KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY, PIPALIA

ANNUAL ACTION PLAN: Jan-Dec 2021

1.Training Programmes:

Quarter wise summary of training

Discipline	On Campus				T	Off campus				T	GT
	I	II	III	IV		I	II	III	IV		
Plant Protection	1	1	2	1	5	1	2	2	1	6	11
Extension	0	0	1	1	2	0	0	1	1	2	4
Horticulture	1	1	2	1	5	1	2	2	2	7	12
Home Science	1	1	1	1	4	1	1	2	1	5	9
Animal Hus.	1	1	1	1	4	1	2	2	1	6	10
Vocational				1					1		2
Extension functionaries			1	1							2
Sponsored training											14
Total					20					26	64

A. On Campus training (For practicing farmers, farm women and rural youth):

I. Quarter (1st Jan to 31st March, 2021)				
Plant Protection	Integrated pest management in summer groundnut	1	25	PF
Horticulture	Irrigation and nutrient management in fruit crops	1	25	PF
Home Science	Preparation of different types of bakery products like biscuits, Cake etc.	1	25	PF
Animal Hus	Importance of artificial insemination in cow and buffalo	1	25	PF
II. (1st April to 30th June, 2021)				
Plant Protection	-Integrated Pest management in cotton & groundnut -Integrated Disease management in groundnut	1 1	25 25	PF PF
Horticulture	Production technology of fruit and vegetable	1	25	PF
Extension	Formation of new SHGs, CIGs,	1	25	PF
Home Science	Preparation of Jam, Squash, Ketchup from fruits	1	25	FW
Animal Hus	Importance of balance ration in milch animal	1	25	PF
III. Quarter (1st July to 30th Sept, 2021)				
Plant Protection	Integrated pest and diseases management in coriander	1	25	PF
Horticulture	-Nursery raising -Organic farming in different horticultural crops	1 1	25 25	PF PF
Home Science	Art & Craft for rural women	1	25	FW
Ani. Husbandry	Importance of colostrum feeding in new born calves	1	25	PF
IV. Quarter (1st Oct to 31st Dec, 2021)				
Plant Protection	Diseases management in spices	1	25	PF
Animal Hus	Fodder crop production technology	1	25	PF
Home Science	Preparation of different pickles	1	25	FW
Extension	Leadership Development	1	25	PF
Horticulture	Production technology of spices crops	1	25	PF

B. Off Campus training (For practicing farmers, farm women and rural youth):

I. Quarter (1st Jan to 31st March, 2021)				
Plant Protection	Integrated pest management in summer crops	1	30	PF
Home Science	Organic Kitchen gardening & its importance on health	1	30	FW
Animal Hus	Clean milk production by proper milking watering and animal washing	1	30	PF
Horticulture	Importance of drip irrigation in horticultural crops	1	30	PF
II. (1st April to 30th June, 2021)				
Plant Protection	-Integrated Pest management in cotton & groundnut -Integrated Disease management in kharif crops	1 1	30 30	PF PF
Extension	Procedure for formation of new SHGs, CIGs	1	30	PF
Horticulture	Production technology in protected cultivation	1	30	PF
Home Science	Preparation of low cost RTS beverages	1	30	FW
Animal Hus	Infertility of cow and Buffalo by diseases & its prevention	1	30	PF
III. Quarter (1st July to 30th Sept, 2021)				
Plant Protection	-Integrated pest and disease management in Rabi crops -Bio control of Pests and Diseases	1 1	30 30	PF PF
Home Science	-Preparation of Peanut milk and its value addition -Importance of green leafy vegetables in diet	1 1	30 30	FW FW
Animal Hus	-Importance of colostrum feeding in new born calves -Creating awareness about balance nutrition management	1 1	30 30	PF PF
Horticulture	-Pruning and training in fruit crops -Management of young Plants/ Orchards	1 1	30 30	PF PF
IV. Quarter (1st Oct to 31st Dec, 2021)				
Plant Protection	Diseases management in cumin & coriander	1	30	PF
Extension	Development of entrepreneurship among rural youth	1	30	PF
Animal Hus	-Fodder crop production technology -Increase nutritive value of low quality roughages for milking animals	1 1	30 30	PF PF
Home Science	Work simplification in household activities and Drudgery reduction technologies in agriculture	1	30	FW
Horticulture	-Cultivation practices of onion and garlic -Post-Harvest Management Technology -Different Bahar treatments in citrus & pomegranate	1 1 1	30 30 30	PF PF PF

2.Vocational Training

S.No	Title of Training	Dura. Days	No. of participants	Type of Participants
1.	Preparation of different bakery products	2	30	Rural women
2.	Low cost RTS drinks	2	30	Rural women

3.Extension Functionaries

Sr.	Title of Training	Dura./Days	No. of participants
1	Management of pink bollworm in cotton and white grub in groundnut	1	27
2.	Cattle health management through vaccination and feed management	1	27

4. Sponsored Training

S.No	Department	No. of Trainings	No. of Participants
1	ATMA	6	180
2	DAO, Rajkot	5	150
3	DRDA/FTC	1	30
4	GSFC/GNFC	4	120

5. Front Line Demonstration

A. Agriculture and Horticulture

Sl. No.	Crop	Variety	Thematic area	Tech. Demo.	Critical inputs with cost (Rs.)	Season and year	Area (ha)	No. of farmer/ demon.	Parameters identified
1	Groundnut	GG-20	IPM	Seed treatment with Chlorpyriphos	Chlorpyriphos & Lambda 2.5 L =Rs. 525	Kharif-2020	4	10	Pest infestation & Yield B:C ratio
2	Groundnut	GG-22	Varietal	Improved variety	GJG-22, Seeds = 30 kg =Rs.2200	Kharif-2020	4	10	Yield, B:C
3	Groundnut	GG-20	IDM	Application of Trichoderma	Trichoderma : 2 Kg =Rs.140 Castor cake: 1Bag (50 Kg =Rs.765	Kharif-2020	4	10	Disease incidence & Yield , B:C ratio
4	Cotton	Bt	INM	Application of Azotobacter, PSB	Azotobacter : 1 lt=Rs.120 PSB Culture : 500 ml =Rs.240	Kharif-2020	4	10	Yield, B:C ratio
5	Cotton	Bt.	IPM	MDP tube	200g. Rs: 1000	Kharif-2020	20	50	Yield, B:C ratio, PB infestation
6	Brinjal	Local	IPM	MDP tube	500 gm Rs. 100	Kharif-2020	4	10	Yield, B:C ratio,
7	Tomato	Local	INM	Grade-4 micro nutrient	250 gm 2pkt	Kharif-2020	4	10	Yield, B:C ratio,
8	Wheat	INM	INM	Azotobacter, PSB	Azotobactor : 1 ltr=Rs. 120 PSB : 1 ltr = Rs.240	Rabi-2020	5	10	Yield, B:C ratio
9	Cumin	GC-4	IDM	Tricho+Castor cake	Trichoderma : 2 kg =Rs.140 Castor Cake: 50 Kg. =Rs.690	Rabi-2020	4	10	Disease incidence & Yield , B:C ratio
10	Chick pea	GG-5	Varietal	Improved variety	Seeds GG-5 : 25 kg = Rs=2100	Rabi-2020	4	10	Yield, B:C ratio
11	Brinjal	GRB-5	Varietal	Improved variety	150 gm	Rabi-2020	4	10	Yield, B:C ratio
12	Garlic	Local	INM	Grade-4 micro nutrient	250 gm 2pkt =Rs.162	Rabi-2020	4	10	Yield, B:C ratio
13	Sesamum	GT-3	Varietal	Improved variety	Seeds GT-3 =2 kg =Rs. 360	Summer-2020	4	10	Yield, B:C ratio
14	Kitchen Gardening	-	Nutritional Security	Vege. Seeds	Seeds of different vegetable	Kharif-2020	0.5	50	Yield, B:C ratio

15	Ease in milking animal	-	Drudgery Reduction	-	Revolving Stools	-	-	5	Average Quantity of milk, time taken, Leg pain, Milk loss
Total							69.5	225	

B. Animal Husbandry

Enterprise	Breed	No. of farmers	No. of animals, poultry birds etc.	Critical inputs	Performance parameters / indicators
Buffalo	Jafarabadi	-	10	Calpar gold (60 ml/day/animal	Milk yield and B:C ration
Cattle	Gir	-	20	Bypass fat (50 gm/day/animal)	Milk yield and B:C ration
Cattle	Gir	-	20	Bypass protein (50 gm/day/animal)	Milk yield and B:C ration

6. ON FARM TESTING:

1. TITLE: RESPONSE OF BIO FERTILIZERS TO WHEAT YIELD (ON GOING)

Technology assessed: Use of bio fertilizer

Treatments:

Farmer's practice: - Application of only DAP & Urea in different doses

Recommended practice: - 120-60-0 NPK kg/ha

Intervention: - Application of Azatobacter& PSB culture (250g/10kg) + 75% of RDF

Observation: Yield (kg/ha), Economics (B:C ratio), Farmers' perception

2.TITLE: MANAGEMENT OF WHITE GRUB IN GROUNDNUT (ON GOING)

Problem definition: Low yield and heavy damage due to white grub

Technology assessed: Integrated pest Management

Technology Option	Treatments	No. of trails
Farmers' practice	Chloropyriphos @ 4 lit./ha at the time of attack + Application of nitrogenous fertilizer Urea with irrigation (50 to 60 kg /ha)	3
Recommended practice	1.Seed treatment with Chloropyriphos @ 25 ml/kg 2. Application of Chloropyriphos @ 4 lit./ha in standing crop (if pest appears) 3. Spraying the trees on bund with Lambda cyelothrin@ 15 ml /15 lit water	

Observations: Yield (kg/ha), Pest incidence (%) Economics (B:C ratio), Farmers' perception

3. TITLE: EFFECT OF CONCENTRATE AND BYPASS FAT FEEDING ON MILK PRODUCTION IN GIR CATTLE.

Problem Definition:

- ✓ Lack of knowledge about bypass fat feeding technology.
- ✓ Low milk production due to improper feeding.
- ✓ Lack of energy for milk production.

Details of technologies selected for assessment:

Dairy production is mainly based on proper scientific feeding of animals. The lactating animals are to be fed with good quality roughages along with green fodder belonging to legumes or cereals as per the availability. Looking to the productivity of gir cattle such food resources are not sufficient to meet the nutrient requirement of a lactating animal. Hence we have to add more nutrious food in to the diet of animals to reach the maximum production potential and to maintain the normal body condition. Now a day, bypass fat feeding technology is recommended for high yielding cattle. Bypass fat feeding technology along with concentrate feeding in cattle to fulfil energy and nutrient requirement. Hence, we have proposed this on farm testing to increase the milk production of gir cattle.

Source of technology: NAU, Navsari (2011)

Production system and thematic area: Nutrition Management

Farmers in the district are not following a wearing system & they also keep them under traditional management system so due to malnutrition & no deworming, the growth rate was found to be hindered.

Performance of the Technology with performance indicators

Treatments:

T 1 -Framer's practice

T 2 -Concentrate (1.5kg/cow/day for maintenance+500 gm for each lit. milk production)

T 3 - Concentrate (1.5kg/cow/day for maintenance+500 gm for each lit. milk Production) + Bypass fat 50-100gm/cow/day.

Detail of OFT Programme:

- ✓ No. of Villages: 5
- ✓ No. of animals: 30 (10 animal/Treatment)
- ✓ Each animal will be in similar physiological condition (age, lactation, days of lactation etc.).

Parameters to be evaluated/ recorded:

- ✓ Milk production (lit / cow / day)
- ✓ Fat percentage
- ✓ B:C ratio
- ✓ Net return

4. TITLE: RESPONSE OF NEW RELEASE VARIETY OF TOMATO GT-6 ON LEAF CURL OCCURRENCE AND YIELD

Problem Definition: Low yield due to micronutrient deficiency.

Technology Assessed: To increase yield of Tomato by decreasing sucking pest infestation by sowing tolerant variety.

Treatment: 1) Farmer practices: Sowing of Local Variety + any Pesticides

2) Recommended practices: Sowing of GT 6 Variety + foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after transplanting, Fipronil 5 SC @ 1.5 ml / liter 20 DAT, and Imidacloprid 70 WG @ 2g / 15 liter 40 DAT.

3) Intervention: Sowing of Local Variety and foliar sprayings of Acephate 75 WP @ 1.5 g / liter 10 days after transplanting, Fipronil 5 SC @ 1.5 ml / liter 20 DAT, and Imidacloprid 70 WG @ 2g / 15 liter 40 DAT

Observation to be recorded: Yield (qtl/ha), B:C ratio, Farmers' perception.

5. TITLE: ASSESSMENT OF EFFECT OF MICRO NUTRIENT ON YIELD OF GARLIC

Problem definition: Low yield due micro nutrient deficiency

Treatments: 1. Farmer's practices: Application of only DAP and Urea in different Doses

2.Recommended practices: Recommended dose of Fertilizer. RDF 50-50-50 (N-P-K) Kg/ha.

3. Intervention: Apply foliar spray of multi-micronutrient formulation Grade IV (Fe-Mn-Zn-Cu-B, 4.0-1.0-6.0-0.5-0.5 %) @ 1% at 60, 75 and 90 DAS in addition to recommended dose of fertilizers (50-50-50 N-P2O5-K2O kg/ha)

Observations: B:C ratio and farmers' perception

6. TITLE: COMPARISON OF SOLAR COOKER WITH TRADITIONAL COOKING SYSTEM

Objectives: -

1. To improve quality and nutrition of Prepared items
2. To reduce drudgery of farm women
3. To reduce time and fuel consumption

Treatment: -

1. Preparation by traditional method (Firewood/cow dung cakes)
2. Preparation by LPG Gas
3. Preparation by solar cooker

Items: -

1. Cake
2. Milk
3. Boiled pulses

No. of Replications: - 5

No. of beneficiaries: 3 Farm women from three different locations

Observations: -

1. Time consumption
2. Fuel consumption
3. Movement
4. Cost saving
5. Organoleptic test: i) Colour ii) Texture iii) Taste iv) Overall Acceptability

7. TITLE: ASSESSMENT OF ACCEPTANCE OF PEANUT MILK IN COMPARISON TO COW'S MILK AMONG CONSUMERS.

Objectives: -

1. To evaluate the sensory characteristics of Peanut milk parallel to cow's milk
2. To analyze the nutritional properties of both milk.
3. To check the shelf life of the peanut milk.

Treatments: -

i) T1- Cow's milk
ii) T2- Peanut milk
iii) T3- Mixture of both milk in equal ratio

Observations: -

1. Sensory characteristics- colour, flavor, taste, overall acceptability
2. Nutritional Properties- Protein, carbohydrate, fat, vitamin & minerals
3. Shelf life- microbiological test and household level test.

7. Extension Activities:

Sr. No.	Activities	Proposed No.
1	KisanMela	1
2	Field Day	5
3	KisanGhosthi	5
4	Radio Talk	As and when required
5	TV Show	As and when required
6	Film Show	5
8	Khedutshibir	15
9	Kisanmahila meeting	5
10	New paper Coverage	As and when required
11	Popular Articles	5
12	Extension Literature	8
13	Advisory Service	As and when required
14	Ex-Trainee Sammelan	2
15	Others- Seminar	4
16	Exhibition	2