 Production and supply of Technological products during 2015-16

A. SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Number of recipient/ beneficiaries		
					General	SC/ST	Total
CEREALS							
OILSEEDS							
PULSES							
VEGETABLES							
FLOWER CROPS							
OTHERS (Specify)	Potato	Kufri Jyoti, K. Megha & K. Girdhari	2 tons	40000.00		6	6

A1. SUMMARY of Production and supply of Seed Materials during 2015-16

Sl. No.	Major group/class	Quantity (ton.)	Value (Rs.)	Number of recipient/ beneficiaries		
				General	SC/ST	Total
1	CEREALS	-	-	-	-	-
2	OILSEEDS	-	-	-	-	-
3	PULSES	-	-	-	-	-

4	VEGETABLES	-	-	-	-	-
5	FLOWER CROPS	-	-	-	-	-
6	Potato	Kufri Jjyoti, K. Megha & K. Girdhari	40000.00	-	6	6
		TOTAL	40000.00		6	6

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

Major group/class	**Crop**	**Variety**	**Numbers (In Lakh)**	**Value (Rs.)**	**Number of recipient beneficiaries**		
					General	**SC/ST**	**Total**
Fruits	-	-	-	-	-	-	-
Spices	-	-	-	-	-	-	-
Ornamental Plants	Gerbera	Jaffana, Cantida, Leiki, Shania, Eiko, P. Intezz ,RCHG series	0.05	2500		2	2
VEGETABLES	Tomato	Megha Tomato 3	0.1	3000.00		4	4
	Broccoli	Solan Green Head	0.05	1500.00		2	2
	King Chilli	Kashi Anmol	0.02	600.00		2	2
	Capsicum	California Wonder	0.06	1800.00		3	3
Forest Spp.	-	-	-	-	-	-	-
Plantation crops	-	-	-	-	-	-	-
Medicinal plants							
OTHERS (Pl. Specify)	-	-	**0.28**	**9400**		**13**	**13**

B1. SUMMARY of Production and supply of Planting Materials (In Lakh) during 2015-16

Sl. No.	**Major group/class**	**Numbers (In Lakh)**	**Value (Rs.)**	**Number of recipient beneficiaries**		
				General	**SC/ST**	**Total**
1	**Fruits**	-	-	-	-	-
2	**Spices**	-	-	-	-	-
3	**Ornamental Plants**	0.05	2500		2	2

4	**VEGETABLES**	0.23	6900.00		11	11
5	**Forest Spp.**	-	-	-	-	-
6	**Medicinal plants**	-	-	-	-	-
7	**Plantation crops**	-	-	-	-	-
8	**OTHERS (Specify)**	-	-	-	-	-
TOTAL		0.28	9400		13	13

C. Production of Bio-Products during 2015-16

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Number of Recipient /beneficiaries		
			No	(qt)		General	SC/ST	Total
BIOAGENTS	-	-	-	-	-	-	-	-
BIOFERTILIZERS	-	-	-	-	-	-	-	-
BIO PESTICIDES	-	-	-	-	-	-	-	-

C1. SUMMARY of production of bio-products during 2015-16

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Number of Recipient beneficiaries		Total number of Recipient beneficiaries
			Nos	(kg)		General	SC/ST	
1	BIOAGENTS	-	-	-	-	-	-	-
2	BIO FERTILIZERS	-	-	-	-	-	-	-
3	BIO PESTICIDE	-	-	-	-	-	-	-
	TOTAL	-	-	-	-	-	-	-

D. Production of livestock during 2015-16

Sl. No.	Type of livestock	Breed	Quantity		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 2015-16

Sl. No.	Livestock category	Breed	Quantity		Value (Rs.)	Number of Recipient beneficiaries		Total number of Recipient beneficiaries
			Nos	(kg)		General	SC/ST	
1	CATTLE	-	-	-	-	-	-	-
2	SHEEP & GOAT	-	-	-	-	-	-	-
3	POULTRY	-	-	-	-	-	-	-
4.	PIGGERY	-	-	-	-	-	-	-
5	FISHERIES	*Cyprinus carpio*	100000	1000	100000		40	40
6	OTHERS (Pl. specify)	-	-	-	-	-	-	-
	TOTAL		100000	1000	100000		40	40

3.6. Literature Developed/Published (with full title, author & reference) during 2015-16

(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	-	-	-
Training manuals	-	-	-
Technical Report	-	-	-
Book/ Book Chapter	-	-	-
Popular articles		-	-
Technical bulletins	-	-	-
Extension bulletins	-	-	-
Newsletter	2	Programme Co ordinator, KVK, East Khasi Hills District	1000
Conference/ workshop proceedings	-	-	-
Leaflets/folders	U Sohsaw Ka rukom Rep ia u Tit Oyster KI biopesticides /bio agents bad ka rukom pyndonkam Biofertilizers lane ki phngit jingim ba pynsboh ia la khyndew Kak Kalandar Ri Dohkha (Fish Farming Calendar)	Smti. I. Kharkongor Programme Coordinator, A. Lyngdoh SMS (Horticulture), Smti. B. Chyne SMS(Plant Protection) B. Chyne, SMS (Plant Protection), Smt. I. Kharkongor (Programme Co ordinator), Dr. Dipali Majumder Associate Professor, J. Tariang SRF B. Chyne, SMS (Plant Protection), Smt. I. Kharkongor (Programme Co ordinator) Shanmebansan Marbaniang,, SMS Agril. Extension Baiaishahlang Syiemlieh, Farm Manager Shri. Samborlang Malngiang	3000

e-publications	-	-	-
Any other (Pl. specify)	-	-	-
TOTAL	-	-	**4000**

N.B. Please enclose a copy of each. In case of literature prepared in local language, please indicate the title in English

(C) Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD / Audio-Cassette)	Title of the programme	Number produced

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

Success Stories of KVK East Khasi Hills, Meghalaya.

a. **Production of off-season exotic vegetable**.

Introduction

Lumwahkrem is a village in Cherrapunjee which is situated at 25.220163 latitude and 91.667160 longitude with GPS coordinates of 25° 13' 12.5868" N and 91° 40' 1.776" E respectively. It is a place which receives annual rainfall of 11,777mm. The monsoon season starts from May end to October. This prolonged monsoon period confines the growing season of the village to the months of November to April. This peculiarity makes it possible for the farmers to produce off-season vegetables which fetches a handsome price in the market. To add to this, the village of Lumwahkrem produces vegetables which are grown organically. Their produce are devoid of any chemical fertilizers and pesticides. This special feature of their produce has made them popular among the residents of Cherrapunjee and Meghalaya as a whole. The office of the KVK, East Khasi Hills conducted PRA in the village to learn of the cropping pattern, problems faced by the farmers and knowledge of exotic vegetables. Upon studying the village and their agricultural practices, the KVK, EKH made an effort to introduce Broccoli in the village.

KVK Intervention:

1. The office of the KVK, East Khasi Hills wanted to create awareness of exotic vegetables to the farmers of Lumwahkrem village. Therefore, inorder to add to the income of the farmers and to introduce them to exotic vegetables , the KVK in the year 2014-15 Introduced Broccoli variety Solan Green Head as an On Farm Trial in the area.
2. Training on Package of practices of Broccoli was given to the farmers. Demonstration on nursery raising of broccoli was also done.

3. A few number of farmers showed interest in growing the vegetable and Shri. Kynpham Rapthap took the initiative to sow the broccoli seeds in his nursery and provide the seedlings raised to his fellow farmer friends.

Impact of intervention:

Prior to the intervention taken by the office of the KVK, EKH, the farmers of Lumwahkrem were not aware of the exotic vegetables especially Broccoli. They had no knowledge of the health benefits of Broccoli and its nutritional content. The vegetables that they grew mainly consisted of Tomato, Lettuce, Mustard leaves, Carrots, Peas, Frenchbean, cauliflower, cabbage, chillies, raddish, beetroot etc. As their produce are organic, they got a good price in the market. However with the introduction of broccoli, which grew very well in their village, they were able to increase their income. At the time Broccoli was a new exotic vegetable and it fetched a slightly higher price in the market compared to the other vegetables. As the farmers of Laitkynsew grew organic broccoli, they were able to sell their produce at a price of Rs. 80/kg and the Broccoli leaves sold at a price of Rs. 30/ bunch.

Fig 1. Broccoli Head

Fig 2. Broccoli at Laitkynsew

Conclusion:

As a result of the good production of Broccoli in the village in the initial stages, the farmers have started growing broccoli regularly. The office of the KVK, EKH was able to conduct Frontline demonstration of Broccoli in 2015-16. The number of farmers growing broccoli have grown from the initial 10 numbers to almost all the farmers residing in Lumwahkrem village. The most recent harvest of Broccoli was done in February 2016 by Shri. Kynpham Rapthap wherein he harvested 60 kgs and sold at a price of 80/kg.

Crop	Area(ha)	Production (kg)	Gross expenditure (Rs.)	Gross income (Rs.)	Net Income (Rs.)	B:C Ratio
Broccoli	**1**	**5000**	**111916.00**	**400000.00**	**288084.00**	**3.5**

b. Low cost mushroom production unit for producing Oyster mushroom

Introduction

Laitdiengsai Village is located at the north-eastern part of East Khasi Hills district under Mawkynrew Block predominantly a hilly area. It lies approximately between 21.7679° N Lat. and 78.8718° E Long. The climate of the area is temperate which permit cultivation of large varieties of horticulture crops including fruits, vegetables, flowers, spices, mushrooms and medicinal plants. The important vegetables grown include cabbage, cauliflower, garden pea, radish and potato. The temperature varies from 1.7 °C to 24 °C which favors the possibility of round year cultivation of oyster mushroom.

KVK intervention

Krishi Vigyan Kendra, East Khasi hills intervened and demonstrated the low cost production of oyster mushroom during 2014-15. The centre also supported the farmer by supplying him oyster spawns. Supports in terms of training on package of practices of Oyster mushroom was given in the village, and since the farmer was keen to start up with the new variety of mushroom, spawns were provided to him from the KVK centre. The intervention of KVK East Khasi Hills has inspired him and he has already set up a small unit for Oyster mushroom production. The KVK scientists are constantly monitoring the activities and are also providing him technical guidance to keep pests and diseases under control.

Impact of intervention

Before the intervention, Mr. Sworen Massar had been practising the traditional farm activities like crop cultivation, animal rearing and cultivation of button mushroom. However, the income from his activities was not sufficient enough to meet the needs. The introduction of oyster mushroom has increase the income of the farmer with a net income of Rs. 2, 25,840 and BC ratio of 4.04. The profit that the farmer gained from the production unit encourages him to have a wider thought of expanding his activity. Even other farmers of the village are impressed from the work that he has been doing and have come forward to express their interest to take up cultivation of oyster mushroom as one of their farm activity.

Conclusion

The farmer express that his income has been increase since oyster mushroom is very feasible in the area, it is economically viable and gives fast return and the farmer could maximize the production of mushroom through the optimum utilisation of space in his farm. He also mentioned the time taken for cultivation is very less and also the cultivation practices is very simple and can be easily follow and manage by him. Thus, mushroom cultivation could also be a source of income generation and self employment for the unemployed youth as well as farm women in the area.

Crop	Area	Yield kg/month	Mushroom sold	Gross expenditure	Gross Return (Rs.)	Net return	BC Ratio
Mushroom	200 m^2	200 kg/month (1200kg/6 month)	Oyster mushroom (Rs @250/kg)	**74160.00**	**300,000**	**225840.00**	**4.04**

Low cost mushroom shed

Mushroom bed after the polythene sheet has been removed

Oyster mushroom ready to be harvested

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

-Nil-

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

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

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

	Identification of courses for farmers/farm women	**Structured Questionnaires, Personal Interview, Scientist Farmers Interaction, PRA techniques,**
	Rural Youth	
	Extension personnel	

3.11 Field activities

i. Number of villages adopted : 15

ii. No. of farm families selected : 225

iii. No. of survey/PRA conducted:5

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab : Mridaparikshak Mini Soil Testing Lab newly established

1. Year of establishment : 2015
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	Mridaparikshak Mini Soil Test kit	1	75000
2	Refill of	2	42545
3	Miscellaneous	1	7475
Total		4	125000.00

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount (In Rupees) realized
Soil Samples	400	650	8	-
Water Samples	-	-	-	-
Plant Samples	-	-	-	-
Petiole Samples	-	-	-	-
Total	400	650	8	-

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

Message type	Crop		Livestock		Weather		Marketing		Awareness		Other Ent.		Total	
	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary	No. of Message	No. of Beneficiary
Text only	**30**	**2000**	-	-	-	-	4	400	**5**	**30**	-	-	**39**	**2430**
Voice only	**10**	**10**	-	-	-	-	-	-	**5**	**30**	-	-	**15**	**40**
Voice and Text both	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	**40**	**2010**	-	-	-	-	**4**	**400**	**10**	**60**	-	-	**54**	**2470**

3.14 Contingency planning for 2015-16

a. Crop based Contingency planning

Contingency (Drought/ Flood/ Cyclone/ Any other please specify)	Proposed Measure	Proposed Area (In ha.) to be covered	Number of beneficiaries proposed to be covered		
			General	SC/ST	Total
-	**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 distributed**	**No. of programmes to be undertaken**	**No. of camps to be organized**	**Proposed number of animals/ birds to be covered through camps**	**Number of beneficiaries proposed to be covered**		
					General	**SC/ST**	**Total**
-	-	-	-	-	-	-	-

4.0. IMPACT

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

Name of specific technology/skill transferred	**No. of participants**	**% of adoption**	**Change in income (Rs.)**	
			Before (Rs./Unit)	**After (Rs./Unit)**
Use of *Trichogramma brassicae* for management of cabbage butterfly (*Pieris brassicae*)	90	80%	Rs.324758	Rs.209614

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**
AROH foundation	Trainings and Method demonstration.
World Vision	Trainings and Method demonstration.
SASMIRA	Distribution of agro textile kits, Demonstration unit, Farmers workshop etc.
ICAR Research Complex for NEH Region, Umiam	Providing good planting materials for farmers
Central Potato Research Institute, Shimla	Collaborated in organizing Kisan Mela and training programmes
Agricultural Technology Management Agency, East Khasi Hills District, Meghalaya	Collaborated in organizing farmers training programme during the year, Delivered lectures as resource persons on various topics related to agriculture, horticulture, animal husbandry, fisheries etc Collaborated in popularizing ornamental fish culture and breeding among the farmers of East Khasi Hills District, Meghalaya
Meghalaya State Aquaculture Mission	Delivered lectures as resource persons on various topics related to aquaculture in East Khasi Hills District.
Department of Biotechnology, North Eastern Hills University, Shillong	Delivered lectures as resource persons on various topics related to aquaculture in East Khasi Hills District.
World Vision	Conducting demonstration on kitchen garden and providing trainings for their extension personnels and farmers
State Departments of Agri, Hort, V ety, fishery Soil Conservation and Forestry	Joint implementation of various programme

AIR , Shillong and DDK, Shillong, leading newspapers of Meghalaya	Publicity of various KVK programmes As experts in Radio talk shows, DDK phone in programmes
SIRD, Meghalaya	Suggestion for implementing various extension Programmes
NESAC, Meghalaya	Establishing Village resources center at KVK East Khasi Hills

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.)
Promoting Usage of Agro-textiles in North-east India	Training: Usage of Agro textiles in protective cultivation and capacity building of the farmers	4th Nov'15	SASMIRA,Ministry of Textile, Govt. of India	50,000.00

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes/No

Sl. No.	Programme	Nature of linkage	Remarks
1	Farm School	Trainings, method demonstrations and field visits	

2	Training and Method demonstration on On farm production of bio agents (*Trichoderma* sp and *Pseudomonas* sp)	To promote simple and low cost technique of mass multiplication of bio agents among the farmers so as to minimize the use of chemical pesticides.	The farmers expressed that they have a keen interest in adopting this technique and are willing to replace the use of chemical pesticides with the use of bio agents.

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)

Sl. No.	Demo Unit	Year of estd.	Area	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	

6.2 Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty.	Cost of inputs	Gross income	
Cereals									
Rice	-	-	-	-	-	-		-	-
Wheat	-	-	-	-	-	-	-	-	-
Maize	-	-	-	-	-	-	-	-	-
Any other	-	-	-	-	-	-	-	-	-
Pulses									
Green gram	-	-	-	-	-	-	-		-
Black gram	-	-	-	-	-	-	-	-	-
Arhar	-	-	-	-	-	-	-	-	-
Lentil	-	-	-	-	-	-	-	-	-
Ay other	-	-	-	-	-	-	-	-	-
Oilseeds									
Mustard	-	-	-	-	-	-	-	-	-
Soy bean	-	-	-	-	-	-	-	-	-
Groundnut	-	-	-	-	-	-	-	-	-
Any other	-	-	-	-	-	-	-	-	-
Fibers									
i.	-	-	-	-	-	-	-	-	-
Spices & Plantation crops									
i.									
Floriculture									
i.									
Fruits									
i.									
Vegetables									
i.									
ii.									

a. Others (specify)									
i.									

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

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

6.4 Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed/ species	Type of Produce	Qty.	Cost of inputs	Gross income	
-	-	-	-	-	-	-	-

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit

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

6.6. Utilization of hostel facilities (Month-Wise) during 2015-16 Accommodation available (No. of beds) :

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

Total					
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	Meghalaya Cooperative Apex Bank	Police Bazar	1710000244042772
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. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	**Pay & Allowances**	5000000	5000000	4998554

2	**Traveling allowances**	220000	220000	220000
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)			
B	POL, repair of vehicles, tractor and equipments	312000	312000	312000
C	Meals/refreshment for trainees			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			512262
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			317000
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	1248000	1248000	200000
G	Training of extension functionaries			20732
H	Maintenance of buildings			198006
I	Establishment of Soil, Plant & Water Testing Laboratory			-
J	Library			-
TOTAL (A)		**6780000**	**6780000**	**6778554**
B. Non-Recurring Contingencies				
1	**Works**	-	-	-
2	**Equipments including SWTL & Furniture**	550000	550000	550000
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	-	-	-
4	**Library** (Purchase of assets like books & journals)	-	-	-
TOTAL (B)		550000	550000	550000
C. REVOLVING FUND		-	-	-
GRAND TOTAL (A+B+C)		**7330000**	**7330000**	**7328554**

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

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2013 to March 2014	-	-	-	-
April 2014 to March 2015	-	-	-	-
April 2015 to March 2016	-	-	-	-

Note: No KVK must leave this table blank

8.0 Please include information which has not been reflected above.

(Write in detail)

8.1 Constraints

(a) Administrative

(b) Financial

(c) Technical

(Signature)
Programme Coordinator