

# **ACTION PLAN**

**(OCTOBER 2007 TO SEPTEMBER 2008)**

OF

## **KRISHI VIGYAN KENDRA JAMNAGAR**

**TO BE PRESENTED AT  
ANNUAL ZONAL WORKSHOP OF ZONE-VI (Rajasthan & Gujarat)  
HELD AT DIRECTORATE OF EXTENSION EDUCATION,  
JUNAGADH AGRICULTURAL UNIVERSITY, JUNAGADH-362 001  
DURING 9<sup>th</sup> – 11<sup>th</sup> October, 2007.**

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**ANNUAL ACTION PLAN OCTOBER-2007 TO SEPTEMBER-2008  
QUARTERWISE SUMMARY OF TRAINING PROGRAMME  
OF KVK, JAU, JAMNAGAR**

**1. TRAINING**

Sl. No.	Subject	On campus					Off campus					G.T.
		I	II	III	IV	T.	I	II	III	IV	T.	
1	Crop production	2	3	2	1	8	3	4	2	1	10	18
2	Horticulture	1	2	1	1	5		1	1	1	3	8
3	Soil health & Fertility	1	1	1	1	4	1			1	2	6
4	Live stock production & management					0		1			1	1
5	Home science	4	2	4	5	15	2	1	2	3	8	23
6	Agri Engineering					0					0	0
7	Plant protection	2	8	4	3	17	2	10	5	3	20	37
8	Fisheries	0	2			2	0	2			2	4
9	Production of Input at site	3	5	5	3	16	5	10	10	6	31	47
10	Capacity Building and Group Management	2			1	3	2			1	3	6
11	Agro-foreshtry											
	<b>Total</b>	<b>15</b>	<b>23</b>	<b>17</b>	<b>15</b>	<b>70</b>	<b>15</b>	<b>29</b>	<b>20</b>	<b>16</b>	<b>80</b>	<b>150</b>
	<b>Rural Youth</b>	3	1	2	2	8	3	1	2	2	8	16
	<b>Extesnion Personals</b>	1	0	1	1	3	1	0	1	1	3	6
	<b>Total</b>	<b>19</b>	<b>24</b>	<b>20</b>	<b>18</b>	<b>81</b>	<b>19</b>	<b>30</b>	<b>23</b>	<b>19</b>	<b>91</b>	<b>172</b>

**A. Training programmes (In details):**

Quarterwise training programmes on various aspects related to Agricultural technology based on thrust areas will be organized during the year 2007-2008. Details of training programme is as under.

**A.1. On Campus Training Programme: (for practicing farmers, farm women & rural youth)**

Sl. No.	Discipline wise training	Title of Training	Duration (days)	No. of participants	Type of participant
	<b>I. Quarter</b>	<b>(April 2008 to June 2008)</b>			
<b>1</b>	<b>Crop Production</b>				
	Seed Production Technology	Seed production technology of groundnut, green gram and black gram.	2	20	PF
	Weed Management	Weed management in cotton and groundnut	2	20	PF
	Zero Tillage Technology	Zero tillage in bajara and sorghum	2	20	PF
	Crop Production Technology	Training on package of practice of groundnut	2	20	PF
		Training on package of practice of cotton	2	20	PF
		Relay cropping in rainfed agriculture	2	20	PF
		Intercropping in rainfed agriculture	2	20	PF
<b>2</b>	<b>Horticulture</b>				
	Vegetable Production Technology	Vegetable production technology for kharif	2	20	PF
	Medicinal Plant Cultivation	Production technology of medicinal and aromatic plants viz., safed musli, aloe vera, lemon grass	2	20	PF
		Package of practice for pamarosa	2	20	PF
	Nursery Raising Technology	Nursery raising of brinjal, tomato and chilli	2	20	PF
	Production Technology for Fruits	Field management of orchard (Fruits) crops	2	20	PF
		Production technology of Pomogranate, sapota, amla, chiku, papaya etc	2	20	PF
	Production Technology for flowers	Introduction of new cut flower in respected area	2	20	PF
<b>3</b>	<b>Animal Science</b>				

	Feed & Fodder Management	Importance of nutritional management in advance Animal Husbandry	2	20	PF
	Dairy farming	White evolution in Animal Husbandry	2	20	PF
	Poultry farming	Major problems and solutions in poultry farming	2	20	PF
	Sheep Rearing	Major step to be taken in milk production in sheep rearing	2	20	PF
	Goatary	Major step to be taken in milk production in goat rearing	2	20	PF
	Duckery				
	Piggery				
	Animal Health Management	Importance of Vaccination in farm animals	2	20	PF
<b>4</b>	<b>Home Science</b>				
	Kitchen Gardening		2	20	FW
	Nutritional management of women and children	Training on child care during development	2	20	FW
		Cares to be taken during pregnancy	2	20	FW
	Embroidery, Tailoring & Handicrafts		2	20	FW
	Value Addition of Plant Products	Training on pickles and preservation	2	20	FW
		Preparation of jam, jelly, tomato catchup, syrup, lemon squash, etc.	2	20	FW
		Value addition in mango fruits	2	20	FW
		Methods of safe storage of foodgrains	2	20	FW
		Backing of wheat flour, corn flour, rice flour, and bajara flour	2	20	FW
	Value Addition of Animal Products	Value addition in milk by preparation of dairy products.	2	20	FW
	Preparation of Home Utility Items	Soft toys preparation	2	20	FW
<b>5</b>	<b>Agril. Engineering</b>				
	Fabrication, repair & maintenance of	Repair and maintenance of local farm implement.	2	20	PF

	farm tools, Machinery & implements, Watershed Management	Integrated watershed training programme	2	20	PF
		Water harvesting through Well recharging	2	20	PF
	Mechanization of Agriculture	Use of chaff cutter in utilization of farm waste.	2	20	PF
<b>6</b>	<b>Agri. Extension</b>				
	Formation of farm science club	Formation of farm science club at KVK villages	2	20	PF
	Formation of SHG	Formation & capacity building of SHG in KVK villages	2	20	PF
	Extension Methodology (PRA tools/ Techniques)	Training to extension function on PRA technique.	2	20	PF
<b>7</b>	<b>Plant protection</b>				
	Integrated Pest Management	Seed treatment technology for groundnut, cotton, castor, sesamum etc. for reduction of pest population	2	20	PF
		Management of pest & disease of groundnut, cotton, castor, sesamum and other crops by adoption of trap crop, relay crop, mix crop practices.	2	20	PF
		Role of inter cropping, trap cropping, mix cropping and set of sowing date for reduction of pest incidence.	2	20	PF
		Effect of summer tillage on pest & diseases reduction.	2	20	PF
	Integrated Disease Management	Seed treatment technology in groundnut, cotton, castor, sesamum and other crops for reduce diseases incidence	2	20	PF
		Use of <i>Trichoderma</i> for management of <i>Sclerotium</i> rot in groundnut	2	20	PF
		Biological management of diseases in groundnut, cotton, castor, sesamum and other crops as pre- treatment.	2	20	PF
		Training on soil solarization for diseases reduction.	2	20	PF
		Training on intercropping for reduction of diseases.	2	20	PF

<b>8</b>	<b>Soil Science</b>				
	Integrated Nutrients Management	Training on fertilizer management in major crops			
		Recycling of farm waste	2	20	PF
	Bio-fertilizers	Role of bio-fertilizers in crop production.	2	20	PF
	Soil Fertility Management	Balance use of fertilizers, and manures in major crops	2	20	PF
		Reclamation of problematic soil	2	20	PF
		Compost making by NADEF method	2	20	PF
		Sampling for soil & water analysis	2	20	PF
<b>9</b>	<b>Fishery</b>				
	Prawn Culture	Awareness programme about importance of prawn hatchery	2	20	PF
	Composite Pisciculture	Training on composite pisciculture (major carp species)	2	20	PF
	Fish Production Technology	Importance of nutritional component in fish production	2	20	PF
		Composite fish culture	2	20	PF
<b>10</b>	<b>Others</b>				
	Agro-forestry	Popularization and promotion of bio-diesel plant : Zetropa	2	20	PF
	Sericulture				
	Mushroom				
	Apiculture				
	Organic Farming	Training on organic farming in vegetable crops.	2	20	PF
	Vermi compost	Handling and cares for vermicompost unit,	2	20	PF
		Preparation of Vermi-compost	2	20	PF
	Others if any (Pl specify)				
	<b>II Quarter</b>	<b>(July 2008 to September 2008)</b>			
<b>1</b>	<b>Crop Production</b>				
	Seed Production Technology				
	Weed Management	Weed management by physical and chemical methods in cotton and groundnut			

	Zero Tillage Technology				
	Crop Production Technology	Time of inter-culturing in major crops			
<b>2</b>	<b>Horticulture</b>				
	Vegetable Production Technology				
	Medicinal Plant Cultivation	Care and handling of medicinal plants	2	20	PF
	Nursery Raising Technology	Training on budding, grafting, shearing, cutting, and other propagation of horticultural crops	2	20	PF
	Production Technology for Fruits	Integrated nutrition management in Horticultural and vegetable crops	2	20	PF
		Intercropping in orchards	2	20	PF
	Production Technology for flowers	Integrated pest and disease management in Horticultural and vegetable crops	2	20	PF
<b>3</b>	<b>Animal Science</b>				
	Feed & Fodder Management	Preparation silo pit for storage of green fodder	2	20	PF
	Dairy farming	Workshop on animal keeping with agriculture	2	20	PF
	Poultry farming	Training on importance of vaccination in poultry	2	20	PF
	Sheep Rearing	Training on importance of vaccination sheep	2	20	PF
	Goatary	Training on importance of vaccination in goatary	2	20	PF
	Duckery				
	Piggery				
	Animal Health Management	Importance of Vaccination in farm animals	2	20	PF
	<b>Total</b>		<b>22</b>	<b>11</b>	<b>33</b>
<b>4</b>	<b>Home Science</b>				
	Kitchen Gardening	Training on kitchen gardening,			
	Nutritional management of women and children	Women and child health care	2	20	FW
		Nutritional requirement during & after pregnancy,	2	20	FW



	Embroidery, Tailoring & Handicrafts	Training on rural women strengthening by handicrafts and tailoring	2	20	FW
	Value Addition of Plant Products	Preparation of lemon squash	2	20	FW
		Preparation of jam, jelly, tomato catchup, syrup, lemon squash, etc.	2	20	FW
		Methods of safe storage of food grains	2	20	FW
		Backing of wheat flour, corn flour, rice flour, and bajara flour	2	20	FW
	Value Addition of Animal Products	Value addition in milk by preparation of dairy products.	2	20	FW
	Preparation of Home Utility Items	Soft toys preparation	2	20	FW
<b>5</b>	<b>Agril. Engineering</b>				
	Fabrication, repair & maintenance of farm tools, Machinery & implements, Watershed Management	Repair and maintenance of local farm implement.	2	20	PF
	Mechanization of Agriculture				
<b>6</b>	<b>Agril. Extension</b>				
	Formation of farm science club	Formation of farm science club at KVK villages	2	20	PF
	Formation of SHG	Formation & capacity building of SHG in KVK villages	2	20	PF
	Extension Methodology (PRA tools/ Techniques)	Training to extension function on PRA technique.	2	20	PF
<b>7</b>	<b>Plant protection</b>				
	Integrated Pest Management	IPM strategy on groundnut, cotton, castor, sesamum and other crops	2	20	PF
		Pest management in sesamum	2	20	PF
		Major constraints of pest management in Bt cotton	2	20	PF
		Reduction of the pest & disease in castor	2	20	PF
		Safety handling of pesticides	2	20	PF
		Use of pheromones for suppression of pest in different crops	2	20	PF

		Sucking pest management in groundnut, cotton, castor, sesamum and other crops	2	20	PF
		Pest management with organic farming	2	20	PF
	Integrated Disease Management	Integrated diseases management in major kharif crops.	2	20	PF
<b>8</b>	<b>Soil Science</b>				
	Integrated Nutrients Management	Integrated nutrient management in groundnut, cotton, castor, sesamum and other crops	2	20	PF
	Bio-fertilizers				
	Soil Fertility Management				
<b>9</b>	<b>Fishery</b>				
	Prawn Culture	Awareness programme about importance of prawn hatchery	2	20	PF
	Composite Pisciculture	Training on composite pisciculture (major carp species)	2	20	PF
	Fish Production Technology	Importance of nutritional component in fish production	2	20	PF
		Composite fish culture	2	20	PF
<b>10</b>	<b>Others</b>				
	Agro-forestry				
	Sericulture				
	Mushroom				
	Apiculture				
	Organic Farming	Training on organic farming in vegetable crops.	2	20	PF
	Vermi compost	Handling and cares for vermicompost unit,	2	20	PF
	Others if any (Pl specify)				
	<b>III Quarter</b>	<b>(October 2007 to December 2007)</b>			
<b>1</b>	<b>Crop Production</b>				
	Seed Production Technology				
	Weed Management	Weed management in cumin, wheat, gram, mustard and vegetable crops			
	Zero Tillage Technology				

	Crop Production Technology	Production technology of cumin	2	20	PF
		Production technology of gram	2	20	PF
		Production technology of mustard	2	20	PF
		Production technology in wheat	2	20	PF
<b>2</b>	<b>Horticulture</b>				
	Vegetable Production Technology	Production technology of onion & garlic	2	20	PF
		Production technology of chilli, tomato, brinjal, cauliflower, cabbage,	2	20	PF
	Medicinal Plant Cultivation	Production technology of cumin and ishabgul	2	20	PF
	Nursery Raising Technology				
	Production Technology for Fruits	Care to be taken in orchards			
	Production Technology for flowers	Floriculture –A new concept in Agri-business	2	20	PF
<b>3</b>	<b>Animal Science</b>				
	Feed & Fodder Management	Nutritional management of farm animal	2	20	PF
	Dairy farming	Workshop on animal keeping with agriculture	2	20	PF
	Poultry farming	Training on importance of vaccination in poultry	2	20	PF
	Sheep Rearing	Training on importance of vaccination in sheep	2	20	PF
	Goatary	Training on importance of vaccination in goat	2	20	PF
	Duckery				
	Piggery				
	Animal Health Management	Training on importance of vaccination in farm animal			
	<b>Total</b>		<b>22</b>	<b>11</b>	<b>33</b>
<b>4</b>	<b>Home Science</b>				
	Kitchen Gardening	Kitchen gardening	2	20	PF
	Nutritional management of	Women and child health care			

	women and children				
	Embroidery, Tailoring & Handicrafts	Soft toys preparation.	2	20	FW
	Value Addition of Plant Products	Backing of wheat flour, corn flour, rice flour, and bajara flour	2	20	FW
		Training on pickles and preservation	2	20	FW
		Preparation of jam, jelly, tomato catchup, syrup, lemon squash, etc.	2	20	FW
		Methods of safe storage of foodgrains	2	20	FW
		Preparation of pickles of aonla	2	20	FW
	Value Addition of Animal Products	Value addition in milk by preparation of dairy products.	2	20	FW
	Preparation of Home Utility Items	Soft toys preparation	2	20	FW
<b>5</b>	<b>Agril. Engineering</b>				
	Fabrication, repair & maintenance of farm tools, Machinery & implements, Watershed Management	Efficient use of irrigation water through drip & sprinkler methods.	2	20	RY
	Mechanization of Agriculture				
<b>6</b>	<b>Agril. Extension</b>				
	Formation of farm science club	Formation of farm science club at KVK villages	2	20	PF
	Formation of SHG	Formation & capacity building of SHG in KVK villages	2	20	PF
	Extension Methodology (PRA tools/ Techniques)	Training to extension function on PRA technique.	2	20	PF
<b>7</b>	<b>Plant protection</b>				
	Integrated Pest Management	IPM in chickpea, vegetable, onion, garlic, cumin,	2	20	PF
	Integrated Disease Management	IDM in cumin, onion, garlic	2	20	PF
		Seed treatment in onion, garlic, wheat, cumin, chickpea and other crops for pest and disease management	2	20	PF

<b>8</b>	<b>Soil Science</b>				
	Integrated Nutrients Management	Integrated nutrient management in rabi crops			
	Bio-fertilizers				
	Soil Fertility Management				
<b>9</b>	<b>Fishery</b>				
	Prawn Culture	Sea weed liquid fertilizer	1	20	PF
		Sea weed Greeting card	2	20	PF
	Composite Pisciculture	Composite fish culture	1	20	FW
	Fish Production Technology	Awareness programme about importance of prawn hatchery	2	20	PF
		Training on composite pisciculture (major carp species)	2	20	PF
		Importance of nutritional component in fish production	2	20	PF
<b>10</b>	<b>Others</b>				
	Agro-forestry		30		30
	Sericulture				
	Mushroom				
	Apiculture				
	Organic Farming	Training on organic farming in vegetable crops.	2	20	PF
	Vermi compost	Handling and cares for vermicompost unit,	2	20	PF
	Others if any (Pl specify)				
	<b>IV Quarter</b>	<b>(January 2008 to March 2008)</b>			
<b>1</b>	<b>Crop Production</b>				
	Seed Production Technology				
	Weed Management				
	Zero Tillage Technology				
	Crop Production Technology	Production technology of summer groundnut, pearl millet, vegetables etc	2	20	PF
<b>2</b>	<b>Horticulture</b>				

	Vegetable Production Technology	Vegetable production technology in summer	2	20	PF
	Medicinal Plant Cultivation				
	Nursery Raising Technology	Nursery raising technology	2	20	PF
	Production Technology for Fruits	Management of orchard	2	20	PF
	Production Technology for flowers				
<b>3</b>	<b>Animal Science</b>				
	Feed & Fodder Management	Importance of nutritional management in advance Animal Husbandry	2	20	PF
	Dairy farming	White evolution in Animal Husbandry	2	20	PF
	Poultry farming	Major problems and solutions in poultry farming	2	20	PF
	Sheep Rearing	Major step to be taken in milk production in sheep rearing	2	20	PF
	Goatary	Major step to be taken in milk production in goat rearing	2	20	PF
	Duckery		2	20	PF
	Piggery		2	20	PF
	Animal Health Management	Training on importance of vaccination in farm animals	2	20	PF
<b>4</b>	<b>Home Science</b>				
	Kitchen Gardening	Training on kitchen gardening,			
	Nutritional management of women and children	Women and child health care	2	20	FW
	Embroidery, Tailoring & Handicrafts	Training on rural women strengthening by handicrafts and tailoring	2	20	FW
	Value Addition of Plant Products	Preparation & preservation of tomato ketch-up	2	20	FW
		Preparation of candy & murrabba of Aonla	2	20	FW
		Preparation of lemon squash	2	20	FW

		Preparation of jam, jelly, tomato catchup, syrup, lemon squash, etc.	2	20	FW
		Methods of safe storage of food grains	2	20	FW
		Backing of wheat flour, corn flour, rice flour, and bajara flour	2	20	FW
	Value Addition of Animal Products	Value addition in milk by preparation of dairy products.	2	20	FW
	Preparation of Home Utility Items	Soft toys preparation	2	20	FW
<b>5</b>	<b>Agril. Engineering</b>				
	Fabrication, repair & maintenance of farm tools, Machinery & implements, Watershed Management	Repair and maintenance of local farm implement.	2	20	PF
		Integrated watershed training programme	2	20	PF
		Water harvesting through Well recharging	2	20	PF
	Mechanization of Agriculture	Use of chaff cutter in utilization of farm waste.	2	20	PF
<b>6</b>	<b>Agril. Extension</b>				
	Formation of farm science club	Formation of farm science club at KVK villages	2	20	PF
	Formation of SHG	Formation & capacity building of SHG in KVK villages	2	20	PF
	Extension Methodology (PRA tools/ Techniques)	Training to extension function on PRA technique.	2	20	PF
<b>7</b>	<b>Plant protection</b>				
	Integrated Pest Management	Pest management in vegetables, fruits crops, chickpea etc	2	20	PF
		IPM an eco friendly approach in pest management	2	20	PF
		Stored grain pest management	2	20	PF
		Pest management in onion and garlic	2	20	PF
	Integrated Disease Management	IDM in Vegetable crops, fruit crops and flowers	2	20	PF
<b>8</b>	<b>Soil Science</b>				

	Integrated Nutrients Management	Preparation of compost pit	2	20	PF
	Bio-fertilizers	Recycling of waste material	2	20	PF
	Soil Fertility Management	Training on soil sampling	2	20	PF
<b>9</b>	<b>Fishery</b>				
	Prawn Culture	Awareness programme about importance of prawn hatchery	2	20	PF
		Kappaphycus (Red algae) cultivation	1	20	PF
	Composite Pisciculture	Training on composite pisciculture (major carp species)	2	20	PF
	Fish Production Technology	Importance of nutritional component in fish production	2	20	PF
		Composite fish culture	2	20	PF
<b>10</b>	<b>Others</b>				
	Agro-forestry	Popularization and promotion of bio-diesel plant : Zetropa	2	20	PF
	Sericulture				
	Mushroom				
	Apiculture				
	Organic Farming	Training on organic farming in vegetable crops.	2	20	PF
	Vermi compost	Handling and cares for vermicompost unit,	2	20	PF
	Others if any (Pl specify)				

### A.2 Off- Campus training (for practicing farmers , farm women & rural youth)

Sl. No.	Discipline wise training	Title of Training	Duration (days)	No. of participants	Type of participant
	<b>I. Quarter</b>	<b>(April 2008 to June 2008)</b>			
<b>1</b>	<b>Crop Production</b>				
	Seed Production Technology	Seed production technology of groundnut, green gram and black gram.	2	30	PF



	Weed Management	Weed management in cotton and groundnut	2	30	PF
	Zero Tillage Technology	Zero tillage in bajara and sorghum	2	30	PF
	Crop Production Technology	Training on package of practice of groundnut	2	30	PF
		Training on package of practice of cotton	2	30	PF
		Relay cropping in rainfed agriculture	2	30	PF
		Intercropping in rainfed agriculture	2	30	PF
<b>2</b>	<b>Horticulture</b>				
	Vegetable Production Technology	Vegetable production technology for kharif	2	30	PF
	Medicinal Plant Cultivation	Production technology of medicinal and aromatic plants viz., safed musli, aloe vera, lemon grass	2	30	PF
		Package of practice for pamarosa	2	30	PF
	Nursery Raising Technology	Nursery raising of brinjal, tomato and chilli	2	30	PF
	Production Technology for Fruits	Field management of orchard (Fruits) crops	2	30	PF
		Production technology of Pomogranate, sapota, amla, chiku, papaya etc	2	30	PF
	Production Technology for flowers	Introduction of new cut flower in respected area	2	30	PF
<b>3</b>	<b>Animal Science</b>				
	Feed & Fodder Management	Importance of nutritional management in advance Animal Husbandry	2	30	PF
	Dairy farming	White evolution in Animal Husbandry	2	30	PF
	Poultry farming	Major problems and solutions in poultry farming	2	30	PF
	Sheep Rearing	Major step to be taken in milk production in sheep rearing	2	30	PF
	Goatary	Major step to be taken in milk production in goat rearing	2	30	PF
	Duckery		2	30	PF

	Piggery		2	30	PF
	Animal Health Management	Vaccination in farm animals	2	30	PF
<b>4</b>	<b>Home Science</b>				
	Kitchen Gardening		2	30	FW
	Nutritional management of women and children	Training on child care during development	2	30	FW
		Cares to be taken during pregnancy	2	30	FW
	Embroidery, Tailoring & Handicrafts		2	30	FW
	Value Addition of Plant Products	Training on pickles and preservation	2	30	FW
		Preparation of jam, jelly, tomato catchup, syrup, lemon squash, etc.	2	30	FW
		Value addition in mango fruits	2	30	FW
		Methods of safe storage of food grains	2	30	FW
		Backing of wheat flour, corn flour, rice flour, and bajara flour	2	30	FW
	Value Addition of Animal Products	Value addition in milk by preparation of dairy products.	2	30	FW
	Preparation of Home Utility Items	Soft toys preparation	2	30	FW
<b>5</b>	<b>Agril. Engineering</b>				
	Fabrication, repair & maintenance of farm tools, Machinery & implements, Watershed Management	Repair and maintenance of local farm implement.	2	30	PF
		Integrated watershed training programme	2	30	PF
		Water harvesting through Well recharging	2	30	PF
	Mechanization of Agriculture	Use of chaff cutter in utilization of farm waste.	2	30	PF
<b>6</b>	<b>Agril. Extension</b>				
	Formation of farm science club	Formation of farm science club at KVK villages	2	30	PF
	Formation of SHG	Formation & capacity building of SHG in KVK villages	2	30	PF

	Extension Methodology (PRA tools/ Techniques)	Training to extension function on PRA technique.	2	30	PF
<b>7</b>	<b>Plant protection</b>				
	Integrated Pest Management	Seed treatment technology for groundnut, cotton, castor, sesamum etc. for reduction of pest population	2	30	PF
		Management of pest & disease of groundnut, cotton, castor, sesamum and other crops by adoption of trap crop, relay crop, mix crop practices.	2	30	PF
		Role of inter cropping, trap cropping, mix cropping and set of sowing date for reduction of pest incidence.	2	30	PF
		Effect of summer tillage on pest & diseases reduction.	2	30	PF
	Integrated Disease Management	Seed treatment technology in groundnut, cotton, castor, sesamum and other crops for reduce diseases incidence	2	30	PF
		Use of <i>Trichoderma</i> for management of <i>Sclerotium</i> rot in groundnut	2	30	PF
		Biological management of diseases in groundnut, cotton, castor, sesamum and other crops as pre-treatment.	2	30	PF
		Training on soil solarization for diseases reduction.	2	30	PF
		Training on intercropping for reduction of diseases.	2	30	PF
<b>8</b>	<b>Soil Science</b>				
	Integrated Nutrients Management	Training on fertilizer management in major crops			
		Recycling of farm waste	2	30	PF
	Bio-fertilizers	Role of bio-fertilizers in crop production.	2	30	PF
	Soil Fertility Management	Balance use of fertilizers, and manures in major crops	2	30	PF
		Reclamation of problematic soil	2	30	PF

		Compost making by NADEF method	2	30	PF
		Sampling for soil & water analysis	2	30	PF
<b>9</b>	<b>Fishery</b>				
	Prawn Culture	Awareness programme about importance of prawn hatchery	2	30	PF
	Composite Pisciculture	Training on composite pisciculture (major carp species)	2	30	PF
	Fish Production Technology	Importance of nutritional component in fish production	2	30	PF
		Composite fish culture	2	30	PF
<b>10</b>	<b>Others</b>				
	Agro-forestry	Popularization and promotion of bio-diesel plant : Zetropha	2	30	PF
	Sericulture				
	Mushroom				
	Apiculture				
	Organic Farming	Training on organic farming in vegetable crops.	2	30	PF
	Vermi compost	Handling and cares for vermicompost unit,	2	30	PF
		Preparation of Vermi-compost	2	30	PF
	Others if any (Pl specify)				
	<b>II Quarter</b>	<b>(July 2008 to September 2008)</b>			
<b>1</b>	<b>Crop Production</b>				
	Seed Production Technology				
	Weed Management	Weed management by physical and chemical methods in cotton and groundnut			
	Zero Tillage Technology				
	Crop Production Technology	Time of inter-culturing in major crops			
<b>2</b>	<b>Horticulture</b>				
	Vegetable Production Technology				
	Medicinal Plant Cultivation	Care and handling of medicinal plants	2	30	PF

	Nursery Raising Technology	Training on budding, grafting, shearing, cutting, and other propagation of horticultural crops	2	30	PF
	Production Technology for Fruits	Integrated nutrition management in Horticultural and vegetable crops	2	30	PF
		Intercropping in orchards	2	30	PF
	Production Technology for flowers	Integrated pest and disease management in Horticultural and vegetable crops	2	30	PF
<b>3</b>	<b>Animal Science</b>				
	Feed & Fodder Management	Preparation silo pit for storage of green fodder	2	30	PF
	Dairy farming	Workshop on animal keeping with agriculture	2	30	PF
	Poultry farming	Training on vaccination	2	30	PF
	Sheep Rearing	Training on vaccination	2	30	PF
	Goatary	Training on vaccination	2	30	PF
	Duckery				
	Piggery				
	Animal Health Management	Vaccination in farm animals	2	30	PF
	<b>Total</b>		<b>22</b>	<b>11</b>	<b>33</b>
<b>4</b>	<b>Home Science</b>				
	Kitchen Gardening	Training on kitchen gardening,			
	Nutritional management of women and children	Women and child health care	2	30	FW
		Nutritional requirement during & after pregnancy,	2	30	FW
	Embroidery, Tailoring & Handicrafts	Training on rural women strengthening by handicrafts and tailoring	2	30	FW
	Value Addition of Plant Products	Preparation of lemon squash	2	30	FW
		Preparation of jam, jelly, tomato catchup, syrup, lemon squash, etc.	2	30	FW
		Methods of safe storage of food grains	2	30	FW
		Backing of wheat flour, corn flour, rice flour, and bajara flour	2	30	FW
	Value Addition of Animal Products	Value addition in milk by preparation of dairy products.	2	30	FW

	Preparation of Home Utility Items	Soft toys preparation	2	30	FW
<b>5</b>	<b>Agril. Engineering</b>				
	Fabrication, repair & maintenance of farm tools, Machinery & implements, Watershed Management	Repair and maintenance of local farm implement.	2	30	PF
	Mechanization of Agriculture				
<b>6</b>	<b>Agril. Extension</b>				
	Formation of farm science club	Formation of farm science club at KVK villages	2	30	PF
	Formation of SHG	Formation & capacity building of SHG in KVK villages	2	30	PF
	Extension Methodology (PRA tools/ Techniques)	Training to extension function on PRA technique.	2	30	PF
<b>7</b>	<b>Plant protection</b>				
	Integrated Pest Management	IPM strategy on groundnut, cotton, castor, sesamum and other crops	2	30	PF
		Pest management in sesamum	2	30	PF
		Major constraints of pest management in Bt cotton	2	30	PF
		Reduction of the pest & disease in castor	2	30	PF
		Safety handling of pesticides	2	30	PF
		Use of pheromones for suppression of pest in different crops	2	30	PF
		Sucking pest management in groundnut, cotton, castor, sesamum and other crops	2	30	PF
		Pest management with organic farming	2	30	PF
	Integrated Disease Management	Integrated diseases management in major kharif crops.	2	30	PF
<b>8</b>	<b>Soil Science</b>				
	Integrated Nutrients Management	Integrated nutrient management in groundnut, cotton, castor, sesamum and other crops	2	30	PF
	Bio-fertilizers				

	Soil Fertility Management				
<b>9</b>	<b>Fishery</b>				
	Prawn Culture	Awareness programme about importance of prawn hatchery	2	30	PF
	Composite Pisciculture	Training on composite pisciculture (major carp species)	2	30	PF
	Fish Production Technology	Importance of nutritional component in fish production	2	30	PF
		Composite fish culture	2	30	PF
<b>10</b>	<b>Others</b>				
	Agro-forestry				
	Sericulture				
	Mushroom				
	Apiculture				
	Organic Farming	Training on organic farming in vegetable crops.	2	30	PF
	Vermi compost	Handling and cares for vermicompost unit,	2	30	PF
	Others if any (Pl specify)				
	<b>III Quarter</b>	<b>(October 2007 to December 2007)</b>			
<b>1</b>	<b>Crop Production</b>				
	Seed Production Technology				
	Weed Management	Weed management in cumin, wheat, gram, mustard and vegetable crops			
	Zero Tillage Technology				
	Crop Production Technology	Production technology of cumin	2	30	PF
		Production technology of gram	2	30	PF
		Production technology of mustard	2	30	PF
		Production technology in wheat	2	30	PF
<b>2</b>	<b>Horticulture</b>				
		Production technology of onion & garlic	2	30	PF

	Vegetable Production Technology	Production technology of chilli, tomato, brinjal, cauliflower, cabbage,	2	30	PF
	Medicinal Plant Cultivation	Production technology of cumin and ishabgul	2	30	PF
	Nursery Raising Technology				
	Production Technology for Fruits	Care to be taken in orchards	2	30	PF
	Production Technology for flowers	Floriculture –A new concept in Agri-business	2	30	PF
<b>3</b>	<b>Animal Science</b>				
	Feed & Fodder Management	Nutritional management of farm animal	2	30	PF
	Dairy farming	Workshop on animal keeping with agriculture	2	30	PF
	Poultry farming	Training on vaccination	2	30	PF
	Sheep Rearing	Training on vaccination	2	30	PF
	Goatary	Training on vaccination	2	30	PF
	Duckery				
	Piggery				
	Animal Health Management	Vaccination in animal			
	<b>Total</b>		<b>22</b>	<b>11</b>	<b>33</b>
<b>4</b>	<b>Home Science</b>				
	Kitchen Gardening	Kitchen gardening	2	30	PF
	Nutritional management of women and children	Women and child health care			
	Embroidery, Tailoring & Handicrafts	Soft toys preparation.	2	30	FW
	Value Addition of Plant Products	Backing of wheat flour, corn flour, rice flour, and bajara flour	2	30	FW
		Training on pickles and preservation	2	30	FW
		Preparation of jam, jelly, tomato catchup, syrup, lemon squash, etc.	2	30	FW



		Methods of safe storage of foodgrains	2	30	FW
		Preparation of pickles of aonla	2	30	FW
	Value Addition of Animal Products	Value addition in milk by preparation of dairy products.	2	30	FW
	Preparation of Home Utility Items	Soft toys preparation	2	30	FW
<b>5</b>	<b>Agril. Engineering</b>				
	Fabrication, repair & maintenance of farm tools, Machinery & implements, Watershed Management	Efficient use of irrigation water through drip & sprinkler methods.	2	30	RY
	Mechanization of Agriculture				
<b>6</b>	<b>Agril. Extension</b>				
	Formation of farm science club	Formation of farm science club at KVK villages	2	30	PF
	Formation of SHG	Formation & capacity building of SHG in KVK villages	2	30	PF
	Extension Methodology (PRA tools/ Techniques)	Training to extension function on PRA technique.	2	30	PF
<b>7</b>	<b>Plant protection</b>				
	Integrated Pest Management	IPM in chickpea, vegetable, onion, garlic, cumin,	2	30	PF
	Integrated Disease Management	IDM in cumin, onion, garlic	2	30	PF
		Seed treatment in onion, garlic, wheat, cumin, chickpea and other crops for pest and disease management	2	30	PF
<b>8</b>	<b>Soil Science</b>				
	Integrated Nutrients Management	Integrated nutrient management in rabi crops			
	Bio-fertilizers				
	Soil Fertility Management				
<b>9</b>	<b>Fishery</b>				
	Prawn Culture	Sea weed liquid fertilizer	1	30	PF

		Sea weed Greeting card	2	30	PF
	Composite Pisciculture	Composite fish culture	1	30	FW
	Fish Production Technology	Awareness programme about importance of prawn hatchery	2	30	PF
		Training on composite pisciculture (major carp species)	2	30	PF
		Importance of nutritional component in fish production	2	30	PF
<b>10</b>	<b>Others</b>				
	Agro-forestry		30		30
	Sericulture				
	Mushroom				
	Apiculture				
	Organic Farming	Training on organic farming in vegetable crops.	2	30	PF
	Vermi compost	Handling and cares for vermicompost unit,	2	30	PF
	Others if any (Pl specify)				
	<b>IV Quarter</b>	<b>(January 2008 to March 2008)</b>			
<b>1</b>	<b>Crop Production</b>				
	Seed Production Technology				
	Weed Management				
	Zero Tillage Technology				
	Crop Production Technology	Production technology of summer groundnut, pearl millet, vegetables etc	2	30	PF
<b>2</b>	<b>Horticulture</b>				
	Vegetable Production Technology	Vegetable production technology in summer	2	30	PF
	Medicinal Plant Cultivation				
	Nursery Raising Technology	Nursery raising technology	2	30	PF

	Production Technology for Fruits	Management of orchard	2	30	PF
	Production Technology for flowers				
<b>3</b>	<b>Animal Science</b>				
	Feed & Fodder Management	Importance of nutritional management in advance Animal Husbandry	2	30	PF
	Dairy farming	White evolution in Animal Husbandry	2	30	PF
	Poultry farming	Major problems and solutions in poultry farming	2	30	PF
	Sheep Rearing	Major step to be taken in milk production in sheep rearing	2	30	PF
	Goatary	Major step to be taken in milk production in goat rearing	2	30	PF
	Duckery		2	30	PF
	Piggery		2	30	PF
	Animal Health Management	Vaccination in farm animals	2	30	PF
<b>4</b>	<b>Home Science</b>				
	Kitchen Gardening	Training on kitchen gardening,			
	Nutritional management of women and children	Women and child health care	2	30	FW
	Embroidery, Tailoring & Handicrafts	Training on rural women strengthening by handicrafts and tailoring	2	30	FW
	Value Addition of Plant Products	Preparation & preservation of tomato ketch-up	2	30	FW
		Preparation of candy & murrabba of Aonla	2	30	FW
		Preparation of lemon squash	2	30	FW
		Preparation of jam, jelly, tomato catchup, syrup, lemon squash, etc.	2	30	FW
		Methods of safe storage of food grains	2	30	FW
		Backing of wheat flour, corn flour, rice flour, and bajara flour	2	30	FW

	Value Addition of Animal Products	Value addition in milk by preparation of dairy products.	2	30	FW
	Preparation of Home Utility Items	Soft toys preparation	2	30	FW
<b>5</b>	<b>Agril. Engineering</b>				
	Fabrication, repair & maintenance of farm tools, Machinery & implements, Watershed Management	Repair and maintenance of local farm implement.	2	30	PF
		Integrated watershed training programme	2	30	PF
		Water harvesting through Well recharging	2	30	PF
	Mechanization of Agriculture	Use of chaff cutter in utilization of farm waste.	2	30	PF
<b>6</b>	<b>Agril. Extension</b>				
	Formation of farm science club	Formation of farm science club at KVK villages	2	30	PF
	Formation of SHG	Formation & capacity building of SHG in KVK villages	2	30	PF
	Extension Methodology (PRA tools/ Techniques)	Training to extension function on PRA technique.	2	30	PF
<b>7</b>	<b>Plant protection</b>				
	Integrated Pest Management	Pest management in vegetables, fruits crops, chickpea etc	2	30	PF
		IPM an eco friendly approach in pest management	2	30	PF
		Stored grain pest management	2	30	PF
		Pest management in onion and garlic	2	30	PF
	Integrated Disease Management	IDM in Vegetable crops, fruit crops and flowers	2	30	PF
<b>8</b>	<b>Soil Science</b>				
	Integrated Nutrients Management	Preparation of compost pit	2	30	PF
	Bio-fertilizers	Recycling of waste material	2	30	PF
	Soil Fertility Management	Training on soil sampling	2	30	PF
<b>9</b>	<b>Fishery</b>				

	Prawn Culture	Awareness programme about importance of prawn hatchery	2	30	PF
		Kappaphycus (Red algae) cultivation	1	30	PF
	Composite Pisciculture	Training on composite pisciculture (major carp species)	2	30	PF
	Fish Production Technology	Importance of nutritional component in fish production	2	30	PF
		Composite fish culture	2	30	PF
<b>10</b>	<b>Others</b>				
	Agro-forestry	Popularization and promotion of bio-diesel plant : Zetropha	2	30	PF
	Sericulture				
	Mushroom				
	Apiculture				
	Organic Farming	Training on organic farming in vegetable crops.	2	30	PF
	Vermi compost	Handling and cares for vermicompost unit,	2	30	PF
	Others if any (Pl specify)				

### A.3 Vocational Training

Sr. No.	Title of Training	Duration (days)	No. of participants	Type of participant
1	Compost by NADEF method	5	10	RY
2	Technique for vermicompost	5	10	RY

### A.4 In service Training

Sr. No.	Title of Training	Duration (days)	No. of participants	Type of participant
1	Pre-seasonal training on kharif crops	2	25	Ext.workers
2	Pre-seasonal training on Rabi crops	2	25	Ext.workers

3	Integrated pest management in cotton	2	25	Ext.workers
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**B. Summary of Training Programme :**

Sl. No.	Subject	T.	T.	G.T.
1	Crop production	8	10	18
2	Horticulture	5	3	8
3	Soil health & Fertility	4	2	6
4	Live stock production & management	0	1	1
5	Home science	15	8	23
6	Agri Engineering	0	0	0
7	Plant protection	17	20	37
8	Fisheries	2	2	4
9	Production of Input at site	16	31	47
10	Capacity Building and Group Management	3	3	6
11	Agro-foreshtry			
	Total	70	80	150
	<b>Rural Youth</b>	8	8	16
	<b>Extesniion Personals</b>	3	3	6
	Total	81	91	172

**2. DEMONSTRATIONS**

Sr. No	Type of demonstra.	Variety	Title	No. of demon.	Area (ha)
<b>2.1 Frontline demonstration</b>					
<b>(A) Kharif (2008)</b>					
1	Groundnut	GG- 7	Yield potentiality	25	10
2	Sesamum	Guj Til-2	Yield potentiality	12	5
3	Castor	GCH-6	Yield potentiality	25	10

4	Green Gram	GM-4	Yield potentiality	10	5
<b>Total</b>				<b>72</b>	<b>30</b>
<b>(B) (Rabi 2007-08)</b>					
1	Wheat	GW-322	Yield potentiality	12	5
2	Mustard	GM-2	Yield potentiality	12	5
3	Gram	Guj.gram-1	Yield potentiality	12	5
4	Cumin	Guj.cumin-4	Yield potentiality	12	5
<b>Total</b>				<b>48</b>	<b>20</b>
<b>2.2 Component Demonstration</b>					
1	Groundnut	GG-20	Stem rot management by Trichoderma	5	2.0
2	Gram	GG-1	Management of Heliothis	5	2.0
<b>Total</b>				<b>10</b>	<b>2.5</b>
<b>Grand total (A+B+C)</b>				<b>321</b>	<b>52.5</b>

### 3. ON FARM TESTING

#### 3.1 OFT - 1

**Title:** :- Low yield in cotton

**Objective** : Fertilizer management in cotton

**Treatment** : Treatment details are as under

Treatment		Period of application	N (kg/ha)	P <sub>2</sub> O <sub>5</sub> (kg/ha)	K <sub>2</sub> O (kg/ha)	Source
T <sub>1</sub>	Farmer practices	Basal	22.5	57.5	0	DAP
		Split-1(30 DAS)	57.5	0	0	Urea
		Split-2 (45 DAS)	57.5	0	0	Urea
		Split-3 (60 DAS)	80	57.5	0	Urea+DAP

		Split-4 (75 DAS)	57.5	0	0	Urea
		<b>Total</b>	<b>275</b>	<b>115</b>	<b>0</b>	
T <sub>2</sub>	Recommended practices	Basal	40	0	0	Urea
		Split-1(30 DAS)	40	0	0	Urea
		Split-2 (45 DAS)	40	0	0	Urea
		Split-3 (60 DAS)	40	0	0	Urea
		<b>Total</b>	<b>160</b>	<b>0</b>	<b>0</b>	
T <sub>3</sub>	Refined practices – I	Basal	40	60	60	Urea
		Split-1(30 DAS)	40	0	0	Urea
		Split-2 (45 DAS)	40	0	0	Urea
		Split-3 (60 DAS)	40	0	0	Urea
		<b>Total</b>	<b>160</b>	<b>60</b>	<b>60</b>	
T <sub>4</sub>	Refined practices – II	Basal	40	60	60	Urea
		Split-1(30 DAS)	40	0	20	Urea
		Split-2 (45 DAS)	40	0	20	Urea
		Split-3 (60 DAS)	40	0	20	Urea
		<b>Total</b>	<b>160</b>	<b>60</b>	<b>120</b>	

**Variety** : B.t. cotton (Government approved variety)

**Critical inputs** : Fertilisers

**No. of farmers** : 3 (Three)

**Size of plot** : 0.40 ha

**Season** : *Kharif*- 2008

**Problems** :

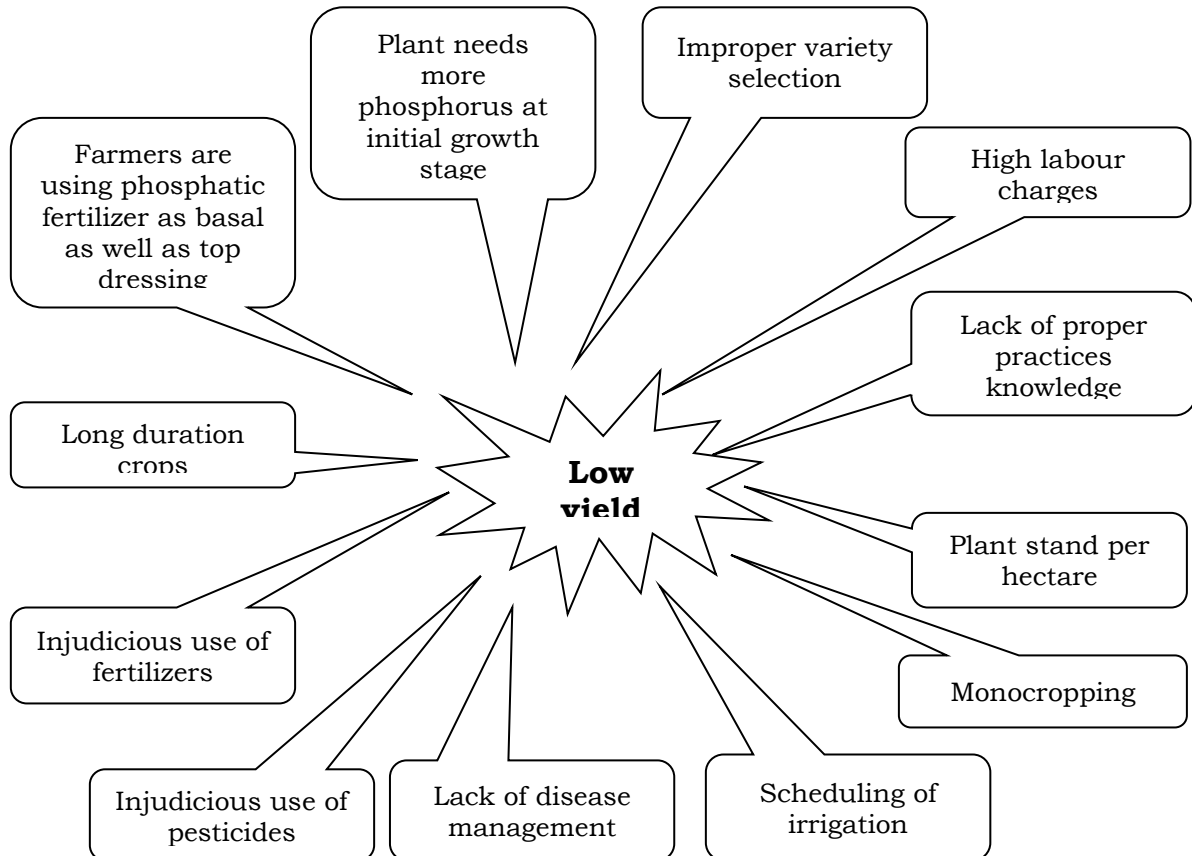
- i. Farmers are using phosphatic fertilizer as basal as well as top dressing.
- ii. Plant needs more phosphorus at initial growth stage.
- iii. Improper variety selection
- iv. High labour charges
- v. Lack of proper practices knowledge
- vi. Plant stand per hectare
- vii. Monocropping
- viii. Long duration crops
- ix. Injudicious use of fertilizers



- x. Injudicious use of pesticides
- xi. Lack of disease management
- xii. Scheduling of irrigation

**Technology intervention :**

160 kg Nitrogen in four split is recommended practice in cotton.



**3.2 OFT – 2 :- Oilseeds (Groundnut)**

**Title :** Yield losses in groundnut due to Sclerotium stem rot.

**Objective :** Management of stem rot in groundnut

**Treatment :** T<sub>1</sub>- Farmers practice (Control)  
 T<sub>2</sub>- *Trichoderma harzeanum* @ 2.5 kg/ha with castor cake @ 500kg/ha at the time of sowing  
 T<sub>3</sub> - Castor cake @ 500 kg/ha

**Variety:** GG-20

**Season:** Kharif- 2008

**No. of farmers :** 3 (Three)

**Size of plot :** 0.40 ha

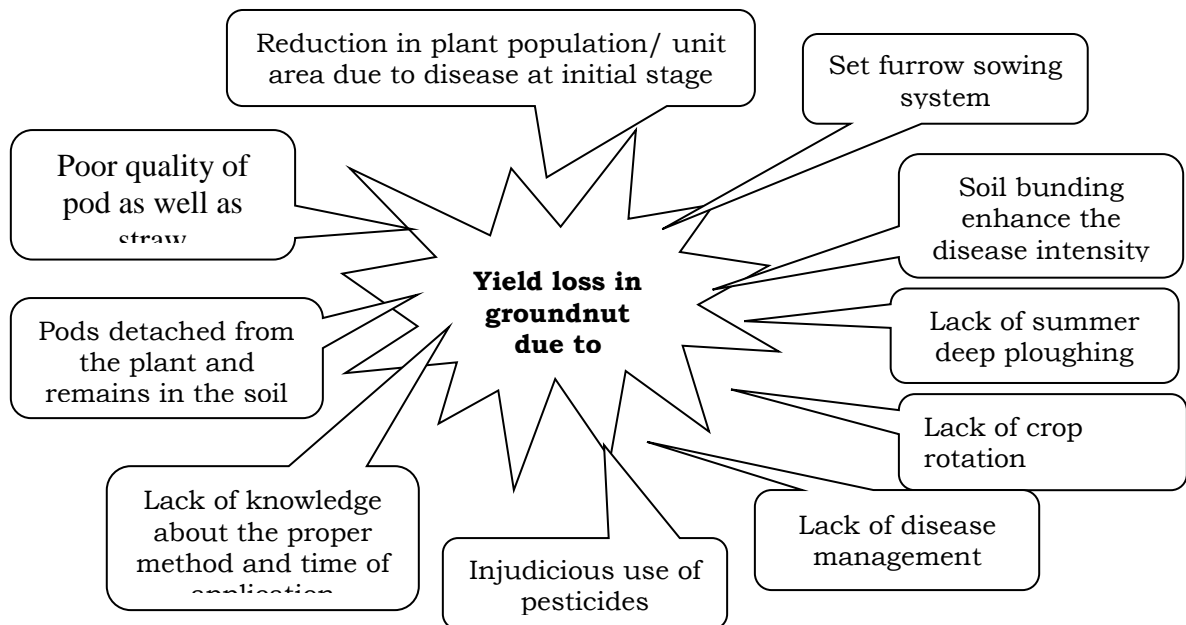
**Problems:**

1. Reduction in plant population/ unit area due to disease at initial stage
2. Poor quality of pod as well as straw
3. Pods detached from the plant and remains in the soil
4. Lack of knowledge about the proper method and time of application
5. Set furrow sowing system
6. Soil bunding enhance the disease intensity
7. Lack of summer deep ploughing
8. Lack of crop rotation

**Critical inputs** : Castor cake and culture of *Trichoderma harzaneum*

**Technology intervention:**

Management of stem rot in groundnut through *Trichoderma harzaneum*



**4. EXTENSION ACTIVITIES**

<b>Sr. no.</b>	<b>Name of Activities</b>	<b>Numbers</b>
1	Field day on a) Groundnut b) Bajra c) Sesamum d) Castor e) Cumin f) Wheat g) Gram	07
2	Farmers day/Farmers meeting	01
3	Agril. Exhibition	01
4	Scientist interaction / Vichar gosthi	05
5	Subscription to farm magazine	25
6	Publication (pamphlets / folders)	10
7	Diagnostic services	As per need
8	Lectures to be delivered in other programmes	15
9	Night meetings	10
10	Telephone helpline	As per demand

**N.B. Above full fledge activities can be performed only after recruiting the staff as per discipline required.**

<b>Sr.No</b>	<b>Demonstration Units</b>	<b>Rs. In Lakh</b>
1	Vermi compost unit	1.50
2	Poly house Unit	1.00
3	Horticulture and vegetable nursery	3.00
4	Animal unit	4.00
5	Fisheries culture unit	4.00
6	Drip irrigation unit with hort. crops	3.00
7	Home science	3.00
8.	Entomological & Pathological laboratory as well as Museum	4.00