

KRISHI VIGYAN KENDRA
JAU – KHAPAT (PORBANDAR)
Annual Action Plan: 2021-2022

1. Training Programmes
Quarter wise Summary of Trainings

Discipline	On Campus				Total	Off campus				Total	Grand Total
	I	II	III	IV		I	II	III	IV		
Crop production	2	1	1	2	6	2	1	2	1	6	12
Horticulture	1	1	2	2	6	2	1	2	1	6	12
Plant protection	1	1	2	1	5	2	2	1	1	6	11
Home Sci.	1	1	1	2	5	1	2	2	2	7	12
Animal Husbandry	1	1	2	2	6	2	2	1	1	6	12
Soil Health	-	-	-	-	0	1	1	-	-	2	2
Vocational Training	1	-	-	1	2	-	1	-	-	1	3
Ext. Functionaries	-	1	1	-	2	-	-	-	-	0	2
Sponsored	2	4	2	2	10	-	-	-	-	0	10
Total	9	10	11	12	42	10	10	8	6	34	76

A. On Campus Training Programs
For Farmers, Farm women and Rural youth

Quarter-I (April to June-21)				
Subject	Title of Training	No. of Days	No. of Parti.	Type of Parti.
Crop Production	Weed Management practices in important <i>Kharif</i> crops	1	20	Farmers
Crop Production	Seed production in major <i>kharif</i> crops	1	20	Farmers
Home Science	Value addition in horticultural produce	1	20	Farm Women
Horticulture	Nursery Raising techniques for vegetables	1	15	Rural Youth
Plant protection	Management of white grub in groundnut	1	20	Farmers
Animal Husbandry	ITK practices in disease management of farm animals	1	25	Farmers & Farmwomen
Quarter-II (July to September-21)				
Crop Production	Nursery Management techniques for various crops	1	20	Farmers
Home science	E market and Social media awareness for women	1	20	Farmwomen

Horticulture	Protected cultivation (Green house, Net house, tunnels)	1	20	Farmers
Plant Protection	Integrated pest and disease management in <i>Kharif</i> crops	1	20	Farmers
Animal Husbandry	Silage management	1	20	Farmers
Quarter-III (October to December-21)				
Crop Production	Recent advances in production technology Fodder Crops	1	20	Farmers
Horticulture	Recent advances in production technologies of spices and vegetables	1	20	Farmers
Horticulture	Advanced production technology for chili	1	20	Farmers
Plant Protection	Integrated pest and disease management in <i>Rabi</i> crops	1	20	Farmers
Plant Protection	Storage pest management	1	20	Farmers
Home Science	Designing & development for high nutrient efficiency diet	1	20	Farm women
Animal Husbandry	Management of farm animals	1	20	Farmers/ Farmwomen
Animal husbandry	Health management in heard	1	20	Farmers
Quarter-IV (January to March-22)				
Crop Production	Production of Organic inputs (Vermicompost, FYM etc.)	1	20	Rural Youth
Crop Production	Integrated farming system	1	20	Farmers
Horticulture	Value addition in flowers & fruits	1	20	Farmwomen
Horticulture	Off seasonal vegetable cultivation	1	20	Farmers
Plant Protection	Integrated pest and disease management in vegetable crops	1	25	Farmers
Home Science	Layout of Nutrition garden and importance of kitchen gardening	1	20	Farmwomen
Home Science	Value addition in fruits & vegetable	1	20	Farmwomen
Animal Husbandry	Hygienic milk production and management of mastitis in milch animals	1	25	Farmers & Farmwomen
Animal Husbandry	Housing management in milch animals	1	20	Farmers & Farmwomen

**B. Off Campus Training Programs
For Farmers, Farm women and Rural youth**

Quarter-I (April to June-21)				
Subject	Title of Training	No. of Days	No. of Parti.	Type of Parti.
Crop Production	Advances in production technology of groundnut, cotton and INM	1	35	Farmers

Crop Production	INM in <i>kharif</i> crops	1	20	Farmers
Horticulture	Layout and Management of mango orchards; IPDM in mango	1	25	Farmers
Horticulture	Production of organic fruits	1	20	Farmers
Plant Protection	IPDM in major <i>Kharif</i> crops	1	35	Farmers
Plant Protection	Stem & collar rot management in groundnut	1	20	Farmers
Home Science	Drudgery reducing technologies for farm women in agriculture	1	25	Farmwomen
Animal Husbandry	Disease, nutrition management & ITK practices in livestock	1	35	Farmers & Farmwomen
Animal Husbandry	Importance of vaccination in animals	1	25	Farmers & Farmwomen
Soil Health	Soil fertility management & soil sampling techniques	1	40	Farmers
Quarter-II (July to September-21)				
Crop Production	Crop diversification in the region	1	25	Farmers
Horticulture	Production Technology of Plantation Crops (Date Palm, Coconut)	1	30	Farmers & Farmwomen
Plant protection	Management of whitegrub in groundnut & pink ballworm in cotton	1	20	Farmers
Plant protection	Storage pest management	1	20	Farmers
Home Science	Nutritional diet for farm women, pregnant women, children & adolescent girls	1	35	Farmwomen
Home Science	Health care for women and aged	1	20	Farmwomen
Animal Husbandry	Care of pregnant animals and Care after calving	1	30	Farmwomen
Animal Husbandry	Artificial insemination	1	20	Farmers & Farmwomen
Soil Health	Soil fertility management & soil sampling techniques	1	25	Farmers
Quarter-III (October to December-21)				
Crop Production	INM and organic farming	1	35	Farmers
Crop Production	Advances in production technology of pulses	1	20	Farmers
Horticulture	Production & Management Technology of Spices (cumin, coriander)	1	25	Farmers
Horticulture	Cultivation of leafy vegetable in protected cultivation	1	20	Farmers
Plant Protection	IPDM in major <i>Rabi</i> crops	1	25	Farmers
Home Science	Preservation of fruits, vegetables	1	35	Rural Youth

	and preparation of different types of masala			
Home Science	Nutritional diet for farm women, pregnant women, children & adolescent girls	1	30	Farmwomen
Animal Husbandry	Fodder Management	1	30	Farmers & Farmwomen
Quarter-IV (January to March-22)				
Crop Production	Advances in production technologies of <i>Rabi</i> crops	1	35	Farmers
Horticulture	Cultivation of spices, onion and garlic	1	25	Farmers
Plant Protection	Biological control of pest & diseases in major crops	1	35	Farmers
Home Science	Preparation of bakery products	1	35	Farmwomen
Home Science	Value addition in dairy products	1	20	Farmwomen
Animal Husbandry	Deworming programme, control of parasites and artificial insemination in farm animals	1	25	Farmers

C. Vocational Training Programme

SrNo	Title of Training	Duration Days	No. of Parti.	Type of Parti.	Schedule quarter
1	Production of organic inputs(vermicomposting)	7	15	Rural youth	I
2	Plug Nursery raising technique for business	7	15	Rural youth	IV
3	Skill development in recent trends (Beauty Parlour)	1 Month	15	Rural youth	-

D. Training Programme Extension Functionaries

Sr No	Title of Training	Duration Days	No. of Parti.	Schedule quarter
1	Integrated crop management- major crops	2	25	II
2	Importance of kitchen gardening (<i>Anganwadi</i> worker)	1	50	III

E. Sponsored Training Programme

Discipline	Title of Training	No. of Courses	No. of Parti.	Sponsoring Agency
Crop Production	Soil health management	2	55	ATMA
Horticulture	Production of organic spices	2	60	ATMA
Plant Protection	Integrated management of pink ball worm in cotton	2	65	ATMA
Plant Protection	Management of white grub in groundnut	2	65	ATMA
Animal Husbandry	Artificial insemination	2	80	ATMA
TOTAL		10	325	

2. Front Line Demonstrations

Physical targets of FLDs (Proposed)

Name of the crop/enterprise	Season	Technology to be demonstrated	Variety	Area (ha.)/No. of units	No. of Demo.	Approx. Cost/FLD (Rs.)
Oilseeds						
Groundnut	Kharif-2021	Improved variety	GJG-22	4	10	2500/-
Pulses						
Green gram	Summer-2022	Imp. Variety	GM-4	4	10	2000/-
Cereals						
Wheat	Rabi-2021-22	Improved variety	GJW-451	4	10	2500/-
Vegetable						
Onion	Rabi-2021-22	Improved Variety	GJRO-11	4	10	2500/-
Onion	Rabi-2021-22	Integrated Disease Management (for disc (root) rot)	Pillipatti	4	10	500/-
Fruit Crops						
Mango	Rabi – 2021-22	IPM in Mango for fruit fly	Kesar	4	10	500/-
Commercial crops						
Cotton	Kharif-2021	Integrated management of pink ball worm	Bt. Variety	10	25	800/-
Kitchen Gardening						
Vegetables	Kharif-2021	Improved variety of 5 crops	Available at JAU, Junagadh	2.5	50	100/-
Vegetables	Rabi - 2021-22	Improved variety of 5 crops	Available at JAU, Junagadh	2.5	50	100/-
Bio-agents						
Chick pea	Rabi-2021-22	Bioagents – HNPV & <i>Beuveria</i>	GG-1/ Digvijay	4	10	600/-
Other Enterprise						
Animal Husbandry	-	Nutrient Management	Chelated Mineral Mixture	-	20	500/-
	-	Nutrient Management	Bypass fat	-	20	500/-
Home Science	-	Drudgery Reduction	Revolving Milking Stool Stand	-	5	-

3. On-Farm Testing

I. On Going

OFT: 1

Title: Integrated Nutrient Management in Summer chili

Problem: Low production in Summer chili

Details of Technologies

Technology Assessed: Integrated Nutrient Management

Treatments

1. **Farmer's practice :** 150-50-00 (kg NPK/ha)
2. **Recommended practice :** 100-50-50 (kg NPK/ha)
3. **Intervention :**

Recommended dose of fertilizer (RDF) + spraying of Banana pseudostem sap @ 1 % thrice. First spray at starting of flowering and another at 15 days intervals.

Observations

1. Yield
2. Economics (B:C ratio)

Source of Technology: NAU, Navsari

OFT – 2

Title - Effect of supplementation of concentrates on milk production of *Gir* cow

Problem Definition - Due to inadequate nutrient in daily ration, the fat % in milk and productivity of the animal decreased, financial loss

Technology Accessed- Supplementary feeding of concentrate

Treatments

1. Farmers practice
2. Feeding of concentrated mixture – 4 kg/animal/day
3. Feeding of concentrated mixture – 4 kg/animal/day + Mineral mixture (50 g/animal/day)

Experiment animal - 9 (3 animals/treatment)

Observations -

1. Milk yield (lit/day)
2. Income

Source of technology - Animal Nutrition Research Station, AAU, Anand

OFT - 3

Title - Assessment of Nitrogen Management in Wheat Crop

Problem Definition - Reduce yield and soil fertility

Technology Assessed- Integrated Nutrient Management

Treatments

- 1. Farmer's practice :-** Application of only DAP & Urea in different doses
- 2. Recommended practice :-** Application of Nitrogen @ 120 kg/ha in three splits ($\frac{1}{4}$ as basal + $\frac{1}{2}$ at 20 to 25 DAS + $\frac{1}{4}$ at 35 to 40 DAS) and 60 kg P₂O₅ & K₂O as basal
- 3. Intervention:-** Application of *Azotobacter* & PSB culture (250 ml/10kg) + 75% of N & P₂O₅ (90-45 kg/haNP) + 100 % K₂O (60 kg/haK)

Observations

1. Yield (q/ha)
2. Economics

Source of Technology: JAU, Junagadh

II. New OFTs

OFT-1

Title - Management of aflarot in groundnut using bio inputs

Problem Definition - Low yield & quality deterioration of seed in groundnut

Technology Assessed- Integrated Disease Management

Treatments

- 1. Farmer's practice-NIL**
- 2. Recommended practice-**Seed treatment with tebuconazole @ 1.5 g/kg seed
- 3. Intervention** -Soil application of *Trichoderma harzianum* @ 0.650 g/ha & *Pseudomonas fluorescens* @ 0.650 g/ha with castor cake @ 125 kg/ha twice; at the time of sowing & after 1 month of first application

Observations

1. Yield (q/ha)
2. Economics
3. Microbial population (aflarot causing) (CFU)- (Before & After)

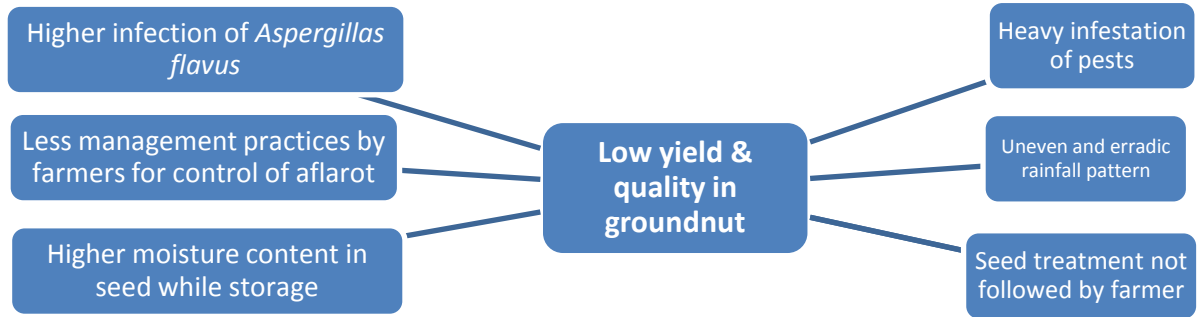
No. of trails - 3

Critical inputs - *Trichoderma harzianum*– 500 g; *Pseudomonas fluorescens*-500 g; castor cake- 100 kg

Cost per trials (whole experiment) - Rs. 3000/-

Source of Technology: JAU, Junagadh

Problem – Cause Diagram



OFT-2

Title - Assessment of PICS bag for Groundnut storage

Objective

1. To provide sustainable and ecologically safe approach to preserve groundnut pods
2. To Reduce storage loss in groundnut seed
3. To increase storage period

Problem Definition

1. Residual effect of insecticides used for stored godown
2. Insecticidal effect on germination
3. High moisture retention during summer days
4. Heavy attack of storage pests
5. High cost of storage
6. Heavy loss of food grains and seeds
7. Lack of regular inspection in stored products.

Treatment

T1–Farmer Practices (Open heaps in storage godown)

T2–Local practices for storage in plastic bag/ woven bags

T3–Storage in Triple layer hermetic “Purdue Improved Crop Storage”(PICS) bags

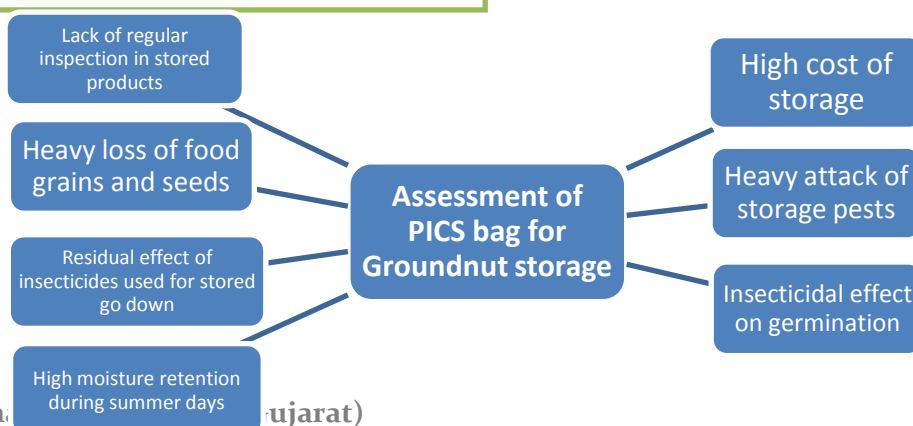
No. of Replication/farmers -3 (Five bags/farmers)

Observation - Post (after six month) storage

1. Weight loss
2. Insect (Bruchid)damage

Source of Technology: JAU, Junagadh Formerly it was from ICRISAT, Hyderabad

Problem – Cause Diagram



4. Other Extension Activities

Sr No	Activity	No. of activities (Targeted)
1	Field Day	15
2	KisanMela	1
3	KisanGhoshi	15
4	Exhibition	3
5	Film Show	10
6	Method Demonstrations	-
7	Farmers Seminar	5
8	Workshop	1
9	Group meetings	4
10	Lectures delivered as resource persons	As & when required
11	Newspaper coverage	As & when required
12	Radio talks	-
13	TV talks	-
14	Popular Articles	10
15	Extension Literature	10
16	Farm Advisory Services	-
	Scientific visit to farmers field	As & when required
	Farmers Visit to KVK	1000
	Diagnostic Visits	As & when required
17	Exposure Visits	-
18	Ex-trainees Sammelan	2
19	Soil Health Camp	2
20	Animal Health Camp	2
21	Agri Mobile Clinic	-
22	Soil Test Campaigns	2
23	Farm Science Club conveners meet	-
24	Self Help Group conveners meetings	-

5. Seed production

Sr No	Crop/Plant	Area (ha)	Production (Q)
1	Groundnut GG-20, Breeder	10.0	80
2	Groundnut GJG-17, Breeder	2.0	25
3	Groundnut GJG-22, Breeder	1.0	15
4	Wheat GJW-463, Foundation	1.0	30

6. Planting Material

Sr No	Crop/Plant	Quantity (no)
1	Brinjal	5000
2	Tomato	5000
3	Coconut (D x T)	1500