

ACTION PLAN

(JANUARY - 2020 TO DECEMBER - 2020)

OF



**KRISHI VIGYAN KENDRA
MORBI**

**SUBMITTED IN THE STATE LEVEL ANNUAL ACTION PLAN
WORKSHOP OF KVKs OF GUJARAT**

AT

**GUJARAT VIDYAPITH , AHMEDABAD ON
13TH & 14TH FEBRUARY , 2020**



**KRISHI VIGYAN KENDRA
JUNAGADH AGRICULTURAL UNIVERSITY
MORBI – 363641**

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ICAR-ATARI, Pune
DETAILS OF ACTION PLAN OF KVKs DURING 2020
(1st January 2020 to 31st December 2020)

1. GENERAL INFORMATION ABOUT THE KVK

1.1. Name and address of KVK with phone, fax and e-mail

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra, Junagadh Agricultural University, Morbi Dist Morbi (Gujarat) – 363641	Office	FAX	kvkmorbi@gmail.com	www.jau.in
	02822-224853	-		

1.2. Name and address of host organization with phone, fax and e-mail

Address	Telephone		E mail	Website address
	Office	FAX		
Junagadh Agricultural University, Junagadh (Gujarat)	0285-2672080	0285-2672653	dee@jau.in	www.jau.in

1.3. Name of the Senior Scientist and Head with phone & mobile no.

Name	Telephone / Contact		
	Mobile	Office	E mail
D. A. Saradava	94267 84628	02822-224853	dasaradava@jau.in

1.4. Year of sanction: 2017 (Grant & Staff from March-2017)

1.5. Staff Position (as on December 31st , 2019)

No.	Sanctioned post	Name of the incumbent	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)
				Current Pay Band	Current Grade Pay		
1	Senior Scientist and Head	Vacant	-	-	-	-	-
2	IC/ Senior Scientist and Head	D. A. Saradava	Plant Protection	57700 - 182400	UL-10	01/03/17	-
	Subject Matter Specialist						
3	Subject Matter Specialist	Dr. Hemangi D. Mehta	Home Science	57700 - 182400	UL-10	01/08/17	-
4	Subject Matter Specialist	Dr. A. H. Sipai	Soil Health	57700 - 182400	UL-10	01/11/19	-
5	Subject Matter Specialist	Vacant	-	-	-	-	-
6	Subject Matter Specialist	Vacant	-	-	-	-	-
7	Subject Matter Specialist	Vacant	-	-	-	-	-
8	Agriculture Officer	Gamansinh S. Zala	B.Sc. Agri.	Fix Pay 38090	Fix Pay	01/08/18	-
9	Programme Assistant	Vacant	-	-	-	-	-
10	Computer Programmer	R. R. Sida	B.C.A.	Fix Pay 38090	Fix Pay	01/04/19	-
11	Farm Manager	Vinuji V. Thakor	B.Sc. Agri.	Fix Pay 38090	Fix Pay	31/07/18	-
12	Accountant/Supervisor	Vacant	-	-	-	-	-
13	Stenographer	Vacant	-	-	-	-	-
14	Driver 1	Vacant	-	-	-	-	-
15	Driver 2	Vacant	-	-	-	-	-
16	Supporting staff 2	Vacant	-	-	-	-	-

1.6. Total land with KVK (in ha): 26Ha.

Sr. No.	Item	Area (ha)
1	Under Buildings	1.0 ha
2.	Under Demonstration Units Pond	1.5 ha.
3.	Under Crops	6.0 ha
4.	Horticulture	Nil
5.	Others if any	17.7 ha road, bund and river valley

1.7. Infrastructural Development:

A. Buildings

No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	KVK	2019-20	575.32	143.00 Lacs			
2.	Farmers Hostel	KVK	2019-20	443.96	61.00 Lacs			
3.	Staff Quarters (6)	-	-	-	-	-	-	-
4.	Demonstration Units (1) Azola Unit	SAU	2019-20	18.0	10000/-	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	2018-19	-	2,00,000/-	-	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-
9	ICT lab	-	-	-	-	-	-	-
10	Other	-	-	-	-	-	-	-

B. Vehicles :-

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Mahindra Bolero	2019	800000/-	5173 km	Working

C. Equipments & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Tractor MasseyDI-241	2017	607137/-	Working
Computer System Acer 18.5	2017	34115/-	Working
Computer System Acer 18.5	2017	34115/-	Working
Printer MF 3010 canon	2017	10266/-	Working
Printer LBP 6510	2017	8761/-	Working

1.8. Details of SAC meetings to be conducted in the year

Sl. No.	Date
1. Scientific Advisory Committee	29/02/2020

2. DETAILS OF DISTRICT

2.1. Major farming systems/enterprises (based on the analysis made by the KVK)

S. No	Farming system/enterprise
1	Cotton-Wheat/Cotton-Cumin/Groundnut-Wheat/Groundnut-Cumin/Cotton-Summer Sesame
2	Animal husbandry – crop based enterprise /Dairy product
3	Farm Waste Management/ Crop residue management
4	Value addition in Groundnut/ Sesame

2.2. Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

A. Soil type

No.	Agro-climatic Zone	Characteristics
1	North Saurashtra Agro Climatic Zone Morbi, Wankaner and Tankara (Agro – eco-situation –No.7)	Semi arid- region with annual rainfall 550-600 mm, 29 rainy days. Maximum temp – 44°C, Minimum range – 5 to 12°C & high evaporation
2	North west agro climatic Zone- 5 Maliya (mi) and Halvad block	Arid to semi arid region with annual rain fall – 500 to 550 mm maximum temp - 45°C, Minimum range – 3 to 12°C & high evaporation

B. Topography

No.	Agro ecological situation	Characteristics
1	Situation No. 7	Plain & hilly areas in wankaner tehsil.
2	Situation No. 5	Plain costal region (saline) affected with desertification

2.3. Soil Types

S. No	Soil type	Characteristics	Area in ha 000'
1	Medium black clayey	Low in organic carbon, heavy cracking and clod formation	202.4
2	Alluvial Soil (sand-loam lomy)	Low fertility status, high infiltration rate	91.8
3	Hilly Soil (light)	Undulating topography, low fertility eroded soil	13.6
4	Silty Soil (loomy)	Low infiltration rate, water logging, difficult to cultivate	5.5

2.4. Area, Production and Productivity of major crops cultivated in the district (2017-18)

S. No	Crop	Area (ha)	Production (M. T.)	Productivity (q/ha)
1	Groundnut	49810	83840	1683
2	Cotton (Bt)	219169	387239	1767
3	Pearl millet	434	413	952
4	Sesame	8903	5797	651
5	Castor	8700	13832	1590
6	Green gram	1429	1156	809
7	Black gram	1080	1001	927
8	Vegetable	1655	45959	2777
9	Fodder	24542	607853	24768
10	Wheat	3900	13436	3445
11	Gram	2115	2991	1414
12	Cumin	5660	5345	944

2.5. Weather data (2019-20)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
June	08.6				
July	83.1				
August	441.9				
September	413.4				
October	22.0				
Total	969.0				

2.6. Production and productivity of livestock, Poultry, Fisheries etc. in the district

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	161857		12 lit/Day
<i>Indigenous</i>			
Buffalo	194019		17 lit/Day
Sheep	87357		

Goats	144309		
Pigs			
<i>Crossbred</i>			
<i>Indigenous</i>			
Rabbits			
Poultry			
Hens	1000000		3 kg/Bird
<i>Desi</i>			
Category		Production (Q.)	Productivity
Fish (Reservoir)			

2.7. Priority thrust areas:

Crop/Enterprise	Thrust area
Groundnut, Sesame etc	Increasing the productivity of the major crops by adopting the recommendation of dry farming technologies and to create awareness for value addition.
Water conservation	<i>In situ</i> soil moisture conservation and rainwater harvesting. Use of cotton stalk for organic manure.
Cotton	Motivating cotton growers to adopt IPM and INM practices for reducing the cost of production.
women empowerment	Providing self employment through skill oriented income generating activities
Agriculture	Developing interest among youth for agriculture as a profession.
Horticulture	Value addition in agriculture produces through proper grading, processing, marketing and information technology.
Income generating activities	Self employment among rural youth and skill oriented income generating activities.
Nutrition management	Care and importance of nutrition in children & pregnant women.

2.8. Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Morbi	Morbi	Gorkhijadia , Jepur , Lutavadar , Bharatnagar , Laxminagar , Jetpar , Amreli , Jodhpar	*Groundnut , Cotton , Sesame , Wheat , Cumin , Gram Chickpea , Onion. *Enterprises are dairy business, Vermi composting, preparation of roasted groundnut and chikki from groundnut seed	Pink ball worm in Cotton, Heavy infestation of sucking pest in cotton , <i>phytophthora</i> disease in sesame and white grub infestation in groundnut.	*IPM and INM in major crops of this area *Increase drainage of soil *Motivate the farmers for arid Horticultural crops. *Efficient use of irrigation water
Tankara	Tankara	Sajjanpar, Jabalpur Hadmatiya, Harbattiyali, Nasitpar,	*Groundnut , Cotton , Sesame , Wheat , Cumin , Gram , Chickpea , Garlic , Onion. Vermi composting, preparation of roasted groundnut and chikki from groundnut seed	Pink ball worm in Cotton, Heavy infestation of sucking pest in cotton , <i>phytophthora</i> disease in sesame and white grub infestation in groundnut. Nutritional deficiency in animal feed and fodder, Less area under Horticultural crops	*IPM and INM in major crops of this area *Increase drainage of soil Efficient use of irrigation water
Halvad	Halvad	Devipur, Devalia,	*Groundnut , Cotton , Sesame , Wheat , Cumin , Gram. *Enterprises are dairy business, Vermi composting, preparation of roasted groundnut and chikki from groundnut seed	Pink ball worm in Cotton, Heavy infestation of sucking pest in cotton , <i>phytophthora</i> disease in sesame and white grub infestation in groundnut. Long inter- calving period in Buffalo, Nutritional deficiency in animal feed and fodder, Less area under Horticultural crops	*IPM and INM in major crops of this area *Reducing the inter- calving period in Buffalo *Motivate the farmers for arid Horticultural crops. *Efficient use of irrigation water

3. TECHNICAL PROGRAMME

3.1. A. Details of targeted mandatory activities by KVK

OFT		FLD	
(1)		(2)	
Number of OFTs	Number of Farmers	Area (ha)	Number of Farmers
2 + 1	20 + 8 Malnutrition Children	20.0	50

Training		Extension Activities	
(3)		(4)	
Number of Courses	Number of Participants	Number of activities	Number of participants
38	965	120	541641

Seed Production (Qtl.)		Planting material (Nos.)	Fish seed prod. (No's)	Soil Samples
(5)		(6)	(7)	(8)
Crop	Qua.(KG)	-	-	-
Groundnut	10.0			
Sesame	5.0			
Cumin	12.0			
Chickpea	25.0			
Black gram	8.0			
Ajvain	5.0			
Pearl millet (Summer)	3.0			

3.1. B. Operational areas details proposed during 2020

No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Proposed Intervention (OFT, FLD, Training, extension activity etc.)*
1	Bt. cotton	Sucking pest Para witting Pink ball worm	1,12,000 ha	Halvad, Tankara, Wankaner, Morbi block	FLD on pinkball worm management.
					Training on pink ball worm management
2	Groundnut	White grub Stem rot	42,000 ha	Tankara, Halvad block	OFT on White grub management in G'dnut. Training on test and Disease management in groundnut.
3.	Cumin	Wilt and Blight	3900 ha	Morbi, Halvad, Maliya	FLD and OFT on Wilt management and also training for IDM in Cumin.

* Support with problem-cause and interventions diagram

3.2. Technologies to be assessed and refined

A.1. Abstract on the number of technologies to be assessed in respect of crops

Thematic areas	Cereals	Oil Seeds	Pulses	Commercial Crops	Vegetables	Fruits	Flower	Plantation Crops	Tuber Crops	TOTAL
Integrated Pest Management	-	1	-	-	-	-	-	-	-	1
Integrated Disease Management	-	-	-	1	-	-	-	-	-	1
TOTAL	-	1	-	1	-	-	-	-	-	2

A.2. Abstract on the number of technologies to be assessed in respect of livestock / enterprises - Nil

B. Details of On Farm Trial / Technology Assessment during 2020

No	Crop/ Enterprise	Prioritized problem	Title of OFT	Tech. options	Source of Tech.	Name of critical input	Qty per Trial	Cost Per Trial	No. of Trial	Total cost for the OFT (Rs.)	Para meter to be studied	Team member
1	Groundnut	White Grub	Management of White Grub in Groundnut	<p>1) Sowing of groundnut without Seed treatment. Farmers adopt drenching of Chlorpyrifos or quinalphos @ 6 lit/ha with irrigation at initiation of pest incidence. (Farmers practice)</p> <p>2) Seed treatment with chlorpyrifos 20EC @ 25 ml/kg seed.(GAU Reco.)</p> <p>3) Soil Application of <i>Metarhizium anisoplii</i> @ 5 kg/ha with 300 kg/ha castor cake at the time of sowing</p>	GAU & JAU	<p>Chlor-pyphos for seed Treatment</p> <p>Metarhizium anisopli For soil application</p>	<p>1.0 Liter</p> <p>2.0 kg</p>	1500	10	15000	<p>1)Yield</p> <p>2) No.of Infested Plant in 1sqmt area</p>	D. A. Saradava Dr. H. D. Mehta

No	Crop/ Enterprise	Prioritized problem	Title of OFT	Tech. options	Source of Tech.	Name of critical input	Qty per Trial	Cost Per Trial	No. of Trial	Total cost for the OFT (Rs.)	Para meter to be studied	Team member
2	Cumin	Wilt	Use of Trichoderma for cumin wilt	<p>1) Sowing of cumin without use of <i>Trichoderma, harzanium</i> (Farmers practices.)</p> <p>2) Application of Trichoderma @ 5 kg /ha with organic manure @1000 kg / ha at the time of sowing.. (Recommended practices.)</p> <p>3) Application of Trichoderma @ 5 kg /ha along with organic manure @1000 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).</p>	JAU	<p>Tricho- Derma</p> <p>Tricho- derma</p>	<p>5 Kg</p> <p>10 kg</p>	1050	10	10500	<p>1) Yield of cumin</p> <p>2) % of incidence in 1 sqmt Area</p>	D. A. Saradava

No	Crop/ Enterprise	Prioritized problem	Title of OFT	Tech. options	Source of Tech.	Name of critical input	Qty per Trial	Cost Per Trial	No. of Trial	Total cost for the OFT (Rs.)	Para meter to be studied	Team member
3	Malnutrition	Mal-nutrition in Child (1 to 5 Year)	A reduce the malnutrition problem in preschool children (1 to 5 yr)	1) Use of mixture of Dalia Dal + Jiggery + Groundnut seed , Amla juice , Banana ,Soybean chips (per child 100 gram & juice 50 ml) 2) Use of Rise , Pigeon Pea, Green grams, Chickpea, Pomegranate, Banana, Potato, Tomato (per child 100 gram & fruit 50 gram) 3) Use of wheat flour + Ghee + Jaggery or Til, Milk, Carrots, Rise, Pigeon Pea, Green grams, Potato, Tomato and Green Vegetables or Pomegranate. (per child 100 gram & fruit 50 gram)	WHO Report -2017	Groundnut seed, rice, Green leafy vegetable, jiggery, Fruits, Pulses, Amla juice. Note:- Ghee& Milk give highly affected children by High Malnutrition	7 kg & 3 Lit.	500	8	4000	Every Month Body weight (WHO- New Body mass index chart, male & female)	Dr. H. D. Mehta

3.3. Frontline Demonstrations

A. Details of FLDs to be organized -

No	Crop	Variety	Thematic area	Technology for demonstration	Critical inputs with cost (Rs.)	Season and year	Area (ha)	No. of farmers/ demon.	Parameters identified
1	Groundnut	NRM	New variety of groundnut GJG22/GJG-32	Variety GJG-32	22000/-	Kharif-2020	4.0	10	Yield, B:C ratio, Farmers perception
2	Cotton	IPM	Pink ball worm management in cotton	MDP	17500/-	Kharif-2020	4.0	10	Yield & Pest population / Yield, B:C ratio, Farmers perception
3	Sesame	NRM	GJG-5 Summer	Variety GJG-5	5000/-	Summer-2020	4.0	10	Yield, B:C ratio, Farmers perception
4	Gram	NRM	New variety of gram GG-5	Variety GG-5	22500/-	Rabi-2020	4.0	10	Yield, B:C ratio, Farmers perception
5	Cumin	ICM			12500/-	Rabi-2020	4.0	10	Yield & B:C Ratio , Farmers perception
				Total	192000/-		20.0	50	

Sponsored Demonstration

Crop	Area (ha)	No. of farmers
1) Pearl millet	2	5

B. Extension and Training activities under FLDs

S. No.	Activity	No. of activities	Month	Number of participants
1	Field days	2	Aug.	50
2	Farmers Training	1	Sep.	1
3	Media coverage	1	Sep.	-
4	Training for extension functionaries	1	Jul.	35

C. Details of FLD on Enterprises

a. Farm Implements :- Nil

b. Livestock Enterprises :- Nil

3.4.Training (Including the sponsored and FLD training programmes):

A. ON Campus

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I - Crop Production								
Integrated Crop Management	1	22	00	22	03	00	03	25
II - Horticulture								
a) Vegetable Crops								
Grading and Standardization	1	00	22	22	00	03	3	25
b) Fruits	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-
d) Plantation Crop	-	-	-	-	-	-	-	-
e) Tuber Crop	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-
III - Soil Health and Fertility Management								
Soil Fertility Management	1	22	00	22	03	00	03	25
Nutrient Use Efficiency	1	22	00	22	03	00	03	25
Soil and Water Testing	1	22	00	22	03	00	03	25
IV - Livestock Production and Management								
V - Home Science / Women Empowerment								
Design and Development of Low / Minimum Cost Diet	1	00	22	22	00	03	03	25
Income Generation Activities for Empowerment of Rural Women	1	00	22	22	00	03	03	25
Rural Crafts	1	00	22	22	00	03	03	25
VI - Agril. Engineering								
Use of Plastics in farming practices	1	22	00	22	03	00	03	25
VII - Plant Protection								
Integrated Pest Management	1	22	00	22	03	00	03	25
Integrated Disease Management	1	22	00	22	03	00	03	25
Bio-control of Pests and Diseases	1	22	00	22	03	00	03	25
VIII - Fisheries	-	-	-	-	-	-	-	-
IX - Production of Inputs at site	-	-	-	-	-	-	-	-
X-Capacity Building & Group Dynamics	-	-	-	-	-	-	-	-
XI - Agro-Forestry	-	-	-	-	-	-	-	-
XII - Others (Pl. Specify)	1	22	00	22	03	00	03	25
TOTAL	13	198	88	286	27	12	39	325
(B) RURAL YOUTH	00	00	00	00	00	00	00	00
(C) EXTENSION PERSONNEL								
Integrated Pest Management	1	22	00	22	03	00	03	25
TOTAL	1	22	00	22	03	00	03	25
GRAND TOTAL (A+B+C)	14	220	88	308	30	12	42	350

B. OFF Campus

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I - Crop Production								
Integrated Farming	1	22	00	22	03	00	03	25
II - Horticulture								
a) Vegetable Crops	-	-	-	-	-	-	-	-
Grading and Standardization	1	00	22	22	00	03	3	25
b) Fruits	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-
d) Plantation Crop	-	-	-	-	-	-	-	-
e) Tuber Crop	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-
III - Soil Health and Fertility Management								
Soil Fertility Management	1	22	00	22	03	00	03	25
Soil and Water Conservation	1	22	00	22	03	00	03	25
Production & Use of Organic Inputs	1	22	00	22	03	00	03	25
IV - Livestock Production and Management								
V - Home Science / Women Empowerment								
Design and Development of High Nutrient Efficiency Diet	1	00	22	22	00	03	03	25
Value Addition	1	00	22	22	00	03	03	25
Income Generation Activities for Empowerment of Rural Women	1	00	22	22	00	03	03	25
Women & Child Care	1	00	22	22	00	03	03	25
VI - Agril. Engineering								
Post Harvest Technology	1	00	22	22	00	03	03	25
VII - Plant Protection								
Integrated Pest Management	3	66	00	66	09	00	09	75
Bio-control of Pests and Diseases	2	44	00	44	06	00	06	50
VIII - Fisheries								
IX - Production of Inputs at Site								
X-Capacity Building & Group Dynamics	-	-	-	-	-	-	-	-
XI - Agro-Forestry	-	-	-	-	-	-	-	-
XII - Others (Pl. Specify)	-	-	-	-	-	-	-	-
TOTAL	15	220	110	330	30	15	45	375
(B) RURAL YOUTH	00	00	00	00	00	00	00	00
(C) EXTENSION PERSONNEL	00	00	00	00	00	00	00	00
GRAND TOTAL (A+B+C)	15	220	110	330	30	15	45	375

C. Consolidated Table (ON and OFF Campus)

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I - Crop Production								
Integrated Crop Management	1	22	00	22	03	00	03	25
Integrated Farming	1	22	00	22	03	00	03	25
II - Horticulture								
a) Vegetable Crops								
Grading and Standardization	2	00	44	44	00	06	06	50
b) Fruits	-	-	-	-	-	-	-	-
c) Ornamental Plants	-	-	-	-	-	-	-	-
d) Plantation Crop	-	-	-	-	-	-	-	-
e) Tuber Crop	-	-	-	-	-	-	-	-
f) Spices	-	-	-	-	-	-	-	-
g) Medicinal and Aromatic Plants	-	-	-	-	-	-	-	-
III - Soil Health and Fertility Management								
Soil Fertility Management	2	44	00	44	06	00	06	50
Nutrient Use Efficiency	1	22	00	22	03	00	03	25
Soil and Water Testing	1	22	00	22	03	00	03	25
Soil and Water Conservation	1	22	00	22	03	00	03	25
Production & Use of Organic Inputs	1	22	00	22	03	00	03	25
IV - Livestock Production and Management								
V - Home Science/Women empowerment								
Design and Development of Low/Minimum Cost Diet	1	00	22	22	00	03	03	25
Designing and Development for High Nutrient Efficiency Diet	1	00	22	22	00	03	03	25
Value Addition	1	00	22	22	00	03	03	25
Income Generation Activities for Empowerment of Rural Women	2	00	44	44	00	06	06	50
Rural Crafts	1	00	22	22	00	03	03	25
Women and Child Care	1	00	22	22	00	03	03	25
VI - Agril. Engineering								
Use of Plastics in Farming Practices	1	22	00	22	03	00	03	25
Post Harvest Technology	1	22	00	22	03	00	03	25
VII - Plant Protection								
Integrated Pest Management	4	88	00	88	12	00	12	100
Integrated Disease Management	1	22	00	22	03	00	03	25
Bio-Control of Pests and Diseases	3	66	00	66	09	00	09	75
VIII - Fisheries								
IX - Production of Inputs at Site								
X - Capacity Building & Group Dynamics								

XI – Agro - Forestry	-	-	-	-	-	-	-	-
XII - Any Other (Pl. Specify)	1	22	00	22	03	00	03	25
TOTAL	28	418	198	616	57	27	84	700
(B) RURAL YOUTH	00	00	00	00	00	00	00	00
(C) EXTENSION PERSONNEL								
Integrated Pest Management	1	22	00	22	03	00	03	25
GRAND TOTAL (A+B+C)	29	440	198	638	60	27	87	725

Details of training programmes attached in **Annexure –I**

3.5. Extension Activities (Including Activities of FLD Programmes)

Nature of Extension Activity	No. of activities	Farmers			Extension Officials			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Field Day	02	42	6	48	2	-	2	48	2	50
KisanMela	01	500	100	600	30	3	33	530	103	633
Kisan Goshti	10	55	45	100	11	8	19	66	53	119
Exhibition	01	110	45	115	20	20	40	130	65	195
Film Show	21	300	100	400	-	-	-	300	100	400
Farmers Seminar	-	-	-	-	-	-	-	-	-	-
Workshop	-	-	-	-	-	-	-	-	-	-
Group meetings	15	55	11	66	05	03	08	60	14	74
Lectures delivered as resource persons	12	-	-	-	-	-	-	-	-	-
Newspaper coverage	03	-	-	-	-	-	-	-	-	-
Radio talks	02	-	-	-	-	-	-	-	-	-
TV talks	02	-	-	-	-	-	-	-	-	-
Popular articles	15	-	-	-	-	-	-	-	-	540000
Extension Literature	05	-	-	-	-	-	-	-	-	-
Advisory Services	-	-	-	-	-	-	-	-	-	-
Scientific visit to farmers field	10	-	-	-	-	-	-	-	-	-
Farmers visit to KVK	07	-	-	-	-	-	-	-	-	-
Diagnostic visits	04	-	-	-	-	-	-	-	-	-
Exposure visits	-	-	-	-	-	-	-	-	-	-
Ex-trainees Sammelan	-	-	-	-	-	-	-	-	-	-
Soil health Camp	-	-	-	-	-	-	-	-	-	-
Animal Health Camp	-	-	-	-	-	-	-	-	-	-
Agri mobile clinic	-	-	-	-	-	-	-	-	-	-
Soil test campaigns	01	-	-	-	-	-	-	-	-	-
Farm Science Club Conveners meet	-	-	-	-	-	-	-	-	-	-
Self Help Group Conveners meetings	-	-	-	-	-	-	-	-	-	-
MahilaMandals Conveners meetings	-	-	-	-	-	-	-	-	-	-
Celebration of important days	07	77	23	100	50	20	70	127	43	170

(specify)										
KrishiMohostva	01	-	-	-	-	-	-	-	-	-
KrishiRath	01	-	-	-	-	-	-	-	-	-
Pre Kharif Workshop	-	-	-	-	-	-	-	-	-	-
Pre Rabi Workshop	-	-	-	-	-	-	-	-	-	-
PPVFRA Workshop	-	-	-	-	-	-	-	-	-	-
Any Other (Specify)	-	-	-	-	-	-	-	-	-	-
Total	120	1139	330	1429	118	54	172	1261	380	541641

3.6. Target for Production and supply of Technological Products

SEED MATERIALS

Sl. No.	Crop	Variety	Quantity (qtl.)
CEREALS	Pearl millet	GHB-538	3.0
OILSEEDS	Groundnut	GJG-22	10.00
	Sesame	G.TIL-2	5.00
PULSES	Chick pea	GG-5	25.00
	Black gram		8.0
VEGETABLES	-	-	-
OTHERS (Specify)	Cumin	GC-4	12.00
	Ajwain	GA-2	5.00

PLANTING MATERIALS :-Nil

BIO PRODUCTS (Sales Only)

Sl. No.	Product Name	Species	Quantity	
			No. of Farmers	kg
BIO PESTICIDES				
1	Beauveria	<i>Beauveria bassiana</i>	1300	7000
2	Trichoderma	<i>Trichoderma harzinium</i>	425	2300

LIVESTOCK :-Nil

4. LITERATURE TO BE DEVELOPED / PUBLISHED

Subject

- **Plant Protection** :- Phemplets – 3
- **Home Science** :- Folder – 2
- **Home Science** :- Phemplets – 3

A. KVK News Letter

Date of start :- 01-01-2020

Number of copies to be published :- Every Three Month on JAU site

B. Literature Developed/Published

S.No.	Topic	Number
1	Research Paper each Scientist	3
2	Technical Reports	5
3	News Letters	4
4	Training Manual all Discipline	1
5	Popular Article	15
6	Extension Literature	5
	Total	33

C. Details of Electronic Media to be Produced :-Nil

D. Success Stories/Case Studies Identified for Development as a Case - Two

Farmer earns Double Income in Crop of Muskmelon through Plastic Mulching

Name	: Shivabhai Maravaniya
Address	: To, Rajpar
Age	: 50 year
Education	: 10th Pass
Source of Income	: Plastic Mulching



Shri Shivabhai is a hardworking, inside knowledge of agriculture and innovate farmer of village Rajpar. Last year (2018) he used plastic mulch in Muskmelon crop provided by college of Agriculture Engineering & Technology through KVK , Morbi in 1 acre area. During Kharif - 2018 only 178-mm rainfall was received at Rajpar due to which very limited water is available in the open well. Which run only 40-45 minutes. But due to plastic mulching no moisture stress was observed and he has harvested double production with good quality of sweet melon.

	Mulching	Without Mulching
Production	3200 kg / acre	1850 kg / acre
Price	Rs.45 / kg	Rs.38 / kg
Income	144000 / acre	66600 / acre
Cost of Cultivation	46000 / acre	32000 / acre
Net Profit	Rs.98000/-	Rs.34600/-



Successful White Onion Cultivation

Name	: Prabhubhai Jivarajbhai Barasara
Address	: To, Jodhpar Nadi
Age	: 60 year
Education	: 11th Pass
Source of Income	: Cultivation Farming



Prabhubhai is a business minded farmer and belongs to near by village of jodhpur (river). he is cultivating the crop technically working to requirement of the market before taking crop he performed soil analysis of the farm and as per the requirement of the onion he is applying fertilizer. He is NHRAF and apply their suggestion in this farm.

last year he harvested an average production of 19000 kg of white onion in one acre he sold 50% of production Rs.240/- 20 kg and remaining 50% of his production he has stored in his own storage mela and later he sold at Rs.265/- 20kg and earned Rs. 251750/- acre. the cost of cultivation of white onion is Rs. 86,000/- and earned a net profit of is 165750/- per acre.



Doubling Of Farm Women Income Through Dairy Farming

1. Bio-Data of Farmer :-

Name	: Pragnaben Uttambhai Dubariya
Address	: To, Rupavati Society ,“Laxmi Narayan”, Tankara.
Date of Birth	: 08/09/1984 Age : 32 year
Education	: 10th Pass
Source of Income	: Dairy Farming & Farming (Last three year)



The vision of Hon'ble prime minister Mr. Narendra Modi to double the farmers' income by 2022 inspired multiple farmers and their families to move forward and empower their economic growth. Mrs. Pragnaben Uttambhai Dubariya (who belongs to taluka Tankara district Morbi) realized the importance of the vision and thought to give a start to dairy farming as it is associated with farming which is a primary source of income for her family. She started to utilize her time in dairy farming from other household work to generate more income for her family rather than solely dependent upon farming.

In 2017, she started with 1 buffalo with the purpose of dairy farming and later she owned 3 cows. Currently, in 2019 she has 25 cattle which includes 9 cows, 6 buffalos and 10 calves. She also helps her husband in farming and uses animal dung as organic fertilizer in her farm. This helps to fertilize soil in an organic way and saves the cost of chemical fertilizers. That's how she gives invaluable support in farming and dairy farming.

2. Land Holding (ha.) - From the farming in 6.5 ha. she makes profit of
Rs.5,00,000 per year

3. Utility of Innovation/GAPs :

Her dairy farming she contributes 180 liters of milk per day on the rate of Rs.40/- per liter which gives her a daily income of Rs.7,200/- and monthly income of Rs. 2,16,000/-. She has a monthly expense or around Rs. 58,000/- and after all deductions she makes profit or Rs. 1,58,000/- per month.

No.	Year	Cattle	Milk Cattle	Income (One Month)	Expenditure of (one month)	Employed Salary (4 Em.) (one month)	Total Profit (One Month)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	2019	25	15	216000/-	43000/-	15000/-	158000/-

With the help of such monthly profit, she purchased a new land and currently looking for purchasing a better living space.

4. Spread of Innovation/GAPs :-

By seeing her success story, other women in the surrounding areas are inspired and visited her dairy farm to understand how they can also boost up their economic growth.

5. Recognition :-

She has been honored by the prize of Rs. 20,000 to score 3rd rank in highest contribution of the milk in Mayur Cooperative Dairy in Morbi for year 2019.



5.1. Indicate the Specific Training need Analysis Tools/Methodology followed for

- A. Practicing Farmers - Nil
- B. Rural Youth - Nil
- C. In-service personnel - Nil

5.2. Indicate the Methodology for Identifying OFTs/FLDs

For OFT:

- i) Field level observations
- ii) Farmer group discussions
- iii) Check the Nutrition level by WHO's New increasing scale for Malnutrition children.

For FLD:

- i) New variety/technology
- ii) Existing cropping system
- iii) Problems at field level

5.3. Field Activities

- i. Name of villages identified/adopted with block name (from which year) -2018

Block	Villages
Morbi	Gorkhijadia
	Jepur,
	Bharatnagar,
	Laxminagar,
Tankara	Sajjanpar
	Hadmatiya
	Nasitpar
	Harbattiyali
	Nasitpar
Halwad	Devipur
	Devalia,

- ii. No. of farm families selected per village : 12
- iii. No. of survey/PRA conducted : One
- iv. No. of technologies taken to the adopted villages: 4
- v. Name of the technologies found suitable by the farmers of the adopted villages:
- 1) White grub management in groundnut (IPM)
 - 2) Wilt management in cumin (IDM)
 - 3) Pink ball worm management in cotton (IPM)
 - 4) Nutrient Management in cotton (INM)
- vi. Impact (production, income, employment, area/technological– horizontal/vertical)
- To increase the production and productivity.
- To increase farm income per area.
- To reduce the cost of cultivation.
- vii. Constraints if any in the continued application of these improved technologies-No

6. LINKAGES

6.1. Functional linkage with different Organizations

Sl.No.	Name of organization	Nature of Linkage (pl. specify)
1	Dy. Director of Agriculture	Most of the Organizations are members of Scientific Advisory Committee (SAC) of KVK and have linkage with different activities of KVK viz., Training Programme, Khedut Sibir, Farmers day, Farmers fair, Film Show, Ex-training meeting and Soil health card etc.
2	Dy. Director of Agril. Extension (FTC)	
3	Dy. Director of Horticulture	
4	Dy. Director of Animal Husbandry	
5	Anandi Sanstha	
6	Shree Divya Jyoti Gram Vikas Kelavani Mandal - Morbi	
7	National Bank for Agriculture & Rural Development (NABARD)	
8	ATMA	
9	Petroleum Conservation of India	

6.2. Details of linkage with ATMA

a) Is ATMA implemented in your District. Yes/No Yes

S. No.	Programme	Nature of linkage
1	Field Visit	Field visit for current field problems
2	Training	Training at village

6.3.E-linkage during 2020 :- Nil

6.4. Give details of Programmes under National Horticultural Mission

S. No.	Programme	Nature of linkage
1	Training	Training at farmers field with staff of Horticulture department

6.5. Nature of linkage with National Fisheries Development Board :-Nil

6.6.Additional Activities Planned including sponsored projects (ProCRA / Pro SOIL / NARI / DAESI / DAMU / DFI , etc.) / schemes during 2020 If involved.
:- DAMU

7. Convergence with Other Agencies and Departments:- Nil

8. Innovator Farmer's Meet 2020

Sl.No.	Particulars	Details
1	Are you planning for conducting Farm Innovators meet in your district?	Yes/ No No
2	If Yes likely month of the meet	No
3	Brief action plan in this regard	No

9. Farmers Field School (FFS) Planned 2020 :- 5

10.1. Technical Feedback of the Farmers about the Technologies Demonstrated and Assessed:

1. GJG-22 Groundnut variety is high yielding.
2. Trichoderma harzianum is very useful to suppress the wilt disease in cumin.
3. Pheromone trap is very useful for mass trapping of pink ball warm moth.
4. GG-5 chickpea variety is high yielding as well as disease resistant compare to GG-2, GJG-3.

10.2.Technical Feedback from the KVK Scientists (Subject wise) to the Research Institutions/Universities:

1. Women farmers is very happy to the KVK open for this District .
2. Pink ball warm problem in cotton.
3. Para wilting in cotton crop.
4. White grub problem in ground nut crop.
5. Sucking pest particularly thrips problem in cotton, onion chilly and garlic crop.

11.Utilization of Hostel Facilities:-Construction work complete in Dec, 2019

TRAINING PROGRAMME

I) Farmers & Farm Women (On Campus)

Date	Clientele	Title of the Training Programme	Duration in Days	No. of Participants			Number of SC/ST			Grand Total
				M	F	T	M	F	T	
Crop Production										
22/02/2020	PF	Importance and Use of Bio Fertiliser	2	22	00	22	03	00	03	25
Horticulture										
06/03/2020	FW	Grading and Standardization	2	00	22	22	00	03	03	25
Live Stock Production.- Nil										
Agri Engineering										
04/03/2020	PF	Use of Plastic in Farming Practice	2	22	00	22	03	00	03	25
Home Science										
20/04/2020	FW	Income Generating through Flower Making	2	00	22	22	00	03	03	25
01/07/2020	FW	Meal Plans for a women Performing Hard Physical Work.	2	00	22	22	00	03	03	25
05/09/2020	FW	Skill Development Training-Marketing Management & Rural Craft	2	00	22	22	00	03	03	25
Plant Protection										
07/04/2020	PF	Store Grain Pest Management and Precautions.	2	22	00	22	03	00	03	25
05/06/2020	PF	Management of Insect Pest & Disease in <i>Kharif</i> Crops.	2	22	00	22	03	00	03	25
06/08/2020	PF	Safe and Judicious Use of Pesticide	2	22	00	22	03	00	03	25
Fisheries – Nil										
Soil Health										
06/06/2020	PF/FW	Importance of Soil Health Card	2	22	00	22	03	00	30	25
13/07/2020	PF	Importance of Soil Analysis and Method of Soil Sampling	2	22	00	22	03	00	30	25
04/08/2020	PF	Nutrient Management in <i>Rabi</i> Crop	2	22	00	22	03	00	30	25
Any Others										
09/11/2020	PF	Irrigation Management in <i>Rabi</i> Crop	1	22	00	22	03	00	03	25

ii) Farmers & Farm Women (Off Campus)

Date	Clientele	Title of the Training Programme	Duration in Days	Number of Participants			Number of SC/ST			Grand Total
				M	F	T	M	F	T	
Crop Production										
25/05/2020	PF	Importance and Criteria for Organic Farming	2	22	00	22	03	00	03	25
Horticulture										
03/11/2020	FW	Household Food Security by Kitchen Gardening	2	00	22	22	00	03	03	25
Livestock Prod.- Nil										
Agri Engineering										
22/07/2019	PF	Post Harvest Technology	2	22	00	22	03	00	03	25
Home Science										
07/05/2020	FW	Information of Income Generating Activity – Food & Agriculture	2	00	22	22	00	03	03	25
17/06/2020	FW	Make a Pomegranate Juice	2	00	22	22	00	03	03	25
05/08/2020	FW	Iron Deficiency and Solution	2	00	22	22	00	03	03	25
02/10/2020	FW	Nutrition Knowledge of Women & Child Care	1	00	20	20	00	05	05	25

Plan prot.										
12/05/2020	PF	Seed treatment for Pest Management	2	22	00	22	03	00	03	25
20/07/2020	PF	Integrated Pest & Disease Management in <i>Kharif</i> Crop	2	22	00	22	03	00	03	25
02/09/2020	PF	Pest & Disease Management in <i>Rabi</i> Crops	2	22	00	22	03	00	03	25
12/10/2020	PF	Role of Predator and Parasite in Pest Management.	2	22	00	22	03	00	03	25
05/11/2020	PF	Bio Control of Pest and Disease	2	22	00	22	03	00	03	25
Fisheries – Nil										
Soil Health										
07/04/2020	PF	Soil Fertility Management	2	22	00	22	03	00	03	25
13/05/2020	PF	Production and Use of Organic Inputs	2	22	00	22	03	00	03	25
08/09/2020	PF	Importance of Soil and Water Testing	2	22	00	22	03	00	03	25

ii) Vocational Training Programmes for Rural Youth – Nil

iii) Training Programme for Extension Functionaries

Date	Clientele	Title of the Training Programme	Duration in Days	No. of Participants			Number of SC/ST			Grand Total
				M	F	T	M	F	T	
On Campus										
10/06/2020	PF	Integrated Pest Management in <i>Kharif</i> Crop	1	34	03	37	03	00	03	40

iv) Sponsored Programme

Discipline	Sponsoring Agency	Clientele	Title of the Training Programme	No. of Course	No. of Participants			Number of SC/ST			G. Total
					M	F	T	M	F	T	
a) Sponsored Training Programme											
Plant Protection	ATMA-Morbi	PF	Preparation of NSKE and its Usefulness in Agriculture Crops.	1	22	00	22	03	00	03	25
Plant Protection	ATMA-Morbi	PF	Safe and Judicious Use of Insecticide for Preservation of Predator, Parasite and Honey Bee.	1	22	00	22	03	00	03	25
Plant Protection	ATMA-Staff	PF	Different IPM Modules for relevant Crops.	1	22	00	22	03	00	03	25
Plant Protection	DAO-Morbi	PF	Insect & Disease Management through Seed Treatment.	1	22	00	22	03	00	03	25
Soil Science	ATMA-Morbi	PF	Importance of Soil Analysis	1	22	00	22	03	00	03	25
Soil Science	DAO-Morbi	PF	Nutrient Management in Rabi Crop	1	22	00	22	03	00	03	25
Soil Science	ATMA-Morbi	PF	Importance and Use of Bio fertilizer	1	22	00	22	03	00	03	25
Home Science	ATMA-Morbi	PF	Women Empowerment / Income Generating Activity	1	22	00	22	03	00	03	25
Total				8	176	00	176	24	00	27	200
b) Sponsored Research Programme – Nil											
c) Any Special Programmes – Nil											

Budget - Details of Budget Utilization (April 2019 to up till Date)

No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	36,24,565/-	36,24,565/-	36,40,134/-
2	Traveling Allowances	1,37,726	1,00,000/-	1,12,847/-
3	Contingencies			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1,00,000/-	1,00,000/-	8,82,16/-
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	99,833/-	99,833/-	90,216/-
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)			
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
G	Training of extension functionaries			
H	Maintenance of buildings			
I	Establishment of Soil, Plant & Water Testing Laboratory			
J	Library			
TOTAL		39,62,124/-	39,24,398/-	39,31,413/-
B. Non-Recurring Contingencies				
1	Works	-	-	-
2	Equipments Including SWTL & Furniture	-	-	-
3	Vehicle (Four wheeler / Two wheeler , please specify)	8,00,000/-	8,00,000/-	8,00,000/-
4	Library (Purchase of assets like books & journals)	-	-	-
TOTAL		8,00,000/-	8,00,000/-	8,00,000/-
C. REVOLVING FUND		13,89,894/-	13,89,894/-	8,00,972/-
GRAND TOTAL (A+B+C)		61,52,018/-	61,14,292/-	55,32,385/-

Details of Budget Estimate (2020-21) based on proposed Action Plan

No.	Particulars	BE 2019-20 proposed (Rs.)
14.1	Recurring Contingencies	
14.1.1	Pay & Allowances	70.00
14.1.2	Traveling Allowances	01.00
14.1.3	Contingencies	
<i>A</i>	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	07.00
<i>B</i>	POL, repair of vehicles, tractor and equipments	04.00
<i>C</i>	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	02.00
<i>D</i>	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	05.00
<i>E</i>	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	01.00
<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	00.75
<i>G</i>	Training of extension functionaries	00.50
<i>H</i>	Maintenance of buildings	-
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory	05.00
<i>J</i>	Library	05.00
14.1	TOTAL Recurring Contingencies	21.25
14.2	Non-Recurring Contingencies	
14.2.1	Works	50.00
14.2.2	Equipments Including SWTL & Furniture	21.00
14.2.3	Vehicle (Four wheeler/Two wheeler, please specify)	02.00
14.2.4	Library (Purchase of assets like books & journals)	05.00
14.2	TOTAL Non-Recurring Contingencies	78.00
14.3	REVOLVING FUND	-
14.4	GRAND TOTAL	170.25

Progress on CFLDs Oilseeds & Pulses :- Nil