

ICAR-Agricultural Technology Application Research Institute Zone-VIII, Pune



## Online Annual Zonal Workshop of Maharashtra, Gujarat and Goa 10-12 July 2020

# Annual Progress Report 2019-20

-: Presented by :-Dr. Janaksinh Rathod Senior Scientist & Head KVK, Surat

## **KVK Profile**

#### Location map of KVK



S.N.	Particular	Area (Ha)
1	Cereals	129184
2	Vegetables	38077
3	Fruit Crops	21691
4	Flower Crops	749

- \* Population: 6079231 (SC-3.75%, ST-18.88%, Gen.:77.37%)
- ✤ Blocks: 9+1=10
- **Villages :713 Gram Panchayat: 572**
- \* Agroclimatic Zone: II- South Gujarat Zone
- \* AES: I to IV
- \* Total land : 432698 ha
- \* Cultivable: 327296 ha
- \* Forest: 36680 ha
- Net Sown area: 285671 + Area >ones: 30016= Total sown area: 315687
- Irrigation: 71.04%, Umarpada:10.87%, Palsana, kamrej, bardoli >90%
- \* Farmers: 140002 (Marginal: 54450, Small: 38110, Big: 47442)
- ✤ (SC: 4392, ST: 37592, Gen.: 97419)
- \* Rain fall (2019) :2099 mm
- Crops: Sugarcane, Paddy, Pigeon pea, Soybean, Sorghum, Pulses
- ✤ Vegetables: Okra, brinjal, vine crops
- ✤ Fruit crops : Banana, Mango, Papaya

## Information about major crops, cropping systems, enterprises and

technical staff available in KVK

Major crops and enterprises & Cropping Sequence

#### Major crops: Field crops:

Cotton, Paddy, Pigeon Pea, Green Gram, Black Gram, Sorghum, Maize, Sugarcane Horticultural crops: Banana, Mango and Vegetables

#### **Cropping Pattern :**

Irrigated areas: Banana-Paddy, Sugarcane-Paddy, Orchards Rain fed areas: Mix cropping Pulses Paddy- gram Paddy- sorghum Sorghum Maize

#### **STAFF POSITION**

S.N	Sanctioned	Filled	Vacant
1	Senior Scientist and Head	01	
2	Scientists	05	01
3	Programme Assistant	01	
4	Farm manager	01	
5	Computer Programmer	01	
6	Accountant / Superintendent	01	
7	Stenographer	01	
8	Supporting staff		04
	Total	11	05

#### Major farming system

S. N.	Farming systems / enterprises
1	Agriculture farming systems
2	Agri - Horti farming systems
3	Agri – Horti -Dairy farming systems
4	Agri - Silviculture farming systems

#### **Major crops**









# **Targets and Achievements of major activities 2019-20**

S. No.	Activity	Tar	get	Achievements		
		No. of programmes	No. of farmers	No. of programmes	No. of farmers	
1	OFTs	6	30	6	30	
2	FLDs	25	450	29	592	
3	Trainings	72	1785	90	3124	
	PF	65	1650	82	2862	
	RY	5	105	3	100	
	EF	2	30	5	162	
	Skill Trainings	0	0	0	0	
4	Extension Activities	18	5438	22	37923	





## Most significant achievements of KVK

#### Significant Achievements of KVK

- Mass trapping of fruit fly by using Methyl Eugenol and Cue-lure (NAUROJI fruit fly trap) in mango, sapota, guava and vegetables covering 550 ha of 85 villages benefitting nearly 1200 farmers.
- Popularized and distributed organic products of Navsari Agricultural University (*Rhizobium, Azotobacter*, PSB, KMB, OLN-NOVEL, *Trichoderma and Pseudomonas*) in different crops and achieved horizontal expansion in 5600 ha area covering 18500 farmers of 280 villages.
- Nearly 2500 people in city area were trained for terrace gardening & kitchen waste composting. Among them, 1850 have started successfully and gaining approximately Rs. 12500/ Year/Garden.
- Popularize HYV of Paddy (NAUR-1 & GNR-3), Gram (GG-4 & GG-5), Pigeonpea (Vaishali), Greengram (Meha) and Soybean (NRC-37) with horizontal expansion of 1250, 160, 1000, 250 and 190 ha. area benefitted near about 4250, 630, 3225, 945 and 760 farmers, respectively.
- Approximately 1200 farmers of 28 villages were adopted SRI technology of transplanted paddy and gain 22 per cent increase in production.







# On Farm Trials

## **OFT-1 : Use of KNO3 and Novel OLN to increase production in Cotton.**

- Problem Identified
- Technologies assessed
- Year of assessment
- Source of technology

Critical inputs supplied

No. of trials

- : Low yield in cotton.
- : Use of KNO3 & Organic Liquid Nutrient
- : 2019-20
- : MCRS, NAU, Surat
- :10
- : Seed G.Cot.Hy-12(Bt), KNO3 & OLN
- Farmers reactions / Feedback : Both KNO3 & OLN increases number of balls & ball weight. But OLN is slightly better than KNO3

Technology options	No. of Balls/ Plant	Ball Weight(g)	Yield (q/ha)	B:C Ratio
Farmers Practice T1- No Use of KNO <sub>3</sub> or OLN	32	3.28	21.50	2.68
Assessed Practice-I T-2 : 3 % KNO <sub>3</sub> Spraying at squaring, flowering and ball formation stage (2010)	34	3.45	23.40	2.78
Assessed Practice -II T3- 2 % NOVEL OLN at flowering (2018)	35	3.34	23.71	3.02







## **OFT 2:** Assessment of fungicide for the management of grain discoloration in paddy

- Problem Identified
- Technologies assessed
- Year of assessment
- Source of technology
- No. of trials
- Critical inputs supplied

- : Low productivity and deterioration in quality of grain.
- : Three spray of Propiconazole 25 EC 0.025% (10 ml/10 lit. water)
- : 2019-20
- : MRRS, NAU, Navsari(2016)
- : 05 (Mahuva Block)
- : Propiconazole 25 EC 0.025%
- Farmers reactions / Feedback : Reduce the discoloration of grain & increase the yield.

Technology options	% infestation	Yield (q/ha)	B:C Ratio
Farmers Practice T1- No Use of Fungicide	12	35.30	2.99
Assessed Practice T-2 : Three spray of Propiconazole 25 EC 0.025% (10 ml/ 10 lit. water). First spray - initiation of disease Second and third spray- After 10 days' interval	3	41.10	3.31



• Problem Identified

: Poor quality of fruits due to infestation of fruit & Shoot borer.

: Installation of pheromone traps and removal of infected shoots

- Technologies assessed
- Year of assessment
- Source of technology
- No. of trials
- Critical inputs supplied
- : AAU, Anand and TNAU, TN

: 2019-20

- : 05
- : Pheromone Trap
- Farmers reactions / Feedback : Reduce the per cent infestation and increase the fruit quality

Technology option	% Infestation	Average yield (q/ha)	Net Return Rs./ha	BCR
T1: Farmers practices as injudicious and indiscriminate use of chemical pesticides	8.0	165.30	237540	4.96
T2: Installation of pheromone traps @ 40 traps/ha (AAU, Anand)	4.5	185.10	274680	5.70
T3: Remove the infected shoot and fruit + install pheromone traps @ 12/ha (TNAU, TN)	3.0	194.50	291100	5.93



## **OFT-4** Assessment of different Indian bean varieties

- Problem Identified
- Technologies assessed
- Year of assessment
- Source of technology
- No. of trials
- Critical inputs supplied
- Farmers reactions / Feedback

- : Low yield of in Indian bean.
- : GNIB-22 & GJIB-2
- : 2019-20
- : NAU, Navsari & JAU, Junagadh
- : 05
- : Seed
- : Both varieties perform good in South Gujrat condition, but GNIB is better than the GJIB-2

Technology options	No. of seeds/Pod	No. of Branches/ Plant	Yield (q/ha)	B:C Ratio
Farmers Practice T1- Local Desi Variety	3.21	3.57	26.2	2.82
Assessed Practice-I T-2 : GNIB-22	3.49	4.46	38.12	4.65
Assessed Practice -II T3- GJIB-2	4.28	5.23	33.40	3.85





## **OFT-5 : Assessment of enriched banana sap on yield of Mango.**

- Problem Identified :Lower yield due to Fruit dropping in mango.
- Technologies assessed : Use Organic Liquid Nutrient(NOVEL)
- Year of assessment : 2019-20
- Source of technology : NAU, Navsari(2012)
- No. of trials : 05
- Critical inputs supplied : Organic Liquid Nutrient(NOVEL)
- Farmers reactions / Feedback : Application of Novel Organic liquid nutrient on mango inflorescence, increases the flower & fruit setting and ultimately the yield.



Technology options	Fruit Drop(%)		Yield (q/ha)	B:C Ratio	
	Pea Stage	Marble Stage			
T1- Farmers Practice (No use of NOVEL)	25	15	21.50		
Assessed Practice T2- Spraying of 1.5 % banana sap at flowering and pea stage	12	10	23.40	2.78	



# **FRONT LINE DEMONSTRATIONS**

## **Results of Front Line Demonstrations (Oilseeds crops)**

	Technology	No of	Δrea	Yield	(q/ha)	% Increase	Additional	Additional	
Crop/season	demonstrated	Farmers	(ha)	Demo	Check	in yield	Cost (Rs)	return (Rs)	BC Ratio
Soybean (KDS-344) + ST + INM + IPM (Kharif-19)	New Variety	50	20	10.23	8.60	19.0	1110	5216	1.46
Sesame(GT 5) + ST + INM + IPM (Summer19)	New Variety	50	20	5.87	5.02	17.00	1200	5225	2.05
Groundnut (TG 37 A) + INM (Summer-19)	New Variety	50	20	16.65	15.25	19.15	500	6440	2.00

#### Crop wise major observation/Feedback

1	Soybean	KDS-344	1.Non-Shattering. 2. Moderately Resistant to smut, YMV, Pod borer & leaf eating
			caterpillar. 3.Seeds are medium size & light yellow colour
2	Groundnut	TG-37A	1.Tolent to collar rot, rust and late leaf spot. 2. Suitable for summer cultivation
3	Sesame	GT-4	1.Moderate yield. 2. Moderately Resistant to Helicoverpa









## **Results of Front Line Demonstrations (Pulse crops)**

	Technology	No of	Area	Yield (q/ha)		% Increase	Additional	Additional	
Crop/season	demonstrated	Farmers	(ha)	Demo	Check	in yield	Cost (Rs)	return (Rs)	BC Ratio
Gram (GG 5) + ST +	New Variety	30	75	10.23	8.60	19.0	300	5472	1.46
INM (Rabi 2019-20)									
Green gram (GAM 5)	New Variety	30	75	6.11	5.20	17.50	600	11495	2.04
+ ST + INM + IPM									
(Summer-2019)									

Crop wise major observation/Feedback

1	Gram	GG -5	1.Medium bold, brown colour seed
			2.Moderate Yield with moderately resistant to Wilt & Stunt diseases
2	Greengram	GAM-5	1.Moderate Yield
			2.Moderately Resistance to YMD







## **Results of Front Line Demonstrations (Other crops)**

	Technology	No. of	Area	Yield	(q/ha)	% Increase	Additional	Additional	
Crop/season	demonstrated	Farmers	(ha)	Demo	Check	in yield	Cost (Rs)	return (Rs)	BC Ratio
Kharif-2019	1	I		1					
GNRH-2	ICM+INM	13	5	44.54	40.50	9.98	1835	7272	2.29
GNR-3	ICM+INM	10	5	48.51	42.10	15.23	1610	11538	2.44
GNR-6	ICM+INM	10	5	46.51	39.90	16.57	1905	11898	2.22
GAR-7	ICM+INM	13	5	43.55	38.80	12.24	580	9500	2.54
Sorghum GNJ-1	ICM	15	6	22.13	18.50	19.62	400	9075	2.64
Tur- GT-104	ICM	3	2	12.54	10.50	19.43	1840	9180	2.65
Tur- GNP-2	ІСМ	3	2	13.73	11.30	21.50	1900	10935	2.86
Soybean- NRC-37	ІСМ	13	5	9.32	8.16	14.22	1890	4060	1.56
Cotton G.Cot.Hy-12Bt	ICM	12	5	22.02	18.40	19.67	1520	18824	2.30

#### Crop wise major observation/Feedback

S.N.	Crop	Technology demonstrated		Feed back
1	Banana	IPDM	1.	Less incidence of wilt. 2. Less infestation of weevil in the field.
2	Brinjal	IPDM	1.	Less incidence of wilt and other diseases
			2.	Less infestation of Brinjal fruit and shoot borer and sucking pest
			3.	Reduce the cost of cultivation by decreasing the use of pesticide
3	Brinjal	INM	1.	Increase in yield and quality of fruit
			2.	Decrease use of chemical fertilizers.
4	Banana	INM	1.	Increase bunch weight and quality
5 Okra IPDM 1.				Less infestation of Okra fruit and shoot borer and sucking pest
			2.	Reduce the cost of cultivation by decreasing the use of pesticide
			3.	Minimize the number of spray
			4.	Farmers are habituate to use botanical and organic pesticides in place of hazardous chemical pesticide.
6	Parvar	INM	1.	Increase in yield and quality of fruits. 2. Increase fruit setting ratio
7	Parvar	IPDM	1.	Less incidence of wilt and nematodes.
			2.	Decrease pollination problem due to awareness regarding botanicals in place of chemical
				pesticides among farmers.
8	Mango	IPM	1.	Less infestation of fruitfly
2. Increase awareness among farmers abo				Increase awareness among farmers about fruitfly infestation
			2	Good kooping quality during storage

3. Good keeping quality during storage







## **Results of Front Line Demonstrations (Horticultural Crops)**

	Technology demonstrated	No. of	Area	Yield (q/ha)		% Increase	Additional	Additional	
Crop/season		Farmers	(ha)	) Demo	Check	in yield	Cost (Rs)	return (Rs)	BC Ratio
Banana Grand Naine Kharif-19	INM	10	4	625.15	585.15	6.84	500	28000	3.92
Banana Grand Naine Kharif-19	IPDM	10	4	650.35	580	12.13	-3000	49245	3.79
Brinjal Surti Rabi-19	INM	10	4	161.25	150.45	7.18	-2200	13069	3.18
Pointed gourd-Local Kharif - 19	INM	10	4	172.45	160.15	7.68	3000	30750	3.42
Brinjal Local Rabi-19	IPDM	10	4	182.25	162.15	12.40	-1700	24120	3.49
Pointed gourd_Local Kharif - 19	IPDM	10	4	157.1	133.25	17.90	-8000	58375	2.86
Mango Rabi-19	IPM (Fruitfly trap)	10	4	61.5	59.15	3.97	-1300	3525	2.84
Okra Hybrid Sum-19	IPDM	10	4	160.25	142.12	12.76	4600	22662	3.43

Crop wise major observation/Feedback

<b>S.N.</b>	Crop	Technology demonstrated	Feed back				
1	Paddy	GNRH -2	<ol> <li>Mid-Early variety, high spikelet fertility</li> <li>Medium slender &amp; Moderately Resistant to diseases &amp; Pests</li> </ol>				
2	Paddy	GNR – 3	1.Early maturing, bold seeded like Gurjari & Jaya Suitable for Murmura & Pauva making 2.Resistant to BLB/Stem borer Insect & Pests				
3	Paddy	GNR -6	<ol> <li>High yield &amp; suitable for rainfed TP</li> <li>Early to mid late maturing &amp; long grain.</li> <li>Low incidence of Insects- pests &amp; diseases.</li> </ol>				
4	Paddy	GAR – 7	<ol> <li>Medium duration with Short slender grain.</li> <li>Good Cooking &amp; Keeping quality</li> </ol>				
5	Sorghum	GNJ-1	<ol> <li>High yielding</li> <li>Less incidence of smut, shoot borer and grain mould</li> </ol>				
6	Pigeonpea	GT-104	<ul><li>1.Red flower. 2.Medium Maturing &amp; Semi-Spreading</li><li>3.Long pod ,More no. of seeds(5-7)/pod 4.Cream Seed Colour</li></ul>				
7	Pigeonpea	GNP-2	1.White round Seed 2.Suitable for Seed as well as vegetable. 3. Moderately Resistant to Pod fly/Wilt				
8	Soybean	NRC-37	<ol> <li>Moderate yield.</li> <li>Early maturing</li> <li>Moderately Resistant to Pest &amp; disease</li> </ol>				
9	Cotton	G.Cot.Hy-12(Bt)	<ol> <li>Early maturing</li> <li>Suitable for Rain fed condition also. 3. Less sucking pests</li> </ol>				



## Results of Front Line Demonstrations (Livestock and Fisheries)

Category	Name of the technology	No. of	No. of Units (Animal/	Major parameters			% change
	demonstrated	Farmer	Poultry/ etc)	Parameter	Demo	Check	in
							parameter
Cow	Nutritional management	20	20	1. Average Milk Yield	9.50(20)	8.38(10)	13.36
	Mineral Mixture 40 mg per Day			(Lit./Day)			
	and De-worming 3g Tablet			2. Service Period	130(19)	148(8)	30.40
				(Days)			
Cow	Nutritional management	20	20	1. Average Milk Yield	10.62	10.76	8.00
	Bypass fat powder 50 g per day			(Lit./Day)			
				2. Fat(%)	4.20	3.80	10.50
Cow	Prevention/Treatment of	20	20	1. No. of Incidence	2(20)	4(10)	75% reduction in
	Ectoparasite Parasites prevention						cases
	by Liquid application on back of						
	animal Poron <sup>@</sup>						







## Results of Front Line Demonstrations (Livestock and Fisheries)

Category	Name of the technology	No. of	No. of Units	Major parameters					% change
	demonstrated	Farmer	(Animal/ Poultry/	Parameter	De	mo	Ch	eck	in
			etc)						parameter
Calf	De-worming + calf Dan @	20	20			At Months			16 %
	50 gms per day up to six				3	6	3	6	
	months			Av. Body Wt. (Kg)	59.7	84.6	53.7	72.9	
				% Increase	11.1	16.0			
Buffalo	Breeding management Cure	10	10	Regular estrus	9(10)		2(5)		55 % Reduction in
	of anoestrus condition by								cases
	giving @Prajna (catalytic								
	hormone) and multi mineral								
	tablets								



## **Results of FLDs on Women Empowerment**

Category	Name of the	No. of	Inputs given	Major parameters			Change	Additional	Additional	<b>BC</b> Ratio
	technology	Farm		Parameter	Demo	Check	in	Cost (Rs)	return (Rs)	
	demonstrated	women					parameter			
Kitchen	Kitchen	100	Seeds and	Production of	95.9	19.97	3.80 times	82	3795	4.79
Garden	Garden		Seedling	Vegetables(Kg)			high			

#### Feed Back:

- 1. Kitchen gardening gives continuous supply of fresh vegetables.
- 2. Income is generated by selling extra vegetables grown in kitchen garden.
- 3. Farm women are not applying any pesticides in kitchen garden so they get organic vegetables.





## **Results of FLDS on Implements and Machinery**

Name of the	Crop	Technology	No. of	Area	Major	Field observation		% change
implement		demonstrated	Farmer	(ha)	parameters	(output/man hour)		in major
						Demo	Check	parameter
Twin Wheel Hoe*	Vegetables & Pulses	Drudgery reduction	20	1	1.Field capacity(ha/hr) 2.Labour requiment (Man hr/ha) 3.Cost of operation(Rs)**	0.013 80 0.1 ha/day 1711	0.0086 116 0.069 ha/day 2587	44.92

\*Twin wheel hoe technology recommended by CIAE, Bhopal-MP \*\*Cost of operation is calculated as per NAU labour wages

Feed back:

- **1. Reduced the labour cost and Time saving**
- 2. Increase the work efficiency



## **Summary of Training Programmes Conducted**

Clientele	No. of o	courses	No. of Participants				
	On Campus	Off Campus	Male	Female	Total		
Practicing farmers	17	60	1301	1408	2709		
Rural Youth (Vocational Trainings)	1	4	103	50	153		
Extension Functionaries	-	3	76	24	100		
Sponsored trainings	-	5	67	95	162		
Total	18	72	1547	1577	3124		

#### **Important Training Programmes :**

- Organic Farming
- Scientific Cultivation of field &

horticultural crops including INM & IPDM

- Training on Terrace Gardening for
   Urban people
- Mushroom cultivation for rural youth
- Value addition in agricultural

produces

 Nutrition & Disease management in milch animals

## **Impact of major Interventions**

Name of intervention/	No of	% of Adoption	Change in income (Rs/ha)			
Technology	beneficiary		Before	After		
Use of improved Varieties Paddy GNR-3 Green gram -Meha Pigeonpea- Vaishali	1000 450 1500	20 15 35	30000 27000 33000	36000 30000 40000		
INM NOVEL (Organic Liquid Nutrient) Bio fertilizers	5000 4000	28 23				
IPM Fruitfly Trap IPDM in Pointed guard	1200 1600	18 12	225000 200000	300000 225000		
Veterinary Mineral Mixture Supplements	500	22	4700 Rs/Lactation	5500 Rs./Lactation		

## Introduction of New crop & Method by Mr. Shaileshbhai Sailor

Area Under

Field Crops: 8.40 ha Horticultural Crops: 1.60 ha (Greenhouse)

- In NVPH system, he has planted the orchid and strawberry plants in two layer system. Soilless cultivation (Use coconut husk and coco peat for orchid)
- First layer system, planting of orchid on coconut husk put on GI stand at the height of 2.5-3.0 feet and 1 meter width.
- In second layer, planting of strawberry (Soilless cultivation) in turf technology (40-20 cm turf) with help of GI pipe in hanging condition.
- Income Nearly 25 Lakhs / year
- Fellow Farmer- 8

Shri. R. C. Faldu, Agril. Minister Shri Mukesh Patel, MLA









## **Economic empowerment of Women Farmer through animal Husbandry**

Name: Jamanaben Maganbhai Nakum

Village: Tuked (Kadvali Faliya)
Age: 45 years
Education: 2 std.
Size of land holding: 15 Vigha
Motivation factor: Family
Source of information: KVK, SUMUL & Line Department

#### Farm Details:

Total herd strength: 27 Gir cows, 2- Heifer, 7 – Female calf, 2 – Male calf.

Total Milk Production: 44000 L (Last year)

Rate: Rs. 80 per L

Gross Income: /- 2,50,000/- per Month

#### **Details of Progress:**

The herd strength is total 27 Gir cows including 18 lactating and 9 dry cows.

Animal rearing through Low cost Farm Investment (Kaccha Farm).

Provide open area ranching for all cows during full day time.

3 Ha Land use for the green fodder production and some dry fodder throughout the year

Year	Production (L)	Gross (Lakh.)	Expenses (Lakh)	Net profit (Lakh)
2016-17	30000	21.00	15.60	5.40
2017-18	36000	28.80	17.28	11.52
2018-19	44000	35.20	20.24	14.96

## **Terrace gardening- Growing Craze in Urban People**

- Whatsapp groups:25 in running condition
- Total Trainings: 21
- Participants : 1700
- Successful Terrace Gardens : 851

ગાર્ડનિંગમાં રસ હતો અને તેની સાથે જ સોવી ભાવેલી-ગલેલી મહિલાઓ પણ ગુંબેશ સાથે

લોકારા રહી છે વેમને આરોગ્ય અંગે બાગતિ વધુ છે. આ ગ્રુંબેશમાં શરૂઆતમાં મોટાભાગની મહિલા તબીબોએ રસ દાખભો પાછળથી સોશિયલ મિડિયા દ્વારા તેનો પ્રયાર પ્રસાર વધો

रूले कुवे झामझाथी महिलालों साहे थ शुक्रिशीओनों रस पण वही रहते थे.

## કૃષિ યુનિવર્સિટીમાં ટેરેસ ગાર્ડન વર્કશોપનું આયોજન કરવામાં આવ્યું હતું 10 ફુટની બાલ્કનીમાં ગાર્ડન બનાવી શકાય

ટેરેસ ગાર્ડન તૈયાર કરવા માટે ખુલ્લી જગ્યા

હોવી જોઈએ. જે જગ્યા પર કથી 7 કલાક

તડકો આવતો હોય અને પાણી સહેલાઈથી

મળી રહેતં હોય તે અગાશી પર ટેરેસ ગાર્ડન

બનાવી શકાય છે.બાલ્કની અથવા અગાસી

પર પણ ગાર્ડન તૈયાર કરી શકાય છે. ટેરેસ

ગાર્ડન બનાવવા માટે એક તગાર માટી, એક

તગાર ખાતર અને એક તગાર નાળિયેરના

ટમેટા, રિંગણ અને કોબીજ અગાસી પર ઉગાડી શકાય

#### Rel Bries citythaskaraurat@gmail.com

'અગાશી, બાલ્કનીમાં ટેરેસ ગાર્ડન બનાવી શકાય છે. રોજિંદા ઉપયોગમાં લેવાતા 40 શાકભાજી આ ગાર્ડનમાં ઉગાડી શકાય છે.' નવસારી કૃષિ યુનિવર્સિટી દારા ક્રિચન ગાર્ડન વર્કશોપનું આયોજન કરવામાં આવ્યુ હતું. જેમાં આ વાત ભાક્તિ પંચાલે કની હતી.

અને સુરતીઓમાં ઘેરના ટેરેસ,

બાલ્કની, આંગણા અને વિવિધ સ્થળો

પર નાની ખેતી કરવા માટે પ્રેરિત

કરવાનો હેતુ હતો. શરૂઆતના બે



ก็เปิรแขงใ ฉเม็ค ระฉาท่ เหเน้

A ASS PERMIT OF STATION

આવે છે

તમામ પાસાઓ પર દેશાન આપવામ

#### કેમિકલ રહિત શાકભાજીના સેવનથી ખુશ છે પરિવાર

છાલામાંથી બનાવેલ પાઉડર અને 100થી

150 ગ્રામ ડાયકોડરમા ખાતર ગ્રામ મિક્ષ

કરો.પછીએને કંડામાં નાંખો.ટેરેસ ગાર્ડનમાં

ટામેટા, રિંગણ, કોબીઝ, ફલાવર, દુધી, વેલા,

મરચાના છોડ, ડગરી, ચોલી, તરિયા, પાપડી,

કારેલા, મેથી, ગુવાર, તુવેર, લસણ,ભીડો,

પાલક અને દરરોજ ઉપયોગમાં લેવાય એવા

શાકભાજી ઉગાડી શકાય છે.

ਪੇਲੂਕੀ ਲਾਜਿਤਾ ਸਿਲਜੇ ਬਾਹਾਰੇ છે ਨੇ ਯਾਗਪਲਬੀ ਵਾ ਗਾਤੀਲੰਸਕੀ ਬੀਯ ਰਹੀ ਲਾਜੇ ਨਾਬਣੇ ਉੱਥੇ ਨੇਕਰ ਲਾਬੇ ਐਨਸ਼ਾ ਹੀ ਯਾਸਟ ਪਤੀ ਨੇ ਸਕੇ ਨੱਸ ਵਾ ਯਸਣ ਕਈ . ਜੋ ਬੀਯਪੂ છੇ ਨੇ ਤੀਸਿਤਰ ਣਰਿੰਗ ਅੰਬਾਰ ਤੇਹੀ ਈਨੇ ਰੋਬਾਣ ਨਵੀਂ ਬਨਾਰ છે. ਨੂੰ ਬਣਮਾਂ ਬਾਨਲਾਈ ાંગાડુ છુ અને પરિવાર સ્સાવણ રહિત સ્વસ્થ ભોષન કરે છે.



लेकर के दौरान गाउंनिंग के सभी पहुलओं पर ध्या-



🕋 🗉 🔚 सूरत की सैकड़ों महिलाओं ने प्रशिक्षण लिया है और एक्टिव है तनक राहीड़ कृषि विक्रान केंद्र के विभागकदास करती हैं कि सैकड़ी की संख्या में परिवारों ने प्रति। हे और महिरकी इसमें अधिक सक्रिय हैं। वरों में अगिनिक खोती कर न सिर्वा पर पर सरिरच 3

अब पता है कि हम परिवार को क्या खिला रहे हैं नेवसिंटी के पछीटिक बायोलीजी से रिटायर प्रोफेसर व विभागण्यस जॉ मॉहि या ने भी घर को गाउँन में लब्दील कर दिया है और ऑगैनिक खेती में सम ये हैं। ठॉ. गढिया कहती हैं कि पहले हमें पता नहीं होता था कि हम बया न











## **Major Extension Activities Conducted during the year**

Extension Activity	No. of programmes	No. of farmers	
Advisory Services	3516	3516	
Diagnostic visits	210	627	
Field Day	22	702	a la
Group discussions	6	151	
Kisan Ghosthi	10	443	
Film Show	113	4003	
Self -help groups	3	49	
Scientists' visit to farmers field	85	267	
Plant/animal health camps	4	554	
Farmers' seminar/workshop	1	110	
Method Demonstrations	53	946	



**Film Show** 



Van Mahotsav





Mahila Shibir



**Constitution Day** 



**Diagnostic Visit** 

**Diagnostic Visit** 

## Major/Other Extension Activities Conducted during the year

Major Extension Activity	No. of programmes	No. of farmers
Celebration of important days	35	4867
Special day celebration	8	919
Exposure visits	6	335
Khedut Shibir	1	1200
Mahila Shibir	3	201
Mahila Meeting	3	56
Lectures delivered as resource persons	92	8365
Newspaper coverage	9	9000
Farmers visit to KVK	636	626
Swachchha Bharat Pakhavadia	21	301
Swachchha Hi Seva	32	685
Total	4869	37923

Other Extension Activity	Number
News paper coverage	9
Extension literature	23
Popular articles	2
Research papers	8
TV TalkDoordarshan	1





## Use of ICTs

#### **FPO/FPC** formed

S.	Name of	No. of	If yes, than	If presently active	Any other		Partic	ulars			Γ	lumbe	r
N.	FPO & Year	Farmers	specify the	then main activities	support which	Electronic	Media (CD./	DVD)				0	
	of	in FPO	role of KVK	of FPO	KVK provides to	Extension	Literature					13	
	formation		in the		existing active	News pape	er coverage					9	
			formation		FPO for	Popular a	rticles					2	
			of FPO		Strengthening	Radio Tall	KS					0	
					them	TV Talks						1	
						Others (pl	. specify)					0	
1	Surtapi	10	Basic	1. Marketing	Technical				T	otal		25	
	FPO Co.		informatio	of fresh & Processed	guidance related				Т	vpe of ]	Messag	ves	
	Limited		n &	organic Produces.	to advanced	Name of	Message	Cron	Livestock	<u>y pe or r</u> Weath	er (	)ther	Total
			guidance	2. To create	agricultural	KVK	Туре	Crop			en	terprise	
			for the	awareness of	techniques.	Surat	Text only	4235	6320	11151		-	21706
			formation	Organic farming.		Total Mess	sages	2	2	2		-	6
			of FPO.				8	1	1				1
2	South	1666		1 Collection &	Technical	<b>S. N.</b>			Wh	atsapp			
2	Guiarat	1000		narketing of	guidance related		No. of me	ssage	No. c	of Farme	ers per	No.	of Bene.
	Progressive			vegetable & fruts.	to advanced		sent			messag	je	fa	armers
	Farmer Self			2. Selling of Cotton	agricultural	1	51			246			12564
	Reliant Co.			cake for animal feed.	techniques.	<b></b>							
	Limited			3. Storage & marketing of soybean from local farmers.		<ul> <li>Local Mahila Mandal promoted by</li> <li>Vanravan &amp; Vashundhara tribal Self Help Group, Gami</li> <li>Jagruti Sakhi Mandal, Parvat</li> <li>Sakhi Mahila Mandal Samiti, Gondalia</li> <li>Saboli Sakhi Mandal, Papikund</li> </ul>					<b>y KVK</b> ntalav		

## **Production and supply of technology inputs from KVK**

Name of the input	Variety / Breed / species, etc	Production (Q)	Supplied to No. of farmers	Value (Rs)
Seeds	Paddy-GNR-3	01.75	14	5250
	- GNR-7	19.25	154	57750
Planting material	Drumstick- PKM-1	3275	330	65500
	Brinjal – Hy-143	60000	20	36000
	Chilli- CJ	30000	10	18000



**Paddy Seedling raising** 

Paddy Variety GNR-3

**Drumstick PKM-1** 

## **Demonstration Units at KVK, Surat**

ि विक्रान केन सुरत **लर्शरी** 



Name of the demonstration unit	Name of the product	Production during the year 2019-20	Net profit realized (Rs)	Remarks if any
Nursery	Drumstick- PKM-1 Brinjal – Hy-143 Chilli- CJ	3275 60000 30000	65500 36000 18000	Planting material given to 360 farmers

#### FARM PRODUCTION

#### Kharif-2019

Major group/ Class crop	Name of the crop	Name of the variety	Quantity of seed/seedlings (q)	Value (Rs)	Number of farmers
Cereals	Paddy	GNR-3	1.75		
		GNR-7	19.25		
	Straw		86.50	42900	

#### Rabi/Summer-2019-20

Major	Name of	Name of	Name of the	Quantity of	Value	Number of
group/Class	the crop	the	hybrid	seed/seedlings(q)	(Rs)	farmers
crop		variety				
Horticulture	Drum Stick	PKM-1		3275	65500	330
	Brinjal		Hy-143	60000	36000	20
	Chilli		CJ	30000	18000	10

## **Status of villages adopted for Doubling Farmers Income**

S. No	Name of the village	Population	No. of households	Major activities conducted	Output/Outcome in brief
1	Balda	2790	734	Survey, preparation of action	
2	Vadia	1354	381	plan & implementation. Shibir,-2, Training-4 & FLDs- 6(110)	





## Survey at Balda

#### Survey at Vadia



## **Details of collaborative activities conducted**

Name of the sponsoring agency	Type of activity	Role of KVK	No. of farmers benefited
ATMA	Training, Exhibitions, Best ATMA Award Participation	As Guest Lecturer in Training	388
Bank of Baroda	Exhibitions	Exhibition stall at Bardoli	2340
Line departments (Horticulture & Agriculture	Training and Sibir, Kristi Mahotsav	As Guest Lecturer in Training	6036
Ambuja Cement Foundation	Trainings, Sibir	As Guest Lecturer in Training	1240
Forest Department	Trainings, Sibir, FLD	As Guest Lecturer in Training	251
Reliance foundation	Trainings, Sibir, Special Day Celebration, FLD	As Guest Lecturer in Training, Input distribution,	515
Baroda Swarojgar Vikas Sansthan	Trainings, Shibir	As Guest Lecturer in Training	58
Mandvi Rice mill Co-operative Society, Mandvi	Trainings, Sibir, FLD	As Guest Lecturer in Training, Input distribution	157
Adani Foundation, Surat	Shibir, Training	As Guest Lecturer in Training	26









## **Awards and Recognition**

S. No.	Name of the award	Given by	Nature of award	Given for
А	KVK Awards			
	Life Fellow to KVK, Scientist Dr. Rakesh K. Patel	The Entomological Society of India on December 31, 2019	CERTIFICATE	Membership
В	Farmers Awards			



## **Progress of DAMU Project**

- 1. Title of the Project: Atmospheric and Climate Research-Modeling Observing System and Servises (ACROSS)-DAMU
- 2. Sanction letter : ASC-08/DAMU/2014 Dated : 05.07.2018
- 3. Name of Damu, District, ATARI zone and Year
  - DAMU Name : Gramin Krishi Mausam Seva-District Agro-Met Unit
  - Name of Blocks: Surat
  - Year of start of AAS at DAMU: --
  - AWS: Not Installed.
- 4. Name and address with landline and mobile numbers along with STD code (also provide e-mail address) of head of ATARI, Project Coordinator, Head of the Krishi Vigyan Kendra (KVK)

Designation	Name	Address	STD code Telephone	Email-id		
			no. & Fax			
Head of ATARI	Dr. Lakhan Singh	ATARI, Pune, Zone -VIII	M.:7088994447	atari.pune@gmail.com		
Head of KVK	Dr. J. H. Rathod	Krishi Vigyan Kendra, Navsari	O: (0261)2655565	kvksurat@nau.in		
		Agricultural University, Surat-	M.: 8128686720			
Project Coordinator (PC)	Shri. S. J. Trivedi	395007	M.: 9429018082	suniltrivedi131164@gmail.com		
SMS	Applications for both the posts are invited but due to COVID 19, exam/interview procedures are still pending.					
Agromet Observer						

#### **Budget Information(Rs.)**

Sr. No.	Year	BE	Opening Balance	Receiept during	Total (BE)	Expenditure	Closing Balance
1	2	3	4	5	6 (4+5)	7	8 (6-7)
1	2018-19	4,80,000	0	4,80,000	4,80,000	156345	323,655
2	2019-20	668,000	323,655	344,345	668,000	209,675	458,325

# **Celebration of Constitution Day**

S.N.	Name of activity organized	No. of officials	No. of VIPs	Total
		attended	attended	participants
		programme	programme	
1	SHG Meeting	50	2	52
2	Reading of 'Preamble'	11	-	11
3	Seminar on Constitution day and distribution of brochures, folders etc. among	7	-	51
	participants			
4	Lecture on Important Constitutional Amendments & their significance	8	2	105
5	Lecture on Agriculture Act and Agriculture Legislation and its importance in post WTO			
	era.			
6	Talk on Constitution and citizen duties, Land legislations and Reforms	0	40	47













## Swachhta Hi Sewa





No. of	Farmers/Students			
activities	Male	Female	Total	
21	198	103	301	
27	454	215	669	





## **Celebration of Van-Mahotsav**



Data	Participants				
Date	Male	Female	Total		
19.07.2019	46	29	75		





Dr. R. J. Patel, Ex. Collector, Valsad





## **Aqaponics, Vertical Farming & Biofloc - A New Trend in Agriculture**

Data	Participants			
Dale	Male	Female	Total	
16.10.2019	102	08	110	



Hon. Vice Chancellor, NAU, Navsari Joint Director of Horticulture, Surat



Lecture by Expert

**Impact: 2 Units of Vertical Farming Started** 

