

PROFORMA FOR ANNUAL REPORT OF KVKS, 2011-12

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
Krishi Vigyan Kendra (KVK), Khawzawl, PO- khawzawl, Distt.- Champhai (MIZORAM)-796310	Office 03831-261484, 261486	FAX 03831- 261485	pckvkkhawzawl@rediffmail.com www.kvkkhawzawl.com

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

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

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

Name	Telephone / Contact		
	Residence	Mobile	Email
Lalrinawmi Renthlei	03831-261484	9436159788 9856229907	pckvkkhawzawl@rediff mail.com

1.4. Year of sanction:2004

1.5. Staff Position (As on 31st March, 2012)

Sl. No.	Sanctioned post	Name of the incumbent	Designation	Discipline	Pay Scale (Rs.)	Present basic (Rs.)	Date of joining	Permanent /Temporary	Category (SC/ST/ OBC/ Others)
1	Programme Coordinator	LALRINAWMI RENTHLEI	PC	Horticulture	15,600-39,100+8,000	22,320	1.7.11	Temporary	ST
2	Subject Matter Specialist	MALSAWMKIMI	SMS	Horticulture	15,600-39,100+5,400	16,880	03.06.09	Permanent	ST
3	Subject Matter Specialist	SAYED KHALIDUDDIN AHMED	SMS	Animal Science	15,600-39,100+5,400	17,550	26.4.08	Permanent	GENERAL
4	Subject Matter Specialist	F. ZORAMTHARI	SMS	Plant Protection	15,600-39,100+5,400	16,880	06.6.09	Permanent	ST
5	Subject Matter Specialist	LALRAMENGI	SMS	Agronomy	15,600-39,100+5,400	15,600	28.4.11	Permanent	ST
6	Subject Matter Specialist	J.VANLALHLUZUALI	SMS	Agril. Extension	15,600-39,100+5,400	15,600	09.03.12	Permanent	ST
7	Programme Assistant	LALHRUAITLUANGI	Programme Assistant	Home Science	9,300-34,800+4200	11,580	1.7.08	Permanent	ST
8	Computer Programmer	SAMSON SAIRENGPUIA SAILO	Computer Programmer	Computer	9,300-34,800+4200	11,580	22.4.08	Permanent	ST
9	Farm Manager	PRAKASH THAPA	Farm Manager	B.Sc (Agri.)	9,300-34,800+4200	11,580	25.4.08	Permanent	GENERAL
10	Accountant / Superintendent	K.VANLALHMANGAIHI	Accountant / Superintendent	-	9,300-34,800+4200	11,580	29.5.08	Permanent	ST
11	Stenographer	CRUSADE THANGPUII	Stenographer	-	5,200-20,200+2,400	8,370	29.2.08	Permanent	ST
12	Driver	LALNUNTLUANGA	Driver	-	5,200-20,200+1,900	6,610	29.2.08	Permanent	ST
13	Driver	R.DENGLIANA	Driver	-	5,200-20,200+1,900	6,610	9.2.08	Permanent	ST
14	Supporting staff	LALTANPUIA	Supporting staff	-	4,440-7,440+1,300	5,330	10.7.08	Permanent	ST
15	Supporting staff	LALVENHIMA	Supporting staff	-	4,440-7,440+1,300	5,330	24.7.08	Permanent	ST

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	1.31
2.	Under Demonstration Units	11.464
3.	Under Crops	3
4.	Orchard/Agro-forestry	0.2
5.	Others (specify)	Nil
	TOTAL	15.97

1.7. Infrastructural Development:

A) Buildings

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

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Gypsy		-	-	Running condition
Tractor	-	-	-	Running condition

C) Equipments & AV aids

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

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

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	19-04-2011	1. Director of Agriculture(R&E) 2. PC, KVK, Khawzawl 3. DAO, Champhai 4. EE, Minor Irrigation 5. DAO, Wildlife 6. DFO, Champhai 7. DVO, Champhai 8. SDAE, Khawzawl 9. AFO, Champhai 10. SDAO, Khawzawl 11. DDK, Champhai 12. AMFU President 13. Jt VC President, Khawzawl 14. Jt YMA, Khawzawl 15. Editor SIAR News, Khawzawl 16. Editor Khawzawl Times, Khawzawl 17. MHIP President, Khawzawl	1. Cultivation of Paddy through SRI in upland terrace and WRC areas where lodging problems exist. 2. Popularization of zero tillage seed driller 3. Selection of Manipur variety may be substituted with local variety(Buh tawi sang) 4. Trials may be conducted on Maize considering different date of sowing. 5. Breeding of common carp and awareness on Paddy cum fish culture.	1. Cultivation of Paddy through SRI in WRC areas where lodging problems exist. 2. Selection of Manipur variety is substituted with local variety(Buh tawi sang) 3. Trials were conducted on Maize considering different date of sowing. 4. Paddy cum fish culture was popularized through demonstration
2.	15-02-2012	1. Director of Agriculture(R&E) 2. PC, KVK, Khawzawl 3. Dy Director (R&E), F&QS 4. SMS, (R&E) 5. DHO, Khawzawl 6. SDAO, Khawzawl 7. DDK Correspondent, Khawzawl 8. AMFU Treasurer 9. EO, Sericulture, Khawzawl 10. RFO, Khawzawl 11. RO, S&WC, Khawzawl	1. Cultivation of Paddy on Jhum land on top soil bedded terrace may be emphasized 2. Use of pre emergence weedicides for weed control 3. Demonstration on turmeric variety Lakadong may be replaced by patna variety for trials. 4. Trainings and demonstration towards afforestation may be conducted from time to time.	Ongoing (to be undertaken)

* 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)

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

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

S. No	Agro-climatic Zone	Characteristics
1.	Sub-tropical/ Sub-temperate/ Humid	Some parts of the district like Ngopa & Khawzawl block experience all the three seasons i.e. winter, summer and rains, while in the Champhai valley the temperature ranges from 1-7 ⁰ C for a longer period during winter, severely affecting the crops because of frosty weather. The relative humidity of the region is higher due to heavy rains(2500 mm annually).

2.3 Soil type/s

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

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

S. No	Crop	Area (ha)	Production (Qtl)	Productivity (Qtl /ha)
1	Jhum Paddy	5610	8975	16.00
2	Paddy (WRC)	4809	10685	22.21
3	Maize	2050	4311	21.00
4	Bean	145	299	2.06
5	Cabbage	175	2363	13.5
6	Onion	6	34	5.66
7	Cauliflower	75	745	9.93
8	Pea	35	150	4.28
9	Tomato	31	292	9.4
10	Capsicum	25	331.5	13.2
11	Broccoli	16	100.1	6.2
12	Okra	279	1861	6.6
13	Raddish	25	58.5	2.34
14	Ginger	1008	4969	4.9
15	Turmeric	555	2784	5
16	Bird eye chilli	1250	6875	5.9
17	Potato	32	332	10.3
18	M.Orange	800	2630	3.28
19	Pineapple	160	1434	8.96
20	Passion fruit	840	3657	4.35
21	Avocado	3	26	8.66
22	Banana	680	8021	11.79

2.5. Weather data

Month	Rainfall (cm)	Temperature °C		Relative Humidity (%)
		Maximum	Minimum	
January	NIL	23	05	78 % -95 %
February	7.3	29	05	
March	126.3	31	08	
April	137	32	13	
May	321	32	17	
June	268.6	33	14	
July	407	28	14	
August	303.6	29	13	
September	200	28	08	
October	100.3	29	07	
November	134	28	06	
December	NIL	24	05	

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	346	560 tons	1.6
<i>Indigenous</i>	6663	788 tons	0.12
Buffalo	3053	14 tons	0.0045
Mithun	1091	2.16 tons	0.002
<i>Indigenous</i>	-	-	-
Sheep & Goats	712 & 115	3 tons	-
Pigs			
<i>Crossbred</i>	24186	437 tons	-
<i>Indigenous</i>	6051	-	-
Rabbits	-	-	-
Poultry			
Hens	-	-	-
<i>Desi</i>	151607	99 tons	-
<i>Improved</i>	44430	-	-
Ducks	430	-	-

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

2.6 Details of Operational area / Villages (2011-12)

No	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	Khawzawl	Khawzawl	Khawzawl	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries	<ul style="list-style-type: none"> Improper nursery management in WRC. Improper nutrient management Infestation of insect pest and diseases. Lack of awareness toward s integrated farming Lack of knowledge and awareness on livestock management, feed and fodder production. 	<ul style="list-style-type: none"> Nursery management Integrated nutrient management Integrated pest management Creating awareness for adoption of integrated farming. Creating awareness for livestock management and feed and fodder production.
2.	Khawzawl	Khawzawl	Biate	Jhum paddy + Tea + Orange + Vegetables + Animal Husbandry	<ul style="list-style-type: none"> Lack of knowledge on crop rotation No proper post harvest management in tea. Lack of quality seed of different vegetables Citrus declining Lack of knowledge and awareness on livestock management, feed and fodder production. 	<ul style="list-style-type: none"> Creating awareness on crop rotation and integrated farming Training on post harvest management in tea. Creating awareness for the use of quality seeds in different vegetables. Rejuvenation of old citrus orchards. Creating awareness for livestock management and feed and fodder production
3	Khawzawl	Khawzawl	Chawngtlai	WRC+Jhum Paddy Grapes + Ginger Passion fruit + Animal Husbandry	<ul style="list-style-type: none"> Lack of Training and Pruning of Passion Fruit & Grapes Improper nursery management in WRC. Improper nutrient management Infestation of insect pest and diseases. 	<ul style="list-style-type: none"> Cultivation practices of Grapes and Passion fruit IDM on Ginger Integrated nutrient management Integrated pest management Creating awareness for livestock management and feed and fodder production
4.	Champhai	Champhai	Champhai	WRC + Maize + Winter vegetables + Animal Husbandry and Fisheries	<ul style="list-style-type: none"> Improper nursery management in WRC. Improper nutrient management Infestation of insect pest and diseases. Lack of awareness toward s integrated farming Lack of knowledge and awareness on livestock management, feed and fodder production. 	<ul style="list-style-type: none"> Nursery management Integrated nutrient management Integrated pest management Creating awareness for adoption of integrated farming. Creating awareness for livestock management and feed and fodder production.

5.	Champhai	Champhai	Zotlang	WRC + Jhum paddy +Potato + Winter vegetables + Animal Husbandry	<ul style="list-style-type: none"> • Improper nursery management in WRC. • Improper nutrient management • Infestation of insect pest and diseases. • Lack of awareness towards integrated farming • Lack of knowledge and awareness on livestock management, feed and fodder production. 	<ul style="list-style-type: none"> • Nursery management • Integrated nutrient management • Integrated pest management • Creating awareness for adoption of integrated farming. • Creating awareness for livestock management and feed and fodder production
6.	Champhai	Champhai	Hmunhmelth a	Jhum paddy + Vegetables + Animal Husbandry	<ul style="list-style-type: none"> • Lack of knowledge on crop rotation • Lack of quality seed of different vegetables • Citrus declining • Lack of knowledge and awareness on livestock management, feed and fodder production. 	<ul style="list-style-type: none"> • Creating awareness on crop rotation and integrated farming • Creating awareness for the use of quality seeds in different vegetables. • Creating awareness for livestock management and feed and fodder production
7.	Champhai	Champhai	Tuipui	WRC + Jhum paddy + Maize + Winter vegetables + Animal Husbandry and Fisheries	<ul style="list-style-type: none"> • Improper nursery management in WRC. • Improper nutrient management • Infestation of insect pest and diseases. • Lack of awareness towards integrated farming • Lack of knowledge and awareness on livestock management, feed and fodder production. 	<ul style="list-style-type: none"> • Nursery management • Integrated nutrient management • Integrated pest management • Creating awareness for adoption of integrated farming. • Creating awareness for livestock management and feed and fodder production.
8.	Khawzawl	Khawzawl	Kawlkuh	Jhum paddy + Maize + Banana + Ginger + Animal Husbandry + orange	<ul style="list-style-type: none"> • Lack of awareness towards integrated farming. • Improper nutrient management. • Citrus declining. • Lack of Orchard management 	<ul style="list-style-type: none"> • Creating awareness for adoption of integrated farming. • Rejuvenation of old citrus orchards. • Creating awareness for livestock management
9.	Khawzawl	Khawzawl	Dulte	Jhum paddy + Banana + Maize + Ginger + Vegetables	<ul style="list-style-type: none"> • Lack of Orchard management. • Improper nutrient management. • Lack of Disease and Pest management. • Lack of awareness towards integrated farming. 	<ul style="list-style-type: none"> • Training on Orchard management. • Integrated nutrient & Pest management. • Creating awareness for adoption of integrated farming.

3. TECHNICAL ACHIEVEMENTS

3. A. Details of target and achievements of mandatory activities by KVK during 2011-12

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
Plant Protection	2	2	2	4				
Horticulture	5	5	6	8				
Agronomy	5	12	10	24	3	3	6	6
Animal Sc.	2	2	4	4				

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	29	12	990	934	286	120	565	2297
Rural youth								
Extn. Functionaries	4	4	50	44				

Seed Production (Qt.)				Planting material (Nos.)	
5		6		6	
Target	Achievement	Target	Achievement	Target	Achievement
2	11.45	4400	4400		

3.B. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem	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.
1.	Management of Insect pest and diseases	Paddy	Incidence of Stem Borer and lack of awareness on Biological Pest management	Bio control of Stem Borer and leaf folder in Rice				Field Day	
2.	Management of disease	Ginger	Rhizome rot disease is found as a severe problem	Rhizome rot management in ginger using Biofor-Pf	NA	Management of Pest & Disease of Ginger using bio agents	NA	Training and Demonstration	Rhizome and Bio-agent
4.	Varietal Evaluation	F.Bean	Low yield of local variety	Varietal evaluation of VL Bean 1,2 with local check	NA		NA	Demonstration	
5.	Varietal Evaluation	Pea	Low production	Varietal evaluation of Field Pea var-VL Matar-42					Seed
6.	Crop Production	Potato	Lack of awareness on cultivation practices and selection of suitable variety	Varietal evaluation of K. Joyti	NA	Cultivation practices of Potato	NA	Training and Demonstration	Potato tubers
7.	Weed Management	Pineapple	High intensity of weeds	Mulching technology for Pineapple				Field Day	
8.	Crop production	Paddy	Low productivity from traditional method and Lodging	Cultivation of rice through SRI		SRI for water economy and higher productivity		Field Day	
9.	Crop production	Paddy	Lack of short duration high yielding variety	Yield performance of Rice variety-Shahsarang				Field Day	Seed
11.	Crop production	Paddy	Lack of short duration high yielding variety	Yield performance of Rice variety-NDR-97				Field Day	Seed
12.	Varietal Evaluation	Paddy	Lodging problem of local variety	Yield performance of Rice variety-Megha-1,2,3				Field Day	Seed
13.	Crop production	Paddy	Lack of short duration high yielding variety	Yield performance of Rice variety-IR-64					Seed

14	Crop production	Paddy	Lack of short duration high yielding variety	Yield performance of Rice variety-Haccha					Seed
15	Crop production	Paddy	Lack in irrigation facilities	Cultivation of direct seeded Paddy					
16	Crop Production	Maize	No Specific Planting distance maintained, only as mixed cropping.	Production of maize, Var.RCM-75,76,BA-61A	Cultivation of Maize through HQPM-1				
17	Fodder Production	Hybrid Napier	Non availability of quality fodder	Cultivation of Hybrid Napier as fodder crop					
18	Pig Production	Pig (Hampshire/LWY)	Non availability of pure breeds	Backyard Scientific management of Pig			Pig production and its Management		
19.	Crop Production	Pulses	Lack of proper cultivation packages of practices		Cultivation of Soyabean var=JS335				
20.	Integrated farming system	Paddy	High cost of cultivation		Paddy cum Fish culture			Demonstration	

3.1 Achievements on technologies assessed and refined

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops/Spices	Vegetables	Fruits	Flower	Plantation crops	Tuber Crops	TOTAL
Varietal Evaluation	6				3					9
Seed / Plant production	5								1	6
Weed Management						1				1
Integrated Crop Management	1									1
Integrated Nutrient Management										
Integrated Farming System										
Mushroom cultivation										
Drudgery reduction										
Farm machineries										
Value addition										
Integrated Pest Management	1				1					2
Integrated Disease Management										
Resource conservation technology										
Small Scale income generating enterprises										
TOTAL	13				4	1			1	19

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										

A.3. Abstract of the number of technologies **assessed** 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								
TOTAL								

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

11). Results of On Farm Trials

A. Technology Assessment Trial 1

- 1) **Title** : **Rhizome Rot management in Ginger using Biofor Pf**
- 2) Problem diagnose/Refined : Rhizome Rot Disease is a major problem in this region
- 3) Details of technologies Selected for assessment /refinement : Assessment/seed treatment for Rhizome Rot management in Ginger using Biofor Pf
- 4) Source of technology : Dept of Plant Pathology, AAU, Jorhat
- 5) Production thematic area : Rainfed
- 6) Thematic area : Rhizome Rot management in Ginger using Biofor Pf
- 7) Performance of the Technology with Performance indicator : Results showed that the treatment plots were not affected by Rhizome Rot disease which gave an average yield of 72.4Qtl/ha in comparison to the control plot of average yield 46.8Q/ha
- 8) Final recommendation for Micro level situation : The productivity and production was found superior when treated with Biofor Pf and it is advisable to treat the Rhizome for further cultivation in the District.
- 9) Constrains identified and Feedback for research : The Farmers of this District are not selective towards the seed Rhizome. They are not aware of the need for treating the seed Rhizome and insect pest management etc.
- 10) Process of farmers Participation and their reaction : Trials and demonstration was conducted at farmer's field regarding seed treatment, time of sowing and time for spraying insecticides/ Pesticides and how to manage the Disease outbreak.

Rhizome Rot was the main disease prevailing in the region. Farmers therefore took keen interest and the Training/Demonstration given to them encouraged them to adopt the practice.

2) Results of On Farm Trials

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Ginger	Rainfed	Rhizome rot disease a severe problem in the region. High cost of input and lack of knowledge on biological pest and disease management	Rhizome Rot management in Ginger using Biofor PF	2	Seed treatment @ 1kg biofor : 10 kg seed rhizome in 2litres of water and make paste dipping the rhizome for 15 minutes and shade dry for 1 hour	No of Infected Plant at 10days a)Treated b)Untreated Yield a)Treated b)Untreated	i)5 % ii)25% i)72.4 Qtl/ha ii)46.8Qtl/ha	Biofor PF treated plant gave more yield and disease incidence was checked	Farmers are encouraged to adopt to practice

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Biofor PF	i)72.4 Qtl/ha	58000	1:1.70
Control	ii)46.8Qtl/ha	37495	1:1.10

Trial 2

- 1) Title : **Bio-control of Stem Borer and Leaf folder in Rice**
- 2) Problem diagnose/defined : Management of insect pest and Diseases
- 3) Details of technologies selected for assessment /refinement : Assessment / Use of *Trichogramma Japonicum* @ 50,000/ha/week starting from 30days after transplanting
- 4) Source of technology : Department of Plant Pathology, AAU-Jorhat
- 5) Production system thematic area : Rainfed
- 6) Thematic area : Management of insect pest and Diseases
- 7) Performance of the Technology with Performance indicators : Results showed that use of *Trichogramma Japonicum* greatly reduced the incidence of Stem Borer and leaf folder
- 8) Final recommendation for micro level situation : *Trichogramma Japonicum* is advisable to be used as it greatly reduced insect, pest and it is easily applicable and eco friendly.
- 9) Constraints identified and feedback for research : Bio control agent not readily available when needed.
- 10) Process of farmers participation and their reaction : Trials were conducted at farmers field with their active participation. On seeing the difference the farmers were encouraged and ready for adoption, provided the bio-agents are made available to them in time.

11). Results of On Farm Trial :

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Pad dy	Rainfed	Lack of management of insect pest and diseases	Biocontrol of Stem Borer and Leaf folder in Rice	2	Use of <i>T.Japonicum</i> @ 50,000/ha/week starting from 30 days after transplanting . (The release should coincide with the egg laying activities)	1. Disease Incidence at 10 days intervals 2. Yield	a) Treated-5% b) Untreated-50% a) Treated-42 qtl/ha b) Untreated-39.8qtl/ha	Incidence of Stem Borer and Leaf folder is found to reduce after using <i>T.Japonicum</i>	Farmers are convinced with the result and if <i>T.Japonicum</i> is available, farmers are willing to adopt

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Use of <i>T.Japonicum</i>	Treated – 42 qtl/ha	26084	1:1.65
	Untreated – 39.8 qtl/ha	18650	1:1.46

Trial 3

- 1) **Title** : **Varietal Evaluation of French Bean**
- 2) Problem diagnose/Refined : Lack of suitable varieties.
- 3) Details of technologies selected for assessment /Refinement : Assessment
French Bean, Variety=VLBean-1,2
- 4) Source of technology : VPKAS, Almora
- 5) Production thematic area : Rain fed
- 6) Thematic area : Varietal evaluation
- 7) Performance of the Technology with Performance indicator : The average number of pods incase of VL Bean 1&2 have been observed to be 15.5 and 14.60 nos respectively as against 15.34 nos for local check. Yield average incase of VL Bean 1&2 have been found to be 86.83 qts & 86.41 qts respectively as against 84.70 qts for local check.
- 8) Final recommendation for Micro level situation : The variety is recommended for further assessment.
- 9) Constrains identified and Feedback for research : Due to its fibrous nature the harvesting of the variety should not be delayed(early picking need to be done)
- 10) Process of farmers Participation and their reaction : Field day and trial was observed for dissemination of the technology at farmers level. Farmers are encouraged and convinced to adopt the variety

10) Results of On Farm Trial
11)

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
F.Bean	Rainfed	Low yield with local variety	Varietal Evaluation of F.Bean	4	Varietal Evaluation of F.Bean 1)VLBean-1 2) VLBean-2 3)Local	a)Average no of Pods/plant b) Average no of Grains/Pods c) Yield qtl/Ha	a)15.5 b)14.6 c) 15.34 a)5.66 b)5.50 c) 5.61 a)86.83 b)86.41 c)84.70

Results of assessment	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
The varieties VLBean1&2 gave average number of pods (15.5&14.60)respectively as compared to 15.34 nos incase of local check. Average yield of VL Bean 1&2 have been 86.83 qts & 86.41 qts respectively as against 84.70 qts incase of local check.	Farmers are convinced with the demonstration and are ready for large scale production if seeds could be made available	1)VLBean-1 2) VLBean-2 3) Local	1)86.83 qtl/ha 2)86.41 qtl/ha 3)84.70 qtl/ha	36405 35775 33210	1:1.39 1:1.38 1:1.35

Trial 4

- 1) **Title** : **Varietal Evaluation of Pea**
- 2) Problem diagnose/Refined : Low productivity and incidence of pest and Diseases
- 3) Details of technologies selected for assessment /Refinement : Assessment
Pea var: VL Matar -42
- 4) Source of technology :
- 5) Production thematic area : Rainfed
- 6) Thematic area : Varietal evaluation
- 7) Performance of the Technology with Performance indicator : VLMatar-42 gave yield of 88.7q/Ha as green pods and 8.3q/Ha as seed which was much higher as compared to Arkel as local check
- 8) Final recommendation for Micro level situation : It was recommended that the variety can be popularized with proper insect and disease management strategy
- 9) Constrains identified and Feedback for research : The variety was found susceptible to powdery mildew and rust diseases
- 10) Process of farmers Participation and their reaction : Field day was observed for dissemination of the technology at farmers level. Farmers were encouraged to adopt the variety as green pods and seed yield are much higher as compared to local check.

11) Results of On Farm Trial

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Pea	Rainfed	Low yield with local variety and incidence of pest and diseases	Varietal Evaluation of Pea	2	Varietal Evaluation of Pea 1)VLMatar-42 2)Local(Arkel)	a)Average plant height b)50% Flowering stage c)Average no of Pods/plant d)Average no of seed/pods e)Yield qtl/Ha:- i)Green Pod ii)Seed	a)3.47 ft b)2.32 ft a)62-65 DAS b)65-70 DAS a)12 b)10.3 a)7 b)6 a)88.7 b)67.3 a)8.3 b)6.6

Results of assessment	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
The variety yielded 88.7q/Ha and 8.3q/Ha as Green pod and seed respectively.	Farmers are convinced with the demonstration and are ready for large scale production if seeds can be made available	1)VLMatar-42 2)Local(Arkel)	Green pod a)88.7qtl/ha b)67.3qtl/ha	87,400 44,600	1.97 : 1 1.5 : 1

Trial 5

- 1) **Title** : **Varietal evaluation of Potato**
- 2) Problem diagnose/Refined : Lack of suitable varieties as location specific , harvesting time coinciding with rain and lack of storage facility
- 3) Details of technologies selected for assessment /Refinement : Refinement/ Sowing date was refined to overcome excessive rain.
1. Potato var : Kufri joyti with K. Giriraj as local check
- 4) Source of technology : CPRS, Upper Shillong, Meghalaya
- 5) Production thematic area : Irrigated field
- 6) Thematic area : Varietal evaluation
- 7) Performance of the Technology with Performance indicator : Results indicated that K.Jyoti gave average yield of 189q/Ha as compared to 124q/Ha in case of K.Giriraj. K.Jyoti gives average weight of tuber/ plant 345gm as against 124gm in case of K.Giriraj
- 8) Final recommendation for Micro level situation : The production of tuber can be increased if sowing is done during august to September instead of January to February to avoid excessive rain.
- 9) Constrains identified and Feedback for research : Due to delayed sowing of seed tubers after the late harvest of paddy,(long duration local variety), no proper development of tubers/rotting at the time of harvesting due to early rainfall.
- 10) Process of farmers Participation and their reaction : Field day was observed for dissemination of the technology at farmers level. Farmers could differentiate the yield traits and tuber sizes and quality of different varieties to select for themselves the best suited variety

11) Results of On Farm Trial

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter
1	2	3	4	5	6	7	8
Potato	Irrigated	Lack of suitable varieties as location specific and lack of storage facility	Varietal evaluation of Potato variety K.Jyoti K.Giriraj	2	Varietal evaluation of Potato	(1) Average plant height (2) Average No of tubers /hill (3) Average weight of tubers (4) Average weight of tubers /plant (5) Tuber yield qtl/ha	i)39 cm ii)26 cm i) 8 ii)7 i)52 gm ii)40gm i)345 gm ii)225 gm i)189 ii)124

Results of refinement	Feedback from the farmer	Technology refinement	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
Yield was higher in K Jyoti compared to K Giriraj hence K Jyoti can be further tried for demonstration	Farmers are convinced with the trial and are ready for large scale production if seeds are made available to them.	K.Jyoti K.Giriraj,	i)189qtl/ha ii)124qtl/ha	73052.35 -	1:1.35 1:1

Trial 6

- 1) **Title** : **Cultivation of Paddy through SRI**
- 2) **Problem diagnose/Refined** : Low productivity and problem of lodging in traditional method of cultivation, weed problem and lack of water management.
- 3) **Details of technologies selected for assessment /refinement** : Assessment, Transplanting of Seedlings at 8-12DAS. Transplanting of 1 seedling /Hill. Control irrigation and manures and fertilizer as recommended
Paddy Variety: Local Tall variety, Manipur Buh
- 4) **Source of technology** : ICAR, Barapani, Shillong, Meghalaya
- 5) **Production thematic area** : WRC.
- 6) **Thematic area** : Water use efficiency and to combat lodging problem of the existing local variety.
- 7) **Performance of the Technology with Performance indicator** : Results showed that the average yield of 44.8qtl/ha, 30.66 nos average of tiller/hill which is found to be much higher as compared to control plot
- 8) **Final recommendation for Micro level situation** : It can be recommended for combating the lodging problem of the local existing tall variety. Yield and yield attributes was found to be much higher in respect to SRI in comparison with conventional WRC. It can be recommended that SRI practice can give more yield if irrigated at timely interval and to those farmers having controllable irrigation channel with limited/ Small areas at present situation.
- 9) **Constraints identified and Feedback for research** : The farmers of this region need to be trained as this is a new system to be introduced in the district. On the contrary, they have been practicing their own system of cultivation as rainfed WRC. SRI being labour intensive at initial stage, farmers are reluctant towards spending the extra labour in the field for leveling, marking, transplanting and weeding etc. SRI should be practiced in areas where irrigation can be controlled
- 10) **Process of farmers Participation and their reaction** : This system being practice as a new type of cultivation, the farmers of this region are slowly motivated through Field Days training, Demonstration and distribution of folders etc. SRI method gave much higher yield in comparison with the present practices and for that reason they are motivated to adopt the method.

11) Results of On Farm Trials

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment
1	2	3	4	5	6	7	8	9
Paddy Var : Local (Mani pur buh)	WRC	Low productivity and problem of lodging from traditional method of cultivation, weed problem and lack of water management	Cultivation of Paddy through SRI	2	SRI Method 1)SRI 2) Conventional	(1)Average Plant Height (2)Average no tiller/Hill (3)Average Length of Panicle (4)Avg no of Effective tillers (5)Avg length of roots (6)Yield qtl/Ha	i)5.5 ft ii)5.9 ft i)30.66 ii)18.3 i)9.83 inch ii)9.9 inch i)29.66 ii)16.75 i)13.6 inch ii)9 inch i)44.8 ii)37.2	SRI Method gave more yield if irrigated at timely intervals and with provision of controllable irrigation system. The plant height was reduced and the plant was rigid with increased root length . The problem of lodging was checked

Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
10	11	12	13	14
Farmers are motivated to adopt the system as the production is higher as compared to Conventional	SRI Method Conventional	44.8 qtl/ha 37.2 qtl/ha	20200 15800	1:1.50 1:1.39

Trial 7

- 1) **Title** : **Yield performance of paddy, IR-64**
- 2) Problem diagnose/Refined : Lack of short duration HYV suitable for this area.
- 3) Details of technologies selected for assessment /refinement : Assessment
Paddy IR-64 with local variety
- 4) Source of technology : IGKV, Raipur, Chhattisgarh
- 5) Production thematic area : WRC
- 6) Thematic area : Yield performance of paddy, IR-64
- 7) Performance of the Technology with Performance indicator : Results showed that the paddy var. IR-64 gave significantly higher yield as compared to local check.
- 8) Final recommendation for Micro level situation : Since the production of this variety gave higher yield as compared to their existing local variety (i.e. Manipur buh, Liangkuma etc.), it is recommended for introducing at farmers field as an instrument for encouraging the farmers of this region for double cropping.
- 9) Constrains identified and Feedback for research : Since most of the farmers of this region are marginal farmers, whatever they produce is mainly consumed by themselves, which can hardly manage their demand. Therefore, they usually grow and select seeds which suit their taste, regardless of the production and productivity.
- 10) Process of farmers Participation and their reaction : The farmers were convinced with the performance of IR-64 with respect to its productivity and production along with its early maturity as well as with respect to lodging problem common in local var. (Manipur buh)

11) Results of On Farm Trial

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials *	Technology Refinement	Parameters	Data on the parameter	Results of Refinement	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Paddy variety IR-64	WRC	Low yield with local variety	Yield performance of short duration Paddy variety IR-64	2	Yield performance of Paddy variety IR-64	1) Plant height 2) Average number of Tiller /Hill 3) Average number of Active Tiller /Hill 4) Average length of Panicle 5) Average no of grains/ panicle 7) yield qtl/Ha	a)2.13 ft b)5.9 ft a)31.8 b)18.3 a)29.82 b)16.75 a)10.12 inch b)9.9 inch a)162.5 b)168.93 a)49.94 b)37.2	The production and productivity of the variety was found to be much higher than that of the existing local variety.	Due to its early maturity the farmers were motivated and encouraged to go for double cropping

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Yield performances of Paddy variety IR-64	IR-64= 49.94 qtl/ha Local = 37.2 qtl/ha	27910 15800	1:1.69 1:1.39

Trial 8

- 1) **Title** : **Varietal Evaluation of paddy**
- 2) Problem diagnose/Refined : Lack of short duration HYV suitable for this area and problem of lodging.
- 3) Details of technologies selected for assessment /refinement : Assessment
Paddy Shhsarang
- 4) Source of technology : ICAR, Barapani, Meghalaya
- 5) Production thematic area : WRC
- 6) Thematic area : Varietal Evaluation of paddy-Shhsarang
- 7) Performance of the Technology with Performance indicator : Results showed that the paddy var. Shhsarang gave much higher yield 49.78 qtls/ha, as compared to local check.
- 8) Final recommendation for Micro level situation : Since the production of this variety gave higher yield as compared to their existing local variety (i.e. Manipur buh, Liankhuma etc.), it is recommended for introducing at farmers field as an instrument for encouraging the farmers of this region for double cropping.
- 9) Constrains identified and Feedback for research : Since most of the farmers of this region are marginal farmers and they produce mainly for sustenance. Therefore, they usually grow and select seeds which suits their taste, regardless of the production and productivity.
- 10) Process of farmers Participation and their reaction : The farmers were convinced with the performance of Shhsarang with respect to its productivity and production along with its early maturity as well as with respect to lodging problems common in local var. (Manipur buh)

11) Results of On Farm Trial

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Refinement	Parameters	Data on the parameter
1	2	3	4	5	6	7	8
Paddy variety Shhsarang	WRC	Low yield with local variety and lack of short duration variety. Problem of lodging .	Varietal Evaluation of Paddy	2	Yield performance of Paddy variety 1)Shhsarang 2)Local	1) Plant height 2)Average number of Tiller /Hill 3)Average number of Active Tiller /Hill 4)Average length of Panicle 5)Average no of grains/ panicle 7) yield qtl/Ha	a)3.47 ft b)5.9 ft a)29 b)18.3 a)26.66 b)16.75 a)10.1 inch b)9.9 inch a)223.75 b)168.93 a)49.78 b)37.2

Results of Assessment	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
The production and productivity of the variety gave much higher results than that of the existing local variety	Due to its early maturity the farmers were motivated and encouraged to go for double cropping	Varietal Evaluation of Paddy 1)Shhsarang 2)Local	a)49.78qtl/ha b)37.2qtl/ha	26530 15800	1:1.66 1:1.39

Trial 9

- 1) **Title** : **Varietal Evaluation of paddy**
- 2) Problem diagnose/Refined : Lack of short duration HYV suitable for this area.
- 3) Details of technologies selected for assessment /refinement : Assessment
Paddy: NDR-97
- 4) Source of technology : Narendra University of Agriculture and Technology, Kumarganj, Faizabad, UP
- 5) Production thematic area : WRC
- 6) Thematic area : Varietal Evaluation of Paddy
- 7) Performance of the Technology with Performance indicator : Results showed that the paddy var. NDR-97 yielded(47.7 qtl/ha), higher with early maturity of 100-105DAS as compared to local check(37.2qtl/ha) which matures at 150-155DAS .
- 8) Final recommendation for Micro level situation : Since the production of this variety gave higher yield as compared to their existing local variety (i.e. Manipur buh, Liankhuma etc.), it is recommended for introducing at farmers field as an instrument for encouraging the farmers of this region for double cropping.
- 9) Constrains identified and Feedback for research : Since most of the farmers of this region are marginal farmers, production is very low and mainly consumed by themselves. Therefore, they usually grow and select seeds which suit their taste, regardless of the production and productivity.
- 10) Process of farmers Participation and their reaction : The farmers were convinced with the performance of NDR-97 with respect to its productivity and production along with its early maturity as well as with respect to lodging problems common in local var. (Manipur buh)

11) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Refinement	Parameters	Data on the parameter
1	2	3	4	5	6	7	8
Paddy variety Paddy: NDR-97	WRC	Low yield with local variety and lack of short duration variety. Problem of lodging .	Varietal Evaluation of Paddy	2	Yield performance of Paddy variety 1) NDR-97 2)Local	1) Plant height 2)Average number of Tiller /Hill 3)Average number of Active Tiller /Hill 4)Average length of Panicle 5)Average no of grains/ panicle 7) yield qtl/Ha	a)2.51 ft b)5.9 ft a)33.4 b)18.3 a)32 b)16.75 a)6.5 inch b)9.9 inch a)140.5 b)168.93 a)47.7 b)37.2

Results of Assessment	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
The production and productivity of the variety were found to be higher than that of the existing local variety and its early maturity motivated the farmers to opt for Double cropping	Due to its early maturity the farmers were motivated and encouraged to go for double cropping	Varietal Evaluation of Paddy 1)NDR-97 2)Local	a)47.7qtl/ha b)37.2qtl/ha	24550 15800	1:1.61 1:1.39

Trial 10

- 1) **Title** : **Varietal Evaluation of paddy**
- 2) Problem diagnose/Refined : Lack of short duration HYV suitable for this area and problem of lodging.
- 3) Details of technologies selected for assessment /refinement : Assessment, Paddy variety Haccha
- 4) Source of technology : Assam
- 5) Production thematic area : WRC
- 6) Thematic area : Yield performance of paddy, Haccha
- 7) Performance of the Technology with Performance indicator : Results shows that the paddy var. Haccha gave yield 30.9 qtl/ha as compared to 37.2qtl/ha incase of local check
- 8) Final recommendation for Micro level situation : Since the variety was found susceptible to blast epidemic, it was further recommended for assessment with proper management strategy.
- 9) Constrains identified and Feedback for research : Proper management strategy need to be adopt to overcome blast epidemic and time of sowing need to be adjusted.
- 10) Process of farmers Participation and their reaction: Farmers were actively engaged through trials, field day etc. They are willing to go for further trial in the next season.

11) Results of On Farm Trial

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Refinement	Parameters	Data on the parameter
1	2	3	4	5	6	7	8
Paddy variety Paddy: Haccha	WRC	Low yield with local variety	Varietal Evaluation of Paddy	2	Yield performance of Paddy variety 1) Haccha 2)Local	1) Plant height 2)Average number of Tiller /Hill 3)Average number of Active Tiller /Hill 4)Average length of Panicle 5)Average no of grains/ panicle 7) yield qtl/Ha	a)2.44 ft b)5.9 ft a)29 b)18.3 a)26.4 b)16.75 a)8.84 inch b)9.9 inch a)148.6 b)168.93 a)30.9 b)37.2

Results of Assessment	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
The production and productivity of the variety was much lower than that of the existing local variety due to blast epidemic	Due to its early maturity the farmers were willing to go for trials in the next season	Varietal Evaluation of Paddy 1)Haccha 2)Local	a)30.9 qtl/ha b)37.2 qtl/ha	- 15800	1 : 1 1:1.39

Trial 11

- 1) **Title** : **Varietal Evaluation of paddy**
- 2) Problem diagnose/Refined : Lack of short duration HYV suitable for this area and problem of lodging.
- 3) Details of technologies selected for assessment /refinement : Assessment, Paddy variety Megha-1,2,3
- 4) Source of technology : ICAR, Kolasib
- 5) Production thematic area : WRC
- 6) Thematic area : Yield performance of paddy, Megha-1,2,3
- 7) Performance of the Technology with Performance indicator : Results showed that all the three paddy varieties yielded lower than local check
- 8) Final recommendation for Micro level situation : Since the varieties did not yield better than local check, further refinement needs to be intervened.
- 9) Constrains identified and Feedback for research : Proper management strategy and time of sowing need to be intervened.
- 10) Process of farmers Participation and their reaction: Farmers were actively engaged in the process and they are willing to go trials in the next season.

11) Results of On Farm Trial

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Refinement	Parameters	Data on the parameter
1	2	3	4	5	6	7	8
Paddy variety Megha-1,2,3	WRC	Low yield with local variety	Varietal Evaluation of Paddy	6	Yield performance of Paddy variety 1) Megha-1, 2) Megha-2, 3) Megha-3, 4)Local	1) Plant height 2)Average number of Tiller /Hill 3)Average length of Panicle 4)Average no of grains/ panicle 5) yield qtl/Ha	a)3.5ft b)3.47ft c)3.55ft d) 5.9 ft a)37 b)33 c)33 d) 18.3 a)7.79inch b)7.5inch c)8.9inch d) 9.9 inch a)66 b)59 c)97 d)168.93 a)31.57 b)25.68 c)33.8 d) 37.2

Results of Assessment	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
Results showed that the paddy var. Megha-1,2,3 gave yield of 31.57qtl, 25.68qtl and 33.8 qtl respectively which was lower than local check with a production of 37.2qtl.	They are willing to go for trial in the next season.	Varietal Evaluation of Paddy 1)Megha-1 2)Megha-2 3) Megha-3 4) Local	a)31.57qtl/ha b)25.68qtl/ha c)33.8qtl/ha d) 37.2qtl/ha	- - - 15800	1:1 1:1 1:1 1:1.39

Trial 12

- 1) **Title** : **Cultivation of direct seeded Paddy**
- 2) Problem diagnose/Refined : Lack of water used efficiency.
- 3) Details of technologies selected for assessment /refinement : Assessment, Cultivation of Paddy through direct seeding method with controlled irrigation scheduled In paddy variety IR-64.
- 4) Source of technology :
- 5) Production thematic area : WRC
- 6) Thematic area : Cultivation of Paddy through direct seeding method
- 7) Performance of the Technology with Performance indicator : Results showed that the technology gave yield of 49.23qtl/ha as compared to 46.43qtl/ha in case of conventional method.
- 8) Final recommendation for Micro level situation : It is recommended for further assessment in the next season.
- 9) Constrains identified and Feedback for research : As it required controlled irrigation schedule, the technology should be adopted in areas where assured irrigation facilities are available and proper weed management should be ensured
- 10) Process of farmers Participation and their reaction : Field days and field demonstrations was conducted to create awareness.
- 11) Results of On Farm Trial

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Refinement	Parameters	Data on the parameter
1	2	3	4	5	6	7	8
Integrated farming system	WRC	Lack of water used efficiency	Cultivation of direct seeded Paddy	2	1) direct seeded Paddy 2) conventional method	1) Plant height 2) Average number of Tiller /Hill 3) Average length of Panicle 4) Average no of grains/ panicle 5) yield qtl/Ha	a)2.05ft b)2.1ft a)30.78 b)26.87 a)10.3inch b)9.73inch a)160.75 b)156.31 a)49.23 b)46.43

Results of Assessment	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
Result showed that the technology gives yield of 49.23qts/ha as compared to conventional method with a production of 46.43qts/ha.	The technology was new and easily applicable to the farmers, and yielded better. They are willing to go for trial in the next season.	1) Direct seeded Paddy 2) conventional method	a)49.23qtl/ha b)46.43qtl/ha	27513 25948.36	1:1.68 1:1.64

Trial 13

- 1) **Title** : **Cultivation of Maize**
- 2) Problem diagnose/Refined : Lack of awareness on improve cultivation packages
- 3) Details of technologies selected for assessment /refinement : Assessment/ Maize varRCM-75, 76 and BA61A was selected and spacing of 25X60cm was adopted
- 4) Source of technology : ICAR, Kolasib
- 5) Production thematic area : Rain-fed
- 6) Thematic area : Cultivation of Maize
- 7) Performance of the Technology with Performance indicator : Result showed that the Maize varRCM-75, 76 and BA61A gave yield of 54.2qts/ha, 49.9qts/ha and 40.7qts/ha respectively. The two varieties RCM-75&76 yielded better as compared to local variety Mimpui(42.6qts/ha)
- 8) Final recommendation for Micro level situation : Since the production of the variety RCM-75&76 gave higher yield as compared to the existing local variety, it is recommended to be introduced to the farmers.
- 9) Constrains identified and Feedback for research : The farmers of this region are mainly rice growers where maize is cultivated only as a secondary crop.
- 10) Process of farmers Participation and their reaction : The farmers were convinced with the performance and are encouraged for large scale production

11) Results of On Farm Trial

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Refinement	Parameters	Data on the parameter
1	2	3	4	5	6	7	8
Maize	Rain fed	Lack of awareness on improve cultivation packages	Cultivation of Maize with local check	6	Cultivation of Maize 1)RCM-75 2)RCM-76 3)BA-61A 4)Local (Mimpui)	1) Plant height 2)Average length of Cob 4)Average diameter of Cob 5)Average no of grains/ cob 6)Date of Harvesting 7) yield qtl/Ha	a)11.1ft b)10.1ft c)8.29ft d)6.2ft a)7.85inch b)7.91inch c)7.56inch d)6.1inch a)5.34inch b)5.71inch c)5.64inch d)5.96inch a)539 b)488 c)396 d)445 a)90-95DAS b) 90-95DAS c) 90-95DAS d) 93-97DAS a)54.2 b)49.9 c)40.7 d)42.6

Results of Refinement	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
Result showed that the Maize varRCM-75, 76 and BA61A gives yield of 54.2qts/ha, 49.9 qts/ha and 40.7 qts/ha respectively. The two varieties RCM-75&76 produced higher output as compared to local variety Mimpui(42.6 qts/ha)	The farmers were convinced with the performance and are encouraged to take up cultivation on large scale	Cultivation of Maize 1)RCM-75 2)RCM-76 3)BA-61A 4)Local(Mimpui)	a)54.2qtl/ha b)49.9qtl/ha c)40.7qtl/ha d)42.6qtl/ha	39488.57 36355.71 29652.85 31037.14	1:1.65 1:1.60 1:1.49 1:1.51

Trial 14

- 1) **Title** : **Use of Paddy Straw as mulch**
- 2) Problem diagnose/Refined : Lack of awareness on use of natural resources for weed control
- 3) Details of technologies selected for assessment /refinement : Assessment, Var-Kew
- 4) Source of technology :
- 5) Production thematic area : Rain-fed
- 6) Thematic area : Weed management
- 7) Performance of the Technology with Performance indicator : On going
- 8) Final recommendation for Micro level situation : On going
- 9) Constrains identified and Feedback for research : On going
- 10) Process of farmers Participation and their reaction : On going

12) Results of On Farm Trial

Crop/enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Refinement	Parameters	Data on the parameter
1	2	3	4	5	6	7	8
Pineapple	Rain fed	Lack of awareness on use of natural resources for weed control	Use of Paddy Straw as mulch	2		1) Weed intensity 2) No of suckers 3) Fruit weight 4) Yield	a)1 time b) 2 times

Results of Refinement	Feedback from the farmer	Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
9	10	11	12	13	14
-	-	-	-	-	-

Trial 15

1. Title : Mineral mixture (agrimin), Feed additive and supplement at existing traditional farmers practices
2. Problem diagnosed/ Refined: Mineral deficiency
3. Production Thematic Area : Strategic Supplement of deficient minerals.
4. Thematic Area : Increase in body weight
5. Performance of Technology with
Performance indicator : Incidence of disease, body weight, etc
6. Final recommendation for micro level
Situation : Mineral mixture as feed additive can be effectively used for supplementing traditional feeds for better growth rate and development in pig rearing
7. Constraints identified and feedback
For research : Awareness programme through training and demonstration is needed at present situation

Data on the Parameter: Body weight at Monthly intervals

Average Body wt	With mineral mixture	Without mineral mixture
3 month	15.75 kg	14.25 kg
4 Months	23.50 kg	19.25 kg
5 Months	32.65 kg	24.75 kg
6 Months	40.25 kg	30.75 kg
7 Months	47.90 kg	36.25 kg
8 Months	55.75 kg	42.25 kg
9 Months	64.25 kg	49.75 kg
10 Months	73.75 kg	56.25 kg

Trial 16

- 1) **Title** : **Cultivation of Fodder Crops**
- 2) Problem diagnose/Refined : Lack of awareness on quality fodder production
- 3) Details of technologies selected for assessment /refinement : Assessment/ Hybrid Napier var-CO2 &3 with a spacing of 50x50cm was adopted.
- 4) Source of technology :
- 5) Production thematic area : Rain-fed
- 6) Thematic area : Cultivation of Fodder crops
- 7) Performance of the Technology with Performance indicator : Result showed that at six cutting CO2 & CO3 gave yield of 346MT and 383MT/ha/year respectively.
- 8) Final recommendation for Micro level situation : fodder production in the district need to be popularized to create awareness.
- 9) Constrains identified and Feedback for research : The farmers of this region are not aware on fodder crop production.
- 10) Process of farmers Participation and their reaction : The farmers actively participated through trainings, demonstration and field days. The farmers realized that growing fodder crops will supplement their huge expenditure. Further, the heavy burden of gathering feed materials from distant places could be minimized.
- 11) Results of On Farm Trial

Fodder Crop production(Hybrid Napier)				
SINo	Parameters observed	Observations		Remarks
		CO-2	CO-3	
1	Cutting Intervals a. First Cutting b. 2 nd to sixth cutting	60-75DAT 45-50 Days after subsequent cutting	60-75DAT 45-50 Days after subsequent cutting	Spacing adopted:50 x 50 cm The fodder is cut closer to the ground level for profuse tillering
2	Yield / Ha./ year	346 Mt	383 Mt	

3.2 Achievements of Frontline Demonstrations

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

List of technologies demonstrated during previous year and popularized during 2011-12 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Technology demonstrated	Horizontal spread of technology		
			No. of villages	No. of farmers	Area in ha
1	Maize	Cultivation of Maize through HQPM-1	1	2	0.25
2	Soyabean	Cultivation of soyabean var JS335	1	2	0.25
3	Paddy	Paddy cum Fish culture	1	2	0.25
Total			3	6	0.75

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

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

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration			Reasons for shortfall in achievement	Farming situation (Rf/ Irrigated, Soiltype, altitude, etc)	Status of soil (Kg/ha)		
					Proposed	Actual	SC/ST	Others	Total			N	P	K
1	Maize	Crop Production	Cultivation of Maize through HQPM-1	Kharif 2011	0.25	0.25	2		2		Rainfed	207	16.3	116.5
												324	19.2	124.7
2	Soyabean	Crop Production	Cultivation of soyabean var JS335	Kharif 2011	0.25	0.25	2		2		Rainfed	215	14.7	128.46
												198	15.9	131.23
3	Paddy	Integrated farming system	Paddy cum Fish culture	Kharif 2011	0.25	0.25	2		2		Irrigated	313.6	17.47	139.78
												301.06	15.39	134.40

Performance of FLD

S. N	Crop	Demo. Yield Qtl./ha	Yield of local Check Qtl./ha	Data on parameter in relation to technology demonstrated (Yield, Disease incidence, etc. as specified in FLD Programme)		Economic Impact				Technical Feedback on the Demonstrated Technology	Farmers' Reaction on specific Technologies
						Average Net Return (Profit) (Rs./ha)		B.C. Ratio			
						Demo	Local Check	Demo	Local Check		
1	2	3	4	5	6						
1	Maize	54.5	41.4	1) Plant height=6.8ft 2)Average length of Cob=7inch 3)Average weight of Cob=226.66gm 4)Average diameter of Cob=6inch 5)Average no of grains/ cob=494 6)Date of Harvesting=85-89DAS 7)yield/Ha=54.5Q	1) Plant height=5.6ft 2)Average length of Cob=6inch 3) Average weight of Cob=200gm 4) Average diameter of Cob=6inch 5) Average no of grains/ cob=443 6) Date of Harvesting=94-97DAS 7) yield/Ha=41.4Q	51938.79	39454.42	1:1.86	1:1.65	Since the production of this variety gave higher yield as compared to their existing local variety , it is recommended for introducing at farmers field.	The farmers were convinced with the performance of HQPM-1 with respect to its productivity and production and are encouraged to grow if seeds are made available to them
2	Soyabean	11.42(seed yield)	12.93(seed yield)	1) Avg plant height(cm)=36.91 2) Avg pod/plant=38 3) Avg seed/pod=2.46 4)100 seed weight(gm)=11.68 5) Seed yield(Q/ha)=11.42	1) Avg plant height(cm)=34.36 2) Avg pod/plant=36 3) Avg seed/pod=2.68 4) 100 seed weight(gm)=13.04 5) Seed yield(Q/ha)=12.95	6970	15755	1;1.21	1;1.47	Soyabean JS-335 can be grown successfully at upland valley areas as well as foot hills .But the seed was smaller than the local variety which greatly effect the weight and seed yield.	Although the seed yield was slightly lower than the local variety farmers preferred this variety for fermentation as this is tastier than the local variety
3	Paddy cum fish culture	49		1) Plant height=2.13 ft 2)Average number of Tiller /Hill=33 3)Average number of Active Tiller /Hill=31.9 4)Average length of Panicle=10.12 inch 5)Average no of grains/ panicle=164.5 7) yield/Ha=49Q	1) Plant height=2.13 ft 2) Average number of Tiller /Hill=31.8 3) Average number of Active Tiller /Hill=29.82 4) Average length of Panicle=10.12 inch 5) Average no of grains/ panicle=162.5 7) yield/Ha=47.2Q	Rs.48,000(Paddy+Fingerlings)	11200	1:1.78	1:1.31	Paddy cum Fish culture is proved to be more profitable as compared to Paddy as mono cropping, So, recommended for further popularization.	Farmers realized that additional income can be obtained through Paddy cum Fish farming as Paddy fields retain water for three to six month a year which allows them to utilize it for fish 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																					
TOTAL																					

(C) EXTENSION PERSONNEL

Productivity enhancement in field crops	1		1							10		1		11		10		1		11		11
Integrated Pest Management																						
Integrated Nutrient management																						
Rejuvenation of old orchards	1		1							10		1		11		10		1		11		11
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	1		1							10		1		11		10		1		11		11

Date	Clientele	Title of the training programme	Discipline	Thematic area	Duration in days	Venue (Off / On Campus)	Number of SC/ST			Total number of participants		
							Male	Female	Total	Male	Female	Total
17.2.12	PF	Pesticides & its uses	Plant protection	IPM	1	Off	60		60	60		60
29.9.11 17.1.12	PF	Disease management of Ginger	Plant protection	IDM	2	On	103	8	111	103	8	111
21.6.11	PF	Diseases & Pest management of M.Orange	Plant protection	IPM	1	Off	30	30	60	30	30	60
17.2.12	PF	System of rice intensification(SRI)	Agronomy	Water Management	1	Off	60		60	60		60
17.1.12	PF	Cultivation of maize with proper cultural packages of practices	Agronomy	Seed production	1	On	78	3	81	78	3	81
21.9.11	PF	Double cropping(WRC-Pea/WRC-Mustard)	Agronomy	Cropping system	1	On	25	5	30	25	5	30
17.1.12 7.2.12 17.2.12	PF	Cultivation of M.Orange	Horticulture	Cultivation of fruits	3	On & Off	95	5	100	95	5	100
17.1.12 7.2.12	PF	Scientific management of backyard Poultry	Animal Sc	Poultry management	2	On	35	5	40	35	5	40
21.6.11 29.9.11	PF	Scientific management of Piggery	Animal Sc	Piggery management	2	On & Off	108	33	141	108	33	141
7.2.12	PF	Vermi compost	Agronomy	Vermi compost production	1	On	10		10	10		10
23.11.11	EF	Use of Fodder as cattle feeds	Animal Sc	Management in farm animals	1	On	10	1	11	10	1	11
23.11.11	EF	Rejuvenation of M.Orange	Horticulture	Rejuvenation of old orchard	1	On	10	1	11	10	1	11
23.11.11	EF	Proper cultural practices in Rice production	Agronomy	Productivity enhancement in field crops	1	On	10	1	11	10	1	11
23.11.11	EF	Vermi compost	Agronomy	Production and used of organic inputs	1	On	10	1	11	10	1	11

(D) Vocational training programmes for Rural Youth

Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
					Male	Female	Total	Type of units	Number of units	Number of persons employed	

(E) Sponsored Training Programmes

Sl.No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/R/EF)	No. of courses	No. of Participants						Sponsoring Agency
								SC/ST			Total			
								Male	Female	Total	Male	Female	Total	
1	17.2.12	Pesticides & its uses	Plant protection	IPM	1	PF	1	60		60	60		60	ATMA (Rs.10,000)
2	29.9.11 17.1.12	Disease management of Ginger	Plant protection	IDM	2	PF	2	103	8	111	103	8	111	ATMA (Rs.20,000)
3	21.6.11	Diseases & Pest management of M.Orange	Plant protection	IPM	1	PF	1	30	30	60	30	30	60	ATMA (Rs.10,000)
4	17.2.12	System of rice intensification(SRI)	Agronomy	Water Management	1	PF	1	60		60	60		60	ATMA (Rs.10,000)
5	17.1.12	Cultivation of maize with proper cultural packages of practices	Agronomy	Seed production	1	PF	1	78	3	81	78	3	81	ATMA (Rs.10,000)
6	21.9.11	Double cropping(WRC-Pea/WRC-Mustard)	Agronomy	Cropping system	1	PF	1	25	5	30	25	5	30	ATMA (Rs.10,000)
7	17.1.12 7.2.12 17.2.12	Cultivation of M.Orange	Horticulture	Cultivation of fruits	3	PF	3	95	5	100	95	5	100	ATMA (Rs.30,000)

8	17.1.12 7.2.12	Scientific management of backyard Poultry	Animal Sc	Poultry management	2	PF	2		35	5	40	35	5	40	ATMA (Rs.20,000)
9	21.6.11 29.9.11	Scientific management of Piggery	Animal Sc	Piggery management	2	PF	2		108	33	141	108	33	141	ATMA (Rs.20,000)
10	7.2.12	Vermi compost	Agronomy	Vermi compost production	1	PF	1		10		10	10		10	ATMA (Rs.10,000)
11	23.11.11	Use of Fodder as cattle feeds	Animal Sc	Management in farm animals	1	EF	1		10	1	11	10	1	11	ATMA (Rs.10,000)
12	23.11.11	Rejuvenation of M.Orange	Horticulture	Rejuvenation of old orchard	1	EF	1				11	10	1	11	ATMA (Rs.10,000)
13	23.11.11	Proper cultural practices in Rice production	Agronomy	Productivity enhancement in field crops	1	EF	1		10	1	11	10	1	11	ATMA (Rs.10,000)
14	23.11.11	Vermi compost	Agronomy	Production and used of organic inputs	1	EF	1		10	1	11	10	1	11	ATMA (Rs.10,000)
Total					19		19		644	93	737	644	93	737	Rs.1,90,000/-

3.4. Extension Activities (including activities of FLD programmes) (Please mention specific Extension Activity conducted by the KVK such as Field Day, Kisan Mela, Exhibition, Diagnostic Visit, etc)

Sl. No.	Nature of Extension Activity	Purpose/ topic and Date	No. of activities	Participants											
				Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension Officials (III)			Grand Total (I+II+III)		
				Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	Field days	Visit of KVK Farm & study on On going activities of the farm=3.5.11; 11.5.11;25.5.11; 7.6.11; 10.6.11; 17.6.11; 19.7.11; 26.8.11; 14.9.11; 16.11.11	10				246	100	346	9	5	14	255	105	360
2.	TV Show	SAC(19.4.11), KVK and its mandates(24.6.11), KVK Farm(16.9.11), Winter vegetable in KVK Farm(14.12.11)	04				500	300	800	30	20	50	530	320	850
3.	Film Show	Pest & Disease of Rice(8.6.11), Cole crops(3.10.11&19.10.11)	03				100	50	150	-	-	-	100	50	150
4.	Training materials produced (a) slides	Pesticides & its uses, Mangt of Pest & diseases of Rice, Mngt of Pest & Diseases of Ginger, Cultivation of M.Orange, Cultivation of Grapes, Cultivation of Winter veget & Pea, SRI, Scientific mangt of Backyard poultry farming & Piggery	10				604	89	693	40	4	44	644	93	737
5.	Diagnostics Study & Scientist visit to farmers Field	Visit to farmers field by scientist to study and for diagnostic visit (28.4.11,3.5.11,13.5.11,	22				22	-	22	-	-	-	22	-	22

		20.5.11,7.6.11,17.6.11,14.7.11,29.7.11,8.8.11,19.8.11,30.8.11, 16.9.11, 24.10.11, 31.10.11, 11.11.11, 23.11.11, 29.11.11, 7.12.11, 11.2.12, 22.2.12)													
6.	PRA Conducted	PRA conducted at Dulte village (19.4.11)	01				30	-	30	-	-	-	30	-	30
7.	Farmer's Visit to KVK	Visit of KVK farm by farmers					50	-	50	-	-	-	50	-	50
8.	Newspaper Coverage	Trainings conducted, on-going activities & Important visitors to KVK farm	12												12
9.	Celebration of important days	Chapchar kut(12.3.11& 2.3.11), Independence day(15.8.11), Christmas day(25.12.11), Republic day(26.1.12)	5												17
10.	Lecture delivered as resource person	MHIP(Rearing of cattle &Poultry farming)	1					50	50					50	50
11.	SAC	Scientific Advisory committee(19.4.11 & 15.2.12)	2							31		31	31		31
	Grand Total		70				1152	589	2141	110	29	125	1662	618	2309

3.5 Production and supply of Technological products

SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qt)	Value (Rs.)	Provided to No. of Farmers/Other Agencies
CEREALS	Paddy	Shahsarang	5	7500	8
		NDR-97	0.4	600	2
		IR 64	5	7500	8
		local	0.4	600	2
OILSEEDS					
PULSES	Pea	VL-Matar 42	0.2	2000	2
		Arkel	0.2	2000	2
		Soyabean	0.25	875	2
VEGETABLES					
FLOWER CROPS					
OTHERS (Specify)					

SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers/Other Agencies
1	CEREALS	10.8	16200	20
2	OILSEEDS			
3	PULSES	0.65	4875	6
4	VEGETABLES			
5	FLOWER CROPS			
6	OTHERS			
	TOTAL	11.45	21075	26

PLANTING MATERIALS

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS	Strawberry	Sweet Charlie	400	800	2
SPICES					
VEGETABLES	Broccoli	Aishwarya	1000	500	4
	Cabbage	Improved Bahar	1000	1000	4
	Cauliflower	Pusa Snowball	1000	1000	4
	Onion	Matahari	1000	1000	4
FOREST SPECIES					
ORNAMENTAL CROPS					
PLANTATION CROPS					
Others (specify)					

SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	400	800	2
2	VEGETABLES	4000	4000	16
3	SPICES			
4	FOREST SPECIES			
5	ORNAMENTAL CROPS			
6	PLANTATION CROPS			
7	OTHERS			
	TOTAL	4400	4800	18

BIO PRODUCTS

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOAGENTS	Vermiworm	<i>E foetida</i>	150000	100	33000	5
BIOFERTILIZERS						
1						
2						
3						
4						
BIO PESTICIDES						
1						
2						
3						
4						

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1	BIOAGENTS	<i>E foetida</i>	150000	100	33000	5
2	BIO FERTILIZERS					
3	BIO PESTICIDE					
	TOTAL		150000	100	33000	5

LIVESTOCK

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		
	Cattle					
	SHEEP AND GOAT					
	POULTRY					
	FISHERIES					
	Others (Specify)					

SUMMARY

Sl. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
1	CATTLE					
2	SHEEP & GOAT					
3	POULTRY					
4	FISHERIES					
5	OTHERS					
	TOTAL					

3.6. Literature Developed/Published (with full title, author & reference)

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

(B) Literature developed/published

Item	Title	Authors name	Number of copies
Research papers			
Total			
Technical reports			
Popular articles			
Leaflets/folders	M.orange, Grape , SRI	Malsawmkimi SMS (Hort), Malsawmkimi SMS (Hort), Lalramengi SMS (Agro)	150 150 150
Total			
GrandTOTAL			

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

3.7. Success stories/Case studies

Success story:

KVK has imparted training to rural farmers of Khawzawl on cultivation practices of winter vegetables, including demonstration on maintaining proper distance, manuring, raised bed (for onion), nursery management, pest and disease management etc. In 2011 Aug. Lalpianthangi (aged 38 years) and Mr Bawihltlanga (aged 51 years) happened to attend this training programme at KVK, Khawzawl, which was the turning point in their life. They were working very hard in their fields without adopting any scientific method. They used to grow only paddy by traditional method in their limited area of land. During winter they used to leave their field unutilized. The training motivated them to start taking up cultivation of onion and cabbage during winter as additional income. Khawzawl KVK assisted them by providing onion seeds variety 'Matahari' and cabbage variety Improved Bahar. Lalpianthangi who is single parent earned an income of Rs.30, 000 to 40,000 per year from cabbage and Mr Bawihltlanga made an income of Rs 40,000 to Rs 47,000 per year from onion cultivation.



Field view of Pi Lalpianthangi (cabbage grower)



Field view of Pu Bawihltlanga (onion grower)

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

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

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

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

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

3.11 Field activities

- i. Number of villages adopted : 9
- ii. No. of farm families selected: 18
- iii. No. of survey/PRA conducted:1

3.12. Activities of Soil and Water Testing Laboratory

Status of establishment of Lab :NA

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

Sl. No	Name of the Equipment	Qty.	Cost
1			
2			
3			
Total			

3. Details of samples analyzed so far :

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples				
Water Samples				
Plant Samples				
Petiole Samples				

Total				
-------	--	--	--	--

4.0 IMPACT

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

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)

NB: Should be based on actual study, questionnaire/group discussion etc. with ex-participants.

4.2. Cases of large scale adoption (Please furnish detailed information for each case)

4.3 Details of impact analysis of KVK activities carried out during the reporting period

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
State department of Agriculture	For technological transfer , skill upgradation and biodata of the district
State department of Horticulture	For technological transfer , skill upgradation and biodata of the district
State department of AH & Vety	For technological transfer , skill upgradation and biodata of the district
All Mizoram Farmers Union (AMFU)	For training & formation of SHGS
NGOs working in the area	For training & transfer of technology

NB The nature of linkage should be indicated in terms of joint diagnostic survey, joint implementation, participation in meeting, contribution received for infrastructural development, conducting training programmes and demonstration or any other

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	26.5.2011	12.10.2011	0.06	IR-64	Seed	5	5040	7500	
	26.5.2011	12.10.2011	0.06	Shahsarang	Seed	5	5040	7500	
	16.5.2011	25.11.2011	0.03	Megha 1	Seed	0.50	720	750	
	16.5.2011	25.11.2011	0.03	Megha 2	Seed	0.50	720	750	
	16.5.2011	25.11.2011	0.03	Megha 3	Seed	0.50	720	750	
Pulses	17.7. 2011	13.12.2011		Soyabean JS 335	seed	0.25	720	875	
Pigeonpea									
Oilseeds									
Fibers									
Spices & Plantation crops									
Floriculture									
Fruits									
Vegetables			0.0001	Cabbage	Seedlings	1000	540	1000	
			0.0001	Cauliflower	Seedlings	1000	540	1000	
			0.0001	Broccoli	Seedlings	1000	540	1000	
			0.0001	onion	Seedlings	1000	540	1000	
Others (specify)									

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	
1	Vermicompost	10	6000	10,000	Utilized at owned farm

6.5 Utilization of hostel facilities (Month Wise):

Accommodation available (No. of beds) :15 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)
May, 2011	RHWE of Bsc (hort) final year, pasighat	1	20	2	
Nov. 2011	Training for capacity building of BTM's and ABTM's under ATMA	2	11	2	
Jan. 2012	Training on cultivation practices of field pea, disease and pest management of Ginger and poultry management of North Khawbung RD block farmers under ATMA	1	15	2	
Feb, 2012	Training on cultivation practices of fruit crops, poultry management and vermicomposting method of Ngopa RD block farmers under ATMA	1	10	2	
Total					
Grand total		5	56	8	

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

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute			
With KVK			

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

Item	Released by ICAR/ZPD		Expenditure		Unspent balance as on 31 st March, 2012
	2009-10	2010-11	2009-10	2010-11	
Inputs		14355		14355	NIL
Extension activities					
TA/DA/POL etc.					
TOTAL		14355		14355	NIL

7.3 Utilization of KVK funds during the year 2011 -12

S. No.	Particulars	Sanctioned (in Lakh)	Released (in Lakh)	Expenditure (in Lakh)
A. Recurring Contingencies				
1	Pay & Allowances	67.87	67.87	67.30
2	Traveling allowances	1	1	1
3	Contingencies	5	5	5
TOTAL (A)		73.87	73.87	73.30
B. Non-Recurring Contingencies				
1	Works			
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)			
4	Library (Purchase of assets like books & journals)			
TOTAL (B)				
C. REVOLVING FUND				
GRAND TOTAL (A+B+C)		73.87	73.87	73.30

7.4 Status of revolving fund (Rs. in lakhs) for last three years

Year	Opening balance as on 1 st April	Income during the year	Expenditure during the year	Net balance in hand as on 1 st April of each year
April 2009 to March 2010	NIL	NIL	NIL	NIL
April 2010 to March 2011	NIL	NIL	NIL	NIL
April 2011 to March 2012	NIL	40,000	NIL	NIL*

* Credited to zonal co ordinator Unit ICAR, Barapani account number: 10228761565

8.0 Please include information which has not been reflected above (write in detail).

8.1 Constraints

- (a) Administrative : No fencing as fund not yet released.
- (b) Financial : Late release of fund and insufficient to meet actual requirement
- (c) Technical : Input for OFT and FLD are not available in time.

Requirements by KVK, khawzawl, Champhai District:

SNo	Components	Amount (Approx)
1	Water harvesting Structure	10 Lakhs
2	Development of model Integrated farming system	50 Lakhs
3	Office Infrastructure	3Lakhs
4	Vehicle (Bolero)	8 Lakhs
5	Meteriological Observatory	5 Lakhs
6	Mobile Expo Van	20 Lakhs
Total :		96 Lakhs