#### ACTION PLAN - 2023 (January to December 2023)

#### **A:** Training Programmes:

#### i) Farmers & Farm women (On Campus)

Month/	Cliente	te Title of the training programme	Durati on in	participants			s SC/ST			G.
Date		programme	days	M	F	T	M	F	T	Total
Crop Prod				1	T	1	1	1		
April	PF	Importance of organic farming in Groundnut	1	25		25			0	25
June	PF	Natural Farming in Kharif Crops	1	22	3	25			0	25
July	PF	Weed management in Kharif Crops	1	21		21	4		4	25
October	PF	Natural Farming in Rabi Crops.	1	22	3	25			0	25
Nov.	PF	Use of Bio-products in Rabi Crops	1	22	3	25			0	25
Horticultu	re					•	,			
May	PF	Improved cultivation practices for important fruit crops	1	20		20	5		5	25
July	PF	Different propagation methods for fruit crops suitable for arid and semi-arid region.	1	22		22	3		3	25
Livestock	Product				I					
Jan.	PF	Importance of Artificial Insemination	1	25		25				25
Feb.	PF	Balanced feeding of Prégnant Animals	1	25		25				25
May	PF	Care and management of livestock during summer	1	20	0	20	05	0	05	25
August	PF	Importance and use of green fodder in milk production	1	15	03	20	4	1	05	25
Nov.	PF/ FW	Infertility of cow & buffalo by infectious disease & its prevention	1	18	0	18	07	0	07	25
Dec.	PF	Application and use of sexed semen in dairy cattle	1	25	0	25	0	0	0	25
Agril. Eng	ineering					•	,			
Feb.	PF	Operation and maintenance of micro irrigation system	1	23		23	2		2	25
April	PF	Rain water harvesting and groundwater recharge techniques	1	23		23	2		2	25
May	PF	Selection and use of improved farm implements and machinery	1	25		25			0	25
July	PF	Farm machinery and its maintenance	1	20		20	5		5	25
August	PF	Importance of small-scale processing and value addition of agriculture produce	1	20		20	5		5	25

October	PF	Importance of post-harvest technology in agriculture	1	23		23	2		2	25
<b>Home Scie</b>	nce									
January	FW	Importance of green leafy vegetables in diet and preparing recipes from vegetables.	1		25	25				25
May	FW	Household food security by kitchen gardening.	1		25	25				25
August	FW	Use of pear millet in preparation of low-cost nutrition diet.	1		23	23		2	2	25
Sept.	RY	Preparation of different pear millet products	1		25	25				25
October	RY	Rural Crafts	1		25	25				25
November	FW	Value addition in Anola	1		22	22		3	3	25
Plant Prot	ection									
April	PF	Importance of seed treatment for insect-pest & disease manag.	1	20		20	5		5	25
May	PF	Integrated insect-pest & disease management in cotton	1	22		22	3		3	25
October	PF	Integrated insect-pest & disease management in Rabi crops.	1	25		25				25

# ii) Farmers & Farm women (Off Campus)

Month/D	Clientele	nrogramme			Nu	G. Total				
		programme	days	M	F	T	M	F	T	Total
Crop Pro	duction			1						
January	PF	Efficient water management in summer field crops	1	20		20	5		5	25
April	PF	Soil & Water Analysis & its importance	1	22		22	3		3	25
May	PF	Improved cultivation practices for kharif crops	1	22		22	3		3	25
June	PF	Nutrient Management in Cotton through Natural Farming	1	17	5	22	3		3	25
Sept.	PF	Improved cultivation practices for Rabi crops.	1	25		25			0	25
October	PF	Use of Bio fertilizers in Rabi crops	1	20		20	5		5	25
Nov.	PF	Integrated weed management in major Rabi Crops	1	22		22	3		3	25
Horticult	ure									
May		Preparation of planting materials n nursery	1	23	2	25				25
July	t	Latest technologies Production echnologies for Fruit Vegetable crops	1	22		22	3		3	25

August	PF	Cultivation practices for onion &	1	25		25				25
		garlic								
Live Sto	ck Prod	luction.		•	•	•				
May	PF	Hemorrhagic Septicemia and its control	1	18	0	18	07	0	07	25
July	PF	Fodder Production Technology	1	17	05	22	03	0	3	25
Sept.	PF	Importance of colostrums feeding in new born calves	1	12	06	18	4	3	7	25
Nov.	PF	Foot & Mouth disease & its control	1	12	5	17	7	0	7	25
Dec.	PF	Clean milk production by proper milking, watering & washing	1	20	0	20	05	0	05	25
Jan.	PF	Nutritive Deficiencies in Infertility problems of Cow and Buffaloes	1	15	03	20	4	1	05	25
March	PF	Zoonotic disease & its preventive measure	1	18	0	18	07	0	07	25
Agril. Eı	ngineer	ing		•	•	•				
March	PF	Importance and use of non- conventional sources of energy in agriculture	1	25		25			0	25
June	PF	Use of plastics in farming practices	1	23		23	2		2	25
June	PF	In-situ moisture conservation practices in dry land agriculture	1	15	7	22	3		3	25
Sept	PF	Importance of post-harvest technology in agriculture	1	20		20	5		5	25
Nov.	PF	Importance of drip irrigation in horticulture crops	1	23		23	2		2	25
Dec.	PF	Selection, repair and maintenance of plant protection equipment	1	23		23	2		2	25
Home So				1	T		T			
January	FW	Value addition in Guava	1		22	22		3	3	25
April	FW	Drudgery reducing technologies for farm women in agriculture	1		24	24		1	1	25
June	FW	Layout of Nutrition Garden and importance of kitchen gardening	1		24	24		1	1	25
August	FW	Income generation activities for empowerment of rural Women	1		24	24		1	1	25
Sept.	RY	Preparation of different pear millet products	1		25	25				25
October	FW	Drum stick-A nutritional diet	1		25	25				25
Dec.	RY	preparation of different types of masala	1		23	23		2	2	25
Plant Pr	otection	n								
April	PF	Management of pinkboll worm in cotton	1	20		20	5		5	25
June	PF	Insect pest & disease management in groundnut	1	25		25				25
October	PF	Store grain pest management	1	22		22	3		3	25

iii) Vocational training programmes for Rural Youth

Crop /	Identified Thrust Area	Training title	Month	Durat ion	No. of Participants		S part		G. Total		
Enterprise	Tillfust Area			(days)	M	F	T	M	F	T	
Agronomy	Integrated farming	Integrated farming	May	6	23		23	2		2	25
	Tailoring and Stitching	Tailoring and Stitching	May	5		25	25				25
Agril. Engg.	Repair and maintenance of farm machinery	Repair and maintenance of sprayer, power sprayer, duster etc.	July	2	23		23	2		2	25
Animal Science	Dairy	Scientific Dairy Farming	Dec.	7	25		25				25
Home Sci.	Value addition	Preparation and preservation of fruits & vegetables products	Dec.	5		24	24		1	1	25
			Total	5	71	49	120	4	1	5	125

# iv) Training programme for extension functionaries

Month	Clientele	Title of the training	Duration (days)	No. of participants			Number of SC/ST			G. Tot
		programme	(uays)	M	F	T	$\mathbf{M}$	F	T	al
June	Extension	Pre-seasonal training on package	1	25		25				25
	workers	of practice for Kharif crops								
May	Ext Workers	Natural Farming in kharif crops	1	18	0	18	7	0	7	25
June	Anganwadi	Layout of Nutrition Garden and	1	0	22	22	0	3	3	25
	workers	importance of kitchen gardening								
, ,	Ext Workers of DWDU	Watershed management	1	23		23	2		2	25
May	Ext Workers	Preventive measures and first aid treatment of important disease in	1	23		23	2		2	25
		dairy animals								
Sept.	Ext Workers	Lumpy skin disease & its control	1	23		23	2	·	2	25
	Total		6	112	22	134	13	3	16	150

#### v) Sponsored training programme

Discipline	Sponsoring agency	Clientele	Title of the training programme	No. of course		No. of participants		Number of SC/ST			G. Total
	agency		programme	course	M	F	T	M	F	T	Total
Livestock	District A.H.	PF	Scientific Dairy	1	25		25				25
	Dept		Farming								
Agril.	ATMA	PF	Use of improved	1	22		22	3		3	25
Engg.			farm implements								
	GGRC/FTC	PF	Efficient use of	1	25		25				25
Engg.			micro irrigation								
			system								
Home	ATMA	FW	Women and child	1		25	25				25
Science			care								
1101110	Reliance	FW	Household food security	1		25	25				25
Science	found Jasdan		by kitchen gardening								
			Total	5	72	50	72	3	0	3	125

#### **SUMMARY OF TRAINING PROGRAMME:**

Sr. No.	Subject	On campus	Off campus	Total
1.	Crop Production	5	7	12
2.	Horticulture	2	3	5
3.	Animal Science	5	7	12
4.	Agril. Engineering	6	6	12
5.	Home science	6	7	13
6.	Plant protection	3	3	6
	Total	27	33	60
1.	Vocational training	3	2	5
2.	In service training	4	2	6
3.	Sponsored Training	4	1	5
	Grand Total	38	38	76

# **B.** Front Line Demonstrations (Proposed)

# i) Crop:

Sl. No.	Стор	Variety	Thematic area	Technology for demonstration	Critical inputs with cost (Rs.)	Season and year	Area (ha)	No. of farmers/demon.	Parameters identified
1	Ground	GJG-32	NRM	Variety+ INM+	Seed - 30 kg	Kharif	4.0	10	No. of
	nut			IPM+IDM	Tricoderma-	-2023			Pods/Plants
					500 gm				Yield, B:C ratio,
					Beauveria-500				Farmers
					gm				perception
					PSB-500 ml				
2	Ground	GG-32	ICM	IPM	Chloro-	Kharif	4.0	10	No. of damaged
	nut				pyriphos 25EC	-2023			plants, Yield,
					(1 Lit./ Farmer)				B:C ratio,
									Farmers
									perception
3	Chick	GJG-6	NRM	Variety	Seed of GJG-6	Rabi-	4.0	10	No. of
	pea			(GJG-6)	(25 Kg/	2023-			Pods/Plants
					Farmer)	24			Yield, B:C ratio,
									Farmers
									perception
4	Wheat	GW-451	ICM	INM	ZnSO <sub>4</sub> ,	Rabi-	2.0	5	Length of spike,
					Azatobactor	2023-			Yield, B:C ratio,
					and PSB	24			Farmers
									perception
5	Cumin	GC-4	ICM	IPM	Seed of	Rabi-	4.0	10	No. of infected
					GC-4	2023-			plants, Yield,
					(6 Kg/	24			B:C ratio,
					Farmer) and				Farmers
					Beuverria				perception
					bassiana				
					2Kg/Farmer				
6	Cumin	GC-4	ICM	Line sowing for	Seed of	Rabi	2.0	5	No. of infected
				minimizing the	GC-4	2023-			plants, Yield,
				diseases	(6 Kg/	24			B:C ratio,
				intensities	Farmer) and				Farmers
					Fungicide				perception

7	Brinjal	GRB-7	Varietal	GRB-7	100 gm/farmer	Rabi-	2.0	10	Yield, B:C ratio,
			Demo.			2023-			Farmers
						24			perception
8	Seasonal	-	Kitchen	Health	Seed of	Kharif	0.5	5	Nutritional
	vege-		gardening	management	different Veg.	-2023			value, farm
	tables								women
									perception
9	Pearl	GHB-	ICM	Varietal	Seed of Pearl	Summ	2.0	5	Yield, B:C ratio,
	millet	1129		Demo.	millet	er-			Farmers
						2023			perception

# ii) Farm Implements:

Name of the implement	Crop	Season and year	No. of farmers	Area (ha)	Critical inputs	Performance parameters / indicators
Agri-drone	Groundnut Cotton	2023	30	12	-	Optimization of pesticides use and time saving
Chaff cutter	Fodder crop (Maize and Sorghum)	2023	5	-	Chaff cutter Demo.	Fodder waste reduction, Farmers perception
Wheel hoe	Groundnut and other line sowing crop	2023	5	0.50	Wheel hoe Demo.	Field capacity and work efficiency/ drudgery reduction

#### iii) Livestock Enterprises

Thrust area	Livestock	No. of farmers	No. of animals	Critical inputs	Performance parameters / Indicators
Nutrient	Cow	20	20	Chelated mineral	Milk yield
Management				Mixture	
				(30 gm/day)	
Nutrient	Buffalo	20	20	Bypass Fat	Milk yield
Management				(100 gm /day)	
Nutrient	Buffalo	20	20	Bypass Protein	Milk yield
Management				(5 kg/day)	
Fodder	Buffalo	10	10	Jinjvo	Fodder yield
Management					& Milk Yield

# C. On Farm Testing (OFTs)

Sr. No.	Crop/ enterprise	Prioritized problem	Title of OFT	Technology options	Source of Technology	Name of critical input	Qty per trial	Cost per trial	No. of trials	Total cost for the OFT(Rs.)	Parameters to be studied	
1	Cotton	Low Yield of Cotton	De- topping of cotton	T-1: Farmers Practices T-2: De-topping at 75 DAS T-3: De-topping of monopodial branches at 75 DAS & 90 DAS	Junagadh Agril. University Junagadh	Seeds of cotton	(2.5 kg/ha)	1000	3	3000/-	1. No. of bolls per plant (10 Plants) 2. Yield (kg/ha) 3. Cost of cultivation 4. B:C Ratio	
2	Groundnut	Deteriorate in yield and quality of groundnut	Natural Farming in kharif Groundnut	T-1: Farmers Practices T-2: Recommended Practices T-3: Interpretations	NCOF, Ghaziabad (U.P.)	<ol> <li>Cow Urine</li> <li>Cow Dung</li> <li>Basan</li> <li>Jaggary</li> <li>Leaves of different trees</li> </ol>	As per preparati on of different products	500	3	1500/-	1. Yield (kg/ha) 2. Cost of cultivation 3. B:C Ratio	
3	Tomato	To increase yield of Tomato by decreasing sucking pest infestation by sowing tolerant variety	Response of New Release Variety of Tomato GT-6 on leaf curl occurance and yield.	T-1: Sowing of Local Variety + any Pesticides.  T-2: 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  T-3: 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	Junagadh Agril. University Junagadh	- Tomato Variety GT -6	250 gm Seed	500	3	1500/-	1. Growth and yield parameters	

4	Cumin	Heavy incidence of wilt disease in cumin	Use of Trichoder ma for wilt disease manageme nt in cumin	No use of trichoderma or fungicide at the time of sowing. But they use fungicides viz., carbendazim, hexaconazole, difenconazole, tebuconazole, propiiconazole, etc after initiation of diseases. (Farmers Practices.)	-	-	-	-	3	-	Wilt (%) and Yield
				Application of Trichoderma @ 5 kg /ha with organic manure @ 500 kg / ha at the time of sowing. (Recommended practices.)	JAU, Junagadh	Trichoderma	1 Kg	70		210/-	
				Application of Trichoderma @ 5 kg /ha along with organic manure @ 500 kg / ha at the time of sowing and second application of Trichoderma @ 5 kg /ha along with organic manure by broadcasting method at 15 days after germination. (Intervention).	-	Trichoderma	2 Kg	140		420	
5	Cumin	Low yield due to sowing	of drip irrigation	<ol> <li>Broad casting method without drip irrigation (Farmer's practices)</li> </ol>	-	-	-	1	3	-	Yield, B:C Ratio and farmer's perception
		method and over irrigation	C	2. Line sowing (20 cm) with drip irrigation (Recommended technology)	RTTC, JAU, Junagadh	Cumin seed	6 kg	1650		4950/-	

6	Cow		Fortified Health management for reducing kid mortality	T1+ Antibiotics (otc) after 5-7	IVRI, Izzatnagar	Colostrum Colostrum Oxytetracy cline	10 % of body weight 10% of b.w 6 mg/kg			600/-	1. Kid survival rate
		diarrhea & low body weight	of cow	days T-3 T1+ deworming		Colostrum Panacure tab	b.w 10% of b.w	100	3	300/-	2. Body weight
				T4 - T1+T2+T3		Colostrum Oxytetracy cline Panacure tab	10% of b.w 6 mg/kg b.w	300		900/-	
7	Buffalo	Low milk yield &	Chelated mineral	T1:-Farmers practices (Control)		T1:- Nil			3		1.Milk yield 2.Postpartum
		longer intercalvin g period in	mixture, By pass protein	T2:-Fed with 50 gms/day chelated mineral mixture supplementation (Reco.)	NDRI, Kernal, Hariyana	Chelated Mineral Mixture	1 kg	200		600	estrus 3. Milk fat %
		buffalo	and By pass fat for enhancing	T3:-T2 + by pass protein (5 kg/day)		Mineral Mix by pass protein	1kg 5 kg	1500		4500	
			milk production in buffalo	T4:- T3 + by pass fat (100 gm/day)		Mineral Mix by Pass	1 kg 5kg	2400		7200	
						Protein by Pass fat	100 gm				

#### **D. Extension Activities:**

<b>Nature of Extension</b>	No. of	Farmers			Exter	nsion Off	ficials	Total			
Activity	activities	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Field Day	5	75	45	120	7		7	82	45	127	
KisanMela	3	30000	10000	40000	45	5	50	30045	10005	40050	
KisanGhosthi	15	300	65	365	7		7	307	65	372	
Exhibition	3	2100	250	2350	15	2	17	2115	252	2367	
Film Show	12	289	78	367	15	3	18	304	81	385	
Farmers Seminar	2	400	50	450	3		3	403	50	453	
Workshop	1	35	5	40				35	5	40	
Group meetings	10	230	20	250				230	20	250	
Lectures delivered as	25	1050	350	1400	25	5	30	1075	355	1430	
resource persons											
Newspaper coverage	5										
Radio talks	3										
TV talks	3										
Popular articles	5										
Extension Literature	10										
Advisory Services	8										
Scientific visit to	22	220	20	240	10		10	230	20	250	
farmers field											
Farmers visit to	150	6000	500	6500	20	10	30	6020	510	6530	
KVK											
Diagnostic visits	5	75		75	5		5	80	0	80	
Exposure visits	3	75	75	150	3	2	5	78	77	155	
Ex-trainees	1	150	25	175				150	25	175	
Sammelan											
Animal Health Camp	2	70		70	4		4	74		74	
Soil test campaigns	480										
Self Help Group	2		60	60		3	3		63	63	
Conveners meetings											
MahilaMandals	2		90	90		2	2		92	92	
Conveners meetings											
Celebration of	5	780	234	1014	5		5	785	234	1019	
important days											
(specify)											
Total	782	41849	11867	53716	164	32	196	42013	11899	53912	