## Annual Action Plan: 2020-2021

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Dissinling	(	On Ca	mpu	<b>S</b>	Tatal	Off campus			S	T del	Grand
Discipline	Ι	II	III	IV	Total	Ι	II	III	IV	Total	Total
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	-	-	-	-	-	1	1	-	-	2	2
Vocational Training	1	-	-	1	2	-	1	-	-	1	3
Ext. Functionaries	-	1	-	-	1	-	-	-	-	-	1
Sponsored	2	4	2	2	10	-	-	-	-	-	10
Total	9	10	10	12	41	10	9	8	6	34	75

# 1. Training Programmes

### Quarter wise Summary of Trainings

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

Quarter-I (Ap	ril to June-20)			
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 agricultural produce	1	20	Farm Women
Horticulture	Nursery Raising techniques for vegetables	1	15	Rural Youth
Plant protection	Management of whitegrub in groundnut	1	20	Farmers
Animal Husbandry	ITK practices in disease management of farm animals	1	25	Farmers & Farmwomen
Quarter-II (Ju	ly to September-20)			
Crop Production	Nursery Management techniques for various crops	1	20	Farmers
Home science	Income generation activities for empowerment of rural women	1	20	Farmwomen
Horticulture	Protected cultivation (Green house, Net house, tunnels)	1	20	Farmers
Plant	Integrated pest and disease	1	20	Farmers

Protection	management in <i>Kharif</i> crops			
Animal	Silage management	1	20	Farmers
Husbandry	Shage management	1	20	1 anners
~	ctober to December-20)			
Crop	Recent advances in production	1	15	Farmers
Production	technology Fodder Crops	1	15	1 armers
Horticulture	Recent advances in production	1	20	Farmers
Homeunture	technologies of spices and	1	20	1 anners
	vegetables			
Horticulture	Advanced production technology	1	20	Farmers
Horneunture	for chili	1	20	Parmers
Plant	Integrated pest and disease	1	20	Farmers
Protection	management in Rabi crops			
Plant	Storage pest management	1	20	Farmers
Protection				
Home Science	Designing & development for high	1	20	Farm
	nutrient efficiency diet			women
Animal	Management of farm animals	1	20	Farmers/
Husbandry		_		Farmwomen
			• •	
Animal	Health management in heard	1	20	Farmers
husbandry				
Quarter-IV (Ja	nuary to March-21)			
Crop	Production of Organic inputs	1	20	Rural Youth
Production	(Vermicompost, FYM etc.)			
Crop	Integrated farming system	1	20	Farmers
Production				
Horticulture	Value addition in flowers & fruits	1	20	Farmwomen
Horticulture	Off seasonal vegetable cultivation	1	20	Farmers
Plant	Integrated pest and disease	1	25	Farmers
Protection	management in vegetable crops			
Home Science	Rural Craft	1	20	Farmwomen
Home Science	Value addition in fruits & vegetable	1	20	Farmwomen
Animal	Hygienic milk production and	1	25	Farmers &
Husbandry	management of mastitis in milch			Farmwomen
, , , , , , , , , , , , , , , , , , ,	animals			
Animal	Housing management in milch	1	20	Farmers &
Husbandry	animals			Farmwomen

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

Quarter-I (April to June-20)					
Subject	Title of Training	No. of Days	No. of Parti.	Type of Parti.	
Crop	Advances in production technology	1	35	Farmers	
Production	of groundnut, cotton and INM				
Crop	INM in <i>kharif</i> crops	1	20	Farmers	
Production					
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 and kitchen gardening	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 (Ju	ly to September-20)			
Crop Production	Crop diversification in the region	1	35	Farmers
Horticulture	Production Technology of Plantation Crops (Date Palm, Coconut)	1	30	Farmers & Farmwomen
Plant protection	Management of white grub 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	Importance of vaccination and health care for infant	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 (O	ctober to December-20)			
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 and preparation of different types of masala	1	35	Rural Youth

Home Science	Nutritional diet for farm women, pregnant women, children & adolescent girls	1	30	Farmwomen
Animal	Fodder Management	1	30	Farmers &
Husbandry				Farmwomen
Quarter-IV (Ja	anuary to March-21)			
Crop	Advances in production	1	35	Farmers
Production	technologies of rabi crops			
Horticulture	Cultivation of spices, onion and	1	25	Farmers
	garlic			
Plant	Biological control of pest & diseases	1	35	Farmers
Protection	in major crops			
Home Science	Preparation of bakery products	1	35	Farmwomen
Home Science	Value addition in dairy products	1	20	Farmwomen
Animal	Deworming programme, control of	1	25	Farmers
Husbandry	parasites and artificial insemination			
	in farm animals			

### C. Vocational Training Programme

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

#### **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

### E. Sponsored Training Programme

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

Physical t	targets of F	LDs (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- 2020	Improved variety	GJG-22	4	10	2500/-
Pulses		·				
Green gram	Summer- 2020-21	Imp. Variety	GAM-5	4	10	2000/-
Cereals		·				
Wheat	<i>Rabi-</i> 2020-21	Improved variety	GJW-463	4	10	2000/-
Vegetable						
Onion	<i>Rabi-</i> 2020-21	Improved Variety	GJRO-11	4	10	2500/-
Onion	Rabi- 2020-21	Integrated Disease Management (for disc (root) rooting)	Pillipatti	4	10	
Fruit Crops	•	· · · · · · · · · · · · · · · · · · ·			•	
Mango	<i>Rabi</i> – 2020-21	IPM in Mango for fruit fly	Kesar	4	10	500/-
Commercial c	rops	· · ·				
Cotton	Kharif- 2020	Integrated management of pink ball worm	Bt. Variety	10	25	600/-
Kitchen Gard	ening		L	I	1	
Vegetables	Kharif- 2020	Improved variety of 5 crops	Available at JAU, Junagadh	2.5	50	100/-
Vegetables	<i>Rabi -</i> 2020-21	Improved variety of 5 crops	Available at JAU, Junagadh	2.5	50	100/-
<b>Bio-agents</b>				L		
Chick pea	<i>Rabi-</i> 2020-21	Bioagents – HNPV & Beuveria	GG-1/ Digvijay	4	10	500/-
Other Enterp	rise					
Animal Husbandry	-	Nutrient Management	Chelated Mineral Mixture	-	20	500/-
	-	Nutrient Management	Bypass fat	-	20	500/-
	-	Disease Management	Mineral mixture + Fenbendaz ole tablet	-	10	500/-
Home Science	-	Drudgery Reduction	Revolving Milking Stool Stand	-	5	-

#### 2. Front Line Demonstrations Physical targets of FLDs (Proposed)

# 3. On-Farm Testing

#### I. On Going

OFT-1 Title: Management of white grub in groundnut

#### Problem Definition: Low yield and heavy damage due to white grub

Technology Assessed: Integrated Pest Management

#### Treatments

- 1. Farmer's practice Chloropyrihpos @ 4 lit./ha at the time of attack
- 2. **Recommended practice** Seed treatment with chloropyriphos 20 E.C @ 25 ml/kg, application of carbofuran 3 G @ 33 kg/ha at the time of sowing.
- 3. Intervention Soil application of *Metarhizium anisopliae* and *Beauveria bassiana* @ 2.5 Kg/ha. at the time of sowing.

#### Observations

- 1. Yield (kg/ha)
- 2. White grub population
- 3. Economics

Source of Technology: JAU, Junagadh

#### <u>OFT: 2</u>

Title: Integrated Nutrient Management in Summer chilli

Problem: Low production in Summer chilli

#### **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

#### <u>OFT – 3</u>

Title - Effect of supplementation of concentrates on 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
- 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

#### <u>OFT – 4</u>

Title - Comparison of solar Cooker with traditional cooking system

#### Objective

- $\checkmark$  To improve quality and nutrition of Prepared items
- ✓ To reduce drudgery of farm women
- $\checkmark$  To reduce time and fuel consumption

#### Treatments

- 1. Preparation by traditional method
- 2. Preparation by solar drying
- 3. Preparation by solar cooker

#### Items

- > Mango murraba
- Boiled sweet potato
- Sweet corn
- Salted groundnut

#### No. of Replication: 5

#### **Observations**

- 1. Time consumption
- 2. Fuel consumption
- 3. Cost Saving
- 4. Organo laptic test (Taste; Texture; Consistency; Acceptance)

#### II. New OFTs

#### <u>OFT - 1</u>

Title - Assessment of Nitrogen Management in Wheat Crop

Problem Definition - Reduce yield and soil fertility

Technology Assessed - Integrated Nutrient Management

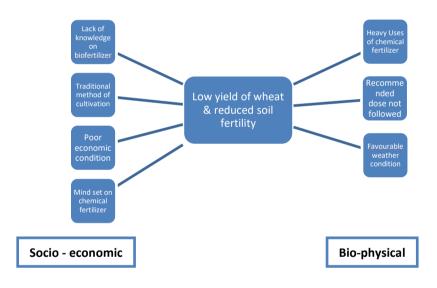
#### Treatments

- 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 P<sub>2</sub>O<sub>5</sub> & K<sub>2</sub>O as basal
- 3. Intervention:- Application of *Azatobacter* & PSB culture (250g/10kg) + 75% of N & P<sub>2</sub>O<sub>5</sub> (90-45 NP kg/ha) + 100 % K<sub>2</sub>O (60 kg K/ha)

#### Observations

- 1. Yield (q/ha)
- 2. Economics

#### Source of Technology: JAU, Junagadh



#### 4. Other Extension Activities

Sr No	Activity	No. of activities (Targeted)
1	Field Day	20
2	Kisan Mela	1
3	Kisan Ghosthi	20
4	Exhibition	5
5	Film Show	15
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)	<b>Production</b> (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	40

#### 6. Planting Material

Sr No	Crop/Plant	Quantity (no)
1	Brinjal	5000
2	Tomato	5000
3	Chilli	5000
4	Papaya (Madhubindu)	1000

#### ATIC

- **1.** Mango Honey bee box 1 farmer
- 2. Cotton MDP 5 farmer
- **3.** Groundnut GJG-22 10 farmer