ANNUAL PROGRESS REPORT

Year: 2022

[Period: January 2022 – December 2022]

Krishi Vigyan Kendra

Lokbharti Gramvidyapith Trust

Sanosara, ***Ta:***Sihor, ***Dist:*** Bhavnagar (Gujarat) - 364 230

E-mail: kvkbhavnagar@gmail.com

ANNUAL PROGRESS REPORT

INDEX

ICAR-ATARI, Pune
DETAILS OF ANNUAL PROGRESS REPORT
Krishi Vigyan Kendra - Bhavnagar
(January 2022 to December 2022)

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)
	Office	FAX		
Krishi Vigyan Kendra, Lokbharati Gramvidyapith, At: Sanosara, Ta.:Sihor, Dist. - Bhavnagar (Guj.)-364230	(02846) 283777	283999	kvkbhavnagar@gmail.com	https://lokbharti.org//Krishi-Vigyan-Kendra

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

Address	Telephone		E mail	Website address
	Office	FAX		
Lokbharati Gramvidyapith Trust, At: Sanosara, Ta.:Sihor, Dist. Bhavnagar (Guj.)-364230	(02846) 283528	283528	Lokbharti@lokbharti.org	www.lokbharti.org

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. N. P. Shukla	(02846) 283777	09426895354	nigamshukla@gmail.com

1.4. Year of sanction: 2009

1.5. Staff Position (as on 31st December, 2022)

Sl. No.	Sanctioned post	Name of the incumbent	Mobile No.	Discipline	If Permanent, Please indicate		Date of joining
					Current Pay Band	Current Grade Pay	
1.	Senior Scientist and Head	Dr. N.P. Shukla	9426895453	Plant Protection	166400	-	13/10/2010
2.	Subject Matter Specialist	Mrs. S. N. Boricha	9978745959	Home Science	73200	-	07/08/2012
3.	Subject Matter Specialist	Vacant	-	Horticulture	-	-	-
4.	Subject Matter Specialist	Mr. P. M Kyada	9726396836	Agri. Engg.	69000	-	27/08/2014
5.	Subject Matter Specialist	Dr. V. R. Desai	9427595990	Animal Husbandry	69000	-	02/09/2014
6.	Subject Matter Specialist	Mr. J. K. Kantariya	7698369732	Agronomy	65000	-	28/02/2017
7.	Subject Matter Specialist	Dr. Saroj Chaudhary	8469478385	Agriculture Extension	65000	-	05/03/2017
8.	Programme Assistant	Mr. P. J. Rathod	9978945445	Soil Science	52000	-	10/05/2011
9.	Computer Programmer	Mr. P. M. Mehta	9879407582	Computer	53600	-	1/10/2010
10.	Farm Manager	Mr. V. B. Savani	9979272288	Horticulture	50500	-	15/08/2012
11.	Accountant/Superintendent	Mr. V. B. Makavana	9426550258	Commerce	53600	-	1/10/2010
12.	Stenographer	Vacant	-	-	-	-	-
13.	Driver 1	Mr. P. M. Rathod	9408373919	-	30200	-	1/10/2010
14.	Driver 2	Mr. P. S. Gameti	9727455394	-	30200	-	1/10/2010
15.	Supporting staff 1	Mr. R. B. Naiya	9825768357	-	25600	-	1/10/2010
16.	Supporting staff 2	Mr. D. P. Vagela	9726379644	-	25600	-	1/10/2010

1.6. Total land with KVK (in ha) :

S. No.	Item	Area (ha)
1	Under Buildings	2.4
2.	Under Demonstration Units	-
3.	Under Crops	9.5
4.	Horticulture	-
5.	Pond	-

1.7. Infrastructural Development:

A) Buildings

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Lakh Rs.)	Starting year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	2012	546.32	54.00	--	--	--
2.	Farmers Hostel	ICAR		303.56	30.00	--	--	--
3.	Staff Quarters (6)	ICAR	2012	399.97	40.00	--	--	--
4.	Plug Nursery	Dept. of Horticulture, Bhavnagar	2016	1 Ha	30.00	--	--	--
5	Rain Water harvesting system	Host Institute	-	-	-	-	-	-
6	Threshing floor	ICAR	2017	83.54	0.69	-	-	-

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Bolero)	2009-10	6,03,650.00	225000 km	Working Condition
Tractor with Trolley	2009-10	6,02,923.00	4780 hrs	Working Condition

C) Equipment & AV aids

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Computer with Accessories (6)	2010-11/2015-16	2,99,350.00	Under use
Photo copier Machine with duplex, stabilizer, Trolley & Accessories (2)	2010-11/2016-17	2,18,700.00	Under use
Fax Machine with Acrylic cover	2010-11	09,000.00	Under use
LCD Projector with laptop & other accessories (2)	2011-12/2015-16	1,60,450.00	Later one is under use
Digital Camera with accessories (2)	2011-12 / 2015-16	53300.00	Under use
LED television set	2015-16	32200.00	Under use
Office furniture	2016	654250.00	Under use

1.8. Details of SAC meeting conducted in the year 2022 (Conducted on 11/02/2022)

Name and Designation of Participants	Salient Recommendations	Action taken
Dr. H. M. Gajipara, Director of Extension Education, JAU, Junagadh	Suggested to organize FLDs and OFTs regarding the Prakrutik Krishi. Suggested to contact Cattle Breeding Farm, Junagadh for AI doses and also increase the AI practice in the district. Suggested to contact Dept. of Agri. Extension for the reformation of the new technical programme of Agri. Extn. Suggested to promote Prakritik Krishi in the district.	The FLDs and OFTs incorporated in AAP accordingly. KVK planned to spread the AI practice in the district with the help of CBF, Junagadh. The new technical programme has reformed with the help of Dept. of Agri. Extn., JAU, Junagadh. KVK planned trainings, lectures and farmers meeting for the promotion of Prakritik Krishi.
Dr. D. S. Hirapara, I/C, Associate Director of Research & Research Scientist and Head, MDFRS, JAU, Targhadia	Suggested to verify the sample size of the New technical programme of Ag. Engg. with the help of Department of Statistic, JAU, Junagadh.	The new technical programme modified with the help of Statistic Department, JAU, Juanagdh.
Dr. H. C. Chhodvadiya, Associate Extension Educationist, DEE, JAU, Junagadh	Suggested to conduct FLDs on Organic Farming.	KVK has conducted FLDs on Organic Farming in upcoming year.
Mr. Dipakkumar B. Khalas, DDM, NABARD, Bhavnaar	Suggested to promote FPOs in the district.	KVK has conducted various activities for promotion of FPOs in the farming communities.
Mr. M. B. Vaghamsi, Dy. Director of Horticulture, Bhavnagar	Suggested to promote various schemes of Dept. of Horti. to the fruits and vegetables growers.	KVK has organized the various extension activities to promote schemes of Horticulture department.
Dr. N. P. Shukla, Sr. Scientist & Head, KVK – Bhavnagar	Suggested to incorporate the NPK nutrients in the new technical programme of Agri. Engg. For batter out comes. Suggested to change the PI and Co- PI of the new technical programme. Suggested to Plan FLDs in Integrated manner, incorporate best animal practices in a single FLD. Suggested to change the Title of New technical programme Agri. Extn.	Reformed the new technical programme accordingly. KVK has organized FLD based on the Suggestion. Title of New technical programme of Agri. Extn. revised
Mr. D. N. Zala, Program Officer, CSPC – Tata Trust, Talaja	Suggested to promote silage in the District.	KVK has created awareness programmes for promotion of Silage making in the district.

Name and Designation of Participants	Salient Recommendations	Action taken
Mrs. P.K. Butani, Assistant Extension Educationist, DEE, JAU, Junagadh.	Suggested to increase horizontal spread of Super Nappier Grass Pakchong and Salinity tolerant Wheat variety KRL – 210 in the district. Suggested to conduct at least one training of students of B.Voc. for ARYA project awareness. Suggested to include OFT on Super nappier grass Pakchong in the Action plan. Suggested to prepare questionnaires and study the horizontal spread of Bhindi Plucker in the district, and based on the study the scale should be developed and it should be published on the Websites.	Various extension activities like Trainings, Seminars and lectures have been planned and conducted to promote wheat variety KRL – 210 and Super nappier grass pakchong in the district. The trainings for the students has been organized under ARYA Project. The OFT conducted accordingly. KVK has conducted a survey to study the horizontal spread of Bhindi Plucker.
Dr. G.S. Dave, Dy. Director of Agriculture (Extension), Bhavnagar	Suggested to aware farmers regarding Urea application in Groundnut and Chickpea.	Trainings on Integrated Nutrient Management in Groundnut and Chickpea has been conducted.

2. DETAILS OF JURISDICTION AREA UNDER KVK (No. of talukas): Ten (10)

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

S. No	Farming system/enterprise
1	Agricultural + Animal Husbandry
2	Agricultural + Horticulture
3	Agricultural + Horticulture + Animal Husbandry
4	Animal Husbandry
5	Agriculture

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

a) Agro-climatic Zones

Sl. No.	Agro-climatic Zone	Characteristics
1	South Saurashtra Agro Climatic Zone	This zone includes part of Sihor, Bhavnagar, Ghogha, Gariadhar, Palitana, Jesar, Talaja, &Mahuva Talukas of Bhavnagar district. The region receives **625-750 mm** of rainfall. The soil type is Shallow medium black calcareous soils. Surface colour of the soil is Very dark grey to dark grayish and dark brown. Main crop of these region are Groundnut, Cotton, Wheat, Pearl millet, Sorghum & Sugarcane.
2	North Saurashtra Agro Climatic Zone	This zone includes part of Umrala, part of Sihor, Bhavnagar, Ghogha, Gariadhar, Palitana, Vallabhipur Talukas of Bhavnagar district. The region receives **400-700 mm** of rainfall. Soil type is Shallow and medium black. Surface colour of the soil is Very dark brown to very greyish brown. Main crop of these regions is Groundnut, Cotton, Wheat, Pearl millet, Sorghum & Sugarcane.
3	Bhal & Costal region	This zone includes Parts of Vallabhipur, Umrala and Bhavnagar talukas of Bhavnagar district. The region receives **625-1000** mm of rainfall. Soil type is Medium black, poorly drained and saline soil. Surface colour of the soil is Dark brown, to dark, Grayish brown. Main crop of these regions is Groundnut, Cotton, Pearl millet, rainfed wheat and Pulse, & Sorghum.

b) Topography

S. No	Agro-climatic Zone	Name of AES	Block covered	Characteristics			
				Rainfall (mm)	General Fertility		
					N	P	K
1	South Saurashtra Agro Climatic Zone	Medium black soils with medium rain fall	30 % Mahuva	625-750	Medium to high	Low	High
			25 % Talaja				
			10 % Ghogha				
		Costal alluvial soils with medium rainfall	40 % Mahuva				
			60 % Talaja				
			20 % Ghogha				
		Shallow black soil with medium rainfall	30 % Mahuva				
			15 % Talaja				
			70 % Ghogha				
2	North Saurashtra Agro Climatic Zone	Medium black soil with 400-500 mm rainfall	100 % Umarala	400-700	Medium to high	Low	Low to Medium
		Medium black soil with 500-600 mm rainfall	30 % Gariyadhar				
		Hilly soil with 500-600 mm rainfall	30 % Palitana				
			20 % Sihor				
3	Bhal& Costal region	Black clay soil with medium rainfall	24.3 % Vallabhipur	625-1000	Poor	Medium	Medium

2.3 Soil Types

S. No	Soil type	Characteristics	Area (Lakh ha)
1	Shallow medium black calcareous soil	Soil texture is clay loam to clay, soil depth is moderate to deep (25 to 75 cm) and availability of nitrogen content medium to high, phosphorus content low and potash content is high	3.08
2	Shallow medium black	Soil texture is clay loam to clay, soil depth is moderate deep to deep (30 to 80 cm) and availability of nitrogen content medium to high, phosphorus content low and potash content is low to medium	1.54
3	Black clay poorly drained saline soil	Soil texture is silty clay loam to silty clay and clay, soil depth is deep to very deep (›90 cm) and availability of nitrogen content low, phosphorus and potash content medium	0.87

2.4. Area, Production and Productivity of major crops cultivated in the district (2020-21)

S. No	Crop	Area (ha)	Production (MT)	Productivity (Qt./ha)
A). Seasonal field Crops				
1	Cotton	224301	732921	672.15
2	*Kharif* Groundnut	117204	220202	1879.79
3	Wheat	23644	76902	3252.48
4	Chickpea	21704	51851	2389
5	*Kharif* Pearl millet	17745	34281	1931.8
6	*Summer* Groundnut	8008	17035	2127.19
7	*Summer* Pearl millet	5584	15149	2713
8	*Kharif* Sesame	3624	1027	283.43
9	Green Gram	1354	479	354
10	Pigeon Pea	1042	1236	1185
11	Black Gram	373	132	353
				Source: *Dept. of Agriculture, District Panchayat, Bhavnagar (2020-21)*
B). Horticulture crop				
I) Fruits crops				
1	Citrus	6536	80720	12.35
2	Mango	4854	37764	7.78
3	Coconut	3612	35723	9.89
4	Guava	3536	37340	10.56
5	Sapota	1831	19134	10.45
6	Banana	1167	53845	46.14
7	Custard Apple	1017	13536	13.31
8	Ber	871	9476	10.88
9	Pomegranate	508	6360	12.52
10	Papaya	216	8113	37.56
II) Vegetable crops				
1	Onion	46000	1191400	25.90
2	Brinjal	2050	41656	26.32
3	Tomato	1342	31134	23.20
4	Okra	619	8171	13.20
5	Chilly	355	596	1.68
6	Cucurbits	1508	21532	14.28
III) Flower crops				
1	Rose	746	634	8.57
2	Merigold	89	779	8.75
				Source: *District Horticulture Department (2020-21)*

2.5. Weather data (2022)

Month	Rainfall (mm)	Temperature 0 C		Average Relative Humidity (%)
		Maximum	Minimum	
January - 22	0	26.5	13.3	45
February - 22	0	28.2	16.4	48
March - 22	0	35.4	25.4	50
April - 22	0	37.6	23.8	44
May – 22	0	39.4	25.9	53
June - 22	53	34.5	27.1	64
July-22	230	33	26	75
August-22	151	32.2	24.8	80
Sep-22	124	33	24.1	75
Oct-22	21	34.2	22.4	56
Nov-22	0	31.7	17.9	49
Dec-22	0	28.6	14.1	50
Total	**579**	**-**	**-**	**-**

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

Category	Population	Production	Productivity
Cattle			
Crossbred	11492	12.74 x 10^3 Ton / yr	8.418 kg milk /day/animal
Indigenous	328571	130.04 x 10^3 Ton /yr	4.131 kg milk /day/animal
Buffalo	334140	212.64 x 10^3 Ton /yr	4.551 kg milk /day/animal
Sheep			
Indigenous	258267	436060 kg /yr	1446 gm wool/sheep/yr
Goats	199173	16.32 x 10^3 Ton /yr	0.487 kg milk /day/animal
Poultry			
Desi layer	16637	10.45 lakh / yr	119 eggs/layer/yr
Improved layer	1042000	1805.78 lakh / yr	295 eggs/layer/yr

(Source: 18th livestock census, Dept. of Animal Husbandry, Gujarat).

2.7. Details of Operational area / Villages

S. No.	Major crops & enterprises in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (Ha/No.) affected by the problem	Names of Cluster Villages	Intervention
1	Cotton	Infestation of Pink Boll Worm	50 per cent	Hadmatiya, Ratanvav, Chamardi, Thasa, Mandavi, Thonda, Ramanka	OFT, FLD, Field day, Trainings, Scientist's visit to farmers field, Group meetings, Distribution of literature, Soil Health card
		Intensive mono cropping	45 per cent		
		Stagnant / decreasing productivity	72 per cent		
		Para wilt	45 per cent		
		Labour scarcity	75 per cent		
		Poor nutrition management Practices	68 per cent		
2	Groundnut	Infestation of whitegrub	38 per cent	Thadach, Devadiya, Thadiya Maliya, Timana, Medha	OFT, FLD, Field day, Training, Field Visits, Telephonic helpline, Distribution of literature, soil Health Card
		Low productivity in summer groundnut due to heat wave	50 per cent		
		Sporadic incidence of wire worm	15 per cent		
		Lack of awareness about INM	65 per cent		

3	Sesame	Lack of awareness regarding nutrition management practices Water scarcity for summer cultivation	65 per cent 80 per cent	Thonda, Mandavi, Ratanvav, Timana	FLD, Field day, Training, Field Visits, Soil Health Card
4	Chickpea	Poor Nutrient Management Practices,	45 per cent	Ratanpar, Monpar, Chamardi	OFT, FLD, Filed day, Training, Field Visits, Telephonic helpline, Distribution of literature, soil Health Card
		Lack of awareness regarding moisture conservation practices	50 per cent		
		Poor Integrated pest management practices	65 per cent		
5	Green gram / Black gram	Poor adoption due to wild animals, fluctuating market prices	75 per cent	Thadiya, Chamardi, Monpar, Virpur, Chok	Training, Field Visits, Telephonic helpline
		Lack of knowledge regarding latest recommended varieties	65 per cent		
6	Wheat	Lack of irrigation management	55 per cent	Maliya, Kumbhan, Shobhavad	OFT on Soil Moisture Indicator for Irrigation Management, FLD, Field day, Training, Field Visits, Soil Health Card, Printed literature
		Poor nutrition management practices	60 per cent		
7	Fodder crops	Cultivation of old variety	65 per cent	Ratanpar, Virpur, Ishora,	Training, FLD on chaff cutter and Variety CoFS – 29, Field visits, Filed Day, Literature distribution, Soil Health Card distribution
		Poor nutrition management	65 per cent		
		No use of chaff cutter for fodder	75 per cent		
		Poor Knowledge of newly recommended variety / fodder crops	70 per cent		
8	Onion	Infestation of thrips	68 per cent	Trapaj, Dakana, Maliya, Medha, Kumbhan, Shevadivadar Chok	Training, Field Visits, Soil Health Card, Printed literature
		Lack of adoption of newly recommended varieties	70 per cent		
		Labour scarcity for transplanting	70 per cent		
		Injudicious use of chemicals	65 per cent		
		Nematode infestation	50 per cent		
9	Brinjal	Poor Nutrition management	60 per cent	Kodiyak, Lakhanka, Khadsaliya, Bhakhal	FLD, Field day, Training, Soil Health card, Visits
		Infestation of fruit and shoot borer	70 per cent		
10	Chilli	Scarcity of healthy seedlings of desirable variety	65 per cent	Avaniya, Morchand, Lakhanka, Koliyak	FLD, Field day, Training, Soil Health card, Visits, Supply of seedlings
		Poor nutrition management	65 per cent		
		Infestation of sucking pest	55 per cent		
11	Kagzilime	Scarcity of reliable planting material	60 per cent	Sanosara, Ambala,	Field visits, literature, Group meetings,

		Poor nutrition management	60 per cent	Surka, Ramdhari	supply of planting material
		Infection of diseases like citrus canker / gummosis	50 per cent		
		Lack of canopy management	70 per cent		
		Lack of Knowledge about "*Bahar"* Treatment.	40 Percent.		
12	Guava	Scarcity of reliable planting material	60 per cent	Aambla, Sanosara, Bajud, Ishwariya	Field visits, Group meetings, Telephonic help line
		Poor Nutrition management	60 per cent		
		Lack of canopy management	70 per cent		
		Nematode infestation.	40 per cent		
		Fruit fly Infestation.	50 Percent		
13	Vegetables	Unavailability of health and pesticide free vegetables for landless labour	75 percent	Avaniya, Morchand, Khadsaliya, Chok	FLD in Kitchen Garden, Field Visit, Training, Telephonic Helpline
14	Dairy farming (Cattle)	Indiscreet breed of cattle Lack of reliable and timely AI facilities Low productivity of milk Poor nutrition and animal health management Lack of maintenance of hygienic condition Poor management of subclinical mastitis in cattle	70 per cent 65 per cent 70 per cent 65 per cent 70 per cent 65 per cent	Ratanvav, Mandavi	Diagnostic visits, FLD on probiotics and bypass fat supplementation, OFTs on management of subclinical mastitis and Prophylactic treatment regime, literature, Training, Field Day

2.8. Priority thrust areas:

Agronomy
To promote improved package of practices
Integrated Nutrient Management
Integrated Pest and Disease Management
Crop diversification and rotation
Soil Health and Fertility Management
Introduction of newly recommended variety
Horticulture
Integrated Pest and Disease Management
Integrated Nutrient Management
Post-Harvest Management of horticultural crops
Nursery Management for fruits and vegetables
To promote protected cultivation
To promote improved cultivation practices in fruits and vegetables
Animal husbandry
To improve milk productivity
To improve feed and fodder management practices
To promote scientific dairy farming and cooperatives
To improve health management practices
To improve breed quality
Ag. Engineering
To increase water use efficiency
To Increase farm mechanization
To promote Soil and Water Conservation Practices
Extending Post Harvest technology of cereals, pluses and horticulture crops
To promote farm innovations
Home Science
Drudgery Reduction of farm women
To develop entrepreneurial skill of farm woman
To promote nutritional security of land less labours
Woman and child care through counseling
Gender mainstreaming through SHGs
Ag. Extn.
Formation and management of FIGs
Entrepreneurship development in Rural Youth
To create awareness for PPVFR
To promote farm innovations
To create awareness for conservation of natural resources and other agriculture related issues

3. TECHNICAL ACHIEVEMENTS

3.1. A. Details of target and achievements of mandatory activities

OFT				FLD			
1				2			
Number of OFTs		Number of farmers		Number of FLDs		Number of farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
4	4	19	19	15	15	415	516

Training				Extension Programmes			
3				4			
Number of Courses		Number of Participants		Number of Programmes		Number of participants	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
85	78	2550	2849	1100	1152	15050	26320

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
25	0	60000	89230

Livestock, poultry strains and fingerlings (No.)		Bio-products (Kg)	
7		8	
Target	Achievement	Target	Achievement
5	0	3000	6500

3.1. B. Operational areas details during the year 2022

S. No.	Major crops & enterprises	Prioritized problems	Extent of area (Ha/No.) affected by the problem	Names of Cluster Villages identified for intervention	Intervention
1	Cotton	Infestation of Pink Boll Worm Intensive mono cropping Stagnant / decreasing productivity Para wilt Labour scarcity Poor nutrition management	60 per cent 40 per cent 70 per cent 50 per cent 70 per cent 70 per cent	Naughanvadar, Babriyat, Sanosara	FLD, Field Day, Trainings, Scientist's visit to farmers field, Group meetings, Distribution of literature, Soil Health card, Lecture Delivered as a resource person
2	Groundnut	Infestation of white grub Low productivity in summer groundnut due to heat wave Sporadic incidence of wire worm Lack of awareness about INM	35 per cent 50 per cent 15 per cent 60 per cent	Lakhavad, Sanosara, Manar, Sosiya, Royal, bhakhal, Moti Jagdhar,	FLD, Field Day, Training, Field Visits, Telephonic helpline, Distribution of literature, soil Health Card, Telephonic Helpline, Lecture Delivered as a resource person, Method Demonstrations, Wheel hoe demonstration, ARYA project
3	Sesame	Crop was damaged due to Heavy rainfall in *Kharif* season Poor nutrition management Water scarcity for summer cultivation	80 per cent 70 per cent 65 per cent	Pipardi,	Training, Field Visits, Printed literature
4	Castor	Cultivation of old variety Poor nutrition management	76 per cent 65 per cent	Timana,	FLD, Field day, Training, Field Visits, Soil Health Card, Printed literature
5	Wheat	Lack of irrigation management Poor nutrition management practices	60 per cent 50 per cent	Gundarna, Sanosara, Manar	FLD on new variety, Field day, Training, Field Visits, Soil Health Card, Printed literature, Lecture Delivered as a resource person
6	Fodder sorghum	Cultivation of old variety Poor nutrition management No use of chaff cutter for fodder	70 per cent 60 per cent 80 per cent	Aambla, Sanosara, Zariya, Vavdi	FLD on chaff cutter, Field visits, Training, Field Visits, Telephonic Helpline, Lecture delivered as a resource person.
7	Chickpea	Poor Yield due to improper fertilizer management Unavailability of newly recommended variety	75 percent 60 percent	Thansa, Pithalpur	FLD, Field day, Training, Field Visits, Soil Health Card, Printed literature
8	Onion	Infestation of thrips Labour scarcity for transplanting Injudicious use of chemicals	70 per cent 70 per cent 60 per cent	Rajapara -	OFT, Training, Field Visits, Telephonic Helpline, SMS Advisory Services, Lecture Delivered as a resource person.
9	Brinjal	Scarcity of healthy seedlings of	70 per cent	Sanosara,	Lecture Delivered,

		desirable variety Infestation of fruit and shoot borer	70 per cent	Zariya, Sarkadiya, Pipardi, Gorkhi	Healthy Seedlings provided to the nearby areas, Telephonic Helpline
10	Okra	Poor fruit harvesting practices Lack of availability of recently developed harvesting tools	85 per cent 95 per cent	Hathab, Khadsaliya	Trainings, Lectures, Visits, Literatures
11	Chilli	Scarcity of healthy seedlings of desirable variety Poor nutrition management Infestation of sucking pest	70 per cent 60 per cent 60 per cent	Kariyani, Sanosara	FLD, Field Day, Training, Scientist visit to farmers fields, Supply of seedlings, FLDs, Seedlings supply, Field day
12	Kagzilime	Scarcity of reliable planting material Poor nutrition management Infection of diseases like citrus canker / gummosis Lack of canopy management	60 per cent 60 per cent 50 per cent 70 per cent	Sanosara, aambla, Karkolia, Mandvi, Mota surka, Sandhida, Zariya	field visits, literature, Group meetings, supply of planting material
13	Guava	Scarcity of reliable planting material Poor Nutrition management Lack of canopy management	60 per cent 60 per cent 70 per cent	Ranghola, Aambla, Sanosara, Krushnapura, Surka, Ishwariya, Shedhavadar	Field visits, Group meetings, Telephonic helpline, Trainings, Lecture delivered, Planting materials suppy
14	Mango	Lack of knowledge regarding organic cultivation	65 per cent	Manar, Sosiya	FLDs under PKVY project, Trainings, Literatures, Booklets,
15	Spice crops (Turmeric, Coriander, Chilli)	Lack of knowledge regarding processing and value addition	75 per cent	Juna Padar, Jesar, Zariya, Moti Jagdhar	Group Formed under ARYA project, Established Spice pulverizing units in the district for Income generation
16	Dairy farming (Cattle)	Indiscreet breed of cattle Lack of reliable and timely AI facilities Low productivity of milk Poor nutrition and animal health management Lack of maintenance of hygienic condition	70 per cent 70 per cent 70 per cent 60 per cent 70 per cent	Zariya, Gadhula, Sanosara, aambla, Naughanvadar, Bhutiya, Bhumbhli	OFT, Diagnostic visits, FLD on probiotics and silage making, OFTs on Prophylactic treatment regime, Mineral mixture, literature, OFT on Azolla
17	Kitchen Garden	Poor Nutrition Management in children Unavailability of chemical free vegetables	65 per cent 90 per cent	Sanosara, Ratanvaav, Manvilas,	FLD, Training, FLD visits, SHG Meeting, Field Day
18	Mushroom Cultivation	Lack of Knowledge regarding Mushroom cultivation Poor knowledge regarding growing practices	95 per cent 85 percent	Bhavnagar,	FLDs, Vocational Trainings, Diagnostic visits, Lectures, Field Day

3.2. Technology Assessment

A1. Abstract on the number of technologies assessed in respect of crops

Thematic areas	Oilseeds	Pulses	Medicinal plants	TOTAL
Varietal Evaluation	-	1	-	1
Value addition	1		1	2
Total	**1**	**1**	**1**	**3**

A2. Abstract on the number of technologies assessed in respect of livestock enterprises

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Nutrition Management	1	-	-	-	-	1
TOTAL	**1**	**-**	**-**	**-**	**-**	**1**

B. Achievements on technologies Assessed

B.1. Technologies Assessed under various Crops

Thematic areas	Crop	Name of the technology assessed	No. of trials	Number of farmers	Area in ha
Varietal Evaluation	Chick pea	Assessment of high yielding variety of Chickpea in rainfed area of Bhavnagar District	5	5	0.5
Value addition	Moringa	Evaluation and standardization of drying process for Moringa oleifera leaves (Drumstick)	1	1	-
Value addition	Ground nut	Development of Peanut paneer from admixture of peanut milk to cow milk	3	3	-
		Total	**9**	**9**	**0.5**

B.2. Technologies assessed under Livestock and other enterprises

Thematic areas	Name of the livestock enterprise	Name of the technology assessed	No. of trials	No. of farmers
Nutrition management	Cattle	Management of Post-Partum Anestrous in dairy cattle	10	10
		Total	10	**10**

C1.Results of Technologies Assessed
Results of On Farm Trial – 1

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Chickpea	Irrigated	Low productivity of crop	Assessment of high yielding variety of Chickpea in rainfed area of Bhavnagar District	5	Farmers Practice (T1) :GJG-3	No. of Pod per Plant	37.4	The result revealed that the Treatment 3 (variety Phule Vikram) give higher yield as compared to other variety GJG-3 and GJG-6.	-	-	-
					Assessed Practice (T2) :GJG-6		55				
					Assessed Practice (T3) : Phule Vikram		60.2				

Technology Assessed	Source of Technology	Production	Please give the unit (kg/ha, t/ha, lit/animal, nuts/palm, nuts/palm/year)	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Farmers Practice (T1) :GJG-3	-	22.25	Q/ha	67323.64	3.05
Assessed Practice (T2) :GJG-6	JAU, Junagadh	29.25	Q/ha	98823.64	4.01
Assessed Practice (T3) : Phule Vikram	MPKV, Rahuri	31.75	Q/ha	110073.64	4.35

Results of On Farm Trial – 2

Crop/ enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement needed	Justification for refinement
1	2	3	4	5	6	7	8	9	10	11	12
Moringa	Irrigated	Poor quality of Moringa leaves powder due to loss of nutrients and colour in traditional sun drying of leaves	Evaluation and standardization of drying process for Moringa oleifera leaves (Drumstick)	1	Drying through Heat Pump dehydrator	Drying time (Hr)	8 hrs	The results shows that Treatment 2 give batter quality then treatment 1	-	-	-
						Temperature ˚C)	50				
						Cost of Drying (Rs.)	350.0				
						Moisture content (%)	5				
						Beta carotene (mg/100 g)	24.56				
						Vitamin C (mg/100 g)	167.50				

Technology Assessed	Source of Technology	Vitamin C (mg/100 g)	Cost of Drying	Net Return (Profit) in Rs. / unit	BC Ratio
13	14	15	16	17	18
Traditional method of drying (open sun drying)	-	96.40	600.0	-	-
Drying through Heat Pump dehydrator	-	167.50	350.0	-	-

Results of On Farm Trial – 3

Enterprise /Crop	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement	Justification
1	2	3	4	5	6	7	8	9	10	11	12
Groundnut	-	Lack of awareness about value added products from peanut and milk. Malnutrition in rural children and farm women.	**Development of Peanut paneer from admixture of peanut milk to cow milk**	3	T2- Peanut milk + Whole cow milk (fat 4.5%) Ratio (50:50)	-	The experiment was failed	-	-	-	The experiment was failed because the results of mentioned treatment was unsatisfactory

Technology Assessed	Source of Technology	Self – life of Turmeric Powder (Days)	Cost of Drying (RS.)	BC Ratio
13	14	15	17	18
Control- Whole cow milk paneer (4.5% fat)	-	-	-	-
T1- Peanut milk + skimmed cow milk (fat% below 1%) ratio (50:50)	-	-	-	-
T2- Peanut milk + Whole cow milk (fat 4.5%) Ratio (50:50)	David, J. (2014). Development of peanut paneer from the admixture of peanut milk and skimmed milk. Res. J. Animal Hus. & Dairy Sci., 5(2) : 113-115.	-	-	-

Results of On Farm Trial - 4

enterprise	Farming situation	Problem definition	Title of OFT	No. of trials	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer	Any refinement	Justification
1	2	3	4	5	6	7	8	9	10	11	12
Cattle	-	Post-Partum anestrous increases inter-calving period and decreases milk production	Management of Post-Partum Anestrous in dairy cattle	10	Treatment 3 – T2 + Phosphorus inj. 15ml I/M for 2 days (61 to 66 days after parturition)	Milk production (l/day/cow)	11.98	Treatment given two months post partum resulted in improved conception rate and minimize inter calving period.	Supplementation of nutrients post calving resulted in early commencement of heat and increased milk production.	-	-
						Commencement of estrous after calving (days)	80 to 90				
						Conception %	75				
						Cost, Rs./cow/60 days	14230.0				
						Gross Income, Rs./cow/60 days	30261.5				
						Net Income, Rs./cow/60 days	16031.5				
						Benefit cost ratio	2.13				

Technology Assessed	Source of Technology	Milk Production (l/day/cow)	Net Income, Rs./cow/60 days	BC Ratio
13	14	15	17	18
Farmer practice (No additional Supplement after two month of calving	-	9.57	9203.07	1.72
Ecbolic and uterine stimulant- 100 ml for 4 days (61 to 64 days after parturition) + Heat inducer and conception promoter 4 capsules for 4 days (65 to 68 days after parturition) + Trace mineral supplement for 20 days (61 to 80 days after parturition)	-	10.23	12277.45	1.91
T2 + Phosphorus inj. 15ml I/M for 2 days (61 to 66 days after parturition)	Post Graduate Institute of Veterinary and Animal Sciences (PGIVAS), Akola, Maharashtra	11.98	16031.5	2.13

C2. Details of each On Farm Trial for assessment

OFT – 1

<table>
<tr><td>Title</td><td>Assessment of high yielding variety of Chickpea in rainfed area of Bhavnagar District</td></tr>
<tr><td>Problem diagnose</td><td>Low productivity of crop</td></tr>
<tr><td>Treatments</td><td></td></tr>
<tr><td>Farmer practice T_1</td><td>Farmers Practice (T1) :GJG-3</td></tr>
<tr><td>Technology to be assessed T_2</td><td>Assessed Practice (T2) :GJG-6</td></tr>
<tr><td>Technology to be assessed T_3</td><td>Assessed Practice (T3) : Phule Vikram</td></tr>
<tr><td>Number of trials</td><td>5</td></tr>
<tr><td>Season</td><td>Rabi</td></tr>
<tr><td>Source of technology</td><td>JAU, Junagadh and MPKV, Rahuri</td></tr>
<tr><td>Thematic area</td><td>Varietal Trial</td></tr>
<tr><td>Performance of the Technology with performance indicators</td><td>
<table>
<tr><th>Parameters</th><th>Farmers Practice (T1) :GJG-3</th><th>Assessed Practice (T2) :GJG-6</th><th>Assessed Practice (T3) : Phule Vikram</th></tr>
<tr><td>No. of Pod par plant</td><td>37.4</td><td>55</td><td>60.2</td></tr>
<tr><td>Yield (Q/ha)</td><td>22.25</td><td>29.25</td><td>31.75</td></tr>
<tr><td>Cost (Rs./ha)</td><td>32801.36</td><td>32801.36</td><td>32801.36</td></tr>
<tr><td>Gross Return (Rs./ha)</td><td>100125</td><td>131625</td><td>142875</td></tr>
<tr><td>Net Return (Rs. /ha)</td><td>67323.64</td><td>98823.64</td><td>110073.64</td></tr>
<tr><td>BC Ratio</td><td>3.05</td><td>4.01</td><td>4.35</td></tr>
</table>
</td></tr>
<tr><td>Feedback/Farmers' perceptions</td><td>The result revealed that the Treatment 3 (variety Phule Vikram) give higher yield as compared to other variety GJG-3 and GJG-6.</td></tr>
<tr><td>Final recommendation for micro level situation</td><td>-</td></tr>
</table>

OFT – 2

<table>
<tr><td>Title</td><td>Evaluation and standardization of drying process for Moringa oleifera leaves (Drumstick)</td></tr>
<tr><td>Problem diagnose</td><td>Poor quality of Moringa leaves powder due to loss of nutrients and colour in traditional sun drying of leaves</td></tr>
<tr><td>Treatments</td><td></td></tr>
<tr><td>Farmer practice T_1</td><td>Traditional method of drying (open sun drying)</td></tr>
<tr><td>Technology to be assessed T_2</td><td>Drying through Heat Pump dehydrator</td></tr>
<tr><td>Number of trials</td><td>1</td></tr>
<tr><td>Season</td><td>Rabi-2022</td></tr>
<tr><td>Source of technology</td><td>-</td></tr>
<tr><td>Thematic area</td><td>Value Addition</td></tr>
<tr><td>Performance of the Technology with performance indicators</td><td>
<table>
<tr><th>Parameters</th><th>Treatment 1</th><th>Treatment 2</th></tr>
<tr><td>Drying time (Hr)</td><td>15 hrs</td><td>8 hrs</td></tr>
<tr><td>Temperature (˚C)</td><td>30 to 40</td><td>50</td></tr>
<tr><td>Cost of Drying (RS.)</td><td>600.0</td><td>350.0</td></tr>
<tr><td>Moisture content (%)</td><td>8</td><td>5</td></tr>
<tr><td>Beta carotene (mg/100 g)</td><td>15.60</td><td>24.56</td></tr>
<tr><td>Vitamin C (mg/100 g)</td><td>96.40</td><td>167.50</td></tr>
</table>
</td></tr>
<tr><td>Feedback/Farmers' perceptions</td><td>-</td></tr>
<tr><td>Final recommendation for micro level situation</td><td>-</td></tr>
</table>

OFT – 3

Title	**Development of Peanut paneer from admixture of peanut milk to cow milk**
Problem diagnose	Lack of awareness about value added products from peanut and milk. Malnutrition in rural children and farm women
Treatments	
Farmer practice T1	Control- Whole cow milk paneer (4.5% fat)
Technology to be assessed T2	T1- Peanut milk + skimmed cow milk (fat% below 1%) ratio (50:50)
Technology to be assessed T3	T2- Peanut milk + Whole cow milk (fat 4.5%) Ratio (50:50)
Number of trials	3
Season	
Source of technology	David, J. (2014). Development of peanut paneer from the admixture of peanut milk and skimmed milk. Res. J. Animal Hus. & Dairy Sci., 5(2) : 113-115.
Thematic area	Value addition
Performance of the Technology with performance indicators	
Feedback/Farmers' perceptions	-
Final recommendation for micro level situation	-
Constraints identified and feedback for research and developmental departments	**The experiment was failed because the results of mentioned treatment were unsatisfactory.**
Constraints identified and feedback for research and developmental departments	-

OFT -4

<table>
<tr><th>Title</th><th>Management of Post-Partum Anestrous in dairy cattle</th></tr>
<tr><td>Problem diagnose</td><td>Post-Partum anestrous increases inter-calving period and decreases milk production</td></tr>
<tr><td>Treatments</td><td></td></tr>
<tr><td>Farmer practice T_1</td><td>Farmer practice (No additional Supplement after two month of calving</td></tr>
<tr><td>Technology to be assessed T_2</td><td>Ecbolic and uterine stimulant- 100 ml for 4 days (61 to 64 days after parturition) + Heat inducer and conception promoter 4 capsules for 4 days (65 to 68 days after parturition) + Trace mineral supplement for 20 days (61 to 80 days after parturition)</td></tr>
<tr><td>Technology to be assessed T_3</td><td>T2 + Phosphorus inj. 15ml I/M for 2 days (61 to 66 days after parturition)</td></tr>
<tr><td>Number of trials</td><td>10</td></tr>
<tr><td>Season</td><td>-</td></tr>
<tr><td>Source of technology</td><td>Post Graduate Institute of Veterinary and Animal Sciences (PGIVAS), Akola, Maharashtra</td></tr>
<tr><td>Thematic area</td><td>Animal Nutrition</td></tr>
<tr><td>Performance of the Technology with performance indicators</td><td>
<table>
<tr><th>Parameter</th><th>T1 (Control)</th><th>T2</th><th>T3</th></tr>
<tr><td>Milk production (l/day/cow)</td><td>9.57</td><td>10.23</td><td>11.98</td></tr>
<tr><td>Commencement of estrous after calving (days)</td><td>120 to 140</td><td>100 to 120</td><td>80 to 90</td></tr>
<tr><td>Conception %</td><td>41.66</td><td>58.33</td><td>75</td></tr>
<tr><td>Cost, Rs./cow/60 days</td><td>12840.0</td><td>13490.0</td><td>14230.0</td></tr>
<tr><td>Gross Income, Rs./cow/60 days</td><td>22043.07</td><td>25767.45</td><td>30261.5</td></tr>
<tr><td>Net Income, Rs./cow/60 days</td><td>9203.07</td><td>12277.45</td><td>16031.5</td></tr>
<tr><td>Benefit cost ratio</td><td>1.72</td><td>1.91</td><td>2.13</td></tr>
</table>
</td></tr>
<tr><td>Feedback/Farmers' perceptions</td><td>Supplementation of nutrients post calving resulted in early commencement of heat and increased milk production.</td></tr>
<tr><td>Final recommendation for micro level situation</td><td>Treatment given two months post partum resulted in improved conception rate and minimize inter calving period.</td></tr>
<tr><td>Constraints identified and feedback for research and developmental departments</td><td>-</td></tr>
<tr><td>Constraints identified and feedback for research and developmental departments</td><td>-</td></tr>
</table>

3.3. FRONTLINE DEMONSTRATION

A. Follow-up for results of FLDs implemented during previous years

List of technologies demonstrated during previous year and popularized during 2022 and recommended for large scale adoption in the district

Sr. No.	Crop/ Enterprise	Thematic Area	Technology demonstrated	Details of popularization methods	Horizontal spread of technology		
					No. of villages	No. of farmers	Area (ha)
1	Wheat	Varietal Evaluation	Salinity tolerant variety KRL-19, New variety GW - 463	Training, feedback and follow up, Distribution of seed	12	245	120
2	Groundnut (*Kharif)*	Integrated Crop Management	Soil application of *Trichoderma* and castor cake, Bio-fertilizers, SNPV, Bio – pesticides	Demonstration, Field Day, Training, feedback and follow up, lecture, visits	40	420	190
3	Groundnut (*Kharif)*	Farm Mechanization	Wheel Hoe	Trainings, Demonstrations, Field Day, Lecture Delivered	10	70	75
4	Sesame *(Summer)*	Integrated Crop Management	Sesame Variety Guj. Til – 3, Bio-fertilizers, Azadirrectin, Soil application of Sulphur 90 %	Demonstration, Field Day, Training, feedback and follow up, lecture, visits	15	235	110
5	Chick pea	Varietal	Variety Guj. Junagadh Chickpea – 5, use of HaNPV for management of *helicoverpa* Bio-fertilizers	Trainings, Demonstration, Field Day, Training, feedback and follow up	55	650	300
6	Onion	Integrated pest management	Bio-fertilizer (NPK consortium), Beauveria, Micro nutrient grade – 4	Demonstration, Field Day, Training, feedback and follow up, distribution	15	120	40
7	Cattles	Nutrition management	Prophylactic Treatment Regime in lactating cattle	Demonstration, Trainings, Meeting, Diagnostic Visits	50	700	-
8			Deworming followed by Mineral mixture supplementation to dairy cattle	Demonstration, Field Day, Training, feedback and follow up, lecture, visits	32	260	-
9		Health Management	0.1 % potassium permanganate solution for post milking teat dipping, Prophylactic treatment regime during post	Demonstration, Field Day, Training, feedback and follow up, lecture, visits	17	250	-

			calving period				
10	Cotton	Integrated Pest Management	Bio-fertilizer (NPK consortium), Beauveria, Micro nutrient grade – 4, Pheromone Traps	Demonstration, Field Day, Training, feedback and follow up	17	325	300
11	Natural farming	INM, IPM	Jivamrit, Ghan Jivamrit,	Training, Meetings, Method Demonstration	10	145	120

B. Details of FLDs implemented during 2022

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstration		
					Proposed	Actual	SC/ST	Others	Total
A	**FLD *Kharif*, 2022**								
1	Groundnut	ICM	INM, IWM, IPM	*Kharif* – 2022	20	20	1	24	25
2	Cotton	ICM	INM, IPM	*Kharif* – 2022	10	10	0	25	25
3	Pearl Millet	Varietal	(GHB 1231) Bio fortified variety	Kharif – 2022	4	4	0	25	25
4	Chilli	ICM	INM, IPM	*Kharif* - 2022	5	5	0	25	25
5	Kitchen Garden	Kitchen Garden	Vegetables seeds and saplings	*Kharif* - 2022	0	0	0	80	80
6	Castor	GCH-9	Varietal	*Kharif* - 2022	5	5	0	11	11
B	**FLD *Rabi*, 2022**								
7	Chickpea	ICM	INM, IPM	Rabi - 2022	20	20	0	50	50
8	Wheat	Varietal	Gujarat Junagadh Wheat – 463	*Rabi* – 2022	10	10	0	25	25
9	Kitchen Garden	Kitchen Garden	Vegetables seeds and saplings	*Rabi* - 2022	0	0	0	80	80
				Total	**74**	**74**	**1**	**345**	**346**

Details of farming situation

Crop	Season	Farming situation (RF/Irrigated)	Soil type	Status of soil			Previous crop	Sowing date	Harvest date	Seasonal rainfall (mm)	No. of rainy days
				N	P	K					
Groundnut	*Kharif* - 2022	*Rainfed*	Medium black soils	Low to Medium	Medium	High	Sorghum	3rd week of June to 1st week of July	2nd week to 3rd week of Oct.	579.0	25
Cotton	*Kharif* – 2022	*Irrigated*	Shallow black soils	Medium to High	Medium to High	High	Cotton	2nd week of June to 1st week of July	2nd week of Dec. to 1st week of Feb.	579.0	25
Pearl millet	*Kharif* – 2022	*Rainfed*	Shallow black soils	Medium to High	Medium to High	High	Cotton	2nd week of June to 1st week of July	1st week to 3rd week of Oct.	579.0	25
Chilli	*Kharif* – 2022	*Irrigated*	Shallow black soils	Low to medium	High	High	Cotton	2nd week of June to 1st week of July	2nd week of Dec. to 1st week of Feb.	579.0	25
Castor	*Kharif* – *2022*	*Irrigated*	Mediam Black Soil	Medium	High	Medium	Cotton	1st week of August to 2nd week of August.	2nd week of Feb. to 3rd week of Feb.	579.0	25
Chickpea	*Rabi* – 2022	*Irrigated*	Medium black soils	Low	Medium	Medium	Groundnut	2nd week of Oct. to 4th week of Oct.	2nd week of Feb. to 1st week of March	0	0
Wheat	*Rabi* – 2022	*Irrigated*	Medium black soils	Medium	High	Medium	Sorghum	2nd week of Oct. to 4th week of Oct.	2nd week of Feb. to 1st week of March	0	0
(Kitchen Garden) Vegetables	*Kharif* – 2022	*Irrigated*	Medium black soils	Medium	Low	Medium to High	Vegetables	2nd week of June to 2nd week of July	1st week of Sept. to 3rd week of Sept.	579.0	25
(Kitchen Garden) Vegetables	*Rabi* – 2022	*Irrigated*	Medium black soils	Low	Medium	High	Vegetables	2nd week of Oct. to 4th week of Oct.	3rd week of Jan. to 2nd week of Feb.	0.0	0

Technical Feedback on the demonstrated technologies

Sl. No.	Crop / Enterprise	Farmers' Feed Back
1	Groundnut (*Kharif*)	Cost of fertilizer application is saved due to soil health card. Application of Micro nutrients helped to overcome *chlorosis* in groundnut. Bio pesticides Beauveria bassiana helped to control the sucking pest in the crop.
2	Cotton	*Beauveria* and Neem Oil proved useful to minimize initial infestation of sucking pest. The infestation of pink boll worms was minimum due to the mass trapping of adults of PBW in Pheromone traps. Immature flower and bud drooping and reddening of leaves was also minimum due to proper nutrient management.
3	Castor	Castor variety GCH- 9 prove effective and gave higher yield as compared to other locally cultivated varieties.
4	Chilli	Various bio inputs found useful for reducing the cost of cultivation, and also useful for effective control of sucking pest
5	Wheat	Gujarat Junagadh Wheat – 463 variety gave higher yield as compared to locally cultivated variety
6	Chickpea	Different Bio Inputs prove effective for the control of Insect and pest attack, and the chickpea variety Gujarat Junagadh Gram – 5 gave higher yield as compared to local variety in irrigated farming condition.
7	Chaff Cutter	The chaff cutter is very useful for cutting green and dry fodder. It reduces the wastage of fodder while animal feeding.
8	Wheel hoe	The wheel hoe is useful for saving time and labour cost.
9	Mineral mixture	Supplementation of minerals results in increased milk production and improved estrous cycle. It resulted in good condition of animals and increased milk fat percent.
10	prophylactic treatment regime	Supplementation of inputs resulted in higher milk production at peak period. Cattle came early in estrous period after calving and conceive within four months of calving.

Farmers' reactions on specific technologies

Sl. No.	Crop / Enterprise	Farmers' Feed Back
1	Groundnut (*Kharif*)	The inputs used as per the suggestions and it helped to reduce pest incidence and weed problem also. Cost of fertilizer application is saved due to soil health card. Application of Micro nutrients helped to overcome *chlorosis* in groundnut. Bio pesticides are cost effective. Adoption of INM helped to increase grain weight**.**
2	Cotton	The inputs helped to increase the productivity of cotton and also helpful to reduce the cost of cultivation. Due to the bio inputs, the infestation of pink boll worms was minimum. Immature flower and bud drooping and reddening of leaves was also minimum due to proper nutrient management.
3	Castor	Castor variety GCH- 9 prove effective and gave higher yield as compared to other locally cultivated varieties.
4	Chilli	Various bio inputs found useful for reducing the cost of cultivation, and also useful for effective control of sucking pest
5	Wheat	Gujarat Junagadh Wheat – 463 variety gave higher yield as compared to locally cultivated variety
6	Chickpea	Different Bio Inputs prove effective for the control of Insect and pest attack, and the chickpea variety Gujarat Junagadh Gram – 5 gave higher yield as compared to local variety in irrigated farming condition.
7	Chaff Cutter	The chaff cutter is very useful for cutting green and dry fodder. It reduces the wastage of fodder while animal feeding.
8	Wheel hoe	The wheel hoe is useful for saving time and labour cost.
9	Mineral mixture supplementation to cow	Supplementation of minerals results in increased milk production and improved estrous cycle. It resulted in good condition of animals and increased milk fat percent.
10	prophylactic treatment regime	Supplementation of inputs resulted in higher milk production at peak period. Cattle came early in estrous period after calving and conceive within four months of calving.

Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	4	Chickpea – 11/03/22 Wheat – 14/03/22 Groundnut – 12/10/22 Bhindi plucker- 10/01/22	33 21 36 33	-
2	Farmers Training	11	05/01/22 04/02/22 11/03/22 05/08/22 23/08/22 06/09/22 21/09/22 12/10/22 12/11/22 12/12/22 30/12/22	25 32 31 35 22 21 47 23 27 24 18	-
3	Training for extension functionaries	3	10/03/22 1506/22 11/7/22 28/11/22	110 40 80 40	-

C. Performance of Frontline demonstrations

Frontline demonstrations on oilseed crops

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut	Integrated Crop Management (ICM)	INM IPM IWM	GJG-22	50	20	25.0	20.0	21.78	18.13	20.13	61159.19	148646.40	87487.21	2.43	64082.34	120454.0	56371.68	1.88

Frontline demonstration on pulse crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Chickpea	ICM	INM, IPM	Guj. Gram - 5	50	20	32.5	25	29.3	22.75	28.79	31681.36	131850	100168.6	4.16	33793.40	102375	68581.6	3.03

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmers	Area (ha)	Yield (q/ha)				% Change in Yield	Other Parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					High	Low	Average												
Cereals																			
Wheat	Varietal	Gujarat Junagadh Wheat – 463	25	10	50.3	47.25	49.8	42.25	17.87	-	-	37453.55	124500	87046.45	3.32	39096.09	105625	66528.91	2.70

Vegetables																		
Chilli	Integrated Crop Management (ICM)	INM IPM	25	5	12.10	7.67	10.29	8.94	15.10	-	-	94672.68	158671.8	63999.12	1.67	97549.8	134100	36550.2	1.37
Commercial Crops																		
Cotton	ICM	INM, IPM	25	10	26.25	21.25	23.90	18.88	26.62	-	-	98566.25	206687.20	108120.95	2.10	95311.67	159536.0	64224.33	1.67
Castor	Varietal	(GHC-11)	10	4	38.50	33.75	35.75	30.50	17.21			101862.93	247568.75	145705.82	2.43	102608.22	202556.25	99948.03	1.97

Frontline Demonstration on Nutri cereals

Crop	Thematic Area	Technology demonstrated	Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/ Poultry/ Birds, etc)	Milk production		% change in major parameter	Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Cattle															
	Animal Nutrition Management	Chelated mineral mixture supplementation	25	25	13.45	11.38	15.39	21360.00	41094.00	19834.00	1.93	19710.00	30415.20	10705.20	1.54
	Animal Nutrition Management	Compound concentrate mixture supplementation to dairy buffaloes	50	50	12.10	9.72	19.67	20880.00	61650.00	40770.00	2.95	22450.00	42192.00	19742.00	1.88
	Animal Nutrition Management	Prophylactic treatment regime during post calving period	40	40	14.94	11.72	21.55	30850.00	54261.00	23411.00	1.76	32100.00	44118.00	12018.00	1.37
	Animal Disease Management	Energy rich supplements for transition period management	25	25	15.10	13.24	12.32	26500.00	61560.00	35060.00	2.32	25800.00	46506.00	20706.00	1.80

FLD on Fisheries

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FLD on Other enterprises

Category	Name of the technology demonstrated	No. of Farmer	No. of units	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.) or Rs./unit				Economics of check (Rs.) or Rs./unit			
				Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FLD on Women Empowerment

Category	Name of technology	No. of demonstrations	Name of observations	Demonstration	Check
-	-	-	-	-	-

FLD on Farm Implements and Machinery

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Major parameters	Fodder waste (kg/animal/day)		% change in major parameter (Waste reduction)	Cost reduction Rs. / animal/day
					Demo	Check		
Chaff cutter (Capacity 1 ton/hr)	Fodder crop (pearl millet, Sorghum)	Chaff cutter	20	Fodder Wastage reduction	0.61	2.67	77.15	15.45

Fodder cost @ Rs. 1000.00/Q

Name of the implement	Crop	Technology demonstrated	No. of Farmer	Area (ha)	Field capacity (ha/day)		% change in major parameter	Cost (Rs./ha)		Cost reduction (Rs./ha)	
					Demo	Check		Demo	Check	Demo	Check
Wheel hoe	Groundnut	Hand tool Wheel hoe (CAET, JAU)	10	10	0.85	0.35	43.82	350 + One-time tool cost	675	325	0
One day= 8 hour, Labour cost @ Rs. 250.00/day/labour for hand weeding, Labour cost @ Rs. 300.00/day/labour for Wheel hoe, Cost of hand tool=Rs. 2600.00											

FLD on Other Enterprise: Kitchen Gardening

Season	Farm Women	Village	total production per day	Family Requirement (g/day)	fulfill of vegetable/family by kitchen garden	% daily requirement of Vegetable fulfill by kitchen garden	% gap between requirement of day and supply of kitchen garden	cost of per day requirement	cost of vegetable supply through kitchen garden	% of daily cost saving
Kharif	**80**	**Nanimal**	0.671	2150	0.671	31	69	80	25	31
Rabi	**80**	**Nanimal**	0.722	2150	0.722	34	66	54	18	34

FLD on Demonstration details on crop hybrids

Crop	technology demonstrated	Hybrid Variety	No. of Farmers	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average						
Pearl Millet	Varietal	(GHB 1231) Bio fortified variety	25	4	31.25	22.5	26.9	24.1	11.6	11351.08	59060.00	47708.92	5.20

3.4. Training Programmes

Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women										
I Crop Production										
Micro Irrigation/irrigation	1	30	13	43	8	0	8	38	13	51
Integrated Crop Management	1	25	0	25	0	0	0	25	0	25
Soil & water conservation	1	30	0	30	7	0	7	37	0	37
Production of organic inputs	2	30	53	83	0	0	0	30	53	83
Total	**5**	**115**	**66**	**181**	**15**	**0**	**15**	**130**	**66**	**196**
III Soil Health and Fertility Management										
Soil fertility management	1	2	27	29	0	0	0	2	27	29
Total	**1**	**2**	**27**	**29**	**0**	**0**	**0**	**2**	**27**	**29**
IV Livestock Production and Management										
Dairy Management	2	15	60	75	2	4	6	17	64	81
Animal Nutrition Management	1	22	8	30	6	4	10	28	12	40
Disease Management	4	53	47	100	7	6	13	60	53	113
Total	**7**	**90**	**115**	**205**	**15**	**14**	**29**	**105**	**129**	**234**
V Home Science/Women empowerment										
Income Generation activities for empowerment of farm women	1	7	25	32	0	0	0	7	25	32
Total	**1**	**7**	**25**	**32**	**0**	**0**	**0**	**7**	**25**	**32**
VI Agril. Engineering										
Post Harvest Technology	1	30	0	30	3	0	3	33	0	33
Total	**1**	**30**	**0**	**30**	**3**	**0**	**3**	**33**	**0**	**33**
IX Production of Inputs at site										
Mushroom Production	1	26	4	30	0	0	0	26	4	30
Total	**1**	**26**	**4**	**30**	**0**	**0**	**0**	**26**	**4**	**30**
X Capacity Building and Group Dynamics										
Leadership development	1	37	0	37	0	0	0	37	0	37
Total	**1**	**37**	**0**	**37**	**0**	**0**	**0**	**37**	**0**	**37**
GRAND TOTAL	**17**	**307**	**237**	**544**	**33**	**14**	**47**	**340**	**251**	**591**

Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women										
I Crop Production										
Cropping Systems	1	21	0	21	0	0	0	21	0	21
Integrated Farming	1	20	0	20	1	0	1	21	0	21
Micro Irrigation/irrigation	1	21	0	21	5	0	5	26	0	26
Integrated Crop Management	3	105	0	105	0	0	0	105	0	105
Integrated nutrient management	1	30	0	30	0	0	0	30	0	30
Total	**7**	**197**	**0**	**197**	**6**	**0**	**6**	**203**	**0**	**203**
II Horticulture										
a) Vegetable Crops										
Production of low value and high volume crops	2	37	0	37	0	0	0	37	0	37

Total (a)	**2**	**37**	**0**	**37**	**0**	**0**	**0**	**37**	**0**	**37**
GT (a-g)	**2**	**37**	**0**	**37**	**0**	**0**	**0**	**37**	**0**	**37**
III Soil Health and Fertility Management										
Soil fertility management	1	55	0	55	2	0	2	57	0	57
Production and use of organic inputs	1	49	0	49	0	0	0	49	0	49
Total	**2**	**104**	**0**	**104**	**2**	**0**	**2**	**106**	**0**	**106**
IV Livestock Production and Management										
Animal Nutrition Management	1	30	0	30	0	0	0	30	0	30
Disease Management	2	9	44	53	3	7	10	12	51	63
Total	**3**	**39**	**44**	**83**	**3**	**7**	**10**	**42**	**51**	**93**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	10	97	107	0	10	10	10	107	117
Location specific drudgery reduction technologies	2	5	60	65	0	0	0	5	60	65
Income Generation activities for empowerment of farm women	1	17	2	19	0	0	0	17	2	19
Total	**5**	**32**	**159**	**191**	**0**	**10**	**10**	**32**	**169**	**201**
VII Plant Protection										
Integrated Pest Management	1	21	0	21	0	0	0	21	0	21
Bio-control of pests and diseases	1	35	0	35	0	0	0	35	0	35
Total	**2**	**56**	**0**	**56**	**0**	**0**	**0**	**56**	**0**	**56**
IX Production of Inputs at site										
Vermi-compost production	1	3	35	38	0	0	0	3	35	38
Organic manures production	1	10	20	30	0	0	0	10	20	30
Natural Farming	1	20	0	20	0	0	0	20	0	20
Total	**3**	**33**	**55**	**88**	**0**	**0**	**0**	**33**	**55**	**88**
X Capacity Building and Group Dynamics										
Formation and Management of SHGs	1	20	0	20	0	0	0	20	0	20
Mobilization of social capital	1	30	0	30	0	0	0	30	0	30
Entrepreneurial development of farmers/youths	1	20	0	20	0	0	0	20	0	20
Total	**3**	**70**	**0**	**70**	**0**	**0**	**0**	**70**	**0**	**70**
GRAND TOTAL	**27**	**568**	**258**	**826**	**11**	**17**	**28**	**579**	**275**	**854**

Farmers' Training including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
(A) Farmers & Farm Women										
I Crop Production										
Cropping Systems	1	21	0	21	0	0	0	21	0	21
Integrated Farming	1	20	0	20	1	0	1	21	0	21
Micro Irrigation/irrigation	2	51	13	64	13	0	13	64	13	77
Integrated Crop Management	4	130	0	130	0	0	0	130	0	130
Soil & water conservation	1	30	0	30	7	0	7	37	0	37
Integrated nutrient management	1	30	0	30	0	0	0	30	0	30
Production of organic inputs	2	30	53	83	0	0	0	30	53	83
Total	**12**	**312**	**66**	**378**	**21**	**0**	**21**	**333**	**66**	**399**
II Horticulture										
a) Vegetable Crops										
Production of low value and high	2	37	0	37	0	0	0	37	0	37

volume crops										
Total (a)	**2**	**37**	**0**	**37**	**0**	**0**	**0**	**37**	**0**	**37**
GT (a-g)	**2**	**37**	**0**	**37**	**0**	**0**	**0**	**37**	**0**	**37**
III Soil Health and Fertility Management										
Soil fertility management	2	57	27	84	2	0	2	59	27	86
Production and use of organic inputs	1	49	0	49	0	0	0	49	0	49
Total	**3**	**106**	**27**	**133**	**2**	**0**	**2**	**108**	**27**	**135**
IV Livestock Production and Management										
Dairy Management	2	15	60	75	2	4	6	17	64	81
Animal Nutrition Management	2	52	8	60	6	4	10	58	12	70
Disease Management	6	62	91	153	10	13	23	72	104	176
Total	**10**	**129**	**159**	**288**	**18**	**21**	**39**	**147**	**180**	**327**
V Home Science/Women empowerment										
Household food security by kitchen gardening and nutrition gardening	2	10	97	107	0	10	10	10	107	117
Location specific drudgery reduction technologies	2	5	60	65	0	0	0	5	60	65
Income Generation activities for empowerment of farm women	2	24	27	51	0	0	0	24	27	51
Total	**6**	**39**	**184**	**223**	**0**	**10**	**10**	**39**	**194**	**233**
VI Agril. Engineering										
Post Harvest Technology	1	30	0	30	3	0	3	33	0	33
Total	**1**	**30**	**0**	**30**	**3**	**0**	**3**	**33**	**0**	**33**
VII Plant Protection										
Integrated Pest Management	1	21	0	21	0	0	0	21	0	21
Bio-control of pests and diseases	1	35	0	35	0	0	0	35	0	35
Total	**2**	**56**	**0**	**56**	**0**	**0**	**0**	**56**	**0**	**56**
IX Production of Inputs at site										
Vermi-compost production	1	3	35	38	0	0	0	3	35	38
Organic manures production	1	10	20	30	0	0	0	10	20	30
Mushroom Production	1	26	4	30	0	0	0	26	4	30
Natural Farming	1	20	0	20	0	0	0	20	0	20
Total	**4**	**59**	**59**	**118**	**0**	**0**	**0**	**59**	**59**	**118**
X Capacity Building and Group Dynamics										
Leadership development	1	37	0	37	0	0	0	37	0	37
Formation and Management of SHGs	1	20	0	20	0	0	0	20	0	20
Mobilization of social capital	1	30	0	30	0	0	0	30	0	30
Entrepreneurial development of farmers/youths	1	20	0	20	0	0	0	20	0	20
Total	**4**	**107**	**0**	**107**	**0**	**0**	**0**	**107**	**0**	**107**
GRAND TOTAL	**44**	**875**	**495**	**1370**	**44**	**31**	**75**	**919**	**526**	**1445**

Training for Rural Youths including sponsored training programmes (On campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
RURAL YOUTH										
Production of organic inputs	1	28	5	33	0	0	0	28	5	33
Bee-keeping	1	38	7	45	5	3	8	43	10	53
Post Harvest Technology	1	10	2	12	0	0	0	10	2	12
TOTAL	**3**	**76**	**14**	**90**	**5**	**3**	**8**	**81**	**17**	**98**

Training for Rural Youths including sponsored training programmes (Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
RURAL YOUTH										
Value addition	2	0	70	70	0	5	5	0	75	75
Post Harvest Technology	1	0	12	12	0	0	0	0	12	12
Income generation activities for empowerment of farm women	2	10	55	65	10	25	35	20	80	100
TOTAL	**5**	**10**	**137**	**147**	**10**	**30**	**40**	**20**	**167**	**187**

Training for Rural Youths including sponsored training programmes – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
RURAL YOUTH										
Production of organic inputs	1	28	5	33	0	0	0	28	5	33
Bee-keeping	1	38	7	45	5	3	8	43	10	53
Value addition	2	0	70	70	0	5	5	0	75	75
Post Harvest Technology	2	10	14	24	0	0	0	10	14	24
Income generation activities for empowerment of farm women	2	10	55	65	10	25	35	20	80	100
TOTAL	**8**	**86**	**151**	**237**	**15**	**33**	**48**	**101**	**184**	**285**

Training programmes for Extension Personnel including sponsored training (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Extension Personnel										
Integrated Pest Management	2	39	0	39	0	0	0	39	0	39
Integrated Nutrient management	2	118	2	120	0	0	0	118	2	120
TOTAL	**4**	**157**	**2**	**159**	**0**	**0**	**0**	**157**	**2**	**159**

Training programmes for Extension Personnel including sponsored training (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Extension Personnel										
Irrigation Water Management	1	104	6	110	0	0	0	104	6	110
TOTAL	**1**	**104**	**6**	**110**	**0**	**0**	**0**	**104**	**6**	**110**

Training programmes for Extension Personnel including sponsored training – CONSOLIDATED (On + Off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Extension Personnel										
Integrated Pest Management	2	39	0	39	0	0	0	39	0	39
Integrated Nutrient management	2	118	2	120	0	0	0	118	2	120
Irrigation Water Management	1	104	6	110	0	0	0	104	6	110
TOTAL	**5**	**261**	**8**	**269**	**0**	**0**	**0**	**261**	**8**	**269**

Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Crop production and management										
Increasing production and productivity of crops	4	173	30	203	0	0	0	173	30	203
Natural Farming	6	166	2	168	0	0	0	166	2	168
Total	**10**	**339**	**32**	**371**	**0**	**0**	**0**	**339**	**32**	**371**
Post harvest technology and value addition										
Processing and value addition	**1**	**7**	**70**	**77**	**0**	**16**	**16**	**7**	**86**	**93**
Total	**1**	**7**	**70**	**77**	**0**	**16**	**16**	**7**	**86**	**93**
Home Science										
Economic empowerment of women	**1**	**2**	**35**	**37**	**0**	**0**	**0**	**2**	**35**	**37**
Value Addition	**1**	**0**	**20**	**20**	**0**	**0**	**0**	**0**	**20**	**20**
Total	**2**	**2**	**55**	**57**	**0**	**0**	**0**	**2**	**55**	**57**
Agricultural Extension										
Capacity Building and Group Dynamics	**2**	**22**	**36**	**58**	**10**	**0**	**10**	**32**	**36**	**68**
Total	**2**	**22**	**36**	**58**	**10**	**0**	**10**	**32**	**36**	**68**
GRAND TOTAL	**15**	**370**	**193**	**563**	**10**	**16**	**26**	**380**	**209**	**589**

Details of vocational training programmes carried out by KVKs for rural youth

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		M	F	T	M	F	T	M	F	T
Crop production and management										
Integrated crop management	**1**	**79**	**1**	**80**	**0**	**0**	**0**	**79**	**1**	**80**
Organic farming	**1**	**5**	**40**	**45**	**0**	**0**	**0**	**5**	**40**	**45**
Total	**2**	**84**	**41**	**125**	**0**	**0**	**0**	**84**	**41**	**125**
Post harvest technology and value addition										
Value addition	**3**	**44**	**38**	**82**	**2**	**0**	**2**	**46**	**38**	**84**
Total	**3**	**44**	**38**	**82**	**2**	**0**	**2**	**46**	**38**	**84**
Income generation activities										
Bee Keeping	**1**	**40**	**12**	**52**	**0**	**0**	**0**	**40**	**12**	**52**
Total	**1**	**40**	**12**	**52**	**0**	**0**	**0**	**40**	**12**	**52**
Grand Total	**6**	**168**	**91**	**259**	**2**	**0**	**2**	**170**	**91**	**261**

3.5. Extension Programmes

Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
Diagnostic visits	74	692	74	766
Field Day	4	484	8	492
Exhibition	3	6494	59	6553
Kisan Mela	1	1286	56	1342
Scientists' visit to farmers field	54	324	100	424
Plant/animal health camps	5	482	15	497
Farmers' seminar/workshop	3	1606	15	1621
Method Demonstrations	25	1529	25	1554
Celebration of important days	11	2409	262	2671
Animal health camps	6	170	3	173
Exposure visits	5	1062	8	1070
Farmers and Dignitaries visit to KVK	13	1245	15	1260
Lecture Delivered as a Resource Person	54	4121	88	4209
Lecture delivered in KVK Trainings	10	752	10	762
Farmers Meetings	20	423	75	498
Telephonic Help Line	862	862	0	862
Awareness Campaign	2	1564	2	1566
TOTAL	**1152**	**25505**	**815**	**26320**

Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature	3
Newspaper coverage	30
Popular articles	1
Radio Talks	2
TV Talks	0
Animal health Camps (Number of animals treated)	6
Social Media (No. of platforms Used)	5
Total	**47**

3.6 Online activities during year 2022

S. No.	Activity Type	Mode of implementation	Title of Program	No. of Programmes	No. of Participants/ Views
A	Farmers training	-	-	-	-
B	Farmers scientist's interaction programme	-	-	-	-
C	Farmers seminars	-	-	-	-
D	Expert lectures	Online	Natural farming	2	323
	Total			**2**	**323**

3.7. PRODUCTION OF SEED/PLANTING MATERIAL AND BIO-PRODUCTS

Production of seeds by the KVKs

Crop	Name of the crop	Name of the variety	Name of the hybrid	Quantity of seed (q)	Value (Rs)	Number of farmers
-	-	-	-	-	-	-

Production of planting materials by the KVK

Crop	Name of the crop	Name of the variety	Name of the hybrid	Number	Value (Rs.)	Number of farmers
Vegetable seedlings	Chilli	Pvt. F1 Hy.	-	50000	75000.0	-
	Tomato	Pvt. F1 Hy.	-	35000	52500.0	-
Fruit Plant	Lime	Kagzi	-	500	10000.0	-
	Guava	Bhavnagar red	-	200	4000.0	-
	Mango	Kesar	-	350	70000.0	-
	Sapota	Kali patti	-	200	40000.0	-
	Coconut	Local	-	50	10000.0	-
	Custard Apple	Balanagari	-	200	5000.0	-
	Pomegranate	Sinduri	-	300	12000.0	-
	Pomegranate	Ganesh	-	230	6900.0	-
Ornamentals	Flowers (Rose, Annuals, Jasood, Perennials)	Different varieties	-	1500	37500.0	-
	Leafy ornamentals	Different varieties	-	200	6000.0	-
	Forest trees	Different varieties	-	500	10000.0	-
Total				**89230**	**338900**	-

Production of Bio-Products

Bio Products	Name of the bio-product	Quantity Kg	Value (Rs.)	No. of Farmers
Bio Fertilizers	Vermi compost	3000	-	5
	Compost from farm waste	3000		5
Azolla	Azolla	500	-	20
	Total	**6500**	**-**	**30**

Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
-	-	-	-	-

4. Literature Developed/Published

A. KVK News Letter
B. Literature developed/published - NIL

C. Details of Electronic Media Produced

S. No.	Type of media (CD / VCD / DVD/ Audio-Cassette)	Title of the programme	Number
-	-	-	-

D. Details of Social Media Platforms Created / Used

S. No.	Type of social media platform	Title of social media	Number of Followers/ Subscribers
1	YouTube Channel	KVK – Bhavnagar	250
2	Facebook page/ Account	KVK – Bhavnagar	4200
3	Mobile Apps	-	-
4	Whats App groups	15	5500
5	Twitter Account	KVK – Bhavnagar	378

D. Success Stories / Case studies, if any

NIL

E. Give details of innovative methodology or innovative technology of Transfer of Technology developed and used during the year

NIL

F. Give details of indigenous technology practiced by the farmers in the KVK operational area which can be considered for technology development (in detail with suitable photographs)

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
1	Cotton, vegetable	Spraying cow urine based formulations	To prevent infestation of pests and diseases
2	Chilli, cotton	Use of fermented flour of pearl millet with buttermilk	To prevent leaf curl in chilli and to prevent sucking pests in cotton
3	Pulses	Mixing ash with grains	To prevent storage pests.

5.1. Indicate the specific training need analysis tools/methodology followed for

NIL

5.2. Indicate the methodology for identifying OFTs/FLDs

For OFT:

i) PRA
ii) Problem identified from Matrix
iii) Field level observations
iv) Farmer group discussions
v) Layout of OFT

For FLD:

i) Baseline Survey and gap analysis
ii) Farmers Group Identification
iii) Identify the New variety/technology
iv) Layout of FLDs
v) Field day

5.3. Field activities

i. Name of villages identified/adopted with block name (from which year): --
ii. No. of farm families selected per village : --
iii. No. of survey/PRA conducted : --
iv. No. of technologies taken to the adopted villages: --
v. Name of the technologies found suitable by the farmers of the adopted villages:--
vi. Impact (production, income, employment, area/technological– horizontal/vertical) --
vii. Constraints if any in the continued application of these improved technologies: --

6. LINKAGES

A. Functional linkage with different organizations

Name of organization	Nature of linkage
Junagadh Agriculture University, Junagadh	Source of information on Agril. Technologies and reporting to DEE office. We also demonstrate the Bio product *(Trhichoderma, Beauveria, Metarizium etc.)* developed by JAU and provided to the farmers. KVK has conducted four Certification courses for Input Dealers of the District on Integrated Pest management.
Department of Agriculture, Govt. of Guj., Bhavnagar	KVK provided training for village level workers i.e. Gram Sevak, prepared contingency plan for district, participated in planning extension activities in district, Resource person for the programmes related to farmers and farm women. KVK has also jointly organized farmers fair and Exhibition at KVK Premises.
Department of Horticulture, Govt. of Guj., Bhavnagar	Conducted a vocational training on value addition, participated in planning extension activities in district, Resource person for the programmes related to farmers and farm women
Department of Ani. Hus.. Govt. of Guj., Bhavnagar	Subject Matter specialist of KVK participates in the animal treatment camps organized by department
ATMA, Govt. of Guj., Bhavnagar	Jointly conducted field visits, planned activities of ATMA and KVK as well as KVK conducted training programmes for extension workers of ATMA. KVK has also jointly organized farmers fair and Exhibition at KVK Premises.
National Horticulture Mission	PC, KVK acted as a member in the evaluation committee of NHM for approval of nurseries, Also Organized a farmers' seminar on Horticultural Crops.
Farmers' Training Centre, Bhavnagar	Knowledge sharing in FFS and other programmes
Gujarat State Seed Corporation	Source of seed related information for farmers
Lokseva Mahavidyalaya, Lokbharti	Jointly organized training programme for farmers as well as scientists of KVK delivered lectures for the students of different agricultural subjects
Lokbharti University for Rural Innovation.	KVK has provided a technical support for formatting the syllabus of various courses offered by the university. KVK also arranged the lectures on various topics of agriculture and food processing for the students of the university.
CSPC, Talaja	Training of Extension Personal of Field workers has been organized collaboration with the agency
Vivekanand Research and Training Institute, Bhavnagar	Training of farmers and Extension officers has been organized collaboration with the agency
Parishram Foundation, Dhasa	Training of farmers and Extension officers has been organized collaboration with the agency

B. List special programmes undertaken by the KVK and operational now, which have been financed by State Govt./Other Agencies

Name of the scheme	Date/ Month of initiation	Funding agency	Amount (Rs.)
-	-	-	-

C. Details of linkage with ATMA

a) Is ATMA implemented in your district Yes

Coordination activities between KVK and ATMA

S. No.	Programme	Particulars	No. of programmes attended by KVK staff	No. of programmes Organized by KVK	Other remarks (if any)
01	**Meetings**	05	05	-	-
02	**Research projects**	-	-	-	-
03	**Training programmes**	03	03	03	-
04	**Method Demonstrations**	12	12	12	-
05	**Extension Programmes**				
06	**Exposure visit**	03	01	01	-
07	**Lecture delivered**	15	15	15	-

D. Give details of programmes implemented under National Horticultural Mission

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Constraints if any
-	-	-	-	-	-

E. Nature of linkage with National Fisheries Development Board

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
-	-	-	-	-	-

F. Details of linkage with RKVY

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	Skill India	Conducted the Trainings on Skill Development	-	-	-

G. Details of linkage with PKVY (Paramparagat Krishi VikasYojana)

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
-	-	-	-	-	-

H. Details of linkage with NFSM

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	CFLD in Oilseeds	Trainings, Inputs demonstrations, Soil testing, etc.	1,80,000.0	1,32,000.0	-
2	CFLD in Pulses		2,55,000.0	1,95,000.0	-

I. Details of linkage with SMAF (Sub-mission on Agro forestry)

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
-	-	-	-	-	-

7. Convergence with other agencies and departments:

S. No.	Programme	Nature of linkage	Funds received if any Rs.	Expenditure during the reporting period in Rs.	Remarks
1	SAP (Swachhata Action Plan)	Inputs Demonstrations, Awareness Campaigning, etc.	22,000.0	21,000.0	-
2	Sponsored Training Programme for Extension Functionaries	Training to the Extension workers of Shreeji Education Seva Trust, Dhasa (NGO)	23000.0	23000.0	-

8. Innovator Farmer's Meet

Sl.No.	Particulars	Details
1	Have you conducted Farm Innovators meet in your district?	No

9. Farmers Field School (FFS)

S. No	Thematic area	Title of the FFS	Budget proposed in Rs.	Brief report
-	-	-	-	-

10.1. Technical Feedback of the farmers about the technologies demonstrated and assessed:

Sl. No.	Crop / Enterprise	Farmers' Feed Back
1	Groundnut (*Kharif*)	The inputs used as per the suggestions and it helped to reduce pest incidence and weed problem also. Cost of fertilizer application is saved due to soil health card. Application of Micro nutrients helped to overcome *chlorosis* in groundnut. Bio pesticides are cost effective. Adoption of INM helped to increase grain weight**.**
2	Sesame (*Kharif*)	A uniform growth of crop was observed. However, the crop is vitiated due to heavy and continuous rainfall during the pod development stage and at the time of harvesting and threshing.
3	Cotton	The inputs helped to increase the productivity of cotton and also helpful to reduce the cost of cultivation. Due to the bio inputs, the infestation of pink boll worms was minimum. Immature flower and bud drooping and reddening of leaves was also minimum due to proper nutrient management.
4	Castor	Castor variety GCH- 9 prove effective and gave higher yield as compared to other locally cultivated varieties.
5	Chilli	Various bio inputs found useful for reducing the cost of cultivation, and also useful for effective control of sucking pest
6	Wheat	GW – 451 variety gave higher yield as compared to locally cultivated variety
7	Chickpea	Different Bio Inputs prove effective for the control of Insect and pest attack, and the chickpea variety Gujarat Junagadh Gram – 5 gave higher yield as compared to local variety in irrigated farming condition.
8	Chaff Cutter	The chaff cutter is very useful for cutting green and dry fodder. It reduces the wastage of fodder while animal feeding.
9	Wheel hoe	The wheel hoe is useful for saving time and labour cost.
10	Bhindi Plucker	Use of Bhindi plucker helps to avoid irritation and injury in finger hence work efficiency could be maintain for continuous 3 to 4 day harvesting
11	Bypass fat supplementation	It resulted in increased milk production as well as fat percent.
12	Mineral mixture supplementation to cow	Supplementation of minerals results in increased milk production and improved estrous cycle. It resulted in good condition of animals and increased milk fat percent.
13	Probiotics supplementation	It improved feed intake and resulted in better digestion of feeds and increased milk production.
14	Application of 0.1% Potassium permanganate as post milking teat dipping	Application of Potassium permanganate (@ 0.1 %) post milking teat dipping solution resulted in reduction of number of subclinical mastitis cases and it helped in gaining previous milk production in cattle suffering from subclinical mastitis.
15	prophylactic treatment regime	Supplementation of inputs resulted in higher milk production at peak period. Cattle came early in estrous period after calving and conceive within four months of calving.

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

Sl. No.	Crop / Enterprise	Farmers' Feed Back
1	Groundnut (*Kharif*)	Cost of fertilizer application is saved due to soil health card. Application of Micro nutrients helped to overcome *chlorosis* in groundnut. Bio pesticides Beauveria bassiana helped to control the sucking pest in the crop.
2	Sesame (*Kharif*)	A uniform growth of crop was observed. However, the crop is vitiated due to heavy and continuous rainfall during the pod development stage and at the time of harvesting and threshing.
3	Cotton	*Beauveria* and Neem Oil proved useful to minimize initial infestation of sucking pest. The infestation of pink boll worms was minimum due to the mass trapping of adults of PBW in Pheromone traps. Immature flower and bud drooping and reddening of leaves was also minimum due to proper nutrient management.
4	Castor	Castor variety GCH- 9 prove effective and gave higher yield as compared to other locally cultivated varieties.
5	Chilli	Various bio inputs found useful for reducing the cost of cultivation, and also useful for effective control of sucking pest
6	Wheat	GW – 451 variety gave higher yield as compared to locally cultivated variety
7	Chickpea	Different Bio Inputs prove effective for the control of Insect and pest attack, and the chickpea variety Gujarat Junagadh Gram – 5 gave higher yield as compared to local variety in irrigated farming condition.
8	Chaff Cutter	The chaff cutter is very useful for cutting green and dry fodder. It reduces the wastage of fodder while animal feeding.
9	Wheel hoe	The wheel hoe is useful for saving time and labour cost.
10	Bhindi Plucker	Use of Bhindi plucker helps to avoid irritation and injury in finger hence work efficiency could be maintain for continuous 3 to 4 day harvesting
11	Bypass fat supplementation	It resulted in increased milk production as well as fat percent.
12	Mineral mixture supplementation to cow	Supplementation of minerals results in increased milk production and improved estrous cycle. It resulted in good condition of animals and increased milk fat percent.
13	Probiotics supplementation	It improved feed intake and resulted in better digestion of feeds and increased milk production.
14	Application of 0.1% Potassium permanganate as post milking teat dipping	Application of Potassium permanganate (@ 0.1 %) post milking teat dipping solution resulted in reduction of number of subclinical mastitis cases and it helped in gaining previous milk production in cattle suffering from subclinical mastitis.
15	prophylactic treatment regime	Supplementation of inputs resulted in higher milk production at peak period. Cattle came early in estrous period after calving and conceive within four months of calving.

11. Technology Week celebration during 2022: YES

Period of observing Technology Week:	22nd February to 28th February 2022
Total number of farmers visited:	700/day
Total number of agencies involved	3 Agencies (KVK - Bhavnagar, ATMA – Bhavnagar, Dept. of Agriculture, Bhavnagar
Number of demonstrations visited by the farmers within KVK campus	10 Demonstration Units Visited (Roop top rain water harvesting unit, Drip Irrigation system unit, Farm Mechanization unit, Vermi Composting unit, NADEP Composting unit, Azolla Unit, Dairy unit, Plug Nursery unit, Renewable Energy Park)
Extension Activities conducted	Farmers Trainings, Meetings, Exposure Visits, Method Demonstrations, Exhibitions

12. IMPACT

A. Impact of KVK activities

NIL

B. Cases of large scale adoption

NIL

C. Details of impact analysis of KVK activities carried out during the reporting period

13. Kisan Mobile Advisory Services

Name of KVK	Message Type	Type of Messages					
		Crop	Weather	Marketing	Awareness	Other enterprise	Total
Bhavnagar	Text only	-	-	-	-	2	2
	Total Messages	**-**	**-**	**-**	**-**	**2**	**2**
	Total farmers Benefitted	**-**	**-**	**-**	**-**		

14. PERFORMANCE OF INFRASTRUCTURE IN KVK

A. Performance of demonstration units (other than instructional farm)

Sl. No.	Demo Unit	Year of establishment	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Vermi Compost Unit	2016	-	-	Vermi Compost	2 tons	-	20000	Sold to other department of Host Organization
2	NADEP Compost Unit	2017	-	-	Compost	1 tons	-	-	Used in the KVK Demonstration farm
3	Mushroom Unit	2019	-	Oyster Mushroom	Mushroom	25 kg	-	-	Used for the vocational trainings of Value addition

B. Performance of instructional farm (Crops) including seed production

Name of the crop	Date of sowing	Date of harvest	Area (ha)	Details of production			Amount (Rs.)		Remarks
				Variety	Type of Produce	Qty. (kg)	Cost of inputs	Gross income	
Cotton	7/7/2022	16/01/2023	4	Pvt.	Seed cotton	7540	-	612306	-
Groundnut	10/7/2022	5/12/2022	3.5	GJG – 32	Pod	180	-	12400	-
Chickpea	7/12/2022	28/03/2023	1	GJG-5	Seed	2300	-	115000	-

C. Performance of production Units (bio-agents / bio pesticides/ bio fertilizers etc.)

Sl. No.	Bio Products	Name of the Product	Qty (kg)	Amount (Rs.)		Remarks
				Cost of inputs	Gross income	
1	Bio Fertilizers	Vermi compost	5000	-	-	-
		Compost from farm waste	4000	-	-	-
2	Azolla	Azolla	500	-	-	-
		Total	**9500**	-	-	-

D. Performance of instructional farm (livestock)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty. (Lit)	Cost of inputs	Gross income	
1	Cattle (Cow)	Gir	Milk	2000	85000.0	68000.0	-
			Ghee	15 kg	24500.0	18500.0	

E. Utilization of hostel facilities

Accommodation available (No. of beds): 30

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
Jan 2022	-	-	-
Feb 2022	-	-	-
March 2022	-	-	-
April 2022	15	30 (2days)	-
May 2022	28	420 (15 days)	-
Jun 2022	-	-	-
Jul 2022	15	225 (15 days)	-
Aug 2022	-	-	-
Sept 2022	-	-	-
Oct 2022	-	-	-
Nov. 2022	28	210 (18days)	-
Dec. 2022	18	324 (18days)	-

F. Database management

S. No	Database target	Database created
-	-	-

G. Details on Rain Water Harvesting Structure and micro-irrigation system

Amount sanction (Rs.)	Expenditure (Rs.)	Details of infrastructure created / micro irrigation system etc.	Activities conducted					Quantity of water harvested in '000 litres	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	No. of plant materials produced	Visit by farmers (No.)	Visit by officials (No.)		
-	-	-	-	-	-	-	-	-	-

H. Performance of Nutritional Garden at KVK farm

Nutritional Garden developed at KVK farm

Area under nutritional garden (ha)	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers visited
	Vegetable crops	08	450
63.58 Square Metter	Fruit crops	-	

Nutritional Garden developed at Village Level

No. of Villages covered	Component of Nutritional Garden	No. of species / plants in nutritional garden	No. of farmers covered
02	Vegetable crops	Kharif – 08 Rabi - 08	50 50
01	Vegetable crops	Mushroom	10

H. Details of Skill Development Trainings organized

S.No.	Name of KVKs/SAUs/ICAR Institutes	Name of QP/Job role	Duration (hrs)	No. of participants					
				SCs/STs		Others		Total	
				Male	Female	Male	Female	Male	Female
-	-	-	-	-	-	-	-	-	-

15. FINANCIAL PERFORMANCE

A. Details of KVK Bank accounts

Bank account	Name of the bank	Location	Branch code	Account Name	Account Number	MICR Number	IFSC Number
With Host Institute	State Bank of India	SANOSARA	SBIN0060025	KRISHI VIGYAN KENDRA LOKBHARTI GRAMVIDYAPITH	30844106935	362002634	SBIN0060025

B. Utilization of KVK funds during the year 2022-23 (Rs. in lakh)

S. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	**Pay & Allowances**	172.90	172.90	172.90
2	**Traveling allowances**	0.52	0.52	0.52
3	**Contingencies**			
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	1.30	1.30	1.30
B	POL, repair of vehicles, tractor and Equipments	1.17	1.17	1.17
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)	1.02	1.02	1.02
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	0.11	0.11	0.11
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)	2.13	2.13	2.13
F	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)	0.09	0.09	0.09
G	Training of extension functionaries	0	0	0
H	Maintenance of buildings	0.02	0.02	0.02
I	Establishment of Soil, Plant & Water Testing Laboratory	0	0	0
J	Library	0	0	0
TOTAL (A)		**179.26**	**179.26**	**179.26**
B. Non-Recurring Contingencies				
1	**Works**	0	0	0
2	**Equipments including SWTL & Furniture**	0	0	0
3	**Vehicle** (Four wheeler/Two wheeler, please specify)	0	0	0
4	**Library** (Purchase of assets like books & journals)	0	0	0
TOTAL (B)		0	0	0
C. REVOLVING FUND		0	0	0
GRAND TOTAL (A+B+C)		**179.26**	**179.26**	**179.26**

C. Status of revolving fund (Rs. in lakh) for the Four years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2018 to March 2019	5.53	6.58	7.46	4.65
April 2019 to March 2020	4.65	6.97	6.49	5.13
April 2020 to March 2021	5.13	8.94	5.24	8.83
April 2021 to March 2022	8.83	34.22	16.24	26.81
April 2022 to March 2023	26.81	42.53	22.64	46.70

16. Details of HRD activities attended by KVK staff during year

Name of the staff	Designation	Title of the training programme	Institute where attended	Mode (Online/Offline)	Dates
Mr. P. M. Kyada	Subject Matter Specialist	Zonal Review Workshop of ARYA	ZPD	Online	15/02/22
Dr. S. Chaudhary	Subject Matter Specialist	Advance production technologies of underutilized vegetable crops under arid and semi arid conditions	SKNAU, Jobner	Jaipur	21/02/22
Mrs. S. N. Boricha	Subject Matter Specialist	Environment leadership and life skills for women scientists and technologies	DoScience and technology, GoI	Online	07/03/22
Mrs. S. N. Boricha	Subject Matter Specialist	Gender and Nutririon survey	ATARI, Jabalpur	Online	20/04/22
Dr. N. P. Shukla	Sr. Sci & Head	Development of a food practice compedium on millet		Online	16/09/22
Dr. N. P. Shukla	Sr. Sci & Head	Special capaign 2.0 for disposal of pending matters	ICAR, New Delhi	Online	26/09/22
Mrs. S. N. Boricha	Subject Matter Specialist	Online review meeting on second phase data collection of NSV	ATARI, Jabalpur	Online	13/12/22

17. Details of progress in Doubling Farmers Income (DFI) villages adopted by KVKs

Name of the village	Total No. of families surveyed	Key interventions implemented	No. of farmers covered in each intervention	Change in income (Rs/unit)	
				Before	After
Gundrana	300	Integrated crop management through introduction of new variety, INM, IPM and crop rotation	150	25000	35000
		Introduction of high yielding variety in wheat crop	130	18000	27000
		Livestock production management through nutritional supplementation and animal health management	50	14000	24000
		Groundnut Processing	2	40000	67000
		Introduction of Organic farming through awareness camps	15	14000	19500

Medha	300	Integrated crop management through introduction of new variety, INM, IPM and crop rotation	100	20500	31500
		Livestock production management through nutritional supplementation and animal health management	50	19000	34000
		Introduction of Organic farming through awareness camps	20	10000	23000

18. Details of activities planned under NARI /PKVY / TSP / KKA

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered
1	PKVY	2	Farmers Trainings, Inputs Demonstrations, Field Visits	12	20
2	NARI	1	Trainings of Farm women, Field Visits, Demonstration of Drudgery reduction tools	4	35

19. Details of Progress of ARYA Project 2022

Name of Enterprise	No of Training Conducted	No of Beneficiaries	No of Extension Activities	No of Beneficiaries	No of Unit established	Change in income		No. Of Groups Formed
						Before	After	
Spice Pulverizing Unit (Chilli, Turmeric and Coriander)	7	236	5	45	2	-	-	2

20. Details of SAP

S. No.	Types of major Activity conducted- Swachhta Pakhwada, Cleaning, Awareness Workshop, Microbial based Agricultural Waste Management by Vermicomposting etc.	No. of Programmes conducted	No. of Participants
1	Awareness Workshop	5	225
2	*Swachhta Pakhwada* celebration	15	536
3	Cleaning of KVK office premises and surrounding campus area	4	72

21. Please include any other important and relevant information which has not been reflected above

NIL

APR SUMMARY

1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	44	919	526	1445
Rural youths	8	101	184	285
Extension functionaries	5	261	8	269
Sponsored Training	15	380	209	589
Vocational Training	6	170	91	261
Total	**78**	**1831**	**1018**	**2849**

2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	25	20	-
Pulses	50	20	-
Cereals	50	14	-
Vegetables	25	5	-
Commercial	36	14	-
Hybrid crops	-	-	-
Total	**186**	**73**	-
Livestock & Fisheries	140	-	140
Other enterprises	190	10	-
Total	**330**	**10**	**140**
Grand Total	**516**	**83**	**140**

3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	3	9	9
Livestock	1	10	10
Various enterprises	0	0	0
Total	**4**	**19**	**19**
Technology Refined			
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
Total	-	-	-
Grand Total	**4**	**19**	**19**

4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	1152	26320
Other extension activities	0	0
Total	**1152**	**26320**

5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages					
		Crop	Weather	Marketing	Awareness	Other enterprise	Total

Bhavnagar	Text only	0				2	**2**
	Total Messages	0				**2**	**2**
	Total farmers Benefitted	**0**	**0**	**0**	**0**	**39097**	**39097**

6. Seed & Planting Material Production

	Quintal/Number	**Value Rs.**
Seed (q)	0	-
Planting material (No.)	89230	338900.0
Bio-Products (kg)	6500	-
Livestock Production (No.)	0	-
Fishery production (No.)	0	-

7. Soil, water & plant Analysis

Samples	**No. of Beneficiaries**	**Value Rs.**
Soil	-	-
Water	-	-
Plant	-	-
Total	**-**	**-**

8. HRD and Publications

Sr. No.	**Category**	**Number**
1	Workshops/Webinar	8
2	Conferences	2
3	Meetings	12
4	Trainings for KVK officials	5
5	Visits of KVK officials	0
6	Book published	1
7	Training Manual	1
8	Book chapters	0
9	Research papers	0
10	Lead papers	0
11	Seminar papers	0
12	Extension folder	6
13	Proceedings	6
14	Award & recognition	0
15	Ongoing research projects	6

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