Quarter wise Summary of Annual Action Plan : 2008 - 2009

1. Training Programme:

Discipline	Total on Campus				Total	Total off campus				Total	Grand Total
	I	II	III	IV		I	II	III	IV		
Crop production	1	3	4	2	**10**	2	2	5	2	**11**	**21**
Pl. Protection	2	-	1	2	**5**	5	3	2	4	**14**	**19**
Home Sci.	-	2	2	1	**5**	2	1	2	2	**7**	**12**
Ag. Eng.	1	2	1	1	**5**	2	2	3	1	**8**	**13**
Fisheries	-	-	1	1	**2**	2	2	2	2	**8**	**10**
Total	**4**	**7**	**8**	**6**	**27**	**13**	**10**	**14**	**11**	**48**	**75**

A. On Campus Training Programs

Subject	Title of Training	Dura-tion Days	No. of Parti.	Type of Parti.
Quarter-I (October to December-08)				
Crop Production	• Improved cultivation practices for rabi crops	2	25	Farmers
Plant Protection	• Integrated disease management in cumin • Storage pest management in groundnut	1 1	25 25	Farmers Farmers
Agril. Engineering	• Micro irrigation in vegetable crops	1	25	Farmers
Quarter-II (January to March-09)				
Crop Production	• Organic Farming	2	25	Rural youth
Agril. Engineering	• Packaging and handling of vegetable crops	2	25	Rural youth
Home Science	• Preparation and preservation of pickles	2	25	Farm women
Quarter-III (April to June-09)				
Crop Production	• Groundnut production technology • Improved production technology for cotton • INM in major Kharif crops	2 2 2	25 25 25	Farmers Farmers Farmers
Plan Protection	• Integrated pest & disease management in Kharif crops	3	25	Farmers
Home Science	• Preservation of fruits & vegetables	1	25	Farm Women
Agril. Engineering	• Soil & water conservation practices	2	25	Farmers
Fisheries	• Value addition in seaweeds	1	25	Fish Farmers
Quarter-IV (July to September-09)				
Crop Production	• Inter cropping in groundnut based cropping system • Sustainable agriculture	2 1	25 25	Farmers Rural youth
Plant Protection	• Integrated management of mealy bug • Pest-Disease management in groundnut	1 2	25 25	Farmers Farmers
Home Science	• Method of safe storage of food grains	1	25	Farm women
Agril. Engineering	• Use of improved Farm implements and machinery	1	25	Farmers
Fisheries	• Mari culture practices	1	25	Fish Farmers

B. Off Campus Training Programs

Subject	Title of Training	Duration Days	No. of Parti.	Type of Parti.
Quarter-I (October to December-08)				
Crop Production	• Improved cultivation practices for rabi crops	1	25	Farmers
	• Integrated nutrient management in major rabi crops	1	25	Farmers
Plant Protection	• Integrated pest & disease management in wheat	1	25	Farmers
	• Pest & disease management in cumin	1	25	Farmers
	• Integrated pest & disease management in gram	1	25	Farmers
	• *Aflatoxin* management in groundnut	1	25	Farmers
	• Storage pest management in groundnut	1	25	Farmers
Home Science	• Care during pregnancy	1	25	Farm women
	• Child nutrition	1	25	Farm women
Agril. Engineering	• Renewable sources of energy	1	25	Farmers
	• Efficient water management in major rabi crops	1	25	Farmers
Fisheries	• Brackish water aquaculture management practices – Tiger shrimp	1	25	Fish Farmers
	• Seaweed cultivation	1	25	Fish Farmers

Quarter-II (January to March-09)				
Crop Production	• Water management in summer groundnut	1	25	Farmers
	• Importance of soil analysis	1	25	Farmers
Plant Protection	• Self preparation of bio-pesticide	1	25	Rural youth
	• Integrated pest & disease management in cumin	1	25	Farmers
	• Integrated pest management in vegetables	1	25	Farmers
Home Science	• Soft toys making for income generation	1	25	Farm women
Agril. Engineering	• Post harvest technology	1	25	Farmers
	• MIS-A boon for farmers	1	25	Farmers
Fisheries	• Shrimp hatchery management	1	25	Fish farmers
	• Preparation of LSF	1	25	Fish Farmers

Quarter-III (April to June-09)				
Crop Production	• Groundnut production technology	1	25	Farmers
	• Bt Cotton	1	25	Farmers
	• INM in kharif crops	1	25	Farmers
	• Use of Gypsum	1	25	Farmers
	• Importance of micronutrients	1	25	Rural youth
Plan Protection	• Importance of Seed treatment	1	25	Farmers
	• *Trichoderma* – Enemy of stem rot	1	25	Farmers
Home Science	• Balanced nutrition in child	1	25	Farm Women
	• Preparation of pickles	1	25	Farm Women
Agril. Engineering	• Rain water management	1	25	Farmers
	• *In-situ* moisture conservation practices	1	25	Farmers
	• Ground water recharge techniques	1	25	Farmers
Fisheries	• Fresh water aquaculture practices- Major carps	1	25	Fish Farmers
	• Fresh water aquaculture practices- Scampi	1	25	Fish Farmers

Quarter-VI (July to Sept.-09)				
Subject	**Title of Training**	**Duration Days**	**No. of Parti.**	**Type of Parti.**
Crop Production	• Castor production technology	1	25	Farmers
	• Intercropping in groundnut based cropping system	1	25	Farmers
Plant Protection	• Biological control of pest & diseases	1	25	Farmers
	• Integrated pest management in cotton	1	25	Farmers
	• IDM in groundnut	1	25	Farmers
	• IPDM in vegetables	1	25	Farmers
Home Science	• Preparation of decorative items from waste materials	1	25	Farm women
	• Cutting, tailoring and embroidery	1	25	Farm women
Agril. Engineering	• Importance of farm mechanization	1	25	Rural youth
Fisheries	• Needs of aquaculture	1	25	Fish Farmers
	• Subsidy assistance from Govt.	1	25	Fish Farmers

C. Vocational Training Programme:

Sr. No.	Title of Training	Duration Days	No. of Parti.	Type of Parti.	Schedule quarter
1	Vermi composting	2	25	Rural youth	II
2	Preparation of bakery items	2	25	Rural Girls	III
3	Grading and packaging	2	25	Rural youth	II

D. In service Training Programme:

Sr. No.	Title of Training	Duration Days	No. of Parti.	Type of Parti.	Schedule quarter
1	Sustainable Agriculture	2	25	Extension Workers	II
2	Crop Production Technology –Kharif crops	3	25	Extension Workers	III
3	Woman power in Agriculture	2	25	Extension Workers	II

2. Demonstrations:

a. Physical targets of FLDs during 2008-09

Particular of the	Season	Name of crop and variety		Area (in ha.)	No. of Demo.
I. Front Line Demonstrations					
(A) Oilseeds	Kharif	i. Groundnut	GG-20	8	16
		ii. Castor	GCH-6	5	10
(B) Pulses	Kharif	i. Pigeon pea	BDN-2	5	10
	Rabi	i. Gram	GG-2	5	10
		ii. Green gram	GM-4	5	10
(C) Other than Oilseeds Pulses	Kharif	i. Pearl millet	GHB-558	5	10
	Rabi	i. Wheat	GW-366	10	20
	Kharif	i. Cotton	-	5	10
	Rabi	i. Cumin	GC-4	5	10

II Component demonstrations				
Use of bio-agents	Rabi	**Chickpea**		
		NPV	5	10
	Kharif	**Groundnut**		
		Trichoderma	5	10

b. Targeted FLDs on implements under cotton mini Mission-2

Sr. No.	Implement	Area (in ha.)	No. of Demo.
1	Shedder	25	2
2	Tractor drawn Sprayer	25	2

c. FLDs on cotton

Production Technology Demonstration

Sr. No.	Component	Name of variety	Area (in Acr.)	No. of Demo.
1.	Varietal	Bt-Mallika Vs RCH-2 as local check	25	25
2.	Varietal	Deshi cotton (Herborium) G.Cot-21 Vs local	25	25

d. FLDs on Fisheries

Sr. No.	Component	Justification	No. of FLD
1.	Insulated Boxes & disinfectants	With a view to improve product quality and reduce post harvest loses	25

3. On-Farm Testing (On going)

(1) Application method of *Trichoderma* against stem rot disease in groundnut

Farmers are either not using fungicides or using fungicides in improper way for seed treatment to protect the crop against soil/seed borne diseases.

- **Reasons for low yield of groundnut**

1. Lower plant population
2. Disease infestation
3. Lack of awareness about recommended package of practices

- **Problem solutions:**

1. Optimum plant population
2. Management of diseases well in advance
3. Awareness for using fungicide in proper way

Intervention:

Method of application of *Trichoderma*, a biological agent for management of stem rot disease in groundnut.

Treatments:

1. No use of fungicides (Farmers practice)
2. Mix *Trichoderma* @ 2.5 kg/ha with castor cake @ 500 kg/ha at the time of sowing (Recommended by JAU).
3. Mix *Trichoderma* @ 2.5 kg/ha with 50 kg fine sand and side application of groundnut row 30 days after sowing in moist condition (interventions)

(2) *In situ* Soil moisture conservation practices for rainfed groundnut

Farmers are not aware of in situ moisture conservation practices and importance of proper tillage practices.

- **Reasons for low yield of groundnut**
  1. Improper Tillage
  2. Erratic rainfall and lack of moisture conservation practices
  3. Lack of awareness about recommended package of practices
- **Problem solutions:**
  1. Deep ploughing
  2. Adoption of recommended moisture conservation practices

Intervention:

Optimum tillage practice for moisture conservation in rainfed groundnut.

Treatments:

1. Shallow tillage with 7-8 inter culturing (Farmers practice)
2. Deep tillage with 2-4 inter culturing (Recommended Practice).
3. Medium tillage with 4-5 inter culturing (intervention)

(3) Integrated Nutrient Management in Mango

Farmers are either using organic manures only or only inorganic fertilizers with improper method and time of application.

Reasons for low yield of mango

- Improper selection of variety at the time of orchard establishment
- Improper management of orchard
- Alternate bearing
- Lack of awareness about recommended package of practices
- Affect of diseases and pests

Problem solutions:

- Proper selection of variety at the time of orchard establishment
- Proper management of orchard
- Reduce crop load at the time of fruiting i.e., on year
- Application of recommended package of practices
- Control over diseases and pests by spraying, dusting and drenching of different fungicide, insecticide and bactericides.

Treatments

1. Farmer practice: Use of FYM @ 100 kg per plant
2. Recommended dose of Fertilizers:
   FYM 100 kg & N: P: K 500:200:500 g/plant
3. Intervention: Dose of Fertilizers
   FYM 150 kg & N: P: K 375:100:250 g/plant

(4) Integrated Management of Fruit fly in mango

Farmers are unaware of scientific recommended method for control of pest. They some times not applying any plant protection measures and who ever apply are neither maintain dose nor proper method and time of application.

Reasons for low yield of mango

- Improper selection of variety at the time of orchard establishment
- Improper management of orchard
- Alternate bearing
- Lack of awareness about recommended package of practices
- Problems of diseases and pests

Problem solutions:

- Proper selection of variety at the time of orchard establishment
- Proper management of orchard
- Reduce crop load at the time of fruiting
- Application of recommended package of practices
- Integrated pests and dieses management.

Treatments:

1. **Farmer practice**:
   (a) Use of Methyl eugenol traps.
   (b) Collection of damaged fruits and destroyed it.
2. **Recommended practices**:
   (a) Collection of damaged fruits and destroyed it.
   (b) Plough around the trees during winter to expose and kill the pupae.
   (c) In month of March spay the one tree with Fenthion 10ml and Methyl eugenol 10ml in 10 lit. water and other eleven trees spay with Fenthion 10ml
   (d) Use of Methyl eugenol traps (Methyl eugenol 0.056ml or 4 drops and 4 drops of dichlorvos on sponge).
   (e) Growing of shyam Tulsi around the orchard and spray it with Fenthion.
   (f) Spay the solution of Mollases 150g and Malathion 100ml in 100lit. water in form of big droplets on the trees and grasses grown on bunds and boundaries of orchard.
3. **Intervention**:
   (a) Collection of damaged fruits and destroyed it.
   (b) Plough around the trees during winter to expose and kill the pupae.
   (c) Growing of shyam Tulsi around the orchard and spray it with Fenthion.
   (d) Use of Methyl eugenol traps.

4. Other Extension Activities:

Sr.No.	Activity	Proposed Number
1.	Kisan Mela	1
2	Field day	10
3.	Kisan Gosthi	30
4	Radio / TV Talks	10
5	TV Show	5
6	Film show	-
7.	Exhibition	5
8	News Paper Coverage	12
9	Popular Article	6
10	Extension Literature (No.)	
	i) Folders / Pamphlets	6
	ii) Slides	-
	iii) Video film show	5
11	**Advisory Service**	2
13.	Diagnostic service	
	i) Farmers visit to K.V.K	250
	ii) Scientist visit to farmers Field	200
14.	Communication media	
	i) Subscriber of krushi go vidhya Magazine	75