

ANNUAL PROGRESS REPORT – 2008-09

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-Wokha, P.O.Box-137, Wokha, Nagaland	03860-242897	03860-242897	kvk_wokha@yahoo.co.in./kvkwokha@gmail.com

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

Address	Telephone		E mail
	Office	FAX	
ICAR, Barapani, Meghalaya	(0364)2570257	0364-2570363	

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

Name	Telephone / Contact		
	Residence	Mobile	Email
N.Khumdemo Ezung	03860-280002	9402434628	khumdemo_ezung@yahoo.com

1.4. Year of sanction:2006

1.5. Staff Position (as on 30th September 2007)

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	Vacant	-	-	-	-	-	-	-
2	Subject Matter Specialist	N.Khumdemo Ezung	SMS	Agronomy	15600 + 5400(GP)	16880+5400(GP)	07/05/07	Temporary	ST
3	Subject Matter Specialist	Dr.H.Moaakum Sangtam	SMS	Animal Science	15600 + 5400(GP)	16880+5400(GP)	26.03.07	Temporary	ST

4	Subject Matter Specialist	Janak.Kr. Singh	SMS	Plant Breeding	15600 + 5400(GP)	16880+5400(GP)	29/03/07	Temporary	OBC
5	Subject Matter Specialist	Megokhono Meyase	SMS	Horticulture	15600 + 5400(GP)	16880+5400(GP)	28/03/07	Temporary	ST
6	Subject Matter Specialist	L.K.Singh	SMS	SWCE	15600 + 5400(GP)	16880+5400(GP)	27/03/07	Temporary	Gen
7	Subject Matter Specialist	Vacant	SMS	Extension	15600 + 5400(GP)				
8	Programme Assistant	Jessica Dohtdong	PA	Home Sc.	5200+2800(GP)	9270+2800(GP)	12/04/07	Temporary	ST
9	Programme Assistant	E.Lireni Kikon	PA	Plant Protection	5200+2800(GP)	9270+2800(GP)	29/03/07	Temporary	ST
10	Computer Programmer	Vacant	-	-	-	-	-	Temporary	-
11	Farm Manager	Abemo Ezung	Farm manager	M.Sc.	5200+2800(GP)	9270+2800(GP)	29/03/07	Temporary	ST
12	Accountant / Superintendent	Vacant	-	-	-	-	--	-	-
13	Stenographer	NyanbeniYanthan	Stenographer	-	5200+2400(GP)	8440+2400(GP)	28/012/06	Temporary	ST
14	Driver	Mhabemo Ezung	Driver	-	5200+2000(GP)	6990+2000(GP)	05/01/07	Temporary	ST
15	Driver	Longshithung Lotha	Driver	-	5200+2000(GP)	6990+2000(GP)	05/01/07	Temporary	ST
16	Supporting staff	Kilumo Ezung	SSGr.I(Cook)	-	4400+1800(GP)	5630+1800(GP)	08/05/07	Temporary	ST
	Supporting staff	Mrs Maluti Devi	SSGr.I	-	4400+1800(GP)	5630+1800(GP)	08/11/07	Temporary	

1.6. Total land with KVK (in ha): Yet to be earn marked

S. No.	Item	Area (ha)
1.	Under Buildings	-
2.	Under Demonstration Units	-
3.	Under Crops	-
4.	Orchard/Agro-forestry	-
5.	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	ICAR		363				
3.	Staff Quarters (6)	ICAR		403.68				
4.	Demonstration Units (2)	-						
5.	Fencing	-		2000 Running Meter				
6.	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
Bolero	2006	5,71,448.00		Good
Tractor	2007	401000.00		Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
LCD	2009		Good
IP Board	2009		Good
Digital Presenter	2009		Good
Digital Camera	2009		Good

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

Sl.No.	Date	Name and Designation of Participants	Salient Recommendations	Action taken
1.	23/07/09	1. Dr. B.P.Bhatt Joint Director, Nagaland Centre 2. Mr.Joseph Humtsoe Joint Director, Dept. of Horticulture 3. Dr. Elithung Humtsoe,DHO, Wokha 4. Dr.Mhonchan shitiri, Coordinator ATMA & Manager		

		Pig Base Breeding Farm. 5. Dr.Sahoo Scientist, SWCE 6. Mr.Vanchamo Ngullie, DPO Deptt. Of Land Resources 7. Mr.Chibosao, SDO(Soil) 8. Mr.Tsenjamo Humtsoe S/S(Seri) 9. Mr.Ketusielle Angami, DFO Deptt. Of Fisheries 10. Dr.J.K.Singh, SMS(PB) 11. Er.L.K.Singh, SMS(SWCE) 12. Ms.Jessica Dohdong, PA(H. Sc.) 13. Ms.Lireni Kikon, PA(PP) 14. Ms.Megokhono Meyase SMS(Horti) 15. N.Khumdemo Ezung, (i/c) & SMS(Agro) 16. Dr. H.M.Sangtam, SMS(A/Sc.) 17. Mr. Abemo Ezung, Farm Manager 18. Mr.Yanphamo Tungoe, Progrssive Farmer 19. Mrs.Liyani Kikon, Progressive Farmer		
--	--	--	--	--

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

2. DETAILS OF DISTRICT (2008-09)

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

S. No	Farming system/enterprise
	Agriculture+Horticulture
	Agriculture+Aquaculture
	Agriculture + Horticulture +Aquaculture
	Agriculture + Horticulture +Silvi pastoral
	Agriculture +Silvipastoral

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

S. No	Agro-climatic Zone	Characteristics
	Sub-tropical Hill zone	Red loamy & brown forest soil or sub montane soil Hilly in terrain
	Sub-tropical plain zone	Residual soil/Lateritic soil with hilly mid altitude
	Mild tropical hill zone	Alluvial soil, foot hill and plain areas bordering Assam

2.3 Soil type/s

S. No	Soil type	Characteristics	Area in ha
1	Red loamy & brown forest soil or sub montane soil	Soil brown in colour, acidic in nature with low nutrient status	70,000 (Approx.)
2	Residual soil/Lateritic soil	Acidic in nature and highly effected by soil erosion	60,000(Approx.)
3	Alluvial soil	Highly fertile soil suitable for cultivation of all crops	32,800(Approx.)

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

No	Crop	Area (ha)*	Production (qtl)*	Productivity (qtl /ha)*
1	Jhum paddy	13295	239310	18
2	TRC/WRC	5420	135500	25
3	Maize	608	10944	18
4	Nagadal	143	1430	10
5	Beans	181	2353	13
6	Peas	23	276	12
7	Rajmash	25	375	15
8	Groundnut	43	430	10
9	Soyabean	208	2496	12
10	Sesamum	251	1004	4
11	Rapeseed Mustard	231	1617	7
12	Linseed	29	232	8
13	Sugarcane	136	7480	55
14	Potato	128	9600	75
15	Tea	119	5355	45
16	Cardamum	25	75	3
17	Ginger	381	30480	80

Source : District Agriculture Officer, Wokha

2.5. Weather data

Month	Rainfall (mm)	Temperature ° C		Relative Humidity (%)
		Maximum	Minimum	
September 2008	310	28.20	19.20	87.70
October	159.70	26.90	16.60	94.00
November	-	26.30	12.70	73.90
December	4.60	22.60	11.20	63.70
January 2009	-	21.30	10.00	50.30
February	-	24.40	11.90	47.30
March	35.60	26.20	14.30	47.80
April	57.60	26.80	16.70	66.30
May	289.60	27.70	17.90	70.70
June	429.00	27.80	19.50	76.60
July	440.00	28.30	20.40	83.80
August	-	-	-	-

Source : District Soil and Water Conservation Officer, Wokha

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	12682	-	-
<i>Indigenous</i>	33469	-	-
Buffalo	629	-	-
<i>Crossbred</i>	88	-	-
<i>Indigenous</i>	177	-	-
Goats	29626	-	-
Pigs		-	-
<i>Crossbred</i>	31640	-	-
<i>Indigenous</i>	48771	-	-
Rabbits	6551	-	-
Poultry			
Hens	68794	-	-
<i>Desi</i>	97703	-	-
<i>Improved</i>	72541	-	-
Ducks	10166	-	-
Turkey and others	157	-	-
Fish			
<i>Marine</i>			
<i>Inland</i>	260	125 mt	1800 kg/ha/year
Prawn			
Scampi			

Source : Report on seventeenth quinquennial livestock census – 2003, Statistical Wing, Directorate of Vety and A.H. Govt of Nagaland.

2.6 Details of Operational area / Villages (2008-09)

Sl.No.	Taluk	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1.	-	Wokha Sadar	Longsachung	Rice, Maize, Piggery, banana and Poultry	Declining soil fertility, local crop variety and local breeds of livestock	Improvement of Jhum and local breeds/ variety
2	-	Wokha Sadar	Longsa	Rice, Maize, Piggery, vegetables and Poultry	Declining soil fertility local crop variety and local breeds of livestock	Improvement of Jhum and local breeds/variety
3	-	Wokha Sadar	Wokha Village	Rice, Maize, passion fruit, banana, Piggery and Poultry	Declining soil fertility ,local crop variety and local breeds of livestock	Improvement of Jhum and local breeds /variety

2.7 Priority/thrust areas

	Thrust area
Rice	Introduction of HYV, IPM & IDM ,Jhum Improvement for sustained Production in Wokha district
Livestocks	Introduction of Improved breeds
Horti crops	Post harvest processing and value addition in important agri-horti commodities
Farm implements	Farm mechanization to reduce drudgery in hill agriculture

3. TECHNICAL ACHIEVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2008-09

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
19	13	57	39	12	10	36	30

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	57	65	1765	2747	130	104	855	864
Rural youth	7	20	160	954				
Extn. Functionaries	1	6	15	209				

Seed Production (Qtl.)		Planting material (Nos.)	
5		6	
Target	Achievement	Target	Achievement
NA	NA	NA	NA
NA	NA	NA	NA

3.B. Abstract of interventions undertaken

S. No	Thrust area	Crop/ Enterprise	Identified Problem
1	Nutrient management	Rice	Nutrient deficiency
2	Soil and water conservation	Jalkund	Moisture stress during lean season
3	Cultivation of pulse(Arkel)	Pea (Arkel)	Low yield of local variety
4	Cultivation of mushroom	Mushroom(Oyster)	Not popularly cultivated
5	Poultry farming	Kuroiler	Low yielding local breeds
6	Crop production	tomato	Low yield of local variety
7	Post harvest management	Fruits and vegetables	Post harvest loss
8	Disease management	Upland Paddy	High incidence of blast in local variety

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.
Biofertilizer application in TRC paddy	-	-	-	-	Biofertilizer
Low cost water harvesting structure	-	-	-	-	Supply of poly film
-	Polularization of Arkel	Package of practices	-	Field day, media coverage	Supply of seeds
-	Polularization of Oyster mushroom	Cultivation methodology	-	Media coverage	Supply of spawn
-	Polularization of kuroiler	Management practices	-	Media coverage	Supply of kuroiler chicks
Performance trial on manikhamnu	-	-	-	-	Supply of seeds
Zero Energy Cool Chamber	-	-	-	-	ZECC
To test the paddy variety Bhalum-1 against blast disease	-	-	-	-	Supply of seeds

3.1 Achievements on technologies assessed and refined

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

[illegible]

Resource conservation technology	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Small Scale income generating enterprises	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL										

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

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

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

B. Details of each On Farm Trial to be furnished in the following format

A. Technology Assessment

Trial 1

- 1) Title : Biofertilizer application on paddy under TRC
- 2) Problem diagnose/defined : Low yield due to nutrient deficiency
- 3) Details of technologies selected for assessment /refinement :
 - i. Without biofertilizer application(Farmers' practice)
 - ii. With biofertilizer application(Azospirillum and Phosphotika)
- 4) Source of technology : Govt. of Nagaland
- 5) Production system thematic area : Rainfed rice based system
- 6) Thematic area : Nutrient Management

- 7) Performance of the Technology with performance indicators : Treated (53.1qt/ha), B:C ratio (1:2.89), No. of grains per panicle (230), Average height(120.40 cm) compared to Untreated

- 8) Final recommendation for
micro level situation : Biofertilizer may be applied under TRC under Wokha District for increasing the productivity
- 9) Constraints identified and
feedback for research : NA
- 10) Process of farmers
participation and
their reaction : Farmers' actively participated in the whole process of the trial programme and actively took part in the data collection and monitoring and were amazed by the performance from the treated plot.

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rice	Rainfed	Low yield due to nutrient deficiency	Application of biofertilizer on paddy under TRC	3	<i>Azospirillum and Phosphotika</i>	1. Height 2. No. of grains/panicle 3. Test weight 4. Grain yield	1. 120.4 cm 2. 230 3. 26.64 gm 4. 53.91 q/ha	Treated- 53.91 q/ha Untreated- 21 qt/ha	

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
<i>Azospirillum and Phosphotika</i>	53.91 q/ha	28128	1:2.89

Trial 2

- | | | |
|--|---|--|
| 1) Title | : | Performance trial on SRI with RCM-5 |
| 2) Problem diagnose/defined | : | Unproductive system of cultivation |
| 3) Details of technologies
selected for assessment
/refinement | : | i. Conventional system(Farmers' practice)
ii. SRI |
| 4) Source of technology | : | Madagascar |
| 5) Production system
thematic area | : | Rainfed rice based system |
| 6) Thematic area | : | Improved cultivation methods |
| 7) Performance of the
Technology with
performance indicators | : | ongoing |
| 8) Final recommendation for
micro level situation | : | ongoing |
| 9) Constraints identified and
feedback for research | : | NA |
| 10) Process of farmers
participation and
their reaction | : | ongoing |

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rice	Rainfed	Unproductive system of cultivation	Performance trial on SRI with RCM-5	3	SRI	1. Height 2. No. of grains/panicle 3. Test weight 4. Grain yield	Ongoing	Ongoing	Ongoing

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
SRI	Ongoing	Ongoing	Ongoing

Trial 3

- | | | |
|--|---|--|
| 1) Title | : | Performance trial on SARS-4 & SARS-2 |
| 2) Problem diagnose/defined | : | Low yield of existing local variety |
| 3) Details of technologies
selected for assessment
/refinement | : | i. Local variety(Farmers' practice)
ii. SARS-2
iii) SARS-4 |
| 4) Source of technology | : | SARS, Yesemyong, Mokokchung |
| 5) Production system
thematic area | : | Rainfed rice based system |
| 6) Thematic area | : | Varietal evaluation |
| 7) Performance of the
Technology with
performance indicators | : | ongoing |
| 8) Final recommendation for
micro level situation | : | ongoing |
| 9) Constraints identified and
feedback for research | : | NA |
| 10) Process of farmers
participation and
their reaction | : | ongoing |

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rice	Rainfed	Low yield of existing local variety	Performance trial on SARS-4 & SARS-2	3	i) Local variety(Farmers practice) ii. SARS-2 iii) SARS-4	1. Height 2. No. of grains/panicle 3. Test weight 4. Grain yield	Ongoing	Ongoing	Ongoing

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
i) Local variety(Farmers' practice) ii. SARS-2 iii) SARS-4	Ongoing	Ongoing	Ongoing

Trial 4

- | | | |
|--|---|--|
| 1) Title | : | Performance trial on Shasarang |
| 2) Problem diagnose/defined | : | Low yield of existing local variety |
| 3) Details of technologies
selected for assessment
/refinement | : | i. Local variety(Farmers' practice)
ii. Shasarang |
| 4) Source of technology | : | ICAR, Barapani |
| 5) Production system
thematic area | : | Rainfed rice based system |
| 6) Thematic area | : | Varietal evaluation |
| 7) Performance of the
Technology with
performance indicators | : | ongoing |
| 8) Final recommendation for
micro level situation | : | ongoing |
| 9) Constraints identified and
feedback for research | : | NA |
| 10) Process of farmers
participation and
their reaction | : | ongoing |

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rice	Rainfed	Low yield of existing local variety	Performance trial on Shasarang	3	i) Local variety(Farmers' practice) ii. Shasarang	1. Height 2. No. of grains/panicle 3. Test weight 4. Grain yield	Ongoing	Ongoing	Ongoing

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
i) Local variety(Farmers' practice) ii. Shasarang	Ongoing	Ongoing	Ongoing

Trial 5

- 1) Title : Zero Energy Cool Chamber for Storage of Vegetables and fruits
- 2) Problem diagnose/defined : Non availability of post harvest storage of vegetables and fruits in the Wokha district
- 3) Details of technologies selected for assessment /refinement : Zero energy cool chamber, IARI model
- 4) Source of technology : IARI, Pusa, New Delhi
- 5) Production system thematic area : Non availability of post harvest storage of vegetables and fruits
- 6) Thematic area : Storage longevity evaluation
- 7) Performance of the Technology with performance indicators :

Particulars	Initial wt. (gm)	Final wt. (gm)	Wt. loss (%)	Shelf life (days)
Cucumber				
Zero Energy Cool Chamber (ZECC)	225	150	33.3	18
Room Condition	131.5	87.5	33.5	13
French Bean				
Zero Energy Cool Chamber (ZECC)	1000	850	15	10
Room Condition	900	600	33.3	10
Passion fruit				
Zero Energy Cool Chamber (ZECC)	1500	1400	6.7	9
Room Condition	1200	1100	8.3	5

- 8) Final recommendation for micro level situation : Observation is still going on hence would like cover rabi season as well.
- 9) Constraints identified and feedback for research : Still going on
- 10) Process of farmers participation and their reaction : popularization has to be taken up, the technology is new to the place and there is acceptability among farmers.

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
Zero Energy Cool Chamber	--	Non availability of post harvest storage of vegetables and fruits in the Wokha district	Zero Energy Cool Chamber for Storage of Vegetables and fruits	10	--	1. weight loss 2. shelf life	1. Weight loss C-33.3%,PF-6.7% 2. Shelf life C-18 days, PF-9days	Projected in the table above	There is acceptability among farmer.
					--				

C-Cucumber

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Zero Energy Cool Chamber for Storage of Vegetables and fruits	NA	NA	NA

Trial 6

- 1) Title : Low cost rainwater harvesting for crop production
- 2) Problem diagnose/defined : Lack of rainwater harvesting for crop production
- 3) Details of technologies selected for assessment /refinement : Jalkund
- 4) Source of technology : ICAR for NEH Region, Umiam
- 5) Production system thematic area : Non availability of low cost rainwater harvesting for crop production
- 6) Thematic area : Crop production and water requirement
- 7) Performance of the Technology with performance indicators : 2000 nos of fingerling size fish was stocked for sale @ Rs. 5 per fingerlings, about 500 kg of cabbage was produced and @ Rs. 7 per kg, 5000 nos of nursery is raised @Rs. 6 per nursery.
- 8) Final recommendation for micro level situation : it can adopted by any farmer and very low cost system of rainwater harvesting
- 9) Constraints identified and feedback for research : material used i.e. LEPD has to carefully handle, it is easily spoilable
- 10) Process of farmers participation and their reaction : The technology is new to the place and there is acceptability among farmers

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rainwater harvesting	Rainfed	Lack of rainwater harvesting for crop production	Low cost rainwater harvesting for crop production	10	--	Crop production and water requirement			There is acceptability among farmer.

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Low cost rainwater harvesting for crop production	Cost of water Rs. 0.30 per liter in the first year	Rs. 26000/-	1:8.25

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

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

Trial 7

- 1) Title : To test the paddy variety Bhalum-1 against blast disease in Wokha district
- 2) Problem diagnose/defined : High incidence of blast disease in local varieties
- 3) Technology selected for assessment
/refinement : Bhalum-1
- 4) Source of technology : ICAR, Barapani
- 5) Production system
thematic area : Crop production and disease management
- 6) Thematic area : Blast resistant variety evaluation
- 7) Performance of the
Technology with
performance indicators : Disease incidence (Nil), Height (113 cm), Duration (145 days)
Grain yield (30.6qt/ha) B:C(2.04:1)
- 8) Final recommendation for
micro level situation : Blast resistant variety Bhalum-1 may be grown in place of the existing
local variety
- 9) Constraints identified and
feedback for research : Need to undertake trails on different date of sowing under Wokha
district
- 10) Process of farmers
participation and
their reaction : as the variety was new, the farmers were a bit reluctant but were
observed to be satisfied with the performance of the variety

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rice	Rainfed	High incidence of blast disease in local variety	To test the paddy variety Bhalum-1 against blast disease in Wokha district	3	Bhalum-1	1. Disease incidence 2.Height 3.Duration 4. Grain yield	1. Nil 2.113 cm 3.145 days 4. 30.60 qt/ha	Disease incidence was observed to be nill and grain yield was recorded 30.60 qt/ha	Good variety and gave higher yield compared to local

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Bhalum-1	30.60 qt/ha	12480	2.04:1

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

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

Trial 8

- 1) Title : Performance of three different genetic groups of Rabbit under low input production system
- 2) Problem diagnose/defined : Non availability of pure breed
- 3) Technology selected for assessment /refinement : New Zealand white, Souviet chinchilla, Giant grey
- 4) Source of technology : ICAR, Barapani
- 5) Production system thematic area : NA
- 6) Thematic area : Evaluation on breeds of rabbit
- 7) Performance of the Technology with performance indicators : Ongoing
- 8) Final recommendation for micro level situation : Ongoing
- 9) Constraints identified and feedback for research : Ongoing
- 10) Process of farmers participation and their reaction : Ongoing

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Rabbit Farming	NA	Non availability of pure breed	Performance of three different genetic groups of Rabbit under low input production system	3	New Zealand white, Soviet chinchilla, Giant grey	1. Body weight 2. Mortality rate 3. Ave. daily feed intake	Ongoing	Ongoing	Ongoing

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
New Zealand white, Soviet chinchilla, Giant grey	Ongoing	Ongoing	Ongoing

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

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

Trial 9

- 3) Title : Comparative study on local cucumber cv. Of Mokokchung and Wokha
- 4) Problem diagnose/defined : Lack of quality cucumber
- 3) Technology selected for assessment
/refinement : Local variety of Mokokchung and Wokha
- 4) Source of technology :
- 5) Production system
thematic area : Rainfed
- 6) Thematic area : Varietal evaluation
- 7) Performance of the
Technology with
performance indicators :
- 8) Final recommendation for
micro level situation : The local cucumber cv. Of Mokokchung can be adopted for commercial
production in place of Wokha variety
- 9) Constraints identified and
feedback for research : NA
- 10) Process of farmers
participation and
their reaction : Active participation from the farmers right from to the sowing till the harvest
and are satisfied with the performance of the variety

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Cucumber	Rainfed	Lack of quality cucumber for consumption	Comparative study on local cucumber cv. Mokokchung and Wokha	3	local cucumber cv. Mokokchung and Wokha	1. Date of sowing	16.02.09/16.02.09	Mokokchung- 717.47 qt/ha Wokha-479.14 qt/ha	
						2. Date of first flowering	21.04.09/24.04.09		
						3. Date of first harvesting	13.05.09/16.05.09		
						4. Vitamin C content (mg/100 gm)	8.32/5.12		
						5. Total sugar (%)	12.5/8.13		
						6. Acidity (%)	0.16/0.10		
						7. No. of seeds/ fruit	363/398.33		
						8. Yield (qt/ha)	717.47 /479.14		

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
local cucumber cv. Mokokchung and Wokha	Mokokchung - 717.47 qt/ha	Mokokchung - 270735/-	Mokokchung - 4.08:1
	Wokha - 479.14 qt/ha	Wokha - 151570/-	Wokha - 2.72:1

Trial 10

- 5) Title : Trial on Brinjal cv. RCMBHL-1 in Wokha District
- 6) Problem diagnose/defined :
- 3) Technology selected for assessment
/refinement : RCMBHL-1
- 4) Source of technology : ICAR, Barapani
- 5) Production system
thematic area : Rainfed and Varietal evaluation
- 6) Thematic area : Varietal evaluation
- 7) Performance of the
Technology with
performance indicators :
- 8) Final recommendation for
micro level situation : Ongoing
- 9) Constraints identified and
feedback for research : Incidence of Egg plant fruit and shoot borer was observed
Trial on Egg plant fruit and shoot borer management
- 10) Process of farmers
participation and
their reaction : ongoing

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Brinjal	Rainfed		Trial on Brinjal cultivar	3	RCMBHL-1	1. Date of sowing	21.02.09)	ongoing	ongoing
						2. Date of germination	07.04.09		
						3. Date of transplanting	04.05.09		
						4. Date of flowering	19.06.09		
						5. Date of first harvesting	07.07.09		
						6. Yield	ongoing		

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
RCMBHL-1	ongoing	ongoing	ongoing

Trial 11

- 7) Title : Production potential of Naga King chillie
- 8) Problem diagnose/defined :
- 3) Technology selected for assessment
/refinement : Naga King chilly
- 4) Source of technology : Govt. of Nagaland
- 5) Production system
thematic area : Rainfed
- 6) Thematic area : Varietal evaluation
- 7) Performance of the
Technology with
performance indicators : Ongoing
- 8) Final recommendation for
micro level situation : Ongoing
- 9) Constraints identified and
feedback for research : Ongoing
- 10) Process of farmers
participation and
their reaction : Farmers' are actively participating in the whole trial process.

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	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Naga King chilli	Rainfed		Production potential of Naga king chilli	3	Naga King chilly	1. Date of sowing	21.02.09	ongoing	ongoing
						2. Date of germination	04.04.09		
						3. Date of transplanting	12.05.09		
						4. Yield	ongoing		

Continue.....

Technology Assessed	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
Naga King Chilly	ongoing	ongoing	ongoing

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

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

B. Technology Refinement : NA

Trial 1

- 1.** Title :
- 2.** Problem diagnose/defined :
3. Details of technologies selected for assessment/refinement:
4. Source of technology :
5. Production system thematic area :
6. Thematic area :
7. Performance of the Technology with performance indicators :
8. Final recommendation for
micro level situation :
9. Constraints identified and
feedback for research :
10. Process of farmers participation
and their reaction :

11). Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology refined	Parameters	Data on the parameter	Results of refinement	Feedback from the farmer	Justifi cation for refinement
1	2	3	4	5	6	7	8	9	10	11

*** No. of farmers**

Technology Refined	*Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
12	13	14	15

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

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

3.2 Achievements of Frontline Demonstrations

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

List of technologies demonstrated during previous year and popularized during 2007-08 and recommended for large scale adoption in the district

S · N O	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularizatio n methods suggested to the Extension system	Horizontal spread of technology		
					No. of village s	No. of farmer s	Are a in ha
	NA	NA	NA	NA	NA	NA	NA

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

b. Details of FLDs implemented during 2007-08 (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
					Proposed	Actual	SC/ST	Others	Total	
1	Pea	Cultivation of Pea	Arkel	Rabi	-	1	10	-	10	Low moisture
2	Rajma	Cultivation of Rajma	Kholar (Tuensang local)	Rabi	-	1	3	-	3	Low moisture
3	Mustard and rapeseed	Cultivation of mustard and rapeseed	TS-36	Rabi	-	1	3	-	3	Low moisture
4	Groundnut	Cultivation of Groundnut	JL-24	Kharif	-	0.5	5	-	5	Late onset of monsoon
5	Soyabean	Cultivation of Soyabean	JS-335	Kharif	-	1	5	-	5	Late onset of monsoon
6	Tomato	Cultivation of tomato	Manikhamnu	Kharif	-	0.5	3	-	3	Late onset of monsoon
7	Maize	Cultivation of Maize	QPM	Kharif	-	0.5	5	-	5	Late onset of monsoon

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
1	Pea	RF	Loamy	-	-	-	Rice	17/10/08	20/02/09	-	-
2	Rajma	RF	Loamy	-	-	-	Rice	02/09/08	07/01/09	-	-
3	Mustard and rapeseed	RF	Loamy	-	-	-	Rice	18/10/08	12/02/09	-	-
4	Groundnut	RF	Loamy	-	-	-	Fallow	14/05/09	Ongoing	-	-
5	Soyabean	RF	Loamy	-	-	-	Mustard	13/06/09	ongoing	-	-
6	Tomato	RF	Loamy	-	-	-	Pea	07/04/09	18/06/09	-	-
7	Maize	RF	Loamy	-	-	-	Fallow	22/04/09	21/08/09	-	-

Performance of FLD

Sl.No.	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Pea	Arkel	Arkel	10	1	10.25	9.80	10.02	6.50	54%	10.02	6.50
2	Rajma	Kholar (Tuensang local)	Kholar (Tuensang local)	3	1	13.50	12.70	13.10	9.25	41%	13.10	8.25
3	Mustard and rapeseed	TS-36	TS-36	3	1	4.20	3.30	3.75	2.85	31%	3.75	2.85
4	Groundnut	JL-24	JL-24	5	0.5	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing
5	Soyabean	JS-335	Js-335	5	1	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing
6	Tomato	Manikhamnu	Manikhamnu	3	0.5	320	280	300	253	18%	Height-47.62cm Days to flowering-34 Fruit wgt-52.2 g No. of fruit/plant-15.51 Yield-300q/ha	Height-55.02cm Days to flowering-36 Fruit wgt-22 g No. of fruit/plant-68.63 Yield-253q/ha
7	Maize	QPM	QPM	5	0.5							

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

Economic Impact (continuation of previous table)

Average Cost of cultivation (Rs./ha)			Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)
Demonstration		Local Check	Demonstration	Local Check	Demonstration	Local Check	
	14	15	16	17	18	19	20
Pea	21200/-	15000/-	40080/-@Rs.40/kg	26000/-	18800/-	11000/-	1.89:1/1.73:1
Rajma	22400/-	15000/-	65500/-@Rs.50/kg	41250/-	44300/-	26250/-	3.09:1/2.75:1
Mustard and rapeseed	11000/-	8500/-	15000/-@Rs.40/kg	11400/-	4000/-	2900/-	1.36:1/1.34:1
Groundnut	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing
Soyabean	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing
Tomato	80500/-	78500/-	3,00000/-@Rs.10/kg	1,26,500/-@Rs.5/kg	2,19,500'-	47800/-	Manikhamnu-3.73:1 Local-1.60:1
Maize							

Analytical Review of component demonstrations (details of each component for rainfed / irrigated situations to be given separately for each season).

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Pea	Rabi	1. Arkel	Rainfed	10.02	6.50	54%
		2. FYM				
		3. Nil				
		4. Sulfex @ 3kg/ha in 1000 litres of water				
Rajma	Rabi	1. Kholar(Tuensang local)	Rainfed	13.10	8.25	58%
		2. FYM				
		3. Nil				
		4. Rogor (0.2%)				
Mustard and rapeseed	Rabi	1. TS-36	Rainfed	3.75	2.85	31%
		2. FYM				
		3. Nil				
		4. Rogor 1.5 ml/litre of water for aphid				
Groundnut	Kharif	1. JL-24	Rainfed	ongoing	ongoing	-
		2. FYM				
		3. Nil				
		4. Plant Protection				
Soybean	Kharif	1. JS-335	Rainfed	ongoing	Ongoing	-
		2. FYM				
		3. 20:60:30 NPK				
		4. Dithane M-45 @0.2% Endosulfan(0.10%) for leaf folder				

Tomato	Kharif		Rainfed	300	253	18%
		1. Manikhamnu				
		2. Bio-fertilizer				
		3. Fertilizer management(120:75:60 NPK)				
		4. Plant Protection(Dithane M-45 @0.2%)				
Maize	Kharif	1. QPM	Rainfed			
		2. Seed treatment with <i>Azotobacter</i> and <i>phosphotika</i>				
		3. Nil				
		4. Monocrotophos for stem borer				

Technical Feedback on the demonstrated technologies

S. No	Feed Back
Pea	low soil moisture availability and incidence of powdery mildew observed
Rajma	good crop compared with local variety
Mustard and rapeseed	incidence of aphid observed
Groundnut	Ongoing
Soyabean	Ongoing
Tomato	Yield was high compared to local check but high incidence of early & late blight disease on the demonstrated variety
Maize	good colour and regular grain formation

Farmers' reactions on specific technologies

S. No	Feed Back
Pea	no additional expenditure in stacking and gave comparatively good yield inspite of low moisture
Rajma	good crop compared with local variety
Mustard and rapeseed	good crop compared with local variety
Groundnut	good crop compared with local variety
Soyabean	ongoing
Tomato	satisfied with the technology but suggested for introduction of resistant varieties to pest and diseases.
Maize	good crop compared with local variety

Extension and Training activities under FLD

Sl.No.	Activity	No. of activities organised	Date	Number of participants	Remarks
1	Field days	2	07/02/09 & 21/08/09	25	
2	Farmers Training	2	17/10/08 & 22/04/09	25	
3	Media coverage	2			
4	Training for extension functionaries				

c. 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		
Paddy thresher	Rice	3	NA	ongoing	ongoing	ongoing	ongoing	ongoing
Maize	Maize	10	ongoing	ongoing	ongoing	ongoing	ongoing	ongoing

- *Field efficiency, labour saving etc.*

(ii) Livestock Enterprises

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Performance parameters / indicators	* Data on parameter in relation to technology demonstrated		% change in the parameter	Remarks
					Demon.	Local check		
Kuroiler farming	Kuroiler	8	70	Body weight	3.6 kg/bird	1.7 kg/bird	111%	Good

- * Milk production, meat production, egg production, reduction in disease incidence etc.

(iii) Other Enterprises

[illegible]

3.3 Achievements on Training (Including the sponsored, vocational, FLD and trainings under Rainwater Harvesting Unit)

A) ON Campus : NA

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

B) OFF Campus

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
(A) Farmers & Farm Women										
I Crop Production										
Weed Management	3				36	22	58	36	22	58
Resource Conservation Technologies										
Cropping Systems										
Crop Diversification										
Integrated Farming										
Water management	2				29	21	50	29	21	50
Seed production	2				55	35	90	55	35	90
Nursery management	1				33	27	60	33	27	60
Integrated Crop Management										
Fodder production										
Production of organic inputs										
II Horticulture										
a) Vegetable Crops										
Production of low volume and high value crops	2				-	100	100	-	100	100
Off-season vegetables	2				3	62	65	3	62	65
Nursery raising										
Exotic vegetables like Broccoli	1				27	23	50	27	23	50
Export potential vegetables										
Grading and standardization										
Protective cultivation (Green Houses, Shade Net etc.)										
b) Fruits										
Training and Pruning	1				65	25	90	65	25	90

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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	1				22	05	27	22	05	27
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	6				163	46	209	163	46	209

C) Consolidated table (ON and OFF Campus)

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

implements										
Production of livestock feed and fodder										
Production of Fish feed										
X Capacity Building and Group Dynamics										
Leadership development										
Group dynamics										
Formation and Management of SHGs										
Mobilization of social capital										
Entrepreneurial development of farmers/youths										
WTO and IPR issues										
XI Agro-forestry										
Production technologies										
Nursery management										
Integrated Farming Systems										
TOTAL	65				1327	1420	2747	1327	1420	2747
(B) RURAL YOUTH										
Mushroom Production	3				91	104	195	91	104	195
Bee-keeping										
Integrated farming										
Seed production	2				44	12	56	44	12	56
Production of organic inputs										
Integrated Farming	1				40	24	64	40	24	64
Planting material production										
Vermi-culture	4				102	73	175	102	73	175
Sericulture										
Protected cultivation of vegetable crops										
Commercial fruit production										
Repair and maintenance of farm machinery and	1				14	14	28	14	14	28

implements										
Nursery Management of Horticulture crops										
Training and pruning of orchards										
Value addition	4				93	89	182	93	89	182
Production of quality animal products										
Dairying										
Sheep and goat rearing										
Quail farming										
Piggery	1				11	14	25	11	14	25
Rabbit farming										
Poultry production	1				34	28	62	34	28	62
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	2				119	53	172	119	53	172
Post Harvest Technology										
Tailoring and Stitching	2				2	37	39	2	37	39
Rural Crafts	1				14	14	28	14	14	28
TOTAL	20				515	439	954	515	439	954
(C) Extension Personnel										
Productivity enhancement in field crops	1				52	-	52	52	-	52
Integrated Pest Management	1				5	20	25	5	20	25
Integrated Nutrient management										
Rejuvenation of old orchards	1				40	11	51	40	11	51

Protected cultivation technology	2				44	10	54	44	10	54
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	1				22	05	27	22	05	27
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	6				163	46	209	163	46	209

(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 elsewhere
					Male	Female	Total	Type of units	Number of units	Number of persons employed	
Flower making	03/11/08 to 04/11/08	Flower making & decoration	Rural craft	2	14	14	28				
Soft toys making	10/12/08 to 11/12/08	Soft toys making	Rural craft	2	2	23	25				

(E) Sponsored Training Programmes

Sl.No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RY/EF)	No. of courses	No. of Participants						Sponsoring Agency	Amount of fund received (Rs.)
								ST			Total				
								Male	Female	Total	Male	Female	Total		
1	01/10/08 03/10/08 04/10/08 03/10/08 23/01/09 24/01/09	Fruits and vegetables production and post harvest technology	Horticulture	Fruits and vegetables production	6	PF	6	107	187	294	107	187	294	HTM(MM-I)	30000/-
2	11/02/09 to 12/02/09	Integrated farming system	Agro.,A.Sc., SWCE and PP	Integrated Farming	2	RY	1	40	24	64	40	24	64	IGNOU, Kohima	74500/-
3	19/03/09 to 20/03/09	Integrated livestock farming cum animal health camp	A.Sc.	Livestock farming cum animal health camp	2	PF	1	-	40	40	-	40	40	Ministry of Rural Development, Govt. of India	12000/-
4	06/05/09	Demonstration on preparation and application of Bordeaux mixture	PP	Disease control	1	PF	1	14	0	14	14	0	14	ATMA	4000/-
5	04/07/09	IPM on paddy & demonstration of trichocard	PP	IPM	1	PF	1	25	03	28	25	03	28	ATMA	6500/-
6	26/06/09	Techniques of squash and jam making	H.Sc.	Fruit processing	1	PF	1	0	22	22	0	22	22	ATMA	8500/-

7	31/07/09 to 04/07/09	Exposure trip to Shillong	-	-	4	SHG		-	15	15	-	15	15	ATMA	50,000/-
8	26/08/09 to 27/08/09	Farmers exposure trip to Mokokchung	-	-	2	PF		-	30	30	-	30	30	ATMA	50,000/-
9	3/08/09 to 07/08/09	Farmers exposure trip to Shillong	-	-	4	PF		-	7	7	-	7	7	ATMA	18,000/-

3.4. Extension Activities (including activities of FLD programmes)

[illegible]

32.	Celebration of important days (specify)	26 th Jan. '09 and 15 th Aug. '09	2												
	Grand Total		92												

3.5 Production and supply of Technological products : Farm under development

SEED MATERIALS

Major group/class	Crop	Variety	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
CEREALS					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
OILSEEDS					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
PULSES					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
VEGETABLES					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
FLOWER CROPS					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
OTHERS (Specify)					
	NA	NA	NA	NA	NA

SUMMARY

Sl. No.	Major group/class	Quantity (qtl.)	Value (Rs.)	Provided to No. of Farmers
1	CEREALS	NA	NA	NA
2	OILSEEDS	NA	NA	NA
3	PULSES	NA	NA	NA
4	VEGETABLES	NA	NA	NA
5	FLOWER CROPS	NA	NA	NA
6	OTHERS	NA	NA	NA
	TOTAL		NA	NA

PLANTING MATERIALS: Farm under development

Major group/class	Crop	Variety	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
FRUITS					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
SPICES					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
VEGETABLES					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
FOREST SPECIES					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
ORNAMENTAL CROPS					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
PLANTATION CROPS					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA
Others (specify)					
	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA

SUMMARY

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

BIO PRODUCTS

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOAGENTS						
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
	NA	NA	NA	NA	NA	NA
BIOFERTILIZERS						
1	NA	NA	NA	NA	NA	NA
2	NA	NA	NA	NA	NA	NA
BIO PESTICIDES						
1	NA	NA	NA	NA	NA	NA
2	NA	NA	NA	NA	NA	NA

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1	BIOAGENTS	NA	NA	NA	NA	NA
2	BIO FERTILIZERS	NA	NA	NA	NA	NA
3	BIO PESTICIDE	NA	NA	NA	NA	NA
	TOTAL	NA	NA	NA	NA	NA

LIVESTOCK : Farm under development

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

SUMMARY

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

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	1. Zero Energy Cool Chamber 2. Preventing food contamination	1. Er.L.K.Singh & Ms.Megokhono Meyase 2. Jessica Dohtdong	
Leaflets/folders	1. Biofertilizer	N.Khumdemo Ezung	100
	2. IPM	N.Khumdemo Ezung	100
	3. Package of practices for pineapple	Megokhono Meyase	100
	4. Package of practice for pea and French bean	Megokhono Meyase	100
	5. Rabbit Farming	Dr.Moaakum Sangtam	100
	6. Trichogramma	Lireni Kikon	100
	7. Trichoderma	Lireni Kikon	100
	8. Oyster mushroom cultivation	Lireni Kikon	100
	9. Food preservation its importance and methods	Jessica Dohtdong	100
	10. Pineapple jam and squash making	Jessica Dohtdong	100
	11. Pickle making	Jessica Dohtdong	100
Total	13		
GrandTOTAL	13		1100

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 : NA

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

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

SUCCESS STORY ON MUSHROOM CULTIVATION

In Wokha District, two SHGs namely Evathera SHG Wokha Village and United SHG Pongidong Village under Wokha District, Nagaland had a deposit money of Rs.500/- in each SHG's which was collected as their membership.

Evathera SHG was formed in the year 2006 with ten members. Then in 2007, KVK Wokha gave training on Oyster Mushroom Cultivation to this group and have made arrangement for the spawn supply since availability of the spawn was the major constraint to establish mushroom production unit at Wokha. At first they started with 10 packets of spawn by which they generated an income of Rs. 6000/- within one and half month. Encouraged by their success in the first instance, they had taken up the project in larger scale and now they considered it as their primary activity. This group had even participated at Republic day for exhibition cum sale. They are very much satisfied with the outcome and are now a happy SHG who are growing in a bigger way. All these are made possible with the help of KVK, Wokha.

Likewise, for United SHG Pongidong Village comprising of ten members all male have also started to experience a similar result with the intervention of KVK, Wokha. Training was also imparted to them for spawn production and mushroom production.



So far they had generated net income of Rs. 19200/- with an expectation of generating more than Rs. 30000/- per month in near future. They are another successful SHG who can now generate their income with Oyster Mushroom Cultivation as the demand is high. Moreover Wokha is such a place that this mushroom can be grown throughout the year.

SUCCESS STORY ON ECHO

'ECHO' THE TRADITIONAL SOIL CONSERVATION PRACTICES IN WOKHA DISTRICT

Echo is the traditional soil conservation system practiced by farmers of Wokha district as well as other districts of Nagaland. It is age old practiced and *echo* is the local name used by *Lotha* community. *Echo* is constructed by using locally available materials like bamboo or wood etc. It is constructed by placing randomly across the slope in *jhum* field. It generally last up to 3 years (**Fig. 1**). This method results into high rate of soil erosion since the logs are placed only in the steep slope areas. However, this method was modified as farmers were adviced to place the logs across the slope at a vertical interval of 3.00 m throughout the area, irrespective of slope. The results reveals that the soil loss was minimized to a great extent.



Fig. 1: 'Echo' the traditional soil conservation system practiced by farmers

***Echo* with Scientific Method**

When farmers' are already familiar with *echo* the traditional soil conservation practices, it can be supplemented with the scientific method or modern soil conservation technique like contour bunding. With the same input, *echo* was constructed by placing the wood log or bamboo along the contour line. In this respect, intensive training on improvement of *echo* system of soil conservation was conducted with the incorporation of the contour bunding and it was found to be very successful in terms of soil conservation. *Echo* with scientific method was adopted in Longsachung village of Wokha district and also were adopted in other nearby villages. Many farmers had already started constructing *echo* with contour bunding system (**Fig. 2**).



Fig.2: Echo with Scientific Method

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

As mentioned above, the traditional method of soil conservation called 'ECHO' was improvised by incorporating the technology of contour bunding for soil conservation. This technology was observed to have a high level of adoption since the farmers' does not have to invest any money on it. It is now slowly spreading to the adjoining villages of the district.

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
NA	NA	NA	NA

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

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

For identifying the training needs of the farmers and rural youth, PRA, survey, questionnaires and interaction with the village elders and leaders was undertaken. However, for the inservice personnel, a thorough discussion with the district Head of Department of Agri. and allied Department was carried out in planning the need base training programmes.

3.11 Details of village adoption : Adopted on July, 2007(continuing)

- i. Number of villages adopted : 3(Longsa, Longsachung & Wokha village)
- ii. Total no. of household : i. Wokha Viilage : 700 nos.
ii. Longsachung : 150 nos.
iii. Longsa : 550 nos.
- ii. No. of farm families selected : 30
- iii. Distance of village from KVK : i. Wokha Viilage : 13 km
ii. Longsachung : 8 km
iii. Longsa : 7 km

3.12. Activities of Soil and Water Testing Laboratory : Laboratory not yet established

Status of establishment of Lab :

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

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

3. Details of samples analyzed so far : NA

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

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)
NA	NA	NA	NA	NA

4.2. Cases of large scale adoption Not yet conducted

4.3 Details of impact analysis of KVK activities carried out during the reporting period Not yet conducted

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
State Deptts. of Agri. and Allied	Participation in meeting, supply of seeds and other critical inputs, trainings and demonstrations
IGNOU	Conducting seminars and trainings
dKt India	Conducting trainings
Lotha Baptist Churches Association(NGO)	Conducting trainings and Seminars at remotest villages
ATMA	Trainings and participation in meetings
Nagaland University	Technical support
NABARD	Financial support
ICAR for NEH Region	Technical and financial support
Central Institute of Horticulture	Human Resource Development

5.2 List special programmes undertaken by the KVK, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
Development of non-forest wasteland through agro-forestry models in Nagaland	June, 2007	Ministry of Rural Development Govt of India	ongoing project

5.3 Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

S. No.	Programme	Nature of linkage	Remarks
1	Trainings	Financial support	Good
2	Demonstrations	Financial support	Good
3	Publkication of extension literatures	Financial support	Good
4	Human Resource Development	Financial support	Good
5	Exposure tour	Financial support	Good

5.4 Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Constraints if any
1	Trainings	Financial support	NA

5.5 Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Remarks
1	Trainings	Financial support	Good

6. PERFORMANCE OF INFRASTRUCTURE IN KVK

6.1 Performance of demonstration units (other than instructional farm): Under development

[illegible]

6.2. Performance of instructional farm (Crops) including seed production: Under development

[illegible]

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

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

6.4 Performance of instructional farm (livestock and fisheries production) Under developmen

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

6.4 6.5 Rainwater Harvesting:

Training programmes conducted by using Rainwater Harvesting Demonstration Unit

[illegible]

6.5 Utilization of hostel facilities : Not yet utilised

Accommodation available (No. of beds) :

Months	Title of the training course/Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
October 2006	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
November 2006	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
December 2006	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
January 2007	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
February 2007	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
March 2007	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
April 2007	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
May 2007	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
June 2007	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
July 2007	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
August 2007	NA	NA	NA	NA
	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
September 2007	NA	NA	NA	NA
	NA	NA	NA	NA
Total	NA	NA	NA	NA
Grand total	NA	NA	NA	NA

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With Host Institute			
With KVK	SBI, Wokha	Wokha	11766515598

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

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2008
	Kharif 2007	Rabi 2007 –08	Kharif 2007	Rabi 2007-08	
Inputs	NA	NA	NA	NA	NA
Extension activities	NA	NA	NA	NA	NA
TA/DA/POL etc.	NA	NA	NA	NA	NA
TOTAL	NA	NA	NA	NA	NA

7.3 Utilization of funds under FLD on Pulses (*Rs. In Lakhs*)

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2008
	Kharif 2007	Rabi 2007 -08	Kharif 2007	Rabi 2007-08	
Inputs	NA	NA	NA	NA	NA
Extension activities	NA	NA	NA	NA	NA
TA/DA/POL etc.	NA	NA	NA	NA	NA
TOTAL	NA	NA	NA	NA	NA

7.4 Utilization of funds under FLD on Cotton (*Rs. In Lakhs*) : NA

Item	Released by ICAR	Expenditure	Unspent balance as on 1 st April 2008
	Kharif 2007	Kharif 2007	
Inputs	NA	NA	NA
Extension activities	NA	NA	NA
TA/DA/POL etc.	NA	NA	NA
TOTAL	NA	NA	NA

7.5. 2008-09(upto September, 2008)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	40.00	40.00	39.93
2	Traveling allowances	1.00	1.00	0.71
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.50	1.50	1.50
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	5.50	5.50	5.50
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL (A)		48.00	48.00	47.64
B. Non-Recurring Contingencies				
1	Works	21.00	21.00	21.00
2	Equipments including SWTL & Furniture			
3	Vehicle (Four wheeler/Two wheeler, please specify)	Nil		
4	Library (Purchase of assets like books & journals)	Nil		
TOTAL (B)		21.00	21.00	21.00
C. REVOLVING FUND		Nil		
GRAND TOTAL (A+B+C)		69.00	69.00	68.64

7.6 Status of revolving fund (Rs. in lakhs) for the 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 2005 to March 2006	Nil	Nil	Nil	Nil
April 2006 to March 2007	1,00000/-	1606	Nil	1,01666/-
April 2007 to March 2008	1,01606/-	5230	Nil	1,06836/-

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

8.1 Constraints :

- (a) Administrative : Programme Coordinator, computer programmer and Accountant cum superintendent not yet appointed
- (b) Financial : Meal for farmers @ Rs.40 per head is not sufficient
- (c) Technical : SMS(Agri. Extension) not yet appointed

TRAININGS, SEMINARS, WORKSHOPS ATTENDED

S. No.	Name & Designation	Seminar/Training/Workshop	Date
1.	Mr. Khumdemo Ezung, Incharge	Meeting cum interaction with new DDG (AE) at AAU	16 th May, 2009
2.	Mr. Khumdemo Ezung, Incharge	Annual Zonal Workshop of KVK, Zone III at AAU Jorhat	5 th - 7 th September, 2009
3.	Mr. Khumdemo Ezung, Incharge	Training cum awareness for protection of plant varieties and farmers right act at ICAR, Nagaland Centre	14 th September, 2009
4.	Miss Megokhono Meyase	Post harvest handling of fresh fruits and vegetables at CIH, Medziphema	16 th – 17 th October, 2008
5.	Miss Megokhono Meyase	National Conference on floriculture for livelihood and profitability at IARI, New Delhi	16 th – 19 th March , 2009
6.	Miss Megokhono Meyase	Designing and management of training at AAU	18 th – 23 rd May, 2009
7.	Miss Megokhono Meyase	Citrus rejuvenation at CIH, Medziphema	3 rd - 4 th April, 2009
8.	Er.L.K.Singh	Worshop cum training programme on Agricultural Farm mechanization and post harvest technology at ICAR, Barpanai	22 nd – 24 th October, 2008

Programme Coordinator(i/c)
KVK, Wokha, Nagaland