

# ICAR-ATARI, Pune

## DETAILS OF ANNUAL PROGRESS REPORT OF KVKs DURING 2021 (January 2021 to December 2021)

### 1. GENERAL INFORMATION ABOUT THE KVK

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

Address with PIN code	Telephone		E mail	Website address & No. of visitors (hits)
Krishi Vigyan Kendra, Navsari Agricultural University Dediapada-393040, Dist: Narmada, Gujarat	Office	FAX	kvkdediapada@nau.in kvknarmada@nau.in	http://narmada.kvk6.in/ Visitors - 1918709
	02649 234501	-		

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

Address	Telephone		E mail	Website address
	Office	FAX		
Navsari Agricultural University, Eru Char Rasta, Dandi Road, Navsari – 396 450, Gujarat, INDIA.	(02637) 282771-75, 282823	(02637) 283794	<u>registrar@nau.in</u> vc@nau.in dee@nau.in	www.nau.in

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

Name	Telephone / Contact		
	Office	Mobile	Email
Dr. Pramod kumar Verma	02649-234501	7575011107	drverma@nau.in

#### 1.4. Year of sanction: 2006

### 1.5. Staff Position (as on December, 2021)

Sl. No.	Sanctioned post	Name of the incumbent	Discipline	If Permanent, please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs. /month)
				Current Pay Band	Current Grade Pay		
1.	Senior Scientist and Head	Dr. Pramod kumar Verma	Ext. Edu.	131400-217100	-	15-08-19	178732/-
2.	Scientist	Vacant	Ext. Edu.	57700-182400	-	-	-
3.	Scientist	Vacant	Agronomy	57700-182400	-	-	-
4.	Scientist	Dr. H. R. Jadav	Entomology	68900-205500	-	30-01-12	96674/-
5.	Scientist	Dr. D. B. Bhinsara	Animal Science	57700-182400	-	20-09-19	88835/-
6.	Scientist	Dr. M. V. Tiwari	Home Science	57700-182400	-	21-08-15	88364/-
7.	Scientist	Dr. J. H. Gohil	Horticulture	57700-182400	-	01/12/2020	90945/-
8.	Programme Assistant	Mr. V. R. Jinjala	Agronomy	39900-126600	-	13-08-15	52908/-
9.	Computer Programmer	Mr. M. H. Bhatt	Computer Programmer	39900-126600	-	17-08-15	54475/-
10.	Farm Manager	Mr. M. L. Visat	Plant Breeding	38,090 Fix	-	11-03-19	38090/-
11.	Accountant/Superintendent	Mr. R. K. Tadavi	Head Clark	35400 -112400	-	01-07-17	70951/-
12.	Stenographer	Vacant	-	-	-	-	-
13.	Driver 1	Mr. S. M. Saiyed	Driver cum Mechanic	19900 -63200	-	23-08-12	34664/-
14.	Driver 2	Vacant	-	-	-	-	-
15.	Supporting staff 1	Vacant	-	-	-	-	-
16.	Supporting staff 2	Vacant	-	-	-	-	-

**1.6. Total land with KVK (in ha):**

S. No.	Item	Area (ha)
1	Under Buildings	05.24
2.	Under Demonstration Units	01.00
3.	Under Crops	10.46
4.	Horticulture	01.60
5.	Pond	00.60
6.	Others if any	02.00
<b>Total</b>		<b>21.60</b>

**1.7. Infrastructural Development:**

**A) Buildings**

S. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq. m)	Expenditure (Rs.)	Starting year	Plinth area (Sq. m)	Status of construction
1	Administrative Building	ICAR	2010	1200	90.00	July-2010	1200	Completed
2	Farmers Hostel	ICAR	2010	1500	30.43	April-2012	1500	Completed
3	Staff Quarters (6)	ICAR	2010	370	39.69	Jan-2010	370	Completed
4	Demonstration Units (6)	ICAR	2017	260	3.86	April-2018	260	Completed
5	Fencing	State	2007	1100	26.00	April-2008	1100	Completed
6	Rain Water harvesting system	ICAR	2012	10	1.00	April-2013	10	Completed
7	Threshing floor	State	2014	200	2.00	April-2014	200	Completed
8	Farm godown	ICAR	2010	110	20.00	April-2011	110	Completed
9	ICT lab	-	-	-	-	-	-	-
10	STL (Soil testing Laboratory)	ICAR	2017	110	16.50	April-2018	110	Completed
11	Implement shed	State	2018	100	4.50	April-2018	100	Completed

**B) Vehicles**

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Bike	2012	49,000/-	33,941	Good
Bolero	2019	8,00,00/-	15962	Good

**C) Equipments & AV aids**

Name of the equipment / Implements	Year of purchase	Cost (Rs.)	Present status
Trailer	26.03.2007	80,000/-	Working
Cultivator	26.03.2007	15,000/-	Working
Plough	22.10.2008	4,300/-	Working
Electronic balance	20.08.2009	8,000/-	Working
Scale balance	09.03.2009	6,000/-	Working
Rotavator	02.03.2009	63,000/-	Working
Disc harrow	09.03.2009	57,120/-	Working
Submersible pump	13.03.2009	41,105/-	Working
Plough	18.03.2009	19,000/-	Working
Leveler	18.03.2009	13,500/-	Working
Pump sprayer	21.03.2009	20,700/-	Working
Thresher	21.03.2009	1,05,000/-	Working
Bund former	26.03.2009	12,348/-	Working
Seed drill	26.03.2009	11,500/-	Working
V ditcher	28.03.2009	20,400/-	Working
Ridge	28.03.2009	15,000/-	Working
Computer with accessories	28.03.2009	36,735/-	Working
Submersible pump	30.03.2009	41,075/-	Working
Honda Portable generator	31.03.2009	38,000/-	Working
Digital camera	06.03.2010	25,000/-	Working
Fax machine	20.03.2010	14,900/-	Working
Digital Copier	29.03.2010	66,600/-	Working
Multi crop thresher	26.03.2010	1,45,000/-	Working
Castor Thresher	26.03.2010	15,500/-	Working

Bag sewing machine	27.03.2010	5,040/-	Working
A&V sound system	10-12-2010	42,898/-	Working
Portable Sound system	10-12-2010	22,784/-	Working
Multimedia projector with trolley & screen	10-12-2010	64,997/-	Working
Seed cum fertilizers drill	16-03-2011	36,100/-	Working
Winnower	16-03-2011	26,500/-	Working
LCD TV	21-03-2011	54,890/-	Working
Lap top	24-03-2011	37,850/-	Working
Computer with accessories	17-03-2011	73,690/-	Working
Water cooler with RO system	19-03-2011	43,900/-	Working
Motor Cycle	22-03-2010	49,650/-	Working
Solar Water Heater	22-03-2012	75,025/-	Working
LCD TV	22-03-2012	40,860/-	Working
Refrigerator	22-03-2012	20,100/-	Working
Water Cooler with RO System	22-03-2012	42,000/-	Working
Magazine Stand Model T-9309	12-03-2014	4,465/-	Working
Acrylic Specimen Box	12-03-2014	840/-	Working
Acrylic Table Top/Desk ped	12-03-2014	4,952/-	Working
Acrylic Door Name Plate	12-03-2014	656/-	Working
Electric Motor 5 H. P	23-08-2014	22,500/-	Working
Electric Motor 0.5 H. P	03-12-2014	2,800/-	Working
Loan Mover	23-12-2014	26,200/-	Working
Sewing Machine with Gear (No. 16)	23-12-2014	91,200/-	Working
Sewing Machine without Gear	23-12-2014	8,000/-	Working
Sewing Machine	23-12-2014	8,000/-	Working
Trolley (2 Wheel)	24-02-2015	85,000/-	Working
Case Wheel	24-02-2015	15,000/-	Working
Samar	24-02-2015	28,000/-	Working
Peddler	24-02-2015	20,000/-	Working
Notice board	03-03-2015	5,980/-	Working
Magazine Stand	03-03-2015	6,240/-	Working

Honda Generator	23-03-2015	96,500/-	Working
Soil testing mini lab.	27/11/2015	75,000/-	Working
Digital electronic weight machine	04/02/2016	29,900/-	Working
Digital electronic weight machine	04/02/2016	6,900/-	Working
Paddy Thresher Fan with motor	04/02/2016	42,000/-	Working
Spray pump with betray	04/03/2016	8,000/-	Working
Paddy Thresher	21/03/2016	1,67,000/-	Working
Lesser band leveler	21/03/2016	2,95,000/-	Working
Rico digital photo copier	17/03/2017	1,50,000/-	Working
Rotary Secker	18/03/2017	99,000/-	Working
Automatic nitrogen distillation operator	16/03/2017	3,08,800/-	Working
Digital Spectro photo meter	16/03/2017	75,000/-	Working
Hot plate	16/03/2017	41,300/-	Working
Oat at oven	18/03/2017	41,800/-	Working
E.C. meter	18/03/2017	34,760/-	Working
Electric top pan	18/03/2017	72,200/-	Working
Flam photo meter	18/03/2017	72,000/-	Working
P.H. Meter	16/03/2017	56,400/-	Working
Mrudaparikshak	25/03/2017	86,000/-	Working
Chap cutter	13/11/2017	26,964/-	Working
Winnowing fan with electric motor	08/02/2018	8,300/-	Working
Tractor mount sprayer	17-02-2018	99,710/-	Working

### 1.8. Details of SAC meetings conducted in the year:

SAC Meeting	Date
14 <sup>th</sup> Scientific Advisory Committee	29-01-2021

## **Proceeding of 14<sup>th</sup>Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Dediapada held on 29/01/2022 at 10:00 A.M. at KVK, Dediapada (Hybrid mode)**

The 14<sup>th</sup>scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Dediapada was held at KVK, Dediapada on 29<sup>th</sup> January, 2022 to review the progress made by KVK during last year (December 2020 to December 2021) and discuss the future action plan for the next year (2022-2023). The meeting was inaugurated by Dr. Z. P. Patel, Honorable Chairman Vice Chancellor, NAU, Navsari, Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari. Dr. P. D. Verma, Member Secretary & Senior Scientist & Head, Krishi Vigyan Kendra, Dediapada welcomed virtually to all dignitaries, committee members, farmers and other invitees.

Dr. P. D. Verma, Senior scientist & Head presented the highlights of KVK and work done during the period of (December 2020 to December 2021). The Scientific Advisory Committee discuss on the topic that how to strengthen the activities of Krishi Vigyan Kendra and given valuable suggestions.

Dr. C. K. Timbadia, Director of Extension Education, NAU, Navsari explained briefly on objectives of Scientific Advisory Committee and mandates of Krishi Vigyan Kendra. He has suggested to promote Natural farming and also, emphasized to aware farmers about NAU e-Shop. Dr. Lalit Mahatama ADR, NAU Navsari said to make keen observation on improved technologies. Dr. Rajesh, Member ATARI, ZONE VIII emphasized to arrange awareness programme on Nutricereals.

Dr. Z. P. Patel, Honorable Chairman & Vice Chancellor, NAU, Navsari emphasized to work on Community Approach in adopted villages of KVK. Which will help us to trigger the new technologies among tribale. Narmada Model Poshan Vatika was virtually inaugurated by the Dr. Z. P. Patel, Honorable Chairman & Vice Chancellor, NAU. The virtual visit of instructional farm for all the member of scientific advisory committee. The work done by KVK was very much appreciated by chairman and SAC member.

### **The details of discussion made by the scientific advisory committee are as under:**

14.1	Approval of the minutes of 13 <sup>th</sup> Scientific Advisory Committee.
	The action taken report of the minutes of 13 <sup>th</sup> SAC meeting (Held on 10 <sup>th</sup> December 2020) was presented before the house and it was approved by the Scientific Advisory Committee.
14.2	Presentation of Progress report (December 2020 to December 2021)
	Senior Scientist & Head, and all the scientists of KVK, NAU, Dediapada presented the report on progress made by KVK for the period of December 2020 to December 2021 the committee satisfied with the activities and achievements made by the KVK.
14.3	Approval of Action plan for the year 2022-2023
	Discussion was made on the Action Plan for the year 2022-2023, which was approved by the house. However, few suggestions were made by the house to strengthen the action plan.

14.3.1	Introduce new variety of sweet corn Madhuram in FLDs.
14.3.2	Organize value addition training on millets.
14.3.3	Arrange OFT on Natural farming as per components.
14.3.4	Create awareness on farm waste management
14.3.5	Create awareness regarding vetivar plantation to reduce soil erosion
14.3.6	Efforts should be made to document endangered is species in collaboration with forest department.
14.3.7	Efforts should be made to increase area of desi cotton.

## 2. DETAILS OF DISTRICT / JURISDICTION AREA OF KVK

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

S. No	Farming system/enterprise
1	Agriculture + Horticulture + Animal husbandry
2	Agriculture + Horticulture + Agroforestry (Agrihortisilvicultural)
3	Agriculture + Animal husbandry
4	Agroforestry

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

#### a) Soil type

Sl. No.	Agro-climatic Zone	Characteristics
1	South Gujarat Zone II & Middle Gujarat Zone III	Rainfall: 1000-1250 mm Type of Soil: Undulating, shallow to medium in depth, fine textured, highly erosive. Soil Characteristics: Low fertility land and hilly terrain with dense forest. Soil fertility: Nitrogen-poor, Phosphorus medium, Potash High.

#### b) Topography

S. No.	Agro ecological situation	Characteristics
1	AES-I	Rainfall: 1000-1250 mm
2	AES IX	Rainfall: >800 mm



### 2.3 Soil Types

S. No	Soil type	Characteristics	Area in ha
1	Undulating, shallow to medium in depth, fine textured, highly erosive	Low fertility land and hilly terrain with dense forest.	94,240
2	Deep black soil- Plain	Deep black soil with high rainfall- plain	23,560

### 2.4. Area, Production and Productivity of major crops cultivated in the area of jurisdiction of KVK (2021)

S. No	Crop	Area (ha)	Production (MT.)	Productivity (Qt./ha)
<b>CEREALS</b>				
1	Paddy	9530	9554/25871	8.90/24.10
2	Wheat	1230	9048	22.62
3	Sorghum	5697	1724	14.10
4	Maize	7247	9999	15.90
<b>TOTAL</b>		<b>23704</b>	<b>56196</b>	<b>85.62</b>
<b>PULSES</b>				
1	Green gram	359	135	5.02
2	Pigeon Pea (Arhar)	18366	18382	9.90
3	Chick pea	1178	1593	976
<b>TOTAL</b>		<b>19903</b>	<b>20110</b>	<b>990.92</b>
<b>OILSEEDS</b>				
1	Soybean	1703	5831	17.10
2	Ground nut	189	347	18.40
3	Sesame	22	13	5.82
4	Castor	314	617	19.64
<b>TOTAL</b>		<b>2228</b>	<b>6808</b>	<b>60.96</b>
<b>OTHERS</b>				
1	Cotton	53456	67548	13.20
2	Sugarcane	5773	358678	744.30
3	Vegetables	2856	2770	9.70
4	Fodder Crops	2179	4794	22.00
<b>TOTAL</b>		<b>64264</b>	<b>433790</b>	<b>789.2</b>

Authentic Source (State / Central Govt): District agriculture department.

## 2.5. Weather data (2021)

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)	
		Maximum	Minimum	Maximum	Minimum
January	-	-	-	-	-
February	-	-	-	-	-
March	-	-	-	-	-
April	0	39.3	23.3	66	17
May	38	37.2	27.8	74	36
June	198.5	32.2	26.1	86	63
July	216.5	29.6	20.6	74	68
August	91.5	27.8	22.9	90	77
September	642	28.1	24.5	97	87
October	37	31.0	21.0	97	56
November	0	32.3	17.1	97	41
December	40.5	27.3	14.1	95	50
<b>Total</b>	<b>1264</b>				

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

Category	Population	Production	Productivity
<b>Cattle</b>			
Crossbred	4226	45,000 Tone/year milk	7.094 lit/day (milk)
Indigenous	136637		2.518 lit/day (milk)
<b>Buffalo</b>	58951		3.462 lit/day (milk)
<b>Sheep</b>	131	-	863 gm/year (wool)
Crossbred	-	-	-
Indigenous	-	-	-
<b>Goats</b>	71897	19843 kg meat/year	3.62 kg/year (meat)
<b>Pigs</b>	-	-	-
Crossbred	-	-	-
Indigenous	74	-	-
<b>Rabbits</b>	73	-	-
<b>Poultry</b>	-	-	-

Hens	-	-	-
Desi	138509	36,00,000 egg/year	0.2504 no. of egg/day
Improved	3887		0.6643 no. of egg/day
Ducks	913	-	-
Turkey and others	-	-	-
<b>Category</b>	<b>Area</b>	<b>Production</b>	<b>Productivity</b>
Fish	-	-	-
Marine	-	-	-
Inland	18.09	-	200 kg/ha
Prawn	-	-	-
Shrimp	-	-	-

## 2.7. Details of Operational area / Villages

Name of the Taluka	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Dediapada	Kunbar, Rohda, Almavadi, Sejpur, Navagam, Panuda, Bhatpur, Soliya	Paddy, Pigeon pea, sorghum, Gram	<ul style="list-style-type: none"> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low irrigation facility</li> <li>• Low animal productivity</li> </ul>	<ul style="list-style-type: none"> <li>• Varietal replacement</li> <li>• Production technology of major crops,</li> <li>• Water conservation,</li> <li>• Arid horticulture,</li> <li>• Dairy management through feeding, housing and Health management</li> </ul>

Relva Bharada, Sabuti, Khuparborsan, Gopaliya, Siyali	Paddy, Pigeon pea, sorghum Gram, Cotton, Wheat	<ul style="list-style-type: none"> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low irrigation facility</li> <li>• Low animal productivity</li> <li>• Insect pest problem in cotton</li> <li>• High use of input in cotton and vegetables</li> </ul>	<ul style="list-style-type: none"> <li>• Varietal replacement</li> <li>• Production technology of major crops,</li> <li>• Water conservation,</li> <li>• Arid horticulture,</li> <li>• Dairy management through feeding, housing and Health management</li> <li>• Integrated pest management</li> <li>• Integrated Nutrient Management</li> </ul>
Mathasar, Kanzari, Pankhala, Kokam, Vandari,	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low irrigation facility</li> <li>• Low animal productivity</li> <li>• Insect pest problem in cotton</li> <li>• High use of input in cotton and vegetables</li> </ul>	<ul style="list-style-type: none"> <li>• Varietal replacement</li> <li>• Production technology of major crops,</li> <li>• Water conservation,</li> <li>• Arid horticulture,</li> <li>• Dairy management through feeding, housing and Health management</li> <li>• Integrated pest management</li> <li>• Integrated Nutrient Management</li> </ul>
Tabda, Zankh, Kham, Bhutbeda,	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low irrigation facility</li> <li>• Low animal productivity</li> <li>• Insect pest problem in cotton</li> <li>• High use of input in cotton and vegetables</li> </ul>	<ul style="list-style-type: none"> <li>• Varietal replacement</li> <li>• Production technology of major crops,</li> <li>• Water conservation,</li> <li>• Arid horticulture,</li> <li>• Dairy management through feeding, housing and Health management</li> <li>• Integrated pest management</li> <li>• Integrated Nutrient Management</li> </ul>

Sagara	Panchpipali, Navagam, Javali, Kel, Ubhariya. Kherdipada, Barktura,	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low irrigation facility</li> <li>• Low animal productivity</li> <li>• Insect pest problem in cotton</li> <li>• High use of input in cotton and vegetables</li> </ul>	<ul style="list-style-type: none"> <li>• Varietal replacement</li> <li>• Production technology of major crops,</li> <li>• Water conservation,</li> <li>• Arid horticulture,</li> <li>• Dairy management through feeding, housing and Health management</li> <li>• Integrated pest management</li> <li>• Integrated Nutrient Management</li> </ul>
	Nanadoramba, Motadoramba, Makran, Nana Kakadiamba, Bodvav	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low irrigation facility</li> <li>• Low animal productivity</li> <li>• Insect pest problem in cotton</li> <li>• High use of input in cotton and vegetables</li> </ul>	<ul style="list-style-type: none"> <li>• Varietal replacement</li> <li>• Production technology of major crops,</li> <li>• Water conservation,</li> <li>• Arid horticulture,</li> <li>• Dairy management through feeding, housing and Health management</li> <li>• Integrated pest management</li> <li>• Integrated Nutrient Management</li> </ul>
Nandod	Boridra, Amali, Nani chikhali, Moti chikhali. Partapnagar,	Paddy, Pigeon pea, sorghum Gram, Cotton, wheat, Vegetable	<ul style="list-style-type: none"> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low irrigation facility</li> <li>• Low animal productivity</li> <li>• Use of local variety,</li> <li>• Imbalance use of</li> </ul>	<ul style="list-style-type: none"> <li>• Varietal replacement</li> <li>• Production technology of major crops,</li> <li>• Water conservation,</li> <li>• Arid horticulture,</li> <li>• Dairy management through feeding, housing and Health management</li> <li>• Varietal replacement</li> </ul>

Tilak-wada	Nimpura, Bunjetha, Utavadi, Gamod.	Cotton, Paddy, Pigeon pea, maize, Gram, Wheat, Sorghum	<ul style="list-style-type: none"> <li>• Insect pest problem in cotton</li> <li>• High use of input in cotton and vegetables</li> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low animal productivity</li> </ul>	<ul style="list-style-type: none"> <li>• Integrated pest management</li> <li>• Integrated Nutrient Management</li> <li>• Production technology of major crops,</li> <li>• Promotion of vegetable crops,</li> <li>• Dairy management through feeding, housing and Health management</li> </ul>
Garudeshvar	Junvad, Fulvadi, Moti raval, Mota raipura, Suka, Zunda, Kalimakwana, Nava vaghpara	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> <li>• Use of local variety,</li> <li>• Imbalance use of fertilizer,</li> <li>• Low irrigation facility</li> <li>• Low animal productivity</li> <li>• Insect pest problem in cotton</li> <li>• High use of input in cotton and vegetables</li> </ul>	<ul style="list-style-type: none"> <li>• Varietal replacement</li> <li>• Production technology of major crops,</li> <li>• Water conservation,</li> <li>• Arid horticulture,</li> <li>• Dairy management through feeding, housing and Health management</li> <li>• Integrated pest management</li> <li>• Integrated Nutrient Management</li> </ul>

## 2.8. Priority thrust areas:

1	Introduction of Improved variety
2	Balance used of fertilizers
3	Eco friendly plant protection technology
4	Dairy management and goat rearing
5	Drudgery reduction technology for farm women health nutrition for vulnerable groups and sickle cell anemia awareness
6	Women empowerment and self-reliability through entrepreneurial development

### 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	32	34	1200	1326

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
115	144	4750	5955	392	543	39327	45255

Seed Production (Qtl.)		Planting materials (Nos.)	
5		6	
Target	Achievement	Target	Achievement
200	268.36	100000	122876

Livestock, poultry strains and fingerlings (No.)		Bio-products - Vermicompost (Kg)	
7		8	
Target	Achievement	Target	Achievement
16	20	10000	13250

### 3.1. B. Operational areas details during the year 2021

Sr. No.	Major crops & enterprises being practiced in cluster villages	Prioritized problems in these crops/ enterprise	Extent of area (ha/No.) affected by the problem in the district	Names of Cluster Villages identified for intervention	Intervention (OFT, FLD, Training, extension activity etc.) *
<b>NMOOP</b>					
1.	Soybean	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	20/50	Almawadi, Soliya, Nani bedwan, Nana doramba, Kodabaa, Kel, Panchpipari and Sorapada	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
2.	Sesame	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	10/25	Almavadi, Sejpur, Gopaliya, Soliya, Siyali, Mota sukaamba and Borsan	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
<b>NFSM</b>					
3.	Pigeon pea	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	12/30	Sejpur, Almavadi, Gopaliya, Panch Pipari, Amdala, Chikada and Khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
4.	Chickpea	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	10/25	Sejpur, Almavadi, Gopaliya, Panch Pipari, Amdala, Chikada and Khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.



5.	Green gram	- No use Improved variety - No use of bio-fertilizer - No use of bio-pesticides	20/50	Almavadi, Bhatpur, kakadiamba	Sejpur, Nana	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
Cereal (KVK)						
6.	Paddy	- No use Improved variety - No use of bio-fertilizer - No use of bio-pesticides	80/200	Jambar, Bandiservan, Almawadi, Soliya, Nani bedwan, Nana doramba, Kodabaa, Sorapada, Kel and Panchpipari		Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
7.	Paddy		80/200			
8.	Paddy		12/30			
9.	Paddy		12/30			
10.	Paddy Drilled	- No use Improved variety - No use of bio-fertilizer - No use of bio-pesticides	05/10	Soliya, Gopaliya and Pansar		Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
11.	Paddy Drilled		15/40			
12.	Maize (IPM)	- No use Improved variety - No use of bio-fertilizer - No use of bio-pesticides	05/10	Tuver, Jambar and Navagam		Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
Cotton (KVK)						
13.	Cotton	- No use Improved variety - No use of bio-fertilizer - No use of bio-pesticides	10/25	Nivalda, Almawadi, Navagam, Nanibedwan, Khokhraumar, Amadala and Nani raval	bhatpur, Sejpur,	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
14.	Cotton		10/25			

<b>Plant Protection (IPM)</b>					
15.	Paddy (IPM)	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	06/12	Soliya, Almavadi and Gopaliya	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
16.	Cotton (IPM)	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	06/12	Almavadi, Soliya and Gopaliya	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
17.	Maize (IPM)	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	05/10	Tuver, Jambar and Navagam	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
18.	Brinjal (Pseudomonas)	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	06/12	Almavadi, Khuradi, Soliya, Besana	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
19.	Chilli (Pseudomonas)	<ul style="list-style-type: none"> <li>- No use Improved variety</li> <li>- No use of bio-fertilizer</li> <li>- No use of bio-pesticides</li> </ul>	06/12	Almavadi, Nivalda, Jargam, Ghankhetar, Gopaliya, Nanasukaamba and Soliya	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
<b>Horticulture</b>					

20.	Indian bean	<ul style="list-style-type: none"> <li>- Use of local variety</li> <li>- No use of biocomponent</li> <li>- Insect pest and Disease problems</li> <li>- Imbalance use of fertilizer</li> </ul>	06/50	Sabuti, Ningath, Navagam, Soliya, Gopaliya and Gajar gota	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
21.	Ajawin	<ul style="list-style-type: none"> <li>- Use of local variety</li> <li>- No use of biocomponent</li> <li>- Insect pest and Disease problems</li> <li>- Imbalance use of fertilizer</li> </ul>	20/50	Servai, Nani bedvan, Moti bedvan and Mohabi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
22.	Water melon	<ul style="list-style-type: none"> <li>- No use of biofertilizers</li> <li>- Insect pest and Disease problems</li> <li>- Imbalance use of fertilizer</li> </ul>	06/15	Khuradi, Gadh, Relva bharada, Kankhadi, Nani bedvan, Moti bedvan and Mohabi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
23.	Mango	<ul style="list-style-type: none"> <li>- No use of proper varieties</li> <li>- Lack of proper cultivation practices</li> <li>- Insect pest and Disease problems</li> <li>- Imbalance use of fertilizer</li> <li>Lack of proper market</li> </ul>	200 plants/20	Vedchha, Mathasar, Dunkhal, Andu, Arethi, Khuradi and Virpur	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
24.	Banana	<ul style="list-style-type: none"> <li>- No use of proper varieties</li> <li>- Lack of proper cultivation practices</li> <li>- Insect pest and Disease problems</li> <li>- Imbalance use of fertilizer</li> <li>- Lack of proper market</li> </ul>	6000 plants/20	Karatha, Rampura, Bhadam, Kalimakavana, Sundarpura and Lasakadi.	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
<b>Women Empowerment</b>					

25.	Revolving type Milking stand and stool	Stress and strain during milking	25/25	Soliya, Zankh, Nanisingloti, Besana, Pratap pura, Chikhali and Khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
26.	Electric Motor operated paddy thresher	Pain in hand, shoulder, more labor requirement	02/22	Gopaliya, Borsan, Soliya, Guldachama, Bhatpur, Almawadi, Besana, Pratap pura, Taval and Khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
27.	Twin wheel hoe	Pain in hand, wrist, and back bone, more labor requirement	25/25	Nivalda, Bhatpur, Almawadi, Sejpur, Navagam, Nanibedwan, Khokhraumar and Kham.	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
<b>Livestock</b>					
28.	Chelated Mineral Mixture	-Mineral Deficiency in animals - No used chelated mineral mixture in feed of animals	50/50	Guldacham, Dediapada, Nivalda, Gadh, Kunbar, Bebar, Sabuti and Gopaliya	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
29.	Fodder Sorghum (COFS-29)	- Use of local and single cut variety - Scarcity of green Fodder	50/50	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.

30.	Fodder Sorghum (CSV-33 MF)	- Use of local and single cut variety - Scarcity of green Fodder	30/30	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
31.	Rubber cow mat	- Poor condition of housing shed of dairy animals	25/25	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
32.	Fodder Oat (Os-377)	- Use of local variety - Scarcity of green Fodder	50/50	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
33.	Mineral Mixture Licking block	- Mineral Deficiency in animals - No used Mineral Mixture Licking block in feed of animals	50/50	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.
<b>Kitchen Garden</b>					
34.	Nutritional kitchen garden	- Nutritional deficiency - Inadequate use of vegetables	50/50	Nani sigloti, Navagam, Bhutbeda, Chikda and Kham	Training, Input seed distribution programme, Field day celebration, Field visits, Farmers and Scientists interaction, Diagnostic Visit, Exhibition Literature Publication and distribution.

\* Support with problem-cause and interventions diagram

### 3.2. Technology Assessment (Kharif 2021, Rabi 2020-21, Summer 2021)

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

Thematic areas	Cereals	Oilseeds	Pulses	Commercial Crops	Vegetables	Fruits	Spices	Plantation crops	Tuber Crops	TOTAL
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Varietal Evaluation	1	0	0	0	0	0	1	0	0	2
Integrated Pest Management	1	0	0	0	0	0	0	0	0	1
Integrated Crop Management	0	0	0	0	0	0	0	0	0	0
Integrated Disease Management	0	0	0	0	0	0	0	0	0	0
Small Scale Income Generation Enterprises	0	0	0	0	0	0	0	0	0	0
Weed Management	0	0	0	1	0	0	0	0	0	0
Resource Conservation Technology	0	0	0	0	0	0	0	0	0	0
Farm Machineries	0	0	0	0	0	0	0	0	0	0
Integrated Farming System	0	0	0	0	0	0	0	0	0	0
Seed / Plant production	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Drudgery Reduction	0	0	0	0	0	0	0	0	0	0
Storage Technique	0	0	0	0	0	0	0	0	0	0
Mushroom cultivation	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>

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

Thematic areas	Cattle	Poultry	Piggery	Rabbitry	Fisheries	TOTAL
Evaluation of Breeds	0	0	0	0	0	0
Nutrition Management	1	0	0	0	0	1
Disease of Management	0	0	0	0	0	0
Value Addition	0	0	0	0	0	0
Production and Management	0	0	0	0	0	0
Feed and Fodder	0	0	0	0	0	0
Small Scale income generating enterprises	0	0	0	0	0	0
<b>TOTAL</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

## 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 (Per trail covering all the Technological Options)
Integrated Nutrient Management	-	-	-	-	-
Varietal Evaluation	Ajwain	Assessment of Ajwain varieties	05	05	2.0
	Wheat	Assessment of Wheat varieties	05	05	2.0
Integrated Pest Management	Maize	Assessment of management techniques against Fall Army Worm in Maize	05	05	2.0
Integrated Crop Management	-	-	-	-	-
Integrated Disease Management	-	-	-	-	-

Small Scale Income Generation Enterprises	-	-	-	-	-
Weed Management	-	-	-	-	-
Resource Conservation Technology	-	-	-	-	-
Farm Machineries	-	-	-	-	-
Integrated Farming System	-	-	-	-	-
Seed / Plant production	-	-	-	-	-
Value addition	-	-	-	-	-
Drudgery Reduction	-	-	-	-	-
Storage Technique	-	-	-	-	-
Mushroom cultivation	-	-	-	-	-
<b>Total</b>			<b>15</b>	<b>15</b>	<b>06</b>

## 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
Evaluation of breeds	-	-	-	-
Nutrition management	Indigenous cattle	Assessment of nutrient management on performance of milk yield of local Indigenous cattle of Narmada district	4	4
Disease management	-	-	-	-
Value addition	-	-	-	-
Production and management	-	-	-	-
Feed and fodder	-	-	-	-
Small scale income generating enterprises	-	-	-	-
<b>Total</b>			<b>4</b>	<b>4</b>



## C1 Results of Technologies Assessed

### OFT-1: Assessment of management techniques against Fall Army Worm in Maize.

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
Maize	Irrigated	Farmers are frequently applying high dose of insecticides to manage FAW, which leads to residual problem and its hazardous effect spoil environment as well as human health.	Assessment of management techniques against Fall Army Worm in Maize.	5	T1-Application Farmers practice : Propenofose 40% + Cypermethrin 4% @ 20-30 ml per 10 lit. water at 10 DAS,	FAW damage (%)	15.05	IPM module found 22.7 q/ha yield with 18.2% increased in yield as compared the farmer's practice.	By adoption of IPM module can minimize the damage due to fall army worm in Maize as compared to chemical method.	Continue	-
						FAW larvae/plant	10.6				
						Yield (Q/ha)	19.2				
						B:C Ratio	2.08				
					IPM module practice: Includes -Pheromone trap @ 5 per ha -T shaped perches @40 per ha -Application of Neem oil 1500 ppm @50 ml per 10 lit. -Application of Flubendiamide 20SP @10ml per 10 lit. -Application of Bouveria bassiana @ 50 gm per 10 lit.	FAW damage (%)	1.87				
						FAW larvae/plant	2.56				
						Yield (Q/ha)	22.6				
						B:C Ratio	2.69				

Contd...

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
T1-Application Farmers practice : Propenofose 40% + Cypermethrin 4% @ 20-30 ml per 10 lit. water at 10 DAS,	-	19.2	Q/ha	38320	2.08
IPM module practice: Includes -Pheromone trap @ 5 per ha -T shaped perches @40 per ha -Application of Neem oil 1500 ppm @50 ml per 10 lit. -Application of Flubendiamide 20SP @10ml per 10 lit. -Application of Bouveria bassiana @ 50 gm per 10 lit.	NAU, Navsari.	22.6	Q/ha	45260	2.69

## 2. Assessment of Wheat varieties

Crop/ enterprise	Farming situation	Problem Diagnosed	Technology Assessed	Parameters of assessment	Data on the parameter	Remark
1	2	3	4	5	6	7
Wheat	Irrigated	-Lack of Knowledge -Low yield -More cost of cultivation	T1: Wheat GW- 496	Yield (Q/ha)	Results awaited due to crop at spike emergence stage.	
				B:C Ratio		
			T2: Wheat GW- 451	Yield (Q/ha)		
				B:C Ratio		

### 3. Assessment of Ajwain varieties Kharif-2020 (Kharif -2021 result awaited)

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	Justifi cation for refine ment
1	2	3	4	5	6	7	8			9	10	11	12
Ajwain	Rain fed Condition (Kharif)	- Lack of proper package of practices - Lack of improved varieties	Assessme nt of Ajwain varieties	4	Varietal assessment	Yield and B:C ratio	Treatment	Yield	B:C ratio	The data from the farmers fields shown that variety Ajmer Ajwain-93 having high yield with more B:C ratio	Ajmer Ajwain-93 variety having good yield and also having better return as compared to other varies and local one	-Need improved varieties which can replace the local variety for better farming of ajwain crop	-
							T1- Local	7.4	8.1				
							T2- Gujarat Ajwain-2	7.7	8.6				
							T2- Ajmer Ajwain-1	8.2	9.2				
							T3- Ajmer Ajwain-2	8.7	9.8				
							T4- Ajmer Ajwain-93	9.9	11.2				

Contd..

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	B:C Ratio
13	14	15	16	17	18
Technology option 1 (Farmer's practice)	Locally available seeds	7.4	quintal	86039	8.1
Technology option 2	S&SRS, Jagudan	7.7	quintal	91365	8.6
Technology option 3	NRC Seed Spices, Ajmer	8.2	quintal	122163	9.2
Technology option 4	NRC Seed Spices, Ajmer	8.7	quintal	105846	9.6
Technology option 5	NRC Seed Spices, Ajmer	9.9	quintal	98880	10.2

#### 4. Assessment of nutrition management on performance of milk yield of local Indigenous cattle of Narmada district

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
Livestock (Indigenous cattle)	No stall feeding and Imbalance feeding practices	The little milk yield in local Indigenous milking cattle of Narmada district due to Imbalance feeding practices	Assessment of nutrition management on performance of milk yield of local Indigenous cattle of Narmada district	4	Supplementation of concentrate feeding (0.5 kg/ 1kg milk production + 1.5 kg) + 30g mineral mixture +De-worming	Milk Production	1.4 lit/ day	4.4 lit/ day	concentrate feeding had significantly increased milk yield and reduced negative energy balance, body condition score loss & calving interval	-	-

Contd...

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
T <sub>1</sub> : Traditional Practice (No stall feeding)	-	250 lit	1.4/Animal/day	6200	-
T <sub>2</sub> : Supplementation of concentrate feeding (0.5 kg/ 1kg milk production + 1.5 kg) + 30g mineral mixture +De- worming	Animal nutrition department, AAU, Anand	550 lit	4.4lit/Animal/day	21750	3.90

**C. 2. Details of each On Farm Trial for assessment to be furnished in the following format separately as per the following details:**

**1. Assessment of management techniques against Fall Army Worm in Maize.**

1	Title of Technology Assessed	:	Assessment of management techniques against Fall Army Worm in Maize.
2	Problem diagnose/defined	:	-Unawareness about application of insecticides -Residual problem, -Due to non-availability of labour, -Biotic and abiotic stress. -poor insect management
3	Details of technologies selected for assessment	:	T1: Farmers practice: Propanofose 40% + Cypermethrin 4% @ 20-30 ml per 10 lit. water at 10 DAS, T2: IPM module practice: Includes -Pheromone trap @ 5 per ha -T shaped perches @40 per ha -Application of Neem oil 1500 ppm @50 ml per 10 lit. -Application of Flubendiamide 20SP @10ml per 10 lit -Application of Bouveria bassiana @ 50 gm per 10 lit.
4	Source of technology	:	NAU, Navsari.
5	Production system/thematic area	:	IPM
6	Performance of the technology with performance indicators	:	Yield increase (%), Yield (Q/ha), B:C Ratio.
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	By adoption of IPM module can minimize the damage due to fall army worm in Maize as compared to chemical method
8	Final recommendation for micro level situation	:	NA
9	Constraints identified and feedback for research	:	NA
10	Process of farmers participation and their reaction	:	Farmer's participation in planning, execution and monitoring.

## 2. Assessment of Wheat varieties

1	Title of Technology Assessed	:	Assessment of Wheat varieties
2	Problem diagnose/defined	:	-Lack of Knowledge -Low yield -More cost of cultivation
3	Details of technologies selected for assessment	:	T1: Wheat GW- 496, T2: Wheat GW- 451, T3: Wheat GW-273
4	Source of technology	:	AAU, Anand
5	Production system/thematic area	:	Varietal
6	Performance of the technology with performance indicators	:	Yield increase (%), Yield (Q/ha), B:C Ratio.
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	--
8	Final recommendation for micro level situation	:	--
9	Constraints identified and feedback for research	:	--
10	Process of farmers participation and their reaction	:	Farmer's participation in planning, execution and monitoring.

### 3. Assessment of Ajwain varieties

1	Title of Technology Assessed	:	Assessment of ajwain varieties
2	Problem diagnose/defined	:	- Lack of proper package of practices - Lack of improved varieties
3	Details of technologies selected for assessment	:	T1- Local T2- Gujarat Ajwain-2 T2- Ajmer Ajwain-1 T3- Ajmer Ajwain-2 T4- Ajmer Ajwain-93
4	Source of technology	:	S&SRS, Jagudan and NRC Seed Spices, Ajmer
5	Production system/thematic area	:	Varietal
6	Performance of the technology with performance indicators	:	Yield increase (%), Yield (Q/ha), B:C Ratio.
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	Ajmer Ajwain-93 variety having good yield and also having better return as compared to other varieties and local one
8	Final recommendation for micro level situation	:	--
9	Constraints identified and feedback for research	:	--
10	Process of farmers participation and their reaction	:	Farmer's participation in planning, execution and monitoring.

#### 4. Assessment of nutrient management on performance of milk yield of local Indigenous cattle of Narmada district (2<sup>nd</sup> Year)

1	Title of Technology Assessed	:	Assessment of nutrient management on performance of milk yield of local Indigenous cattle of Narmada district.
2	Problem diagnose/defined	:	The little milk yield in local Indigenous milking cattle of Narmada district due to Imbalance feeding practices
3	Details of technologies selected for assessment	:	T <sub>1</sub> : Traditional Practice (No stall feeding) T <sub>2</sub> : Supplementation of concentrate feeding (0.5 kg/ 1kg milk production + 1.5 kg) + 30g mineral mixture + De-worming
4	Source of technology	:	Animal nutrition department, AAU, Anand
5	Production system/thematic area	:	Nutritional management
6	Performance of the technology with performance indicators	:	Milk Production
7	Feedback, matrix scoring of various technology parameters done through farmer's participation / other scoring techniques	:	--
8	Final recommendation for micro level situation	:	--
9	Constraints identified and feedback for research	:	--
10	Process of farmers participation and their reaction	:	Farmer's participation in planning, execution and monitoring.



### 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 2021 and recommended for large scale adoption in the district

S. No	Crop/ Enterprise	Thematic Area*	Technology demonstrated	Details of popularization methods suggested to the Extension system	Horizontal spread of technology		
					No. of villages	No. of farmers	Area in ha
Oilseed Crops (NMOOP)							
1.	Soybean	ICM	Improved variety, Bio Fertilizers, Bio Pesticide	Improved variety, seed treatment	07	50	20
2.	Sesame	ICM	Improved variety, Bio Fertilizers, Bio Pesticide	Improved variety, seed treatment	07	25	10
Pulses Crops (NFSM)							
3.	Pigeon pea	ICM	Improved variety, Bio Fertilizers, Bio Pesticide	Improved variety, seed treatment	06	20	10
4.	Pigeon pea	ICM	Improved variety, Bio Fertilizers, Bio Pesticide	Improved variety, seed treatment	07	30	12
5.	Chickpea	ICM	Improved variety, Bio Fertilizers, Bio Pesticide	Improved variety, seed treatment	06	25	10
6.	Chickpea	ICM	Improved variety, Bio Fertilizers, Bio Pesticide	Improved variety, seed treatment	07	25	10
7.	Green gram	ICM	Improved variety, Bio Fertilizers, Bio Pesticide	Improved variety, seed treatment	04	50	20
Cereals (KVK)							
8.	Paddy (T.P)	Varietal	Improved variety	Improved variety	09	200	80
9.	Paddy (T.P)	Varietal	Improved variety	Improved variety	09	200	80
10.	Paddy (T.P)	Varietal	Improved variety	Improved variety	09	30	12
11.	Paddy (T.P)	Varietal	Improved variety	Improved variety	09	30	12
12.	Paddy (Drilled)	Varietal	Improved variety	Improved variety	03	10	05
13.	Paddy (Drilled)	Varietal	Improved variety	Improved variety	03	40	15

14.	Maize	Varietal	Improved variety	Improved variety	3	10	5
<b>Cotton (KVK)</b>							
15.	Cotton	Varietal	Improved variety	Improved variety	08	30	12
16.	Cotton	Varietal	Improved variety	Improved variety	09	25	10
17.	Cotton	Varietal	Improved variety	Improved variety	08	43	18
18.	Cotton	Varietal	Improved variety	Improved variety	09	25	10
<b>Plant Protection (KVK)</b>							
19.	Paddy (IPM)	IPM	Pheromone, Trap, Acetamipride, Neem oil 1500ppm, Bavaria bassiana	Bio-logical pest control and Seed treatment	03	16	06
20.	Cotton (IPM)	IPM	Pheromone Trap, Acetamipride, Neem oil 1500ppm, Bavaria bassiana	Bio-logical pest control	03	16	06
21.	Cotton (IPM)	IPM	Pheromone Trap, Acetamipride, Neem oil 1500ppm, Bavaria bassiana	Bio-logical pest control	03	16	06
22.	Maize (IPM)	IPM	Pheromone trap and lure of FAW, Neem oil (1500 ppm), Flubendamide 20 SP, Bavaria bassiana	Bio-logical pest control	03	10	05
23.	Brinjal (Pseudomonas)	Bio-component	Pseudomonas liquid	Seed treatment	04	16	06
24.	Chilli (Pseudomonas)	Bio-component	Pseudomonas liquid	Seed treatment	07	16	06
<b>Horticulture (KVK)</b>							
25.	Indian bean	Varietal	Improved variety	Improved variety	04	40	20
26.	Indian bean	Varietal	Improved variety	Improved variety	06	50	06
27.	Ajwin	Varietal	Improved variety	Improved variety	02	10	04
28.	Ajwin	Varietal	Improved variety	Improved variety	04	50	20
29.	Water melon	INM	Novel	Liquid organic fertilizer	07	15	6
30.	Mango	Varietal	Improved variety	Improved variety	07	20	10 plant/ Farmers
31.	Banana	Varietal	Improved variety	Improved variety	06	20	300 plant/ Farmers
<b>Women Empowerment (Farm Implements and Machinery) (KVK)</b>							

32.	Milking cow/ buffalo	Drudgery reduction	Revolving type Milking stand and stool	Revolving type Milking stand and stool	07	25	25
33.	Paddy thresher	Drudgery reduction	Paddy thresher with winnowing fan	Electric Motor operated paddy thresher with winnowing fan	09	22	02
34.	Vegetable/gram/Moong bean	Drudgery reduction	Twin wheel hoe	Twin wheel hoe	08	25	25
<b>Animal Science (KVK)</b>							
35.	Animal Nutrition	Animal Nutrition	Chelated Mineral Mixture	Chelated Mineral Mixture	08	50	50
36.	Animal Nutrition	Animal Nutrition	Fodder Sorghum (COFS-29)	Fodder Sorghum (COFS-29)	09	50	50
37.	Animal Nutrition	Animal Nutrition	Fodder Sorghum (CSV-33MF)	Fodder Sorghum (CSV-33MF)	09	30	30
38.	Animal Production	Animal Production	Rubber cow mat	Rubber cow mat	09	25	25
39.	Animal Nutrition	Animal Nutrition	Fodder Oat (Os-377)	Fodder Oat (Os-377)	09	20	20
40.	Animal Nutrition	Animal Nutrition	Mineral Mixture Licking Block	Mineral Mixture Licking Block	09	50	50
<b>Kitchen Garden (KVK)</b>							
41.	Nutritional Kitchen Garden	-	Household food security by kitchen gardening	Seeds of vegetables and Vegetable Seedlings	05	50	50

B. Details of FLDs implemented during 2021 (**Kharif 2021, Rabi 2020-21, Summer 2021**) (Information is to be furnished in the following **three tables for each category** i.e., **cereals, horticultural crops, oilseeds, pulses, cotton and commercial crops.**)

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/demonstration			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
Oilseed Crops (NMOOP)										

1.	Soybean	ICM	NRC-37	Kharif-21	20	20	50	00	50	-
2.	Sesame	ICM	GT-5	Summer-21	10	10	25	00	25	-
Pulses Crops (NFSM)										
3.	Pigeon pea	ICM	BDN-711	Kharif-20	10	10	20	00	20	-
4.	Pigeon pea	ICM	GT-105	Kharif-21	12	12	30	00	30	-
5.	Chickpea	ICM	GG-5	Rabi 2020-21	10	10	25	00	25	-
6.	Chickpea	ICM	GG-5	Rabi 2021-22	10	10	25	00	25	-
7.	Green gram	ICM	GM-6	Summer-21	20	20	50	00	50	-
Cereals (KVK)										
8.	Paddy	ICM	GNR-2	Kharif 2021	80	80	200	00	200	-
9.	Paddy	ICM	GNR-6		80	80	200	00	200	-
10.	Paddy	ICM	GNRH-2		12	12	30	00	30	-
11.	Paddy	ICM	GAR-13		12	12	30	00	30	-
12.	Paddy Drilled	ICM	PURNA		05	05	10	00	10	-
13.	Paddy Drilled	ICM	Tapi		15	15	40	00	40	-
14.	Maize	ICM	GAMYH-1		05	05	10	00	10	-
Cotton (KVK)										
15.	Cotton	ICM	Bt. H.-10	Kharif-20	12	12	30	00	30	-
16.	Cotton	ICM	Bt. H.-10	Kharif-21	10	10	25	00	25	-
17.	Cotton	ICM	Bt. H.-12	Kharif-20	18	18	43	00	43	-
18.	Cotton	ICM	Bt. H.-12	Kharif-21	10	10	25	00	25	-
Plant Protection (KVK)										
19.	Paddy	IPM	Pheromone trap and lure, Neem oil (1500 ppm), acetamiprid 20 SP, Beauveria bassiana	Kharif 2021	06	06	16	00	16	-

20.	Cotton	IPM	Pheromone trap and lure, Neem oil (1500 ppm), acetamiprid 20 SP, Beauveria bassiana	Kharif 2020	06	06	16	00	16	-
21.	Cotton	IPM	Pheromone trap and lure, Neem oil (1500 ppm), acetamiprid 20 SP, Beauveria bassiana	Kharif 2021	06	06	16	00	16	-
22.	Maize	IPM	Pheromone trap and lure of FAW, Neem oil (1500 ppm), Flubendamide 20 sp, Beauveria bassiana	Kharif 2021	05	05	10	00	10	-
23.	Brinjal	Bio com.	Local	Rabi-2020-21	06	06	16	00	16	-
24.	Chilly	Bio com.	GNR-2		06	06	16	00	16	-
Horticultural Crops (KVK)										
25.	Indian bean	ICM	GNIB-22	Late Kharif 2020	20	20	40	00	40	-
26.	Indian bean	ICM	GNIB-22	Late Kharif 2021	06	06	50	00	50	-
27.	Ajawain	ICM	AA-1, AA-2 and AA-93	Late Kharif 2020	04	04	10	00	10	-
28.	Ajawain	ICM	AA-1, AA-2 and AA-93	Late Kharif 2021	20	20	50	00	50	-
29.	Watermelon	INM	Novel	Summer-21	06	06	15	00	15	-
30.	Mango	ICM	Sonpari	Kharif-21	10 plant/ person	10 plant/ person	20	00	20	-
31.	Banana	ICM	G-9	Late-Kharif- 21	300 plant/ person	300 plant/ person	20	00	20	-

### 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					
Soybean	Kharif-21	RF	Deep black	250-280	45-75	370-430	Fellow	3 <sup>rd</sup> Wk. June-21	1 <sup>st</sup> wk. Oct-21	1254	47
Sesame	Summer-21	RF	Deep black	260-290	40-75	360-430	Fellow	2 <sup>nd</sup> Wk. Feb.-21	1 <sup>st</sup> wk. May-21	1254	47
Pigeon pea	Kharif-21	RF	Deep black	260-280	55-57	350-405	Fellow	3 <sup>rd</sup> Wk. June-21	1 <sup>st</sup> wk. Feb-22	1254	47
Chickpea	Rabi-2020-21	RF	Deep black	265-285	55-75	360-450	Fellow	1 <sup>st</sup> Wk. Nov.-20	1 <sup>st</sup> wk. Feb.-21	1254	47
Green gram	Summer-21	RF	Deep black	260-275	45-75	360-420	Fellow	2 <sup>nd</sup> Wk. Feb.-21	1 <sup>st</sup> wk. May-21	1254	47
Paddy (T.P)	Kharif-21	RF	Deep black	270-280	45-75	360-420	Fellow	3 <sup>rd</sup> Wk. June-21	2 <sup>nd</sup> wk. Oct.-21	1254	47
Paddy (Drilled)	Kharif-21	RF	Deep black	260-280	45-65	340-460	Fellow	3 <sup>rd</sup> Wk. June-21	4 <sup>th</sup> wk. Sep.-21	1254	47
Maize	Kharif-21	RF	Deep black	260-290	50-65	350-430	Fellow	3 <sup>rd</sup> Wk. June-21	4 <sup>th</sup> wk. Sep.-21	1254	47
Cotton	Kharif-21	RF	Deep black	270-290	45-65	360-420	Fellow	3 <sup>rd</sup> Wk. June-21	1 <sup>st</sup> wk. Feb.-22	1254	47
Paddy (IPM)	Kharif-21	RF	Deep black	250-260	40-65	340-420	Fellow	3 <sup>rd</sup> Wk. June-21	2 <sup>nd</sup> wk. Oct.-21	1254	47

Cotton (IPM)	Kharif-21	RF	Deep black	265-275	45-75	350-430	Fellow	3 <sup>rd</sup> Wk. June-21	1 <sup>st</sup> wk. Feb.-22	1254	47
Maize (IPM)	Kharif-21	RF	Deep black	265-275	45-75	360-420	Fellow	3 <sup>rd</sup> Wk. June-21	4 <sup>th</sup> wk. Sep.-21	1254	47
Brinjal (Pseudomonas)	Rabi-2020-21	RF	Deep black	250-270	45-65	360-430	Vegetable	1 <sup>st</sup> Wk. Nov.-20	4 <sup>th</sup> wk. Feb.-21	1254	47
Chilli (Pseudomonas)	Rabi-2020-21	Irrigated	Deep black	280-290	55-65	320-430	Vegetable	1 <sup>st</sup> Wk. Nov.-20	4 <sup>th</sup> wk. Feb.-21	1254	47
Indian bean	Late Kharif-21	Irrigated	Deep black	250-270	45-65	360-430	Paddy	3 <sup>rd</sup> Wk. Sept-21	4 <sup>th</sup> wk. Dec. -21	1254	47
Ajawain	Late Kharif-21	Irrigated	Deep black	265-285	55-75	360-450	Paddy	3 <sup>rd</sup> Wk. Sept-21	4 <sup>th</sup> wk. Dec. -21	1254	47
Water melon	Summer-21	Irrigated	Deep black	260-275	45-75	360-420	Paddy	2 <sup>nd</sup> Wk. Feb.-21	1 <sup>st</sup> wk. May-21	1254	47
Mango	Kharif-21	Irrigated	Deep black	270-280	45-75	360-420	Fellow	3 <sup>rd</sup> Wk. June-21	-	1254	47
Banana	Late Kharif-21	Irrigated	Deep black	260-280	45-65	340-460	Fellow	3 <sup>rd</sup> Wk. Sept-21	-	1254	47

#### Technical Feedback on the demonstrated technologies

Discipline	S. N.	Feed Back
Crop Production and Plant Protection	1	Soybean NRC-37 having more pod formation and have no pod shattering. However, in KDS-344 observed poor pod setting during heavy rain fall.
	2	Line sowing of sesame GT-5 gave higher yield as compared to broadcasting method.
	3	BT Cotton H -12 having a greater number of balls with high yield.
	4	Paddy GNR-6 found higher yield in rain fed area.
	5	TG37A variety of groundnut is early maturing and less affected by leaf spot.
	6	Pseudomonas liquid reduce root rot of brinjal and chilly.
	7	Stem borer attack was less in Purna variety of drilled paddy
	8	Pigeon pea GT-105 having low wilt as compared to local variety.

	9	Low incidence of wilt was observed in Chickpea GJG-5.
Animal Science	10	Area specific Chelated Mineral Mixture Increase fertility & Reproductive Performance in heifer, Increase Milk Production in Milch animals, Promotes growth and development in calves
	11	It gives 5–6 cuts in one year at 60 days intervals. The leaves and stem is highly succulent in nature. It contains high protein (8.41%) and less crude fibre. It attains 50% flowering in 65–70 days and ready for seed harvest in 105–110 days. The variety is recommended for cultivation in Narmada under irrigated conditions. It is tolerant to shootfly/ stem borer. Average yield of green fodder is 170 t/ha in 5-6 multicut.
	12	Reduce incidence Fracture, Hygroma, Mastitis, other body injury and Improve Digestion, Increases Blood flow to teats & udder of cows, Increases Resting Time which help production of milk yield
	13	Reduces women drudgery in terms of time, efficiency, and physical hazards (finger injuries, wrist pain muscle stress and postural improvement etc.) through twin wheel hoe.
Home science	14	<ul style="list-style-type: none"> <li>➤ One Farm women can thresh paddy ten times faster than four persons. It can also be used to thresh moist crop. Another feature of the thresher is that it retains the complete straw and does not chop it.</li> <li>➤ Paddy straw can be used as gap fillers in packaging and manufacturing of earthen houses etc. The paddy thresher is easily repairable and can be used for both commercial and domestic purposes.</li> </ul>
	15	Revolving type milking stand and stool is very effective in milking when compared with traditional method (in squatting position). It is useful in reducing human cost of work, body pain and helpful in increasing work efficiency. It improves the work posture from squatting to sitting; provision of wheels makes the movement easy and reduces the Musculo-skeletal problems while performing the milking activity.
		Dairy farming is a back breaking activity as it stresses almost all parts of the body. It involves 10-12 minutes at one time per animal (morning or evening) so both times include 20-25 minutes activity per animal per day to each animal. This activity is a routine activity which affects any worker's capacity. Use of improved tools for performing the selected activities reduces the muscular efforts leading to maximum efficiency in terms of health and output and also reduce time for milking in 5-7 minute.



		Majority of women used steel container, there is risk of milk felt down. provision of wheel in stool reduces the stress and strain of milkman, it shows with revolving stool women could make more strip with using both hands in milking as compared to traditional way of milking in squatting position, more strokes mean more efficiency.
	16	<ul style="list-style-type: none"> <li>➤ Kitchen garden ensures household food security</li> <li>➤ Provides economic returns through sale of excess produce</li> <li>➤ Kitchen garden acts as an experimental plot for organic techniques</li> <li>➤ Helps in the conservation of traditional varieties of vegetable seeds</li> <li>➤ Kitchen garden contributes to increased household income by reducing spending on fruits and vegetables.</li> </ul>
	17	<ul style="list-style-type: none"> <li>➤ Paddy thresher improves work efficiency, reduce time and save labour cost.</li> <li>➤ Broken grains nil and save length of straw for fodder.</li> </ul>

#### Farmers' reactions on specific technologies

Discipline	S. N.	Feed Back
Crop Production	1	TG-37A variety of groundnut is high yielding, bold seeded fetching good price and more haulm yield
	2	NRC-37 variety of soybean gave higher number of pods and more yield as compared to JS-335 and local.
	3	Sesame GT-5 is bold seeded and early maturing.
	4	BDN-711 variety of pigeon pea is bold seeded and early maturing.
	5	GNR-2 gave better yield, lodging problem is less as compared to other varieties
	6	Paddy Purna gave more tillering and high yielding ability under drilled condition.
	7	GNIB-22 is early maturing with a greater number of pods.
	8	Indian bean (GNIB-2) gave higher number of tillering (8-10) with 15-20 numbers of pods per tiller.
	9	Chickpea GJG-5 having bold seeded and getting high market price.
Plant protection	10	BT cotton H-12 having a greater number of bolls and less sucking pest problem.

	11	GM-6 variety of green gram resistant to yellow mosaic disease and bold seeded, fetching good price in the market.
	12	Maize and sorghum crop was most affected by FAW.
Horticulture	13	NOVEL (Organic liquid fertilizer) gave high fruit setting and yield of banana and water melon.
	14	Indian bean (GNIB-2) gave higher number of tillering (8-10) with 15-20 numbers of pods per tiller.
	15	GNIB-2 is early maturing with a greater number of pods.
Animal Science	16	Area specific Chelated Mineral Mixture helpful in digestion, fertility, Reproductive Performance, Milk Production, Promotes growth and development and also reduce calving interval & age of first parturition.
	17	It Can be grown throughout the year as a multicut variety under irrigated conditions which very useful manage of green fodder requirement of livestock throughout year.
	18	Rubber cow mat is very useful in dairy animal specially pregnant and milch animals which help in Increase productivity & profitability, Anti-slip surfaces, Increase milk production, Easy to clean & Hygienic maintain in animal shed, Reduces the risk of leg injury, Sturdy And Durable, Eco-friendly, Excellent Insulation and Cost-Effective long-lasting Product.
Home science	19	Twin wheel hoe eliminates pain, avoids bending and squatting postures, reduces drudgery of farm women in weeding operation. Productivity of worker increased more than three times.
	20	<ul style="list-style-type: none"> <li>➤ Kitchen garden gave better health from balanced diet reduces household medical expenses</li> <li>➤ It is an effective way for women to utilize their available free time</li> <li>➤ Farm women can contributes to financial independence for personal expenses</li> <li>➤ Kitchen garden provides an opportunity to bond / share experiences with other women.</li> <li>➤ Kitchen Garden provides continuous supply of fresh vegetables and fruits throughout the year.</li> </ul>
	21	Paddy thresher reduces the time and pain in shoulder, increase the work efficiency and saves money and manpower too Although it's a good source of income generation for farming community.
	22	Revolving stand and stool use of this tool women felt high relief from body stress because it improves the work posture from squatting to sitting, Provision of wheels makes the movement easy and it reduces the musculoskeletal problems while performing the milking activity.

	23	The farm women took out 10.2 lit. of milk in 7-8 min. from one animal with revolving stand and stool as compared to the traditional way of milking animal who took 11.00 min. for milking 8.6 lit. of milk from one animal. So, time spent on activity decreased in improved method as compared to squatting method. He or she can freely use both hands for milking.
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### Extension and Training activities under FLD

Sl. No.	Activity	No. of activities organized	Date	Number of participants	Remarks
1	Field days	Field day on kharif	06/10/2021	251	
		Field day celebration of IMP cotton and paddy	27/10/2021	25	
		Field day CFLDs sorghum KDS 344	27/10/2021	27	
		Field day celebration of IMP cotton paddy	27/10/2021	25	
		Field day FLD soybean KDS 344	27/10/2021	27	
		Paddy thresher women friendly farm implements	15/11/2021	40	
		Awareness on drudgery reduction technology - paddy thresher	30/11/2021	25	
		Field day on drudgery reduction technology - paddy thresher	30/11/2021	22	
		Field day on turmeric	05/01/2021	22	
		Field day on turmeric GNT 1 & 2	11/01/2021	20	
		Field day on turmeric	16/01/2021	22	
		Field day on GNIB-22 Indian bean	05/01/2021	13	
		Field day on GNIB-22 Indian bean	15/01/2021	28	
		Field day of FLD papadi	05/01/2021	30	
		Field day on chickpea GG-3	11/02/2021	30	
		Field day on chickpea GG-5	12/02/2021	26	
		Field day on chickpea GG-3	17/02/2021	45	
2	Farmers Training	Scientific cultivation of drilled paddy (Variety - Tapi/Purna)	31/05/2021	32	
		Scientific cultivation of kharif paddy (GR-13)	01/06/2021	30	

	Scientific cultivation of paddy (GNR-2)	02/06/2021	92	
	Scientific cultivation of cotton (H-10 & H-12)	07/06/2021	54	
	Scientific cultivation of soybean (NRC-37/KDS-344)	10/06/2021	50	
	Scientific cultivation of pigeonpea (GT-105)	22/06/2021	32	
	Training on drudgery reduction tools	03/06/2021	23	
	Importance of vegetables in daily diet	04/06/2021	21	
	Scientific cultivation of paddy	01/06/2021	20	
	Scientific cultivation of paddy	02/06/2021	31	
	Scientific cultivation of paddy	03/06/2021	32	
	Scientific cultivation of paddy	04/06/2021	22	
	Scientific cultivation of paddy	14/06/2021	19	
	Scientific cultivation of paddy	15/06/2021	16	
	Scientific cultivation of paddy	16/06/2021	18	
	Scientific cultivation of paddy	17/06/2021	17	
	Scientific cultivation of paddy	18/06/2021	47	
	Awareness about Scientific cultivation of paddy	19/06/2021	44	
	Scientific cultivation of kharif crops	21/06/2021	44	
	Scientific cultivation of soybean	20/06/2021	28	
	Kitchen garden planning and then implement in kitchen garden	24/06/2021	55	
	Scientific cultivation of Bt cotton	22/06/2021	33	
	Gramin krishi mausam seva	04/06/2021	33	
	IPM kharif crops	28/06/2021	38	
	How to raise nursery of vegetable / planting material	28/06/2021	38	
	Mango orchard planning and management	30/06/2021	30	
	Planning and implementation of nutritional kitchen garden	18/06/2021	15	
	Imp of maize	09/09/2021	20	
	Organic farming	21/10/2021	125	

		IPM of chickpea under NFSM	26/10/2021	90	
		Scientific cultivation gram under NFSM	25/10/2021	45	
		FLD cum training of ajwain crop	01/10/2021	65	
		FLD cum training of indian bean	08/10/2021	55	
		Imp of kharif crops	13/09/2021	20	
3	Media coverage	Field day celebration	Divya Bhaskar 16-01-2021	01	
		vocational training	Gujarat Samachar 17-02-2021	01	
		Krishi mela and training program	Divya Bhaskar 10-03-2021	01	
		Webinar on jal sanchay ane tapaka paddhati	Sandesh 09-05-2021	01	
		Webinar on Fertile soil and bee's importance in crop production	Gujarat Samachar 23-05-2021	01	
		Planning of kharif crops before monsoon	Gujarat Samachar 23-05-2021	01	
		Webinar on bee's importance in crop production	Divya Bhaskar 23-05-2021	01	
		Distribution of 10 beneficiary kits	Gujarat Samachar 29-05-2021	01	
		Webinar on the importance of milk in human diet	Divya Bhaskar 03-06-2021	01	
		Guidance to Women, Farmers on Animal Health, Productivity Enhancement (Milk Day Celebration)	Gujarat Samachar 04-06-2021	01	
		World Environment day celebration	Sandesh 07-06-2021	01	

		Training on scientific method of soybean under NMOOP	Gujarat Samachar 15-06-2021	01	
		Awareness campaign on Nutri kitchen garden and their management	Divya Bhaskar 26-06-2021	01	
		Kitchen Garden Information to Tribal Women	Gujarat Samachar 28-06-2021	01	
		Educational activities at the MVG Study Center in Dumkhal	Sandesh 13-07-2021	01	
		Guidelines for farmers to grow paddy	Gujarat Samachar 14-07-2021	01	
		feedback program in special reference to vocational training	Divya Bhaskar 01-08-2021	01	
		World breastfeeding day celebration	Divya Bhaskar 07-08-2021	01	
		Farm women shibir on Agriculture and Nutrition	Sandesh 13-08-2021	01	
		bharat ki Azadi ka Amrut mahotsav celebration	Divya Bhaskar 16-09-2021	01	
		National nutritional month celebration	Sandesh 17-09-2021	01	
		Poshan vatika and tree plantation program	Gujarat Samachar 19-09-2021	01	
		Entrepreneurship Development Program	Divya Bhaskar 02-10-2021	01	
		Traditional food and fruit exhibition	Sandesh 17-10-2021	01	
		On Reach tool center Program	Divya Bhaskar	01	

			23-10-2021		
		On Reach tool center Program	Gujarat Samachar 23-10-2021	01	
		Two days vocational training	Sandesh 30-10-2021	01	
		World Soil day celebration	Divya Bhaskar 06-12-2021	01	
		World Soil day celebration	Sandesh 08-12-2021	01	
4	Training for extension functionaries	Diet planning for different age groups according to RDA	08/10/2021	36	

### C. Performance of Frontline demonstrations

#### Frontline demonstrations on oilseed crops

Performance demonstration on selected 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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sesamum	ICM	Improved Seed (1 kg/acre); Bio- fertilizers like Rhizobium (1 L/acre), PSB (1 L/acre), KMB (1 L/acre), Bio-pesticides like Pseudomonas liquid, (1 L/acre), Liquid micro nutrient like Banana pseudo stem (NOVEL), (2 L/acre).	GT-5	25	10	9.5	8.6	9.1	7.5	21.33	27200	46226	19026	1.70	26800	38434	11633	1.36

Mustard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Safflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Linseed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sunflower	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Soybean	ICM	Improved Seed (25 kg/acre); Bio- fertilizers like Rhizobium (1 L/acre), PSB (1 L/acre), KMB (1 L/acre), Bio-pesticides like Pseudomonas liquid, (1 L/acre), Liquid micro nutrient like Banana pseudo stem (NOVEL), (2 L/acre),	NRC-37	50	20	19.5	17.4	18.6	14.2	30.99	26500	61307	34807	2.31	25800	46926	21126	1.82
Castor																		

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

#### 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										
Pigeon pea (Kharif-20)	ICM	Improved Seed (6 kg/acre); Bio-fertilizers like Rhizobium (1 L/acre), PSB (1 L/acre), KMB (1 L/acre), Bio-pesticides like Pseudomonas liquid, (1 L/acre), Liquid micro nutrient like Banana pseudo stem (NOVEL), (2 L/acre), neem oil (1500 ppm) (1lit)	BDN-711	25	10	16.6	15.4	15.97	14.13	13.02	27300	67074	39774	2.45	26500	59356	32856	2.23



Pigeon pea (Kharif-21)	ICM	Improved Seed (6 kg/acre); Bio-fertilizers like Rhizobium (1 L/acre), PSB (1 L/acre), KMB (1 L/acre), Bio-pesticides like Pseudomonas liquid, (1 L/acre), Liquid micro nutrient like Banana pseudo stem (NOVEL), (2 L/acre), neem oil (1500 ppm) (1lit)	GT-105	30	12	Result awaited due to crop is standing												
Black gram	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Green gram	ICM	Improved Seed (25 kg/acre); Bio-fertilizers like Rhizobium (1 L/acre), PSB (1 L/acre), KMB (1 L/acre), Bio-pesticides like Pseudomonas liquid, (1 L/acre), Liquid micro nutrient like Banana pseudo stem (NOVEL), (2 L/acre), neem oil (1500 ppm) (1lit)	GM-6	50	20	11.5	10.2	10.8	8.31	29.96	28000	45346	17134	1.62	27400	34888	7488	1.27

Chickpea	ICM	Improved Seed (5 kg/acre); Bio-fertilizers like Rhizobium (1 L/acre), PSB (1 L/acre), KMB (1 L/acre), Bio-pesticides like Pseudomonas liquid, (1 L/acre), Liquid micro nutrient like Banana pseudo stem (NOVEL), (2 L/acre), neem oil (1500 ppm) (1lit)	GG-5	25	10	14.9	13.2	14.6	11.3	29.20	28500	74338	45838	2.61	26500	57487	30987	1.72
Field pea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lentil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Horse gram	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cowpea	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

### 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 (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
					High	Low	Average												
Cereals																			
Paddy	ICM	Improved variety (GNR-2)	200	80	45.8	41.5	44.4	34.8	27.51	40-48 tiller/pl	20-34 tiller/pl	25200	70965	45765	2.82	23400	55655	32255	2.38
Paddy	ICM	Improved variety (GNR-6)	200	80	47.6	43.2	44.6	36.6	21.86	42-50 tiller/pl	20-38 tiller/pl	23600	63813	40213	2.70	21800	51308	29508	2.35

<b>Paddy</b>	ICM	Improved variety (GAR-13)	30	12	49.3	42.6	47.80	36.7	30.25	45-50 tiller/pl	20-38 tiller/pl	24700	65674	40974	2.67	23300	51361	28061	2.20
<b>Paddy</b>	ICM	Improved variety (GNRH-2)	30	12	49.8	44.5	49.06	36.9	32.95	45-50 tiller/pl	20-38 tiller/pl	24700	68651	43951	2.75	23300	51560	28260	2.21
<b>Paddy</b>	ICM	Improved variety (PURNA)	10	5	19.8	15.6	17.44	12.8	35.94	32-44 tiller/pl	15-24 tiller/pl	15800	34880	19480	2.21	15500	26660	11160	1.72
<b>Paddy</b>	ICM	Improved variety (TAPI)	40	15	23.8	18.7	19.5	13.3	46.62	35-45 tiller/pl	15-24 tiller/pl	16300	38245	21945	2.35	16900	26210	9310	1.55
<b>Paddy</b>	IPM	Pheromone trap and lure, Neem oil (1500 ppm), acetamiprid 20 SP, Beauveria bassiana	16	6	37.5	29.4	33.47	27.55	21.49	40-52 tiller/pl	21-24 tiller/pl	26700	66931	40231	2.51	27800	55100	27300	1.98
<b>Waterlogged Situation</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Coarse Rice</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Scented Rice</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Wheat</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Wheat Timely sown</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Wheat Late Sown</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Mandua</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Barley</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Maize</b>	ICM	Improved variety GAYMH-1	10	5	25.9	22.4	23.78	20.3	17.24	Mean 1.5 damaged combs/pl	Mean 1.5 damaged combs/pl	15400	47560	32160	3.08	16500	40700	24200	2.47
<b>Maize (IPM)</b>	IPM	Pheromone Trap, Flubendia	10	5	25.9	23.5	24.2	20.4	18.63	Mean 1.5 damaged combs/pl;	Mean 2.5 damaged combs/pl;	17800	48320	30520	2.72	19400	40840	21440	2.11

		vide 20 SP, Neem oil 1500ppm, Bavaria bassiana								Mean 0-1.0 FAW/pl	Mean 0-1.8 FAW/pl								
<b>Amaranth</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Millets</b>																			
<b>Jowar</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Bajra</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Barneyard millet</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Finger millet</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Vegetables</b>																			
<b>Bottle gourd</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Bitter gourd</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cowpea</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Sponge gourd</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Petha</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Tomato</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Indian Bean (Kharif- 20)</b>	ICM	Varietal (GNIB)	50	6	32.1	26.4	29.8	24.5	21.7	-	-	25000	119225	94225	4.8	98039	25000	69038	3.4
<b>Indian Bean (Kharif- 21)</b>	ICM	Varietal (GNIB)	50	6	Result awaited due to crop is standing														
<b>Capsicum</b>																			
<b>Chilli</b>	Bio compon ent	Trichoder ma spp.	16	6	240	234	237	213	11.27	32-44 fruits/ pl	15-24 fruits /pl	26700	52140	25440	1.95	29900	46860	16960	1.56

<b>Brinjal</b>	Bio compon ent	Pseudom onas spp.	16	6	245	238	244.7	222	10.03	42-50 fruits /pl	20-24 fruits /pl	24600	58728	34128	2.38	27500	53376	25876	1.94
<b>Vegetable pea</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Soft gourd</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Okra</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Colocasia (Arvi)</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Broccoli</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cucumber</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Onion</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Coriender</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Lettuce</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cabbage</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Cauliflow er</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Elephant fruit</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Any other (Pl specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Flower crops</b>																			
<b>Marigold</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Bela</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Tuberose</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Gladiolus</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Any other (Pl. specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Fruit crops</b>																			
<b>Mango</b>	ICM	Variety (Sonpari)	20	5	Result awaited due to crop is standing														
<b>Strawberry</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Guava	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Banana	ICM	Grand Nine (G-9)	20	5	Result awaited due to crop is standing														
Papaya	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Muskmelon	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Watermelon	ICM	INM, NOVEL Fruit fly trap	15	6	468	438	457	403.6	13.23	-	-	50000	456903	406903	9.13	55000	403612	348613	7.3
Any other (Pl. specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Spices & condiments																			
Ginger	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ajwain (Kharif-20)	ICM	Variety (AA-93)	25	10	10.5	8.9	10.1	8.5	18.82	-	-	14000	142480	128480	10.2	16000	127300	111300	7.95
Ajwain (Kharif-21)	ICM	Variety (AA-93)	25	10	Result awaited due to crop is standing														
Garlic	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Turmeric	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Crops																			
Sugarcane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Potato	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cotton (Kharif-20)	ICM	Improved variety (H-10)	30	12	18.5	17.3	17.7	14.9	18.7	41 No. of balls/pl ;Mean 9-21 sucking pests/pl	30 No. of balls/pl ;Mean 26-32 sucking pests/pl	30000	75947	45947	2.53	28500	63993	35993	2.25

Cotton (Kharif-21)	ICM	Improved variety (H-10)	25	10	Results awaited due to crop at maturity														
Cotton (Kharif-20)	ICM	Improved variety (H-12)	50	20	20.2	18.5	19.57	17.65	10.95	45 No. of balls/pl ;Mean 11-22 sucking pests/pl	30 No. of balls/pl ;Mean 26-33 sucking pests/pl	30000	84160	54160	2.81	28500	75904	47404	2.66
Cotton (Kharif-21)	ICM	Improved variety (H-12)	25	10	Results awaited due to crop at maturity														
Cotton (Kharif-20)	IPM	Pheromone trap and lure, Neem oil (1500 ppm), acetamiprid 20 SP, Beauveria bassiana	16	6	19.7	19.4	19.5	17.6	11.0	50 No. of balls/pl ; Mean 8-20 sucking pests/pl	30 No. of balls/pl ;Mean 16-27 sucking pests/pl	26000	83958	57958	3.2	24000	75734	51734	3.15
Cotton (Kharif-21)	IPM	Pheromone trap and lure, Neem oil (1500 ppm), acetamiprid 20 SP, Beauveria bassiana	12	6	Results awaited due to crop at maturity														
<b>Medicinal &amp; aromatic plants</b>																			
<b>Mentholment</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Kalmegh</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Ashwagan dha	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Any other (Pl. specify)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Fodder Crops</b>																			
Sorghum (F)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cowpea (F)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize (F)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lucern	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Berseem	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oat (F)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Napier	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grasses	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

### 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										
Sorghum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



### FLD on Livestock

Category	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units (Animal/ Poultry/ Birds, etc)	Major parameters		% change in major parameter	Other parameter		Economics of demonstration (Rs.)				Economics of check (Rs.)			
					Demo	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
<b>Dairy</b>																	
Cattle/Buffalo	Animal Nutrition	Chelated Mineral Mixture	50	50	91	140	35	-	-								
Cattle/Buffalo	Animal Nutrition	Fodder Sorghum (COFS-29)	50	50	420	250	68	-	-	11300	41600	30300	3.68	11300	25000	13700	2.21
Cattle/Buffalo	Animal Nutrition	Fodder Sorghum (CSV 33 MF)	60	60	465	250	86.00	-	-	11300	46000	34700	4.07	11300	25000	13700	2.21
Cattle/Buffalo	Animal Production	Rubber cow mat	25	25	2.9	2.4	20.83			1700	2500	800	1.47	-	-	-	-
Cattle/Buffalo	Animal Nutrition	Oat Os-377	20	20	Result awaited due to crop standing												
Cattle/Buffalo	Animal Nutrition	Mineral Mixture Licking Block	50	50	396	459	13.73	-	-	-	-	-	-	-	-	-	-
<b>Poultry</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Sheep &amp; Goat</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Vaccination</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

### FLD on Fisheries - Nil

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)
<b>Common Carps</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Composite fish culture</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Feed Management</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

\* Economics to be worked out based total cost of production per unit area and not on critical inputs alone.

\*\* BCR= GROSS RETURN/GROSS COST

### 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)
Oyster Mushroom	Oyster Mushroom Immunity Buster	25	25	80.0	0	0	Yield Kg/unit	0	1500	8000	6500	5.33	0	0	0	0
Button Mushroom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Apiculture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maize Sheller	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Value Addition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermi Compost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sericulture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

### 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	Area (ha)	Major parameters	Filed observation (output/man hour)		% Change in major parameter	Labor reduction (man days)				Cost reduction (Rs. /ha or Rs./Unit etc.)			
						Demo	Check		Land preparation	Sowing	Weeding	Total	Land preparation	Labour	Irrigation	Total

Revolving type Milking stand and stool	Milking cow/buffalo	Revolving type Milking stand and stool	25	-	Time saves Safe and clean milking practices	56	59	94.1	-	-	-		1		250	-	950
Paddy thresher	Paddy	Electric Motor operated paddy thresher with winnowing fan	2	-	Time saves Work efficiency improve	16	72	22.22	-	-	-		2	*18000	500	-	17,500
Twin wheel hoe	Vegetable/gram	Twin wheel hoe	25	-	Time saves Work efficiency improve	21	28	75.00	-	-	2.6	3.5	1	1650	250	-	1400

NOTE: \* One time investment (machine cost) for paddy thresher.

\*\* labour cost calculated as per university labour wages.

#### FLD on Other Enterprise: Kitchen Gardening

Category and Crop	Thematic area	Name of the technology demonstrated	No. of Farmer	No. of Units	Yield (Kg)		% change in yield	Other parameters		Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demonstration	Check		Demo	Check	Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
Seeds and seedlings of vegetables	Health and nutritional security	Nutritional garden	50	50	90.30	50.00	80.60	-	-	1050	5065	4015	4.82	750	2000	2350	2.6

#### 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						
Oilseed crop	-	-	-	-	-	-	-	-	-	-	-	-	-

Pulse crop	-	-	-	-	-	-	-	-	-	-	-	-	-
Cereal crop	ICM	Improved variety (GNRH-2)	30	12	53.51	45.51	49.01	36.6	32.90	24700	63038	38338	2.55
Vegetable crop	-	-	-	-	-	-	-	-	-	-	-	-	-
Fruit crop	-	-	-	-	-	-	-	-	-	-	-	-	-
Other (specify)	-	-	-	-	-	-	-	-	-	-	-	-	-

***Note : Remove the Enterprises/crops which have not been shown***

### 3.4. Training Programmes (Online programmes if any should be included under On Campus category)

#### Farmers' Training including sponsored training programmes (on campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	01	0	0	0	0	20	20	0	20	20
Micro Irrigation/irrigation	01	0	0	0	8	23	31	8	23	31
Seed production	01	0	0	0	0	32	32	0	32	32
Nursery management	01	0	0	0	0	22	22	0	22	22
Integrated Crop Management	07	0	0	0	286	88	374	286	88	374
Soil & water conservation	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (Awareness programme GKMS)	06	0	0	0	133	112	245	133	112	245
<b>Total</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>427</b>	<b>297</b>	<b>724</b>	<b>427</b>	<b>297</b>	<b>724</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high value crops	02	0	0	0	70	13	83	70	13	83
Off-season vegetables										
Nursery raising	01	0	0	0	0	23	23	0	23	23
Exotic vegetables										
Export potential vegetables	02	0	0	0	80	25	105	80	25	105
Grading and standardization	01	0	0	0	0	55	55	0	55	55
Protective cultivation	01	0	0	0	6	12	18	6	12	18
Others (pl specify)										
<b>Total (a)</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>156</b>	<b>128</b>	<b>284</b>	<b>156</b>	<b>128</b>	<b>284</b>
<b>b) Fruits</b>										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	0	0	0	0	0	0	0	0	0	0
Cultivation of Fruit	01	0	0	0	4	11	15	4	11	15
Management of young plants/orchards	01	0	0	0	60	0	60	60	0	60

Rejuvenation of old orchards	01	0	0	0	0	55	55	0	55	55
Export potential fruits	01	0	0	0	0	33	33	0	33	33
Micro irrigation systems of orchards	01	0	0	0	7	19	26	7	19	26
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (b)</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>71</b>	<b>118</b>	<b>189</b>	<b>71</b>	<b>118</b>	<b>189</b>
<b>c) Ornamental Plants</b>										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total ( c)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>d) Plantation crops</b>										
Production and Management technology	01	0	0	0	24	200	224	24	200	224
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (d)</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>200</b>	<b>224</b>	<b>24</b>	<b>200</b>	<b>224</b>
<b>e) Tuber crops</b>										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (e)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>f) Spices</b>										
Production and Management technology	01	0	0	0	15	50	65	15	50	65
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (f)</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>50</b>	<b>65</b>	<b>15</b>	<b>50</b>	<b>65</b>
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (g)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>GT (a-g)</b>	<b>14</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>266</b>	<b>496</b>	<b>762</b>	<b>266</b>	<b>496</b>	<b>762</b>
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>IV Livestock Production and Management</b>										
Dairy Management	03	0	0	0	61	41	102	61	41	102
Poultry Management	02	0	0	0	78	32	110	78	32	110
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	01	0	0	0	5	10	15	5	10	15
Disease Management	01	0	0	0	4	35	39	4	35	39
Feed & fodder technology	01	0	0	0	15	10	25	15	10	25
Production of quality animal products	03	0	0	0	43	82	125	43	82	125
Others (pl specify)										
<b>Total</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>206</b>	<b>210</b>	<b>416</b>	<b>206</b>	<b>210</b>	<b>416</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	0	0	0	0	0	0	0	0	0	0
Design and development of low/minimum cost diet	01	0	0	0	10	35	45	10	35	45
Designing and development for high nutrient efficiency diet	2	0	0	0	0	125	125	0	125	125
Minimization of nutrient loss in processing	2	0	0	0	5	135	140	5	135	140

Processing and cooking	2	0	0	0	105	104	209	105	104	209
Gender mainstreaming through SHGs	2	0	0	0	0	114	114	0	114	114
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	2	0	0	0	5	78	83	5	78	83
Women empowerment	0	0	0	0	0	0	0	0	0	0
Location specific drudgery reduction technologies	02	0	0	0	0	73	73	0	73	73
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	04	0	0	0	0	156	156	0	156	156
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>125</b>	<b>820</b>	<b>945</b>	<b>125</b>	<b>820</b>	<b>945</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	07	0	0	0	233	113	346	233	113	346
Integrated Disease Management	3	0	0	0	56	31	87	56	31	87
Bio-control of pests and diseases	3	0	0	0	29	51	80	29	51	80
Production of bio control agents and bio pesticides	03	0	0	0	98	78	176	98	78	176
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>416</b>	<b>273</b>	<b>689</b>	<b>416</b>	<b>273</b>	<b>689</b>
<b>VIII Fisheries</b>										
Integrated fish farming	01	0	0	0	10	45	55	10	45	55
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0



Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>45</b>	<b>55</b>	<b>10</b>	<b>45</b>	<b>55</b>
<b>IX Production of Inputs at site</b>										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	04	0	0	0	15	29	44	15	29	44
Group dynamics	01	0	0	0	30	17	47	30	17	47
Formation and Management of SHGs	01	0	0	0	44	0	44	44	0	44

Mobilization of social capital	01	0	0	0	44	0	44	44	0	44
Entrepreneurial development of farmers/youths	01	0	0	0	28	0	28	28	0	28
WTO and IPR issues	01	0	0	0	55	66	121	55	66	121
Others (pl specify)										
<b>Total</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>216</b>	<b>112</b>	<b>328</b>	<b>216</b>	<b>112</b>	<b>328</b>
<b>XI Agro-forestry</b>										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>85</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1666</b>	<b>2253</b>	<b>3919</b>	<b>1666</b>	<b>2253</b>	<b>3919</b>

#### Farmers' Training including sponsored training programmes (off campus)

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	0	0	0	0	0	0	0	0	0	0
Micro Irrigation/irrigation	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Crop Management	03	0	0	0	23	41	64	23	41	64
Soil & water conservatioin	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (Awareness programme on GKMS)	06	0	0	0	99	85	184	99	85	184
<b>Total</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>122</b>	<b>126</b>	<b>248</b>	<b>122</b>	<b>126</b>	<b>248</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										
Production of low value and high valume crops	0	0	0	0	0	0	0	0	0	0

Off-season vegetables	0	0	0	0	0	0	0	0	0	0
Nursery raising	01	0	0	0	30	8	38	30	8	38
Exotic vegetables	0	0	0	0	0	0	0	0	0	0
Export potential vegetables	0	0	0	0	0	0	0	0	0	0
Grading and standardization	0	0	0	0	0	0	0	0	0	0
Protective cultivation	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (a)</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>30</b>	<b>8</b>	<b>38</b>	<b>30</b>	<b>8</b>	<b>38</b>
<b>b) Fruits</b>										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	01	0	0	0	25	5	30	25	5	30
Cultivation of Fruit	03	0	0	0	55	0	55	55	0	55
Management of young plants/orchards	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Export potential fruits	0	0	0	0	0	0	0	0	0	0
Micro irrigation systems of orchards	0	0	0	0	0	0	0	0	0	0
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (b)</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>5</b>	<b>85</b>	<b>80</b>	<b>5</b>	<b>85</b>
<b>c) Ornamental Plants</b>										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total ( c)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>d) Plantation crops</b>										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (d)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>e) Tuber crops</b>										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (e)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>f) Spices</b>										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (f)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (g)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GT (a-g)</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110</b>	<b>13</b>	<b>123</b>	<b>110</b>	<b>13</b>	<b>123</b>
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>IV Livestock Production and Management</b>										
Dairy Management	01	0	0	0	20	20	40	20	20	40
Poultry Management	0	0	0	0	0	0	0	0	0	0
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	01	0	0	0	11	08	19	11	08	19
Disease Management	0	0	0	0	0	0	0	0	0	0
Feed & fodder technology	01	0	0	0	06	13	19	06	13	19
Production of quality animal products	01	0	0	0	09	12	21	09	12	21
Others (pl specify)										
<b>Total</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>53</b>	<b>99</b>	<b>46</b>	<b>53</b>	<b>99</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	01	0	0	0	04	11	15	04	11	15
Design and development of low/minimum cost diet	0	0	0	0	0	0	0	0	0	0
Designing and development for high nutrient efficiency diet	01	0	0	0	3	22	25	3	22	25
Minimization of nutrient loss in processing	0	0	0	0	0	0	0	0	0	0
Processing and cooking	01	0	0	0	20	25	45	20	25	45
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Women empowerment	01	0	0	0	12	56	68	12	56	68
Location specific drudgery reduction technologies	01	0	0	0	04	26	30	04	26	30
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	01	0	0	0	05	35	40	05	35	40

Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>48</b>	<b>175</b>	<b>223</b>	<b>48</b>	<b>175</b>	<b>223</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	03	0	0	0	65	45	110	65	45	110
Integrated Disease Management	01	0	0	0	15	16	31	15	16	31
Bio-control of pests and diseases	01	0	0	0	20	0	20	20	0	20
Production of bio control agents and bio pesticides	01	0	0	0	27	24	51	27	24	51
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>127</b>	<b>85</b>	<b>212</b>	<b>127</b>	<b>85</b>	<b>212</b>
<b>VIII Fisheries</b>										
Integrated fish farming	0	0	0	0	0	0	0	0	0	0
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0

Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>IX Production of Inputs at site</b>										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>X Capacity Building and Group Dynamics</b>										
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	0	0

Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Mobilization of social capital	0	0	0	0	0	0	0	0	0	0
Entrepreneurial development of farmers/youths	0	0	0	0	0	0	0	0	0	0
WTO and IPR issues	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>XI Agro-forestry</b>										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>453</b>	<b>452</b>	<b>905</b>	<b>453</b>	<b>452</b>	<b>905</b>

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

Thematic area	No. of courses	Participants								
		Others			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>I Crop Production</b>										
Weed Management	0	0	0	0	0	0	0	0	0	0
Resource Conservation Technologies	0	0	0	0	0	0	0	0	0	0
Cropping Systems	0	0	0	0	0	0	0	0	0	0
Crop Diversification	0	0	0	0	0	0	0	0	0	0
Integrated Farming	01	0	0	0	0	20	20	0	20	20
Micro Irrigation/irrigation	01	0	0	0	8	23	31	8	23	31
Seed production	01	0	0	0	0	32	32	0	32	32
Nursery management	01	0	0	0	0	22	22	0	22	22
Integrated Crop Management	10	0	0	0	309	129	438	309	129	438
Soil & water conservation	0	0	0	0	0	0	0	0	0	0
Integrated nutrient management	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	12	0	0	0	232	197	429	232	197	429
<b>Total</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>549</b>	<b>423</b>	<b>972</b>	<b>549</b>	<b>423</b>	<b>972</b>
<b>II Horticulture</b>										
<b>a) Vegetable Crops</b>										



Production of low value and high volume crops	02	0	0	0	70	13	83	70	13	83
Off-season vegetables										
Nursery raising	02	0	0	0	30	31	61	30	31	61
Exotic vegetables										
Export potential vegetables	02	0	0	0	80	25	105	80	25	105
Grading and standardization	01	0	0	0	0	55	55	0	55	55
Protective cultivation	01	0	0	0	6	12	18	6	12	18
Others (pl specify)										
<b>Total (a)</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>186</b>	<b>136</b>	<b>322</b>	<b>186</b>	<b>136</b>	<b>322</b>
<b>b) Fruits</b>										
Training and Pruning	0	0	0	0	0	0	0	0	0	0
Layout and Management of Orchards	01	0	0	0	25	5	30	25	5	30
Cultivation of Fruit	04	0	0	0	4	66	70	4	66	70
Management of young plants/orchards	01	0	0	0	60	0	60	60	0	60
Rejuvenation of old orchards	01	0	0	0	0	55	55	0	55	55
Export potential fruits	01	0	0	0	0	33	33	0	33	33
Micro irrigation systems of orchards	01	0	0	0	7	19	26	7	19	26
Plant propagation techniques	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (b)</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>96</b>	<b>178</b>	<b>274</b>	<b>96</b>	<b>178</b>	<b>274</b>
<b>c) Ornamental Plants</b>										
Nursery Management	0	0	0	0	0	0	0	0	0	0
Management of potted plants	0	0	0	0	0	0	0	0	0	0
Export potential of ornamental plants	0	0	0	0	0	0	0	0	0	0
Propagation techniques of Ornamental Plants	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (c)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>d) Plantation crops</b>										
Production and Management technology	01	0	0	0	24	200	224	24	200	224

Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (d)</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>200</b>	<b>224</b>	<b>24</b>	<b>200</b>	<b>224</b>
<b>e) Tuber crops</b>										
Production and Management technology	0	0	0	0	0	0	0	0	0	0
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (e)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>f) Spices</b>										
Production and Management technology	01	0	0	0	15	50	65	15	50	65
Processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (f)</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>50</b>	<b>65</b>	<b>15</b>	<b>50</b>	<b>65</b>
<b>g) Medicinal and Aromatic Plants</b>										
Nursery management	0	0	0	0	0	0	0	0	0	0
Production and management technology	0	0	0	0	0	0	0	0	0	0
Post harvest technology and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total (g)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GT (a-g)</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>321</b>	<b>564</b>	<b>885</b>	<b>321</b>	<b>564</b>	<b>885</b>
<b>III Soil Health and Fertility Management</b>										
Soil fertility management	0	0	0	0	0	0	0	0	0	0
Integrated water management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient Management	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Management of Problematic soils	0	0	0	0	0	0	0	0	0	0
Micro nutrient deficiency in crops	0	0	0	0	0	0	0	0	0	0
Nutrient Use Efficiency	0	0	0	0	0	0	0	0	0	0
Balance use of fertilizers	0	0	0	0	0	0	0	0	0	0

Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>IV Livestock Production and Management</b>										
Dairy Management	04	0	0	0	81	61	142	81	61	142
Poultry Management	02	0	0	0	78	32	110	78	32	110
Piggery Management	0	0	0	0	0	0	0	0	0	0
Rabbit Management	0	0	0	0	0	0	0	0	0	0
Animal Nutrition Management	02	0	0	0	16	18	34	16	18	34
Disease Management	01	0	0	0	4	35	39	4	35	39
Feed & fodder technology	02	0	0	0	21	23	44	21	23	44
Production of quality animal products	04	0	0	0	52	94	146	52	94	146
Others (pl specify)										
<b>Total</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>252</b>	<b>263</b>	<b>515</b>	<b>252</b>	<b>263</b>	<b>515</b>
<b>V Home Science/Women empowerment</b>										
Household food security by kitchen gardening and nutrition gardening	01	0	0	0	04	11	15	04	11	15
Design and development of low/minimum cost diet	01	0	0	0	10	35	45	10	35	45
Designing and development for high nutrient efficiency diet	3	0	0	0	3	147	150	3	147	150
Minimization of nutrient loss in processing	2	0	0	0	5	135	140	5	135	140
Processing and cooking	3	0	0	0	125	129	254	125	129	254
Gender mainstreaming through SHGs	2	0	0	0	0	114	114	0	114	114
Storage loss minimization techniques	0	0	0	0	0	0	0	0	0	0
Value addition	2	0	0	0	5	78	83	5	78	83
Women empowerment	01	0	0	0	12	56	68	12	56	68

Location specific drudgery reduction technologies	03	0	0	0	4	99	103	4	99	103
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Women and child care	05	0	0	0	5	191	196	5	191	196
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>173</b>	<b>995</b>	<b>1168</b>	<b>173</b>	<b>995</b>	<b>1168</b>
<b>VI Agril. Engineering</b>										
Farm Machinery and its maintenance	0	0	0	0	0	0	0	0	0	0
Installation and maintenance of micro irrigation systems	0	0	0	0	0	0	0	0	0	0
Use of Plastics in farming practices	0	0	0	0	0	0	0	0	0	0
Production of small tools and implements	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Small scale processing and value addition	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>VII Plant Protection</b>										
Integrated Pest Management	10	0	0	0	298	158	456	298	158	456
Integrated Disease Management	4	0	0	0	71	47	118	71	47	118
Bio-control of pests and diseases	4	0	0	0	49	51	100	49	51	100
Production of bio control agents and bio pesticides	04	0	0	0	125	102	227	125	102	227
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>543</b>	<b>358</b>	<b>901</b>	<b>543</b>	<b>358</b>	<b>901</b>
<b>VIII Fisheries</b>										
Integrated fish farming	01	0	0	0	10	45	55	10	45	55
Carp breeding and hatchery management	0	0	0	0	0	0	0	0	0	0
Carp fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0

Composite fish culture	0	0	0	0	0	0	0	0	0	0
Hatchery management and culture of freshwater prawn	0	0	0	0	0	0	0	0	0	0
Breeding and culture of ornamental fishes	0	0	0	0	0	0	0	0	0	0
Portable plastic carp hatchery	0	0	0	0	0	0	0	0	0	0
Pen culture of fish and prawn	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Edible oyster farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Fish processing and value addition	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>45</b>	<b>55</b>	<b>10</b>	<b>45</b>	<b>55</b>
<b>IX Production of Inputs at site</b>										
Seed Production	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Bio-agents production	0	0	0	0	0	0	0	0	0	0
Bio-pesticides production	0	0	0	0	0	0	0	0	0	0
Bio-fertilizer production	0	0	0	0	0	0	0	0	0	0
Vermi-compost production	0	0	0	0	0	0	0	0	0	0
Organic manures production	0	0	0	0	0	0	0	0	0	0
Production of fry and fingerlings	0	0	0	0	0	0	0	0	0	0
Production of Bee-colonies and wax sheets	0	0	0	0	0	0	0	0	0	0
Small tools and implements	0	0	0	0	0	0	0	0	0	0
Production of livestock feed and fodder	0	0	0	0	0	0	0	0	0	0
Production of Fish feed	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Apiculture	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<b>X Capacity Building and Group Dynamics</b>										
Leadership development	04	0	0	0	15	29	44	15	29	44
Group dynamics	01	0	0	0	30	17	47	30	17	47
Formation and Management of SHGs	01	0	0	0	44	0	44	44	0	44
Mobilization of social capital	01	0	0	0	44	0	44	44	0	44
Entrepreneurial development of farmers/youths	01	0	0	0	28	0	28	28	0	28
WTO and IPR issues	01	0	0	0	55	66	121	55	66	121
Others (pl specify)										
<b>Total</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>216</b>	<b>112</b>	<b>328</b>	<b>216</b>	<b>112</b>	<b>328</b>
<b>XI Agro-forestry</b>										
Production technologies	0	0	0	0	0	0	0	0	0	0
Nursery management	0	0	0	0	0	0	0	0	0	0
Integrated Farming Systems	0	0	0	0	0	0	0	0	0	0
Others (pl specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>115</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2064</b>	<b>2760</b>	<b>4824</b>	<b>2064</b>	<b>2760</b>	<b>4824</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	03	0	0	0	33	64	97	33	64	97
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0

Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	02	0	0	0	5	65	70	5	65	70
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>129</b>	<b>167</b>	<b>38</b>	<b>129</b>	<b>167</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0

Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	0	0	0	0	0	0	0	0	0	0
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	01	0	0	0	0	24	24	0	24	24
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	0	0	0	0	0	0	0	0	0	0
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0
Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>24</b>	<b>24</b>	<b>0</b>	<b>24</b>	<b>24</b>



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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Nursery Management of Horticulture crops	0	0	0	0	0	0	0	0	0	0
Training and pruning of orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation of vegetable crops	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Integrated farming	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Production of organic inputs	0	0	0	0	0	0	0	0	0	0
Planting material production	0	0	0	0	0	0	0	0	0	0
Vermi-culture	0	0	0	0	0	0	0	0	0	0
Mushroom Production	03	0	0	0	33	64	97	33	64	97
Bee-keeping	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Value addition	0	0	0	0	0	0	0	0	0	0
Small scale processing	0	0	0	0	0	0	0	0	0	0
Post Harvest Technology	0	0	0	0	0	0	0	0	0	0
Tailoring and Stitching	01	0	0	0	0	24	24	0	24	24
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Production of quality animal products	0	0	0	0	0	0	0	0	0	0
Dairying	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	02	0	0	0	5	65	70	5	65	70
Quail farming	0	0	0	0	0	0	0	0	0	0
Piggery	0	0	0	0	0	0	0	0	0	0
Rabbit farming	0	0	0	0	0	0	0	0	0	0
Poultry production	0	0	0	0	0	0	0	0	0	0
Ornamental fisheries	0	0	0	0	0	0	0	0	0	0
Composite fish culture	0	0	0	0	0	0	0	0	0	0
Freshwater prawn culture	0	0	0	0	0	0	0	0	0	0
Shrimp farming	0	0	0	0	0	0	0	0	0	0
Pearl culture	0	0	0	0	0	0	0	0	0	0

Cold water fisheries	0	0	0	0	0	0	0	0	0	0
Fish harvest and processing technology	0	0	0	0	0	0	0	0	0	0
Fry and fingerling rearing	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>153</b>	<b>191</b>	<b>38</b>	<b>153</b>	<b>191</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	01	0	0	0	1	35	36	1	35	36
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0

Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>35</b>	<b>36</b>	<b>1</b>	<b>35</b>	<b>36</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	0	0	0	0	0	0	0	0	0	0
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0

Household food security	0	0	0	0	0	0	0	0	0	0
Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

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

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Productivity enhancement in field crops	0	0	0	0	0	0	0	0	0	0
Integrated Pest Management	0	0	0	0	0	0	0	0	0	0
Integrated Nutrient management	0	0	0	0	0	0	0	0	0	0
Rejuvenation of old orchards	0	0	0	0	0	0	0	0	0	0
Protected cultivation technology	0	0	0	0	0	0	0	0	0	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0
Care and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0
Formation and Management of SHGs	0	0	0	0	0	0	0	0	0	0
Women and Child care	0	0	0	0	0	0	0	0	0	0
Low cost and nutrient efficient diet designing	01	0	0	0	1	35	36	1	35	36
Group Dynamics and farmers organization	0	0	0	0	0	0	0	0	0	0
Information networking among farmers	0	0	0	0	0	0	0	0	0	0
Capacity building for ICT application	0	0	0	0	0	0	0	0	0	0
Management in farm animals	0	0	0	0	0	0	0	0	0	0
Livestock feed and fodder production	0	0	0	0	0	0	0	0	0	0
Household food security	0	0	0	0	0	0	0	0	0	0

Any other (pl.specify)	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>35</b>	<b>36</b>	<b>1</b>	<b>35</b>	<b>36</b>

### Sponsored training programmes

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Crop production and management</b>										
Increasing production and productivity of crops	04	0	0	0	115	102	217	115	102	217
Commercial production of vegetables	01	0	0	0	174	100	274	174	100	274
<b>Production and value addition</b>										
Fruit Plants	0	0	0	0	0	0	0	0	0	0
Ornamental plants	0	0	0	0	0	0	0	0	0	0
Spices crops	0	0	0	0	0	0	0	0	0	0
Soil health and fertility management	0	0	0	0	0	0	0	0	0	0
Production of Inputs at site	0	0	0	0	0	0	0	0	0	0
Methods of protective cultivation	02	0	0	0	26	17	43	26	17	43
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>315</b>	<b>219</b>	<b>534</b>	<b>315</b>	<b>219</b>	<b>534</b>
<b>Post harvest technology and value addition</b>										
Processing and value addition	01	0	0	0	8	22	30	8	22	30
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>22</b>	<b>30</b>	<b>8</b>	<b>22</b>	<b>30</b>
<b>Farm machinery</b>										
Farm machinery, tools and implements	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Livestock and fisheries</b>										
Livestock production and management	01	0	0	0	15	0	15	15	0	15
Animal Nutrition Management	01	25	0	25	0	0	0	25	0	25
Animal Disease Management	0	0	0	0	0	0	0	0	0	0
Fisheries Nutrition	0	0	0	0	0	0	0	0	0	0

Fisheries Management	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>15</b>	<b>0</b>	<b>15</b>	<b>40</b>	<b>0</b>	<b>40</b>
<b>Home Science</b>										
Household nutritional security	0	0	0	0	0	0	0	0	0	0
Economic empowerment of women	01	0	0	0	0	65	65	0	65	65
Drudgery reduction of women	01	0	0	0	10	18	28	10	18	28
Others (pl. specify)										
<b>Total</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>10</b>	<b>83</b>	<b>93</b>	<b>10</b>	<b>83</b>	<b>93</b>
<b>Agricultural Extension</b>										
Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GRAND TOTAL</b>	<b>12</b>	<b>25</b>	<b>0</b>	<b>25</b>	<b>348</b>	<b>324</b>	<b>672</b>	<b>373</b>	<b>324</b>	<b>697</b>

**Details of vocational training programmes carried out by KVKs for rural youth (4 or more days)**

Area of training	No. of Courses	No. of Participants								
		General			SC/ST			Grand Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Crop production and management</b>										
Commercial floriculture	0	0	0	0	0	0	0	0	0	0
Commercial fruit production	0	0	0	0	0	0	0	0	0	0
Commercial vegetable production	0	0	0	0	0	0	0	0	0	0
Integrated crop management	0	0	0	0	0	0	0	0	0	0
Organic farming	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Post harvest technology and value addition</b>										
Value addition	02	0	0	0	0	35	35	0	35	35
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>02</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>35</b>	<b>35</b>	<b>0</b>	<b>35</b>	<b>35</b>
<b>Livestock and fisheries</b>										
Dairy farming										

Composite fish culture	0	0	0	0	0	0	0	0	0	0
Sheep and goat rearing	01	0	0	0	6	40	46	6	40	46
Piggery	0	0	0	0	0	0	0	0	0	0
Poultry farming	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>01</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>40</b>	<b>46</b>	<b>6</b>	<b>40</b>	<b>46</b>
<b>Income generation activities</b>										
Vermicomposting	0	0	0	0	0	0	0	0	0	0
Production of bio-agents, bio-pesticides,	0	0	0	0	0	0	0	0	0	0
bio-fertilizers etc.	0	0	0	0	0	0	0	0	0	0
Repair and maintenance of farm machinery and implements	0	0	0	0	0	0	0	0	0	0
Rural Crafts	0	0	0	0	0	0	0	0	0	0
Seed production	0	0	0	0	0	0	0	0	0	0
Sericulture	0	0	0	0	0	0	0	0	0	0
Mushroom cultivation	01	0	0	0	40	0	40	40	0	40
Nursery, grafting etc.	0	0	0	0	0	0	0	0	0	0
Tailoring, stitching, embroidery, dying etc.	05	0	0	0	0	51	51	0	51	51
Agril. para-workers, para-vet training	01	0	0	0	0	35	35	0	35	35
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>										
<b>Agricultural Extension</b>										
Capacity building and group dynamics	0	0	0	0	0	0	0	0	0	0
Others (pl. specify)	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>86</b>	<b>126</b>	<b>40</b>	<b>86</b>	<b>126</b>
<b>Grand Total</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>161</b>	<b>207</b>	<b>46</b>	<b>161</b>	<b>207</b>

### 3.5. Extension Programmes

Nature of Extension Activity	No. of activities	Beneficiaries		
		Male	Female	Total
Awareness Programme	14	384	406	790
Field day	17	323	355	678
Film Show	28	80	762	842
FLD visit	34	129	95	224
Scientist visit to farmers fields	7	30	16	46
Shibir/Mahila shibir	14	842	621	1463
Field visits	53	228	203	431
Method Demonstration	11	142	91	233
Group Meeting/SHG	13	101	207	308
Farmer's scientist interaction	5	316	153	469
Educational tour	2	21	49	70
Lectures delivered as resource persons	132	4088	5419	9507
Extension Literature distribution	1	5010	5190	10200
Advisory Services/ Telephone/what up	152	1652	1101	2753
Exhibition participation /Fair	2	430	580	1010
Farmers visit to KVK	1	5698	7822	13520
Celebration of various days	16	594	822	1416
Diagnostic visits	24	111	42	153
Celebration of ICAR foundation day	1	47	20	67
Celebration of world soil day	1	32	30	62
Celebration of world food day	1	0	58	58
Celebration of world milk day	1	100	59	159
Celebration of Environmental day	1	14	37	51
Celebration of world bee day	1	50	45	95
Celebration of Mahila Kissan Divas	1	15	55	70
Swachhta pakhawada 16-31/12/2021	10	221	359	580
<b>Total</b>	<b>543</b>	<b>20658</b>	<b>24597</b>	<b>45255</b>

Note- Advisory services includes social media, website, telephonic calls etc.



### Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	00
Extension Literature	00
Newspaper coverage	30
Popular articles	02
Radio Talks	00
TV Talks	00
Animal health camps (Number of animals treated)	47
Social Media (No. of platforms Used)	05
Others (pl. specify)	00
<b>Total</b>	<b>91</b>

### 3.6 Online activities during year 2021

S. No.	Activity Type	Mode of implementation (Video conferencing / Audio Conferencing / Facebook Live / YouTube Live/ Zoom/ Google meet/ Webex etc)	Title of Program	No. of Programmes	No. of Participants / Views
<b>A</b>	<b>Farmers training</b>				
	01				
	<b>Total</b>	0	-	-	0-
<b>B</b>	<b>Farmers scientist's interaction programme</b>				
	01	Google meet	Field day of rabi crops and farmers feedback of CFLD of chickpea (online dial conference)	01	156
	<b>Total</b>	-	-	<b>01</b>	<b>156</b>
<b>C</b>	<b>Farmers seminars</b>				
	01	-	-	-	-
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

D	Expert lectures				
	01	Google meet	Gujarat ma mushroom ni khetini sakyatao	01	35
	<b>Total</b>	-	-	<b>01</b>	<b>35</b>
E	Any other (Pl. specify)				
	01	-	-	-	-
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>Grand Total (A+B+C+D+E)</b>	-	-	<b>02</b>	<b>191</b>

### 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 (g)	Value (Rs)	Number of farmers
Cereals	wheat	GW-451	-	5.30	18550	
	Paddy		GNRH-2	4.74	94800	
	Paddy	GAR-13	-	33.60	110208	
	Paddy	GNR-2	-	13.30	43624	
	Paddy	GNR-6	-	5.60	17472	
	Paddy	GNR-9	-	17.50	54600	
	Paddy	GR-17 (Sardar)	-	29.00	90480	
	Paddy	GR-16 (Tapi)	-	31.50	98280	
	Paddy	Devali Kolam	-	10.50	32760	
	Paddy	Purna	-	57.40	179088	
	Paddy	Heerakasi	-	3.00	9360	
Oilseeds	Niger	GN-3	-	0.60	4200	
Pulses	gram	GG-3	-	16.00	112000	
	gram	GG-5	-	12.25	85750	
	Green Gram	GM-6(T.F)	-	10.00	100000	
	Green Gram	GM-6 (Foundation)	-	5.50	66,000	
	Green Gram	GM-5(T.F)	-	1.50	15000	
	Soyabean	KDS-344	-	2.70	16200	
	Soyabean	NRC-37	-	0.30	1800	
	Soyabean	NRC-127	-	0.17	1020	
Commercial crops	-	-	-	-	-	-
Vegetables	-	-	-	-	-	-
Flower crops	-	-	-	-	-	-
Spices	-	-	-	-	-	-
Fodder crop seeds	-	-	-	-	-	-
Fiber crops	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-

Others	Sunhemp	-	-	7.00	24500	
	Nagali	-	-	0.30	1200	
	Vari	-	-	0.60	2400	
<b>Total</b>		-	-	<b>268.36</b>	<b>1179292</b>	

### 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
Commercial						
Vegetable seedlings	Brinjal seedlings	Gulabi	-	30000	18000	500
	Tomato seedlings	GT-1	-	30000	18000	
	Chilly seedlings	GVC-101, 111	-	25000	15000	
	Broccoli seedlings	-	-	700	420	
	Cabbage seedlings	-	-	15000	9000	
	Other Vegetable	-	-	15000	9000	
Fruits	Mango	Kesar	-	1550	93000	
		Sonpari	-	216	12960	
		Rajapuri	-	120	7200	
		Langado	-	60	3600	
		Amrapali	-	45	2700	
		Hafus	-	55	3300	
		Daseri	-	430	25800	
	Custard Apple	-	-	200	6000	
Ornamental plants	-	-	-	-	-	-
Medicinal and Aromatic	-	-	-	-	-	-
Plantation Material	Moringa	PKM-2	-	3000	90000	-
	Little gourd	-	-	800	12000	
	Paraval	-	-	500	7500	
	Spine gourd	-	-	200	3000	
Spices	-	-	-	-	-	-
Tuber	-	-	-	-	-	-
Fodder crop saplings	-	-	-	-	-	-
Forest Species	-	-	-	-	-	-
Others	-	-	-	-	-	-
<b>Total</b>	-	-	-	<b>122876</b>	<b>336480</b>	-

### Production of Bio-Products

Bio Products	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg		
Bio Fertilizers	-	-	-	-
Bio-pesticide	-	-	-	-
Bio-fungicide	-	-	-	-
Bio Agents	-	-	-	-
Vermicompost	Vermicompost	13250	92750	

Others	-	-	-	-
<b>Total</b>	-	<b>13250</b>	<b>92750</b>	-

#### Production of livestock materials

Particulars of Live stock	Name of the breed	Number	Value (Rs.)	No. of Farmers
<b>Dairy animals</b>				
Cows	-	-	-	-
Buffaloes	-	-	-	-
Calves	-	-	-	-
Goat	Surati	20	42000	
Others (Pl. specify)	-	-	-	-
<b>Poultry</b>				
Broilers	-	-	-	-
Layers	-	-	-	-
Duals (broiler and layer)	-	-	-	-
Japanese Quail	-	-	-	-
Turkey	-	-	-	-
Ducks	-	-	-	-
Others (Pl. specify)	-	-	-	-
<b>Piggery</b>				
Piglet	-	-	-	-
Others (Pl. specify)	-	-	-	-
<b>Fisheries</b>				
Indian carp	-	-	-	-
Exotic carp	-	-	-	-
Others (Pl. specify)	-	-	-	-
<b>Total</b>		<b>20</b>	<b>42000</b>	

#### Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	251	75300
Water	-	-
Plant	-	-
<b>Total</b>	<b>251</b>	<b>75300</b>

#### 4. Literature Developed/Published (with full title, author & reference)

A. KVK News Letter ((Date of start, Periodicity, number of copies distributed etc.)

B. Literature developed/published

Item	Title	Authors name	Number
<b>Research papers</b>			
01	Impact of Training Programmes on on Vermi Compost Trainees, <i>Int.J.Curr.Microbiol.App.Sci.</i> , Vol.9, Issue-12, December-2020.	Dr. M. V. Tiwari, Prof. V. K. Poshia and Dr. P. D. Verma	01

02	Study on Knowledge of Owners of Milch Animals about Animal Breeding in Tribal Area of South Gujarat, <i>Int.J.Curr.Microbiol.App.Sci.</i> , Vol.10, Issue-03, December-2021.	D. B. Bhinsara, P. D. Verma, J. J. Pastagia and Hitesh Parmar	01
03	Medicinal Plants: Improve Our Immunity, <i>Just Agriculture Multidisciplinary e-Newsletter</i> , Vol.2, Issue-2, October-2021.	Dr. M. V. Tiwari, Prof. V. K. Poshia and Dr. P. D. Verma	01
04	Performance of Twin Wheel Hoe in Narmada District, <i>International Journal of Scientific Engineering and Applied Science</i> , Vol.7, Issue-7, July-2021.	Dr. M. V. Tiwari, Prof. V. K. Poshia and Dr. P. D. Verma	01
05	Potential of zinc seed treatment in improving yield and grain bio fortification of maize: A success story, <i>Agri journal world</i> , Vol.1, Issue-2, pp.6-11, september-2021.	Nitin N. Gudadhe, Vijay Poshia, Y. A. Garde, P. D. Verma, C. K. Timbadia and V. P. Usadaida	01
06	Extent of Adoption of “Novel Organic Liquid Nutrients” in Fruits and Vegetable Crops, <i>Agricultural Science Digest</i> , Vol.41, Issue-01, March-2021.	P. K. Modi, S. M. Chavan and P. D. Verma	01
07	Awareness of farm women through location specific drudgery reducing technologies in agriculture, <i>Bhartiya Krishi Anusandhan Patrika</i> , Accepted and is to be publish.	Dr. M. V. Tiwari, Prof. V. K. Poshia and Dr. P. D. Verma	01
<b>Technical reports</b>	SAC, MPR, AAP, APR, ZREAC, NAU Spectrum, Agresco,	-	01
<b>News letters</b>	-	-	-
<b>Technical bulletins</b>	-	-	-
<b>Popular articles</b>			
01	<i>Su tame kala ghav khadha se? fayada janine tamane achary thase. Krushi Prabhat newspaper</i> , 30 November 2021.	Dr. M. V. Tiwari, Dr. J. H. Gohil and Dr. P. D. Verma	01
02	<i>Bajara ke aushadhiy gun. Krishi jivan</i> , January 2021.	Dr. M. V. Tiwari, Dr. J. H. Gohil and Dr. P. D. Verma	01
<b>Extension literature</b>			
<b>Others</b>	-	-	-
<b>TOTAL</b>			<b>10</b>

#### 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 Narmada	43
2	Facebook page/ Account	KVK Narmada	874
3	Mobile Apps	-	-
4	WhatsApp groups	11	733
		Mushroom Grower	33
		Advisory plant protection	184
		Animal Husbandry @ KVK	23
		Women's technology park	66
		TWTC Group	31
		Bagayati kheti narmada	37
		GKMS_Narmada Dediapada	171
		GKMS_Narmada Sagbara	62
		GKMS_Narmada Nandod	65
		GKMS_Narmada Tilakwada	33
		GKMS_Narmada Garudeswar	28
5	Twitter Account	KVK Narmada	08
6	Any other (Pl. Specify)	-	-

## D. SUCCESS STORIES/CASE STUDIES

### 1. Motor operated Paddy thresher: need of hour to fight against work efficiency improvement

Name : Taraben Shantilalbhai vasava  
 Village : Khaam, Talkua: Dediapada, District: Narmada  
 Age : 52 years old  
 Education : B.A.  
 Land holding : 4.5 Acre



#### 1. Situation analysis/Problem statement:

Women play a major role in rice cultivation of Narmada district, this is one of that crop in which involvement of women is, maximum, throughout the world, rural women historically have played, and continue to play an important role in rice farming systems. They undertake much of the back-breaking labor in rice production, including tasks such as transplanting, weeding, harvesting and winnowing. Drudgery of Farm women is an important aspect that has attracted wide attention of researchers. If measured by the extensiveness and intensiveness of their involvement, farm women shoulder much more burden than men. Importantly, women are involved in more strenuous activities as compared to men. The awkward posture and static load exert strain on the cardiovascular system the musculoskeletal system may endure substantial performance limitations. Most tasks are performed with bare hands and feet and involve awkward postures as well as highly repetitive movements. These work factors have previously been found to lead to musculoskeletal disorders. It is difficult to maintain any posture for a long time due to fatigue resulting from static muscular effort. There is a need to

quantify the drudgery involved in paddy threshing and available technologies, which can be transferred to reduce the stress and increasing efficiency, thereby, improving health and well being of women.



## 2. Plan, Implement and Support

In view of the above situation, Krishi Vigyan Kendra decided to organize Front Line Demonstrations in adopted villages of Narmada district. An improved electric operated paddy thresher developed by KVK, Dahod with collaboration of PAE, AAU, Dahod is recommended for the paddy growers of middle Gujarat because of affordable cost, drudgery reduction and remarkable performance during the year 2013. An improved electric operated paddy thresher was selected under FLD. In Narmada district it was observed that the threshing of paddy was carried by beating methods. Above methods are time consuming and increasing labour costs. KVK Narmada has planned Front line demonstrations regarding Motor operated paddy thresher for 2 Self help group. The selected farm women were trained for the operation and working procedure of paddy thresher prior to conduct FLD. Besides, regular visit of farmers' field were also arranged.



**Method demonstration**



**Method Demonstrations**

## 3. Output:

Smt. Tara Ben Vasava thresh 600 Q/ paddy with power operated paddy thresher without any labour during threshing. It was observed that the threshing of paddy was carried by beating methods, above methods are time consuming and increasing labour costs. So, scientist home science distributed Motor operated paddy thresher as a FLD tool.

## Performance of technology

Cost analysis of paddy thresher in one day			
Sr. No.	Labour /per day (cost)	Materials and motor cost	Paddy threshed in 8 hr.
Manual beating	500	-	544 (kg)
Paddy thresher	250	17500	700(ctl.)

The cost analysis were calculated according to standard cost calculations on per day basis and labour charges (₹ 250/- per day) as per Government of Gujarat. From the table it is clear that the machine recovers its purchase cost per year in compared to manual beating respectively. The results shown that the threshing capacity was very high in electric operated paddy thresher than manual beating. The initial cost of the machine was high compared to other methods. The demonstrated machine was found satisfactory in operation and appreciated by the farmers.

### 4. Outcome:

She started to share it with nearby villages on rent basis. It can thresh paddy without chopping the straw of the moist crop. Paddy thresher is low cost and high power threshing machine. She told us the straw, chaff, grains are separated and thrown separately thus reducing drudgery and it is very easy to handle and maintain. There is no wastage of straw because It does not chop the straw and hence we get it in full length with contamination free grains.

### 5. Impact:

The standard of living of the farm women was increased. Paddy thresher reduces the time and pain in shoulder, increase the work efficiency and saves money and manpower too. Although it's a good source of income generation for farming community. At last but not least Tara ben earns 4000/ Rs. rent from Paddy thresher within two month also sharing the benefits of this this technology in nearby villages.

## 2. Poshan Vatika : A manageable, Model for Food Security and Diversity

Name : Vasava Urmilaben Dalpatbhai  
Village : Gajargota, Taluka: Dediapada, District: Narmada  
Age : 42 years  
Education : 9<sup>th</sup>  
Land holding : 1.5 Acre



### 1. Situation analysis/Problem statement:

Adequate nutrition is very important during all the stage of life, as healthy life cannot be sustained without adequate nourishment. Deficiency diseases caused by micro nutritive are one of the serious problems. Nutritional deficiency is most prevalent in Narmada district where the habitual diet lacks variety and people cannot afford to diversify their diets and unable to include fruit and vegetables in their diet. KVK Narmada initiated a campaign to reduce these problem lies in the improvement and diversification of household diet by growing kitchen gardening.





## **2. Plan, Implement and Support:**

The main objective of these kitchen gardens is to provide good nutritional vegetables to the family members because in the present scenario it is hard to attain such vegetables. Preparing such kitchen garden in the village makes availability of all types of vegetables in the village. Smt. Urmila ben Vasava is successful backyard Kitchen gardener from Gajargota village within Dediapada block of Narmada district in Gujarat. She started kitchen gardening in 2019 in a very small area. She did not have prior more knowledge of kitchen gardening. She came in contact with the Home scientist of KVK Narmada and showed her keen interest in Kitchen gardening and other technical support from the scientists. She is hard working and able to grasp the technologies faster and adopt it.

## **3. Output:**

The detailed components of kitchen garden model were demonstrated; constant follow up visits, Training, Group meeting field days, and other extension activities have been concentrated. Initially, She was adopting kitchen garden with constant encouragement, KVK scientist are successful in building up confidence in them. Now she is happy to enhance the nutritional affordability for her family. These kitchen gardens are meant to increase food diversity in the diets of the participating families and reduce reliance on the market for introduced vegetables and fruits. Really, She developed a beautiful and attractive kitchen garden with the help of KVK scientist.

## **4. Outcome:**

According to Smt. Urmila ben, kitchen garden has been impactful for her family and their village as well as other villages of district. There is seen increase in the Micro monthly savings which has led to financial stability. Her family gets proper nutritional balanced diet that consists of green vegetables like root crop, leafy vegetables, Okra, Bitter guard, Brinjal, carrot, spinach, methi, Cucumber, Indian bean, Bottle guard, Drumstick, Chilli, coriander, radish etc. She also planted fruit plants such as Banana, Mango, Guava, lemon, custard apple, Papaya, Pomegranate etc. Urmila ben proudly claimed that the vegetables and fruits grown in the garden were being utilized in recipes within their home. Additionally, She said the quantity was more than sufficient for the foods to be distributed equally for the whole family. Now she is happy to enhance the nutritional affordability for his family and earn an addition income from sale of surplus produce. The intervention has also been successful in reducing reliance on the market.

## **5. Impact :**

Now She became a motivator for many of farmers in the district. She adopted the technology and produce year-round fruits and vegetables. She was also found to actively guide other farmers in adoption of new technologies. With his intervention they have started to grow different vegetable crops

in a season in the village and as a result they are realizing better price in the market. The key to his success seems to his eagerness to learn and understand very soon, hard work & positive attitude. She started to sale surplus vegetables in the weekly market.



### 3. Eco friendly management of FAW in Maize by adopting IPM

Name : Shri Manojbhai Narshihbhai Vasava  
Village : Jambar, Talkua: Dediapada, District Narmada  
Education : up to 10th std.  
Land holding : 7.5 Acre (5 Irrigated + 2.5 Non Irrigated)  
Major crop : Paddy, Cotton, Pigeon Pea, Vegetables  
Cultivated : Motivation factor: KVK, Navsari Agricultural University, Dediapada



#### 1. Situation Analysis:

Fall armyworm causes serious leaf feeding damage as well as direct injury to the ear. While fall armyworms can damage corn plants in nearly all stages of development. Maize monoculture and overuse of pesticides that increase resistance have turned the fall armyworm into a serious pest. The information regarding the FAW occurrence and intervention measures to manage FAW and lack of knowledge about FAW life cycle and their infestation on maize. When the knowledge level of farmers and their intervention ways of management practices are known, It can lead to more refined approaches of control measures considering their own methods. the proposed study was helpful to find out the extent of chemical insecticides and other non chemical (Bio-pesticides, organic) methods used by the farmers against FAW in maize.

IPM strategies had become imperative to sustain productivity of maize in an eco friendly manner. A bio-intensive IPM module with much reliance on conservation and promotion of naturally occurring bio agents, bio pesticides and botanicals as tools for sustainable production of maize was validated over 12 hectares under farmers' field conditions at block Dediapada and Sagabara regions of Narmada a predominantly rainfed maize. Jambar is located 6 km near to Dediapada block of Narmada. Major crops were cultivated such as cotton intercropped with pigeonpea, blackgram, jowar, groundnut, maize, soybean and chickpea and vegetables. Shri Manojbhai Narshihbhai Vasava is a farmer of village JAMBAR who educated up to 10th standard and having 7.5 Acre of land. He was cultivating local and old varieties of paddy, pigeon pea, vegetable and using old practices due to this he got less profit. Under this situation, they found difficult to sustain household food and livelihood for his family.



FLD on Maize IPM



On campus training cum IPM kit distribution program



## 2. Plan, Implement and Support:

KVK adopted Jambar village since last two year and different demonstrations were given to the farmer of Jambar including Mr. Manojbhai. KVK scientists guided to adopt the integrated insect pests management method of maize cultivation. In view of the above situation, Krishi Vigyan Kendra decided to organize Front Line Demonstrations of IPM of Maize from the year 2020-21 to 2021-22 in Kharif season. These demonstrations were organized in an area of 12 ha. with the involvement of 32 farmers. The IPM modules included pheromone trap and lure of FAW (5 nos./ha), installation of bird perches (40 nos), Foliar spray of Neem based botanical (Neem oil 1500 ppm) @ 50ml/pump, and biopesticides *Bouveria bassiana* @ 50ml/pump. The selected farmers were trained for the scientific cultivation of maize prior to conduct the FLD. As in tribal areas, the technical know-how of the farmers is very poor. Therefore, it was decided to conduct method demonstration about the scientific method of seed treatment and simultaneously other concepts were included time to time in the training and other activities. Besides, regular visit of farmers' field were also arranged. The detailed information on activities carried out by KVK and support in building farmers' skills in adoption of this variety is shown below.

Sr no	Year	Name of activity	No. of participants
1	2020-21 to 2021-22	on campus training	4
		off campus training	4
		FLD visit	15
		Group meeting	3
		Diagnostic visit	18
		Field day	3

## 3. Output :-

The management practices adopted in the bio-intensive module were by Mr. Sevabhai. He started cultivation of cotton by adopting drip system and all practices of IPM like, Deep summer ploughing, Sanitation of field, weeds removal /Alternative hosts/previous crops stubbles, cultivation of inter crop/ trap crop, use of yellow sticky trap, Neem oil and used proper dose of recommended insecticides as per guidance of KVK scientists.





Field visit to FLD Maize IPM



#### 4. Outcome:

He got high yield range of 25.9 Qtl/ha and at that time cotton price was good in the market so he earns about Rs. 51800/-ha net income which is 26.3% more as compared to other farmers in the villages. The result of cotton IPM was highly praise worthy by the KVK Scientists, as well as villagers too.



Larvae of FAW



Whorl and comb damage by FAW



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#### 5. Impact:-

Shri. Manojbhai Narshihbhai Vasava was reduced the cost of plant protection inputs and fetches more prices in the market as compared to others. Not only had that he enriched himself about the difference between the eco friendly modules which demonstrated under the FLDs. IPM maize which having less problem by FAW.

As a result, this eco friendly module in Maize was horizontally spread in five villages covering 50 farmers in 20 ha. during these two years. Because of live contact, constant follow up, motivation and good communication of Scientists with the farmers and significant result, this technology is getting momentum among the tribal farmers of Narmada district. The standard of living of the farmers who benefitted by this technology has also been increased.

#### 4. Improved variety of drilled rice (TAPI): need of hour to fight against famine in tribal area

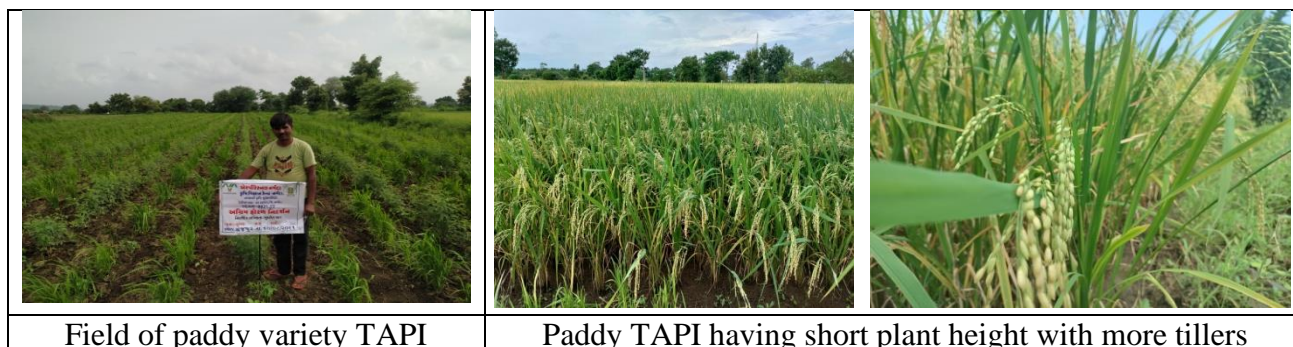
Name : Shri. Jayeshbhai Jinabhai Vasava  
Village : Sejpur, Talkua: Dediapada, District Narmada  
Age : 46 years old  
Education : Post Graduate.  
Land holding : 6.5 acre



##### 1. Situation Analysis

The ‘Green Revolution’ is the name given to the dramatic increase in cereal crop yields through modern agricultural inputs – irrigation, fertilizers, improved seeds, and pesticides – in the 1960s. For rice, the revolution began with the release by IRRI of the high- yielding semi dwarf variety IR8 in 1966. The world average rice yield in 1960, the product of thousands of years of experience, was about 2 t/ha. Astonishingly, the rice varieties and technologies developed during the Green Revolution have increased yields in some areas up to 6–10 t/ha.

In tribal areas where traditional agriculture is characterized with age old cropping system mainly mono cropping which reflects the low productivity of various crops. The rainfed crops grown by the tribal farmers are drilled paddy, sorghum, pigeon pea and other pulses either single crop, mixed or intercrops. Paddy is the dominated crop in the area as rice is the staple food in the region. In Narmada district, the productivity of 8.90 qtl/ha drilled paddy and 24.10 qtl/ha transplanted paddy is low as compared to untapped yield potential. It has been observed that introduction of suitable improved varieties is still lacking in the area. This situation compel the tribal farmers to prefer unrecognized varieties of drilled ( Direct seeding) paddy.



Field of paddy variety TAPI

Paddy TAPI having short plant height with more tillers

##### 2. Plan, Implement and Support:

In view of the above situation, Krishi Vigyan Kendra decided to organize Front Line Demonstrations in adopted villages of Narmada district. An improved variety of drilled paddy named TAPI developed by Navsari Agricultural University during the year 2020. The variety TAPI was selected under FLDs from the year 2020 to 2022. The farmers’ preferred varieties of drilled paddy were generally Nagpuri, GR-5, IR-28 and mix seed of unrecognized were considered as check plots to compare the yield potential of variety under FLDs ie. Tapi. These demonstrations were organized in an area of 20 ha. with the involvement of 50 farmers. The selected farmers were trained for the scientific cultivation of paddy prior to conduct the FLD. As in tribal areas, the technical know-how of the farmers is very poor. Therefore, it was decided to conduct method demonstration about the scientific method of seed treatment and simultaneously other concepts were included time to time in the training and other activities. Besides, regular visit of farmers’ field were also arranged. The detailed



information on activities carried out by KVK and support in building farmers' skills in adoption of this variety is shown below.

Sr. no.	Year	Name of activity	No. of participants
1	2020-21 to 2021-22	on campus training	2
		off campus training	2
		FLD visit	12
		Group meeting	3
		Diagnostic visit	15
		Field day	2



On campus Farmers training cum seed distribution Programme

### 3. Output :-

Most of the farmers in Narmada district were sowing drilled paddy local and old variety. So, we had given improved variety and the basal dose of fertilizers including supplementary. Among all the farmers Shri. Jayeshbhai Jinabhai Vasava. obtained 23.80 Q/ha with improved technology module ie Seed of Improved variety Tapi, Sowing method with proper distance (30cms) with row to row Seed Treatment (Bavistin @3 gm/kg seed), Recommended dose of fertilizers (75:25:00 NPK kg/ha). However, In previous year her drilled paddy yield was to the tune of 1000 to 15000 kg/ha only.

### 4. Outcome:

However, the highest yield was observed in the field of Shri. Jayeshbhai Jinabhai Vasava with the variety of Tapi (23.8 Q/ha) which clearly indicated the superiority and suitability of not only the grain yield of new released variety but also the more yield of fodder. The CBR was also higher. It was 1:3.13 in demonstrated plots during the year as compared 1:1.66 in previous year.

### Performance of technology

Specific Technology	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Previous yield with local variety	14.5	15200	29000	11500	1.66
Yield after adoption of cultivar Tapi	23.8	17500	47600	32400	3.13
% Increase in Demonstration	64.1				

## 5. Impact :

Simultaneously, Shri. Jayeshbhai Jinabhai Vasava fetched more prices in the market as compared to hybrid variety. Not only had that she becomes aware about the difference between the characteristics of hybrid seed and the improved varieties which demonstrated under the FLDs. The encouraging results of that varieties lead to motivate her to reduce their dependency on agro dealers about improved seeds. Not only that, the infestation of stem borer was low in this variety, new variety of Paddy Tapi also good in eating and making Rotla purpose, required less water and having early maturity, higher fodder yield as compared to local variety. In nutshell, the tribal farmers have become aware about the quality of rice as compared to local and old varieties for both purposes i.e., eating and marketing.

As a result, these varieties horizontally spread in 10 villages covering 100 farmers in 40 ha during these years. The farmers were benefitted economically as the cost of seed was reduced by using the improved seed.

Due to live contact, constant follow up, motivation and well communication of Scientists of Krishi Vigyan Kendra, Narmada and FLDs significant result, this technology is getting momentum among the tribal farmers of Narmada district. The standard of living of the farmers who benefitted by this technology has also been increased.

## 5. Eco friendly cultivation of Bt cotton by adopting IPM

Name : Shri Chaturbhai Hirabhai Vasava  
Village : Almawadi, Talkua: Dediapada, District Narmada  
(DFI Adopted villager)  
Age : 41 years old  
Education : Graduate  
Land holding : 16 Acre (10 Irrigated + 6 Non Irrigated)



### 1. Situation Analysis:

Cotton is a key cash crop having direct bearing on socio-economic structure of farmers of block Dediapada region of Narmada. It continues to suffer heavily from a complex of insect-pests and diseases, which affect the crop from seedling to harvest stage. The losses due to pests amount to 50-60% resulting in substantial yield reduction. Calendar based application of chemical insecticides and their injudicious use was the prime strategy to manage the various pests during 1980s. Though the crop occupied only 5% arable land, it consumed 54% of the total chemical pesticides before introduction of transgenic cotton in 2002. The altered cropping systems, multiplicity of non-descript cultivars, imbalanced fertilizer use, and intensive cultivation have aggravated the problems of pests and environmental hazards. IPM strategies had become imperative to sustain productivity of cotton in an eco friendly manner. A bio-intensive IPM module with much reliance on conservation and promotion of naturally occurring bio agents, bio pesticides and botanicals as tools for sustainable production of cotton was validated over 20 hectares under farmers' field conditions at block Dediapada and Sagabara regions of Narmada a predominantly rainfed cotton belt. Almawadi is located in the tribal belt of Dediapada block of Narmada. Major crops were cultivated such as cotton intercropped with pigeonpea, blackgram, jowar, groundnut, maize, soybean and chickpea and vegetables. Shri Chaturbhai Hirabhai Vasava is a farmer of village Almawadi who educated up to graduate and having 16.0 Acre of land. He was cultivating local and old varieties of paddy, pigeon pea, vegetable and using old practices due to

this he got less profit. Under this situation, they found difficult to sustain household food and livelihood for his family.

## 2. Plan, Implement and Support:

KVK adopted Almawadi village under DFI since last three year. different demonstrations were given to the farmer of Almawadi including Mr. Chaturbhai. KVK scientists guided to adopt the integrated insect pests management method of BT cotton cultivation. Regular field scouting formed a vital component of the pest management as it provided reliable information on the time when pest reached the economic threshold level. Management measures were applied when pest population reached ETL.



FLD on Cotton IPM

Field visit and Field day celebration program

## 3. Output :-

The management practices adopted in the bio-intensive module were by Mr. Chaturbhai. He started cultivation of cotton by adopting drip system and all practices of IPM like, Deep summer ploughing, Sanitation of field, weeds removal /Alternative hosts/previous crops stubbles, cultivation of inter crop/ trap crop, use of yellow sticky trap, Installation of pheromone trap of PBW, Neem oil (1500 ppm) and used proper dose of recommended insecticides as per guidance of KVK scientists.



Field visit and Installation of pheromone trap of PBW

Specific Technology	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Previous yield without IPM Local farming practices	17.2	37500	91160	53660	2.43
Yield after adoption of IPM practices	20.7	35600	109710	74110	3.08
% Increase in Demonstration plot	20.3				



#### 4. Outcome:

He got high yield range of 20.7 Qtl/ha and at that time cotton price was good in the market so he earns about Rs. 79530/-ha net income which is 20.3 % more as compared to other farmers in the villages. The result of cotton IPM was highly praise worthy by the KVK Scientists, as well as villagers too.

#### 5. Impact:-

Shri Chaturbhai Hirabhai Vasava was reduced the cost of plant protection inputs and fetches more prices in the market as compared to others. Not only had that he enriched himself about the difference between the eco- friendly modules which demonstrated under the FLD of cotton IPM which having less problem of sucking pest.

As a result, this eco- friendly module in cotton was horizontally spread in five villages covering 250 farmers in 100 ha. during these six years. Because of live contact, constant follow up, motivation and good communication of Scientists with the farmers and significant result, this technology is getting momentum among the tribal farmers of Narmada district. The standard of living of the farmers who benefitted by this technology has also been increased.

#### 6. Low cost Mushroom cultivation

Name : Vasava Mukeshbhai Raisingbhai  
Village : Soliya, Ta: Dediapada, Dist: Narmada  
Age : 32 years old  
Education : 10<sup>th</sup> std  
Land holding : 4.0 Acr. (1 Irrigated + 3 Non Irrigated)  
Major crop : Paddy, Cotton, and Pigeon Pea  
Cultivated



##### 1. Situation Analysis:

Diversification in any farming system imparts sustainability. Mushrooms are not only imparting diversification but also help in addressing the problems of quality food, health and environment related issues. One of the major areas that can contribute towards goal of conservation of natural resources as well as increased productivity is recycling of agro-wastes including agro industrial waste. Paddy is the major food grain crop in India as well as in Gujarat. So, large amount of paddy straw has also been produced. KVK scientists conducted PRA survey in Narmada district and found that, farmer's mainly using paddy straw as food for animals. Utilizing these wastes for growing mushrooms can enhance income and impart higher level of sustainability in this region as well as in whole country.

##### 2. Plan, Implement and Support:

KVK Narmada conducted various programmes for the awareness of importance of technology related to Agriculture. KVK adopted Soliya village under **Mera Gav Mera Gourav** and **DFI program** since, 2019 and different demonstrations were given to the farmer of Soliya including Mr. Mukeshbhai Raisingbhai Vasava and came in the contact of KVK, Narmada. Vocational training on Mushroom cultivation conducted with 20 trainees in 2014 and among them five was from Village Soliya. Mr. Mukeshbhai received the oyster mushroom spawn along with full kit package of demonstration and practices from KVK. He decided to initiate Oyster Mushroom cultivation along with his farming at

house hold level. After knowing potential value of mushroom he got much more interest in Mushroom cultivation. Consequently he started small scale Mushroom Production unit near his home. **“One person with passion is greater than ninety nine with interest.”**



**Mushroom cultivation**



**Scientists visited at Mushroom unit**

### 3. Output :-

Vocational/ Skilled training for Rural youth, method demonstration on Oyster mushroom, Full kit package for demonstration (which content like spawn, Formalin, Carbendanzim, polythene bags) were supplies by KVK. Post evolution visits, Monitoring and feedback and guidance were given by Scientist (Plant Protection) after establishment of small scale Oyster Mushroom cultivation and Production unit at their home. TSP District Planning Officer-Narmada and KVK were organized various programmes like Vocational/ Skilled training for Rural youth, group meetings of FIGs and SHGs farmers. By adoption of mushroom cultivation, he earns a sum of about Rs.14000/ month from mushroom cultivation. He tried to spread and popularize this low cost technology of Oyster mushroom among villagers. He was joined FIGs to cultivate the mushroom under ATMA.

Impact factor	After Adoption
Crop / Agricultural	Mushroom
Yield of Mushroom / one unit (Size 20 X15 Sq.ft.)	5 kg X 40 cylinders = 200 kg
Cost of cultivation	6000/-
Total income	20000/-
Net income	14000/-
Sale Value	Rs. 100 / kg.
B : C Ratio	2.33

### 4. Outcome:

Through DFI and Mera Gav Mera Gourav programme created awareness about low cost technology of Oyster mushroom. Now he has a regular income source through mushroom by selling into local market and nearby hotel. With this he receives good identity as a progressive farmer and got ATMA best farmer award.



**Low cost unit at home**



**Mushroom harvesting**



**Dignitaries visit**



**Mushroomstall**

			
Paddy straw sterilization	Straw Drying	Bag preparation	Packets Selling

## 5. Impact:-

Shri Mukeshbhai Vasava got extra income by adopting mushroom farming and he was also fetches more prices in the local market. Not only had that he enriched himself about the scientific method of mushroom framing by attending vocational training conducted at KVK Narmada under ASCI during 2019-20. As a result, the scientific method of mushroom framing was horizontally spread in five villages covering 25 farmers during these three years. Because of live contact, constant follow up, motivation and good communication of Scientists with the farmers and significant result, this technology is getting momentum among the tribal farmers of Narmada district. The standard of living of the farmers who benefitted by this technology has also been increased.

## 7. Improved variety of transplanted Rice (GNRH-2): Empowering the tribal Farmers

Name : Shri. Rayjibhai Gamiyabhai Vasava  
Village : Jambar, Talkua: Dediapada, District Narmada  
Age : 63 years old  
Education : 10<sup>th</sup> old SSC  
Land holding : 5.0 acre



### 1. Situation Analysis

In tribal areas where traditional agriculture is characterized with age old cropping system mainly mono cropping which reflects the low productivity of various crops. The rainfed crops grown by the tribal farmers are drilled paddy, sorghum, pigeon pea and other pulses either single crop, mixed or intercrops. Paddy is the dominated crop in the area as rice is the staple food in the region. In Narmada district, the productivity of 8.90 qtl/ha drilled paddy and 24.10 qtl/ha transplanted paddy is low as compared to untapped yield potential. It has been observed that introduction of suitable improved varieties is still lacking in the area. This situation compel the tribal farmers to prefer unrecognized varieties of drilled (Direct seeding) paddy.



FLD paddy variety GNRH-2 with more tillers



## 2. Plan, Implement and Support:

In view of the above situation, Krishi Vigyan Kendra decided to organize Front Line Demonstrations in adopted villages of Narmada district. An improved variety of drilled paddy named GNRH-2 developed by Navsari Agricultural University during the year 2018. The variety GNRH-2 was selected under FLDs from the year 2018 to 2022. The farmers' preferred varieties of paddy were generally IR-28, GNR-2, GR-17, MASURI, and private hybrid seed were considered as check plots to compare the yield potential of variety under FLDs i.e. GNRH-2. These demonstrations were organized in an area of 20 ha. with the involvement of 50 farmers. The selected farmers were trained for the scientific cultivation of paddy prior to conduct the FLD. As in tribal areas, the technical know-how of the farmers is very poor. Therefore, it was decided to conduct method demonstration about the scientific method of seed treatment and simultaneously other concepts were included time to time in the training and other activities. Besides, regular visit of farmers' field were also arranged. The detailed information on activities carried out by KVK and support in building farmers' skills in adoption of this variety is shown below.

Sr no	Year	Name of activity	No. of participants
1	2018-19 to 2021-22	on campus training	4
		off campus training	4
		FLD visit	36
		Group meeting	10
		Diagnostic visit	28
		Field day	5



On campus Farmers training cum seed distribution Programme

## 3. Output :-

Most of the farmers in Narmada district were sowing drilled paddy local and old variety. So, we had given improved variety and the basal dose of fertilizers including supplementary. Among all the farmers Shri. Rayjibhai Gamiyabhai Vasava obtained 23.80 Q/ha with improved technology module i.e. Seed of Improved variety Tapi, Sowing method with proper distance (30cms) with row to row Seed Treatment (Bavistin @3 gm/kg seed), Recommended dose of fertilizers (75:25:00 NPK kg/ha). However, In previous year her drilled paddy yield was to the tune of 1000 to 15000 kg/ha only.



Paddy variety GNRH-2 having more tillers with more grains

#### 4. Outcome:

However, the highest yield was observed in the field of Shri Rayjibhai Gamiyabhai Vasava with the variety of GNRH-2 (55.4 Q/ha) which clearly indicated the superiority and suitability of not only the grain yield of new released variety but also the more yield of fodder. The CBR was also higher. It was 1:3.14 in demonstrated plots during the year as compared 1:2.66 in previous year.

#### Performance of technology

Specific Technology	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Previous yield with local variety	37.6	23300	52570	29270	2.26
Yield after adoption of cultivar Tapi	55.4	24700	77560	52860	3.14
% Increase in Demonstration	47.5				


#### 5. Impact :

Simultaneously, Shri. Rayjibhai Gamiyabhai Vasava fetched more prices in the market as compared to hybrid variety. Not only had that she becomes aware about the difference between the characteristics of hybrid seed and the improved varieties which demonstrated under the FLDs. The encouraging results of that varieties lead to motivate her to reduce their dependency on agro dealers about improved seeds. Not only that, the infestation of stem borer was low in this variety, new variety of Paddy GNRH-2 also good in eating, higher fodder yield as compared to local variety. In nutshell, the tribal farmers have become aware about the quality of rice as compared to local and old varieties for both purposes i.e., eating and marketing.

As a result, these varieties horizontally spread in 10 villages covering 125 farmers in 50 ha during these years. The farmers were benefitted economically as the cost of seed was reduced by using the improved seed.

Due to live contact, constant follow up, motivation and well communication of Scientists of Krishi Vigyan Kendra, Narmada and FLDs significant result, this technology is getting momentum among the tribal farmers of Narmada district. The standard of living of the farmers who benefitted by this technology has also been increased.

## 8. SOYBEAN (NRC-37): A Promising variety to augment soybean productivity in tribal area

Name : Shri. Kirankumar Shantilal Vasava. Village : Kodaba, Talkua: Sagbara, District Narmada Age : 39 years old Education: up to 10th std. Land holding : 6 Acre (Irrigated)	
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### Technology Module:

Improved Varieties	:	NRC-37
Seed Rate/ha	:	50 kg
Seed Treatment	:	Carbendazim + Thiram (1+2 gm/kg seed) and Bio- fertilizers like Rhizobium (1 L/acre), PSB (1 L/acre), KMB (1L/acre)
Sowing Time	:	last week of June to first week of July
Spacing (cm)	:	45-60 cm X 2.5 cm
Irrigation with stages	:	3 times immediately after sowing, Flower initiation, pod filling mostly required. 30 DAS and 45 DAS.
Moisture Conservation Practices Followed	:	Use of Broad Bed Furrow Planter for sowing (removal of excess water through furrow during heavy rain & also irrigation in furrow during less rainfall)
Fertilizer Application	:	20:80:40 NPK kg/ha, 40 kg of Sulphur as Gypsum 220 kg/ha as basal.
Insect/pest Management Practices	:	Neem oil 1500 ppm @ 50ml/pump and use of Pheromone traps @5/ha for leaf folder and pod borer.
Weed Control	:	Hand weeding and thinning operation done after 30DAS. Pre emergence (PE): Pendimethalin @ 1.0-1.5 a.i./ha in 500-600 litre of water.
Harvesting	:	95-110 DAS
Existing Cropping Systems	:	Sole crop only.

### Farming situation :-

Soybean (*Glycine max* L. Merrill) is the world's most important seed legume, which contributes to 25 % of the global edible oil, about two-thirds of the world's protein concentrate for livestock feeding. Soybean is now predominantly grown as rain fed crop in vertisols and associated soils with an average crop season rainfall of 900 mm.

### Climatic vulnerability:-

Soybean grow best where the daytime temperature averages between 60°F to 70°F (16 -21 °C). Soybean is not frost-tolerant. In Narmada district have two agro climatic zones. South Gujarat Zone II, AES-I (Dediapada, Sagbara, Garudeshvar & Nandod) with Rainfall: 1000-1250 mm and Middle Gujarat Zone III, AES-IX (Tilakwada) with Rainfall: 900-1000 mm.

### Problems identified :-

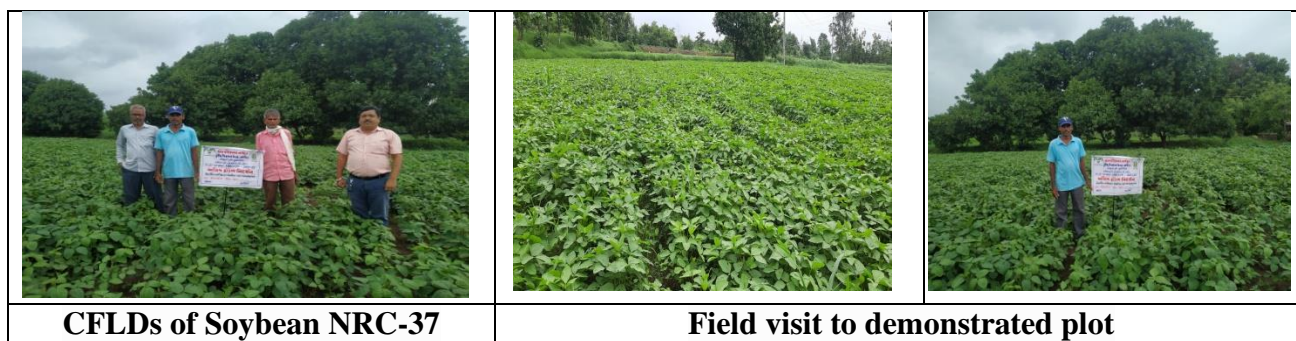
The non-availability of good quality seeds of high-yielding varieties in the desired quantities in the district. In *Rabi* and summer season, it has been observed that scarcity of irrigation water at later

stage is one of the major reasons for low productivity. Besides, poor economic statuses of the tribal farmers inhibit them to purchase major input *like* fertilizers as well as to perform important operation timely. Not only that, unseasonal rainfall at harvesting stage of *Kharif* crops, high temperature in October-November also major reason for delay in sowing of *Rabi* crops. Mostly pulses and oilseeds crop were found wilt and root rot in our district.

#### **Technological intervention in brief :-**

The rain fed crops grown by the tribal farmers are drilled paddy, sorghum, pigeon pea and other pulses either single crop, mixed or intercrops. They grow paddy to fulfil food need of the family as rice is the staple food in the tribal region. In case of oilseeds/pulses generally; our farmers cultivated Soybean, Groundnut like oilseed crops and Pulses like Pigeon pea, Chickpea as sole. This was affected by wilt and root rots most common in our district. Therefore, under demonstration of NMOOP and NFSM; we were selected bio-pesticides. As well as bio fertilizers NOVARAJI liquids like Rhizobium, PSB and KMB for crop growth.

We were selected pseudomonas spp. and Trichoderma spp. liquid as bio component in our CFLDs. Moreover, to that we were gave bio- fertilizers like Rhizobium, PSB and KMB manufactured from our NAU, Navsari products which fulfilled the requirements of nutrients for proper growth of the crops. We were also utilized our unique product which is NOVEL organic liquid micronutrient prepared from Banana pseudo stem. This all input given to farmers during our CFLDs.



#### **Efforts made by KVK / methodology followed:-**

In view of this, Krishi Vigyan Kendra decided to organize Cluster Front Line Demonstrations under NMOOP in adopted villages of Narmada district. Soybean variety NRC-37 was selected under CFLDs from the year 2017-18 to 2021-22. The farmers' preferred varieties of soybean generally JS-335, GS-2, and mix seed of soybean which is considered as check plots to compare the yield potential of variety under CFLDs i.e. NRC-37. These demonstrations were organized in an area of 80 ha. with the involvement of 200 farmers. The selected farmers were trained for the scientific cultivation of soybean prior to conduct the CFLDs. As in tribal areas, the technical know-how of the farmers is very poor. Therefore, it was decided to conduct method demonstration about the scientific method of seed treatment and simultaneously other concepts were included time to time in the training and other activities.







Sr No	Year	Name of activity	No. of activity	No. of participants
1	2017-18 to 2021-22	On campus training	8	296
		Off campus training	12	380
		FLD visit	29	210
		Group meeting	15	385
		Diagnostic visit	30	110
		Field days	10	570

		
<b>Seed distribution under CFLDs-NMOOP</b>	<b>Scientific Field visit</b>	<b>Fieldday program</b>

#### Output :-

Most of the farmers in Narmada district preferred to grow soybean varieties like JS-335 and old variety. Whereas, we were given improved variety like NRC-37 with bio fertilizers (like Rhizobium, PSB, KMB), banana pseudo stem liquid (NOVEL), botanicals like Neem oil (1500ppm) and bio pesticides (like Trichoderma, Pseudomonas). Among all the farmers Mr. Kirankumar Shantilal Vasava obtained 19.8 Q/ha yield of soybean with improved technology module ie Seed of Improved variety NRC-37, Sowing method with proper distance (45 x 10 cms) with row to row, Seed treatment (Carbendazim @3 gm/kg seed), Recommended dose of fertilizers (20:40:00 NPK kg/ha).

			
<b>Pod setting and Rhizobium nodulation in NRC-37 compared with JS-335 (National check)</b>			

#### Outcome: -

The yield of soybean during previous years was to the tune of 1000 to 1500 kg/ha only. Whereas, the highest yield was observed in the demonstration field of Mr. Kirankumar with the variety



of NRC-37 i.e (19.8 Q/ha) which clearly indicated the superiority and suitability of variety. Besides, it also gave more fodder (24.6 Q/ha straw yield). The CBR was also higher. It was 1:2.47 in demonstrated plots during the year as compared 1:1.91 in local.

Specific Technology	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Previous yield with local variety	14.9	25800	49170	23370	1.91
Yield after adoption of cultivar NRC-37	19.8	26500	65340	38840	2.47
% Increase in Demonstration plot	32.9				

#### Impact:-

Shri. Kirankumar Shantilal Vasava fetched more prices in the market as compared to others (Rs. 5 more per one kg). Not only had that he enriched himself about the difference between the characteristics of improved varieties which demonstrated under the CFLDs. Soybean (NRC-37) having special features like Non-shattering, white colour flower and presence of hairs on pods which led to low insects -pests attacks. As well as required less water and having early maturity, higher fodder yield as compared to local variety.

As a result, this variety horizontally spread in 12 villages covering 200 farmers in 80 ha. during these four years. Because of live contact, constant follow up, motivation and good communication of Scientists with the farmers and significant result, this technology is getting momentum among the tribal farmers of Narmada district. The standard of living of the farmers who benefitted by this technology has also been increased.

#### Success story format for individual farmer: oilseeds 2021:


<b>Name of KVK</b>	Narmada (Gujarat)												
<b>Crop and Variety</b>	Soybean NRC-37												
<b>Name of farmer &amp; Address</b>	Shri. Kirankumar Shantilal Vasava, At & Po: Kodaba, Talkua: Sagbara, District Narmada (Gujarat)												
<b>Details of technology demonstrated</b>	<p><b>Technologies adopted:</b></p> <ul style="list-style-type: none"> <li>• Demonstration of Improved variety Soybean NRC-37 was given.</li> <li>• Seed treatment with <i>Pseudomonas fluorescense</i>, <i>Trichoderma viride</i>, Cultures of <i>Phospho Solubling bacteria</i> (PSB), <i>Potassium mobilizing Bacteria</i> (KMB) and <i>Rhizobium</i> Spp.</li> <li>• Foliar sprays of crop booster Banana pseudo stem liquid, i.e. NOVEL@50-150ml per 10litre water.</li> <li>• Balanced use of fertilizer; 20:80:40 NPK kg/ha, 40 kg of sulphur as Gypsum 220 kg/ha as basal application. The pod formation and development is greatly influenced by fertilizer application.</li> <li>• Foliar spray of botanicals like Neem oil (1500 ppm) for sucking insect management.</li> <li>• Regular visit of farmers' field were also arranged. The detailed information on activities carried out by KVK and support in building farmers' skills in adoption of this variety is shown below.</li> </ul> <table border="1"> <tr> <th>Sr. No.</th><th>Year</th><th>Name of activity</th><th>No. of participants</th></tr> <tr> <td rowspan="2">1</td><td rowspan="2">2017-2022</td><td>Group meeting</td><td>296</td></tr> <tr> <td>On campus training</td><td>380</td></tr> </table>			Sr. No.	Year	Name of activity	No. of participants	1	2017-2022	Group meeting	296	On campus training	380
Sr. No.	Year	Name of activity	No. of participants										
1	2017-2022	Group meeting	296										
		On campus training	380										

				Off campus training	210
				FLD visit	385
				Diagnostic visit	110
				Field day	570
<b>Institutional Involvement</b>	<ul style="list-style-type: none"><li>• To analyze the technology gap, group meeting of adopted villages of were conducted and to get information on soil, water and other conditions and take samples for our STL.</li><li>• Farmers training were conducted before conducting demonstration.</li><li>• Field day was conducted on farmer’s field during pod maturing stage and got feedback from farmer. ATMA Narmada and SHGs leaders and other Missionary workers were remained present during field day.</li></ul>				
<b>Success Point</b>	<ul style="list-style-type: none"><li>• Soybean NRC-37 having special features like; it has oblong shaped leaflets and slightly constricted pods and having early maturity as compared to local variety. The farmers were benefitted economically as the cost of seed was reduced by using the improved seed.</li></ul>				
<b>Farmer Feedback</b>	<ul style="list-style-type: none"><li>• High yield of demonstration was found due to improved seed Soybean NRC-37 and higher use of Bio fertilizers like Rhizobium @ 10ml per kg seed, PSB @ 10ml per kg seed, KMB @ 10ml per kg seed at sowing time in soil. As well as drenching of NAUROJI NOVEL @ 50-150 ml per 10 L water at vegetative phase and also foliar application of NAUROJI NOVEL (Banana pseudo stem based liquid nutrients) @ 50-150 ml per 10 L water during flowering stage.</li></ul>				
<b>Yield (q/ha)</b>					
<b>Demonstration</b>	19.8				
<b>Potential yield of variety/technology</b>	22.3				
<b>District average</b>	17.1				
<b>State average</b>	14.2				
<b>National average</b>	10.6				

#### Performance of technology vis-à-vis Local check (Increase in productivity and returns)

Practice used	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
<b>Farmer practices</b>	14.9	25800	49170	23370	1.91
<b>Demonstration</b>	19.8	26500	65340	38840	2.47
<b>% Increase</b>	32.9				

#### 9. Eco friendly management of chickpea pod borer with Non chemical measures.

<b>Name:</b> Mr. Jitendrabhai Jalubhai Vasava <b>Village:</b> Servai, Taluka: Dediapada, District: Narmada <b>Age:</b> 40 years <b>Education:</b> 10th Std. <b>Land holding:</b> About 3 acres	
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**Crop : Chickpea (NFSM)**

<b>Improved Varieties</b>	:	Chickpea (GG-5)
<b>Seed Rate/ha</b>	:	60 kg per ha
<b>Seed Treatment</b>	:	Bio fertilizers like Rhizobium@ 10 ml per kg seed, PSB @ 10 ml per kg seed, KMB @ 10 ml per kg seed.
<b>Sowing Time</b>	:	15 <sup>th</sup> October to 15 <sup>th</sup> November
<b>Spacing</b>	:	R x P : 60x20-120 cm
<b>Irrigation with stages</b>	:	Flower initiation, pod filling mostly required.
<b>Moisture Conservation Practices Followed</b>	:	Use of Broad Bed Furrow Planter for sowing removal of excess water through furrow during heavy rain & also Irrigation in furrow during less rain fall
<b>Fertilizer Application</b>	:	20:40:00 NPK kg/ha,
<b>Insect/pest Management Practices</b>	:	Neem oil 1500 ppm @ 40ml / pump and use of Pheromone traps@5/ha for pod borer
<b>Weed Control</b>	:	Pendimethalin @ 1.0-1.5a.i./ha in 500-600 liter of water
<b>Harvesting</b>	:	95-110 DAS
<b>Existing Cropping Systems</b>	:	Sole crop.

**1. Farming Situation**

In tribal areas, the farmer practices conventional farming with low productivity. The rainfed crops grown by tribal farmers include paddy, sorghum, maize, pigeon pea, chickpeas and other legumes as a single crop, mixed or intercrop. In monsoon, paddy is the main crop in the area as rice is the staple food in the area. Then in winter chickpea crop is also grown especially in moist black soil in Narmada district. It has been observed that the area still lacks suitable improved varieties. To rectify this situation tribal farmer, need to increase the use of improved varieties.

**2. Climatic vulnerability:-**

<b>Agro-climatic Zone</b>	<b>Characteristics</b>
South Gujarat Zone II , AES-I (Dediapada, Sagbara, Garudeshvar & Nandod)	Rainfall: 1000-1250 mm
Middle Gujarat Zone III, AES-IX (Tilakwada)	Rainfall: 900-1000 mm

**3. Problems identified:**

The non-availability of good quality seeds of high-yielding varieties in the desired quantities in the district. In *Rabi* and summer season, it has been observed that scarcity of irrigation water at later stage is one of the major reasons for low productivity. Besides, poor economic statuses of the tribal farmers inhibit them to purchase major input *like* fertilizers as well as to perform important operation timely. Not only that, unseasonal rainfall at harvesting stage of *Kharif* crops, high temperature in October-November also major reason for delay in sowing of *Rabi* crops. Mostly pulses and oilseeds crop were found wilt and root rot in our district.

**4. Technological intervention in brief: -**

In our Narmada district generally; our farmers cultivated Soybean, Groundnut like oilseed crops and Pulses like Pigeon pea, Chickpea as sole. This was affected by wilt and root rots most common in our district. Therefore, under demonstration of NMOOP and NFSM; we were selected bio-pesticides. As well as bio fertilizers NOVARAJI liquids like Rhizobium, PSB and KMB for crop

growth. We were selected pseudomonas and Trichoderma spp. liquid as bio component in our CFLDs. Moreover, to that we were gave bio- fertilizers like Rhizobium, PSB and KMB manufactured from our NAU, Navsari products which fulfilled the requirements of nutrients for proper growth of the crops. We were also utilized our unique product which is NOVEL organic liquid micronutrient prepared from Banana pseudo stem. This all input given to farmers during our CFLDs



**Improved variety of chickpeas (GG-5) demonstration plot with 'T' shaped bird perches**

##### 5. Efforts made by KVK / methodology followed:-

In view of the above situation, Krishi Vigyan Kendra, Narmada decided to give front line demonstrations in the adopted villages of Narmada district. Improved variety of chickpea GG-5 of Junagadh Agricultural University was selected for FLDs from the year 2019-20 to 2021-22. Most of the farmers used local chickpea seeds. This was compared as a check plot to compare with the yield of the demonstration plot. These demonstrations were held in a total area of 60 hectares. In which 150 farmers have benefited. The selected farmers were first trained on scientific cultivation of chickpeas. The technical knowledge of farmers in tribal areas is very poor. Therefore, it was decided to demonstrate the scientific method of seed treatment and at the same time training and other activities were organized from time to time as per other requirements. Apart from this, regular visits were also made to the farmers' farms. In addition, the extension activities carried out by KVK and the information which helped in enhancing the skills of the farmers in adopting this variety are shown in the table below.

SR. NO.	YEAR	ACTIVITIES	PARTICIPANTS
1	2019-20 2021-22	On campus training	100
		Off campus training	276
		FLD visits	56
		Group meeting	07
		Method demonstration	02
		Diagnosis field visit	47
		Field day	09



**On campus training cum seed distribution**

**Field visit and field day**



### Output :-

Most of the farmers in Narmada district were cultivating local and old varieties in the conserved moist soil. Therefore, in the demonstration plot we have introduced the improved variety of chickpea G.G.-5, Organic Fertilizers (Rhizobium, PSB, KMB), and Supplementary Fertilizers (NOVEL) were used as per recommendation:

Among other farmers in the village, Mr. Jitendrabhai Jalubhai Vasava has got 14.9 quintals / hectare in demonstration plot. In which improved technology module i.e. improved chickpea G.G.-5 varieties of seeds, for sowing method proper spacing (30 cm) from furrow to furrow, seed treatment (Carbendazim @ 5 g / kg seed), recommended dose of fertilizer (20:20:50 NPK kg / ha) special care was taken. However, 'T' shaped supports (bird perches) were installed before the onset of flowering gram to check pod borer infestation in the field. So that the predatory birds can sit on the 'T' shaped support in the field and eat the gram pod borer caterpillars. This technology was reduced the population gram pod borer in the field by natural control. Thus, pods suffered less damage than due to gram pod borer caterpillars. He was also use need-based botanical (Neem oil 1500 ppm) for effective control of pod borer.

### Outcome :-

Last year, its chickpea yield was only 600-1000 kg / ha. However, the highest yield in Shri Jitendrabhai Vasava's farm was found 14.9 quintals / ha. in demonstration plot. Comparing the CBR score, it was found to be 1: 2.67 in the demonstration plot during the year, while it was 1: 2.21 in the local check.



**Pod setting of chickpeas (GG-5) with 'T' shaped supports in demonstration plot**

Specific technology	Yield (q/ha)	Cost of cultivation (rs/ha)	Gross income (rs/ha)	Net income (rs/ha)	B:c ratio
Yield of previous method	11.5	26500	58650	32150	2.21
Yield after adopting eco friendly approaches in chickpea variety (GG-5) demonstration plot by the farmer	14.9	28500	75990	47490	2.67
Increase in yield (%)	29.6				

### Impact:-

As a result, this technology was horizontally spread in 12 villages covering 300 farmers in 120 ha. during these four years. This technology is gaining momentum among the tribal farmers of Narmada district through constant contact by the scientists of Krishi Vigyan Kendra, Narmada and FLD, following the advice instructions and timely guidance. Adoption of this technology also increased the living standard of farmers.

### Success story format for individual farmer: Pulses- 2021:

Success story format for individual farmer: Palses - 2021.

Name of KVK	Narmada (Gujarat)																				
Crop and Variety	Chickpea (GG-5)																				
Name of farmer & Address	Mr. Jitendrabhai Jalubhai Vasava, At & Po: Servai, Talkua: Dediapada, District Narmada (Gujarat)																				
Details of technology demonstrated	<p><b>Technologies adopted:</b></p> <ul style="list-style-type: none"><li>Demonstration of Improved variety Chickpea (GG-5) was given. This improved variety also cultivated in low rainfall areas, light and medium soils.</li><li>Seed treatment with <i>Pseudomonas fluorescence</i>, <i>Trichoderma viride</i>, Cultures of <i>Phospho Solubling bacteria</i> (PSB), <i>Potassium mobilizing Bacteria</i> (KMB) and <i>Rhizobium</i> Spp.</li><li>Foliar sprays of crop booster Banana pseudo stem liquid, <i>i.e.</i> NOVEL@50-150ml per 10 litre water.</li><li>Balanced use of fertilizer; NPK: 20- 40- 00 kg/ha, as basal application. The pod formation and development of Chickpea is greatly influenced by fertilizer application.</li><li>Foliar spray of botanicals like Neem oil (1500ppm) for sucking insect management.</li><li>Regular visit of farmers' field were also arranged. The detailed information on activities carried out by KVK and support in building farmers' skills in adoption of this variety is shown below.</li></ul> <table><tr><th>Sr. No.</th><th>Year</th><th>Name of activity</th><th>No. of participants</th></tr><tr><td rowspan="7">1</td><td rowspan="7">2019-20 to 2021-22</td><td>On campus training</td><td>100</td></tr><tr><td>Off campus training</td><td>276</td></tr><tr><td>FLD visits</td><td>56</td></tr><tr><td>Group meeting</td><td>07</td></tr><tr><td>Method demonstration</td><td>02</td></tr><tr><td>Diagnosis field visit</td><td>47</td></tr><tr><td>Field day</td><td>09</td></tr></table>	Sr. No.	Year	Name of activity	No. of participants	1	2019-20 to 2021-22	On campus training	100	Off campus training	276	FLD visits	56	Group meeting	07	Method demonstration	02	Diagnosis field visit	47	Field day	09
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Institutional Involvement	<ul style="list-style-type: none"><li>To analyze the technology gap, group meeting of adopted villages were conducted and to get information on soil, water and other conditions and take samples for our STL.</li><li>Farmers training were conducted before conducting demonstration.</li><li>Field day was conducted on farmer's field during pod maturing stage and got feedback from farmer. ATMA, Narmada and SHGs leaders and other Missionary workers were remained present during field day.</li></ul>																				
Success Point	<ul style="list-style-type: none"><li>Variety GG-5 has been developed by experts from JAU, Junagadh. It is an early maturing variety recommended due to highly adaptability under drought or poor soil condition, as well as best under conserved water/moisture condition of soil. Also cultivated in low rainfall areas, light and medium soils.</li><li>The damage of sucking pests is comparatively less and having early maturity, higher fodder yield (15.7 Q/ha) as compared to local variety.</li></ul>																				
Farmer Feedback	<ul style="list-style-type: none"><li>High yield of demonstration was found due to improved seed variety GG-5 and higher use of Bio fertilizers like Rhizobium@ 10ml per kg seed, PSB@ 10ml per kg seed, KMB @ 10ml per kg seed at sowing time in</li></ul>																				

	soil. As well as drenching of NAUROJI NOVEL @50-150 ml per 10 L water at vegetative phase and also foliar application of NAUROJI NOVEL (Banana pseudo stem based liquid nutrients) @50-150 ml per 10 L water during flowering stage.
<b>Yield (q/ha)</b>	
<b>Demonstration</b>	14.9
<b>Potential yield of variety/technology</b>	18.5
<b>District average</b>	10.5
<b>State average</b>	14.5
<b>National average</b>	12.6

**Performance of technology vis-à-vis Local check (Increase in productivity and returns)**

<b>Practice used</b>	<b>Yield (q/ha)</b>	<b>Gross cost (Rs/ha)</b>	<b>Gross income (Rs/ha)</b>	<b>Net income (Rs/ha)</b>	<b>B:C ratio</b>
<b>Farmer practices</b>	11.5	26500	58650	32150	2.21
<b>Demonstration</b>	14.9	28500	75990	47490	2.67
<b>% Increase</b>	29.6				

**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**

<b>S. No.</b>	<b>Crop / Enterprise</b>	<b>ITK Practiced</b>	<b>Purpose of ITK</b>
1	All Pulses	Mixing of Chulah ash during storage.	Chulah ash use for mixing with whole pulses to minimize attack of pulse beetle.
2	All cereals	Plastics ribbies placed in field of jowar, maize etc.	Plastics ribbies placed in field of jowar, maize etc. which act as bird scarer and keep away them field.
3	Chickpea	Installation of 'T' shaped bamboo stands are placed in many places in chickpea fields.	T' shaped bird perches installed in field which allow birds predatory activities and eaten the insects.
4	Tomato	Growing marigold as border crop in tomato fields to control fruit borer attack.	Use marigold as trap crop in field which reduce fruit borer attack in main crop i.e., Tomato
5	Mango	Ripening of Mango	To induce early ripening of mango fruits, used bamboo vessels. fruits covered with paddy straw and paste with cow dung.

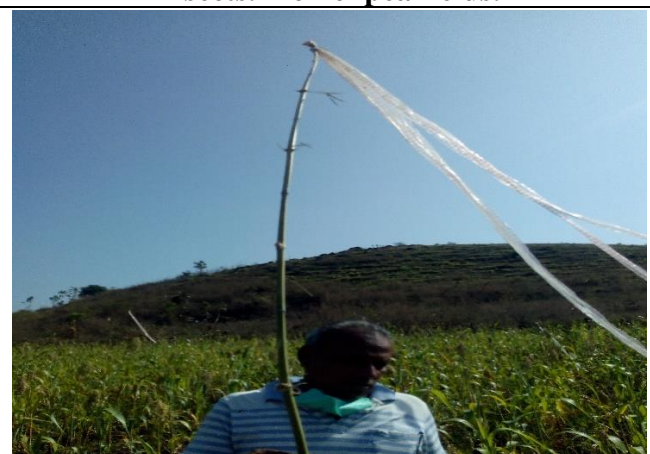
6	Pregnancy Diagnosis	Identification of conceiving of milch animals	Observation Symptoms cattle and Buffalo after Artificial insemination
7	Oestrus Detection	Detection of Heat period	Efficient and profitable reproductive performance of dairy herd requires routine heat detection and proper timing of artificial insemination
8	Animals	Neem tree leaves used as a herbal dewormer	Neem tree leaves used as a herbal anthelmintic for control of nematodes parasite in goats.



**Installation of 'T' shaped bamboo stands to allow birds predatory activities and eaten the insects.in chickpea fields.**



**Neem tree leaves used as a herbal anthelmintic for control of nematodes parasite in goats.**



**Plastics ribbies placed in field of jowar, maize etc. which act as bird scarer and keep away them field.**



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

#### **A. Practicing Farmers**

- On Campus - Group discussion with farmers as well as line department and field visit.
- Off Campus - Group discussion with farmers as well as line department and field visit.

#### **B. Rural Youth**

- Vocational Training - Group discussion with rural youth as well as line department.
- Skill Development - Group discussion with rural youth as well as line department.



C. In-service personnel

- a) Gram Sevak - Group discussion with rural youth as well as line department.
- b) Extension Worker - Group discussion with rural youth as well as line department.

**5.2. Indicate the methodology for identifying OFTs/FLDs**

For OFT:

- i) PRA
- ii) Field level observations
- iii) Farmer group discussions
- iv) Performance of existing technology

For FLD:

- v) New variety/technology
- vi) Poor yield at farmers level
- vii) Existing cropping system

**5.3. Field activities**

**i. Name of villages identified/adopted with block name (from which year) - 2019-20**

S. N.	Taluka	Name of the block	Name of the village
1	Nandod	Nandod	Boridra, Aamali, Nani chikhali, Moti chikhali.
2	Tilakwada	Tilakwada	Nimpura, Bunjetha, Utavadi, Gamod.
3	Sagbara	Sagbara	Palasavada, Umaral, Navagam, Javali, Kolvan, Ubhariya, Kherdipada, Barktura, Nanadoramba, Motadoramba, Makran, Nana Kakadiamba, Bodvav
4	Dediapada	Dediapada	Kunbar, Rohda, Mulkapada, Vadva, babda Relva Bharada, Sabuti, Moskut, Gavalawadi Mathasar, Kanzari, Pankhala, Kokam, Vandri. Tabda, Zankh, Sajanaavav, Bhutbeda.
5	Garudeshvar	Garudeshvar	Khadganda, Dhamdra, Dhaniyala, Dhavali. Junvad, Fulvadi, Moti raval, Motaraipura, Suka, Nava vaghpara

**ii. No. of farm families selected per village:**

No. of farm families	Name of the village
125 (Five per village)	Boridra, Nani chikhali, Moti chikhali, Nimpura, Bunjetha, Palasavada, Kherdipada, Barktura, Nanadoramba, Motadoramba, Nana Kakadiamba, Relva Bharada, Gavalawadi, kham, Bhutbeda, Soliya, Nighat, besana, Khurdi, chikda

iii. No. of survey/PRA conducted: 5

iv. No. of technologies taken to the adopted villages: 35

v. Name of the technologies found suitable by the farmers of the adopted villages:

Crops / enterprises	Names of Cluster Villages identified for intervention	Name of the technologies found suitable by the farmers of the adopted villages
Soybean	Almawadi, Soliya, Nani bedwan, Nana doramba, Kodabaa, Kel, Panchpipari and Sorapada	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Sesame	Almavadi, Sejpur, Gopaliya, Soliya, Siyali, Mota sukaamba and Borsan	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Cotton	Nivalda, bhatpur, Almawadi, Sejpur, Navagam, Nanibedwan, Khokhraumar, Amadala and Nani raval	Improved variety, Micro nutrient, Pheromone, Trap, Acetamiprid, Neem oil 1500ppm, Bavaria bassiana
Pigeon pea	Sejpur, Almavadi, Gopaliya, Panch Pipari, Amdala, Chikada and Khuradi	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Chickpea	Sejpur, Almavadi, Gopaliya, Panch Pipari, Amdala, Chikada and Khuradi	Improved variety, Fertilizer management including bio fertilizers, Bio Pesticides, Pheromone trap and lures, 'T' shaped bird perches.
Green gram	Almavadi, Sejpur, Bhatpur, Nana kakadiamba	Improved variety, Fertilizer management including bio fertilizers, Bio Pesticides, Pheromone trap and lures, 'T' shaped bird perches.
Paddy (Drilled) and (T.P.)	Jambar, Bandiservan, Almawadi, Soliya, Nani bedwan, Nana doramba, Kodabaa, Sorapada, Kel, Panchpipari, Soliya, Gopaliya and Pansar	Improved variety Pheromone, Trap, Acetamipride, Neem oil 1500ppm, Bavaria bassiana
Maize	Tuver, Jambar and Navagam	
Chilli	Almavadi, Nivalda, Jargam, Ghankhetar, Gopaliya, Nanasukaamba and Soliya	Pseudomonas liquid
Brinjal	Almavadi, Khuradi, Soliya, Besana	Pseudomonas liquid
Indian bean	Sabuti, Ningath, Navagam, Soliya, Gopaliya and Gajar gota	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Ajawin	Servai, Nani bedvan, Moti bedvan and Mohabi	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Watermelon	Khuradi, Gadh, Relva bharada, Kankhadi, Nani bedvan, Moti bedvan and Mohabi	Novel
Mango	Vedchha, Mathasar, Dunkhal, Andu, Arethi, Khuradi and Virpur	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides

Banana	Karatha, Rampura, Bhadam, Kalimakavana, Sundarpura and Lasakadi.	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Revolving type Milking stand and stool	Soliya, Zankh, Nanisingloti, Besana, Pratap pura, Chikhali and Khuradi	Revolving type Milking stand and stool
Electric Motor operated paddy thresher	Gopaliya, Borsan, Soliya, Guldachama, Bhatpur, Almawadi, Besana, Pratap pura, Taval and Khuradi	Electric Motor operated paddy thresher with winnowing fan
Twin wheel hoe	Nivalda, Bhatpur, Almawadi, Sejpur, Navagam, Nanibedwan, Khokhraumar and Kham.	Twin wheel hoe
Chelated Mineral Mixture	Guldacham, Dediapada, Nivalda, Gadh, Kunbar, Bebar, Sabuti and Gopaliya	Chelated Mineral Mixture
Fodder Sorghum (COFS-29)	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Fodder Sorghum (CSV-33 MF)	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Rubber cow mat	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Rubber cow mat
Fodder Oat (Os-377)	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Improved variety, Fertilizer management including biofertilizers, Bio Pesticides
Mineral Mixture Licking block	Andu, Soliya, Gopaliya, Motasukha amba, Guldacham, Kham, Nanasukha amba, Tabada and khuradi	Mineral Mixture Licking Block
Kitchen garden	Nani sigloti, Navagam, Bhutbeda, Chikda and Kham	Seedlings of vegetables

**vi. Impact (production, income, employment, area/technological horizontal/vertical)**

Name of technology	No of farmers	Production (%)	Income (Rs./ha)	Horizontal spared (ha)
Improved variety (cotton, paddy, Pigeon pea, Chickpea, Green gram Groundnut, Soybean, Sesame)	905	10-40	25000-82000	360
IPM (Pheromone, Trap, Acetamipride, Neem oil 1500ppm, Bavaria bassiana, Cotton, Paddy, Pigeon pea, Brinjal, Chilli)	84	12-15	30000-60000	28

Bio-fertilizers	528	10-30	35000-40000	244
Novel	405	10-20	25000-32000	200
Hand weeder and paddy thresher	60	-	3000-5000	100

Topic of training	No of training	No of farmers	Production (%)	Income generation	Employment (%)
Vocational training on Mushroom cultivation, Tailoring,	12	235	-	3500-5000 (Rs. Per month )	57.5

**vii. Constraints if any in the continued application of these improved technologies**

CONSTRAINTS	SUGGESTION
<ul style="list-style-type: none"> <li>• Vacant post of technical staff.</li> <li>• Transfer policy</li> <li>• Financial problem.</li> <li>• Lack of in infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Timely fill up vacant post of technical staff.</li> <li>• Bounded them for 3 years through contractual bond</li> <li>• Timely release of funds and separate fund for farm development should be allocated</li> <li>• Provision of extra fund for KVK building and farmers hostel development</li> </ul>

**5.4. No. and Name of villages adopted for Doubling Farmers Income. Indicate whether benchmark survey of the villages are done or not.**

S.N.	Taluka	Name of villages adopted for Doubling Farmers Income	No. of villages	whether benchmark survey of the villages are done or not
1	Dediapada	Soliya	2	Done
2		Almavadi		Done

**6. LINKAGES**

**A. Functional linkage with different organizations**

Sr. No.	Name of organization	Nature of Linkage
1.	Line Departments of Government of Agriculture/ Horticulture/ Animal Husbandry/ Fishery / department	Khedutsibir, Animal health camp, Sponsored training. In-service trainings and other extension activities, technical support, Participation in meeting
2.	AKRSP (I), NGO, Dediapada	Sponsored training, Mahilasibir, technical support
3.	Main Water Management Research Unit, NAU, Navsari	Collaboration-FLD on Low-Cost Greenhouse
4.	Research Stations, NAU	Participation-Farmers day, Seed-FLDs, etc.
5.	FTC, Rajpipla	Experts lectures
6.	Missionary – NGO	Sponsored training programme, extension activities
7.	Integrated Child Development Services	Organizing In-service training for Anganwadi workers & Technical guest lecture for ICDS Training Centre.

8.	Navsari Agricultural University, Navsari	For Technical products, technical guidance and supports.
9.	Ananad Agricultural University, Anand	For Technical guidance and FLDs input
10.	Junagadh Agricultural University, Junagadh	For Technical guidance and FLDs input
11.	Reliance foundation, Netrang	For Trainings, extension activities and Self Employment training, seed mela
12.	Integrated water shed management programme, Dediapada	For Trainings, extension activities and Self Employment training
13.	Forest department, Dediapada	For Trainings, extension activities and Self Employment training
14.	Jilla ayojan vibhag, Narmada	For Trainings, extension activities and Self Employment training
15.	Prayojana vahivatdar kacheri, Rajpipla	For Trainings, extension activities and Self Employment training
16.	GSFC, Dediapada	For Trainings, extension activities and Self Employment training
17.	GNFC, Dediapada	For Trainings, extension activities and Self Employment training
18.	Fodder research centre, Dhamrod	For Trainings, extension activities and Self Employment training
20.	Salinity research centre, Bharuch	For Trainings, extension activities and Self Employment training
21.	District Industries Center, Narmada	For Trainings, extension activities and Self Employment training
22.	Indrekasanshthan, Dediapada	For Trainings, extension activities and Self Employment training
23.	Fisheries department, Dediapada	For Trainings, extension activities and Self Employment training
24.	NABARD Bank, Rajpipla	For Trainings, extension activities and Self Employment training
25.	Swarojgar gramin bank, Rajpipla	For Trainings, extension activities and Self Employment training

**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. In Lakhs)
Agriculture Research Station	2018-19	State	26.35
Niche crops (Pulse)	2018-19	State	03.00
Niche crops (Paddy)	2018-19	State	02.00
Niche crops (Sorghum)	2018-19	State	01.50
Tribal women training center	2018-19	State	17.87
Adaptive trial scheme	2018-19	State	08.50
TSP (Seed)	2018-19	State	00.50

**C. Details of linkage with ATMA**

a) Is ATMA implemented in your district: Yes  
 If yes, role of KVK in preparation of SREP of the district?

**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 (Farmers)
01	Meetings	09	09	05	-
02	Research projects	-	-	-	-
03	Training programmes	08	08	00	464
04	Demonstrations	02	02	00	527
05	Extension Programmes				
	Kisan Mela	00	00	00	00
	Technology Week	-	-	-	-
	Exposure visit	03	03	00	82
	Farmers-Scientists Interaction	01	01	00	175
	Exhibition	-	-	-	-
	Soil health camps	-	-	-	-
	Joint visit to villages	36	36	00	146
	Farm school	18	18	00	125
	Animal Health Camp	-	-	-	-
	Kisangosthi	00	00	00	00
	Others (Pl. specify)	-	-	-	-
06	Publications	-	-	-	-
	Video Films	-	-	-	-
	Books	-	-	-	-
	Extension Literature	-	-	-	-
	Pamphlets	-	-	-	-
	Others (Pl. specify)	-	-	-	-
07	Other Activities (Pl. specify)	-	-	-	-
	Watershed approach	-	-	-	-
	Integrated Farm Development	-	-	-	-
	Agri-preneurs development	-	-	-	-

**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
-	Nil	-	-	-	-

**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
-	Nil	-	-	-	-

**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	2	Training	7.08	0.30	-

**G. Details of linkage with PKVY (Paramparagat Krishi Vikas Yojana)**

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

**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	1	Training & FLDs	04.65	01.08	-

**I. Details of linkage with SMAF (Sub-mission on Agroforestry)**

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

**7. Convergence with other agencies and departments: -Nil-****8. Innovator Farmer's Meet**

Sl. No.	Particulars	Details
1	Have you conducted Farm Innovators meet in your district?	No
2	Brief report in this regard	No

**9. Farmers Field School (FFS)**

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

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

S. No	Technical Feedback of the farmers
10.1.1	Reduces women drudgery in terms of time, efficiency, and physical hazards (finger injuries, wrist pain muscle stress and postural improvement etc.) through twin wheel hoe.

10.1.2	Continuous supply of fresh vegetables and fruits free of cost throughout the year through kitchen Garden.
10.1.3	Paddy thresher saves time and paddy straw length without breakage of grain. Reduces pain in shoulder and improve work efficiency with minimum no. of labour.
10.1.4	NPS-1 variety of Indian bean gave higher number of tillering (8-10) and number of pods per tiller (15-20).
10.1.5	Novel organic liquid fertilizers application gave high fruit setting and yield of water melon.
10.1.6	Foliar application of Novel organic liquid fertilizers reduce flowering drop and increase yield in green gram, soybean, pigeon pea, Indian bean and sesame crops.
10.1.7	Purna variety of paddy is gave more tillering and high yielding ability under drilled condition.
10.1.8	BDN 711 variety of pigeon pea is early maturing and resistance to wilt as compared to Local.
10.1.9	NRC 37 variety of soybean gave higher number of pods and more yield as compared to JS-335 and local.
10.1.10	Good quality pheromone lures for cotton pink ball worm and paddy yellow stem borer are not available in local market.
10.1.11	Utilization of bio-fertilizers improved soil health.
10.1.12	Good quality compost produced through NADEP by application of decomposer bottle.
10.1.13	More income acquired by poly house through production of vegetable seedling.
10.1.14	SRI techniques is also suitable in wheat crop.
10.1.15	GG-22 variety of groundnut is high yielding, bold seeded and more haulm yield.
10.1.16	GG-3 is most prefer in conserve moisture soil.
10.1.17	Reduce incidence Fracture, Hygroma, Mastitis, other body injury and Improve Digestion, Increases Blood flow to teats & udder of cows, Increases Resting Time which help production of milk yield
10.1.18	Area specific Chelated Mineral Mixture Increase fertility & Reproductive Performance in heifer, Increase Milk Production in Milch animals, Promotes growth and development in calves
10.1.19	It gives 5–6 cuts in one year at 60 days intervals. The leaves and stem is highly succulent in nature. It contains high protein (8.41%) and less crude fibre. It attains 50% flowering in 65–70 days and ready for seed harvest in 105–110 days. The variety is recommended for cultivation in Narmada under irrigated conditions. It is tolerant to shootfly/ stem borer. Average yield of green fodder is 170 t/ha in 5-6 multicuts.

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

### **Crop production:**

- (i) Farmers require high yielding hybrid variety of maize
- (ii) Farmers require high yielding bold seeded variety of pigeon pea for vegetable purpose.
- (iii) Need to develop ICM for organic farming crops in Narmada district

### **Plant Prot.:**

- (i) Need of farmers for sucking pest resistant variety in cotton
- (ii) Severe infestation of viral disease in cucurbits mainly bitter guard

### **Home Sci.:**



- (i) Need to develop weaning food for malnourish children
- (ii) Modification needed in drudgery reduction technologies at university level.

#### **Horticulture:**

- (i) Great extent of Novel for farmers.
- (ii) NPS -1 & 2 is suitable for hilly area.

#### **Animal Science:**

- (i) Entrepreneurship development through *surti goat* and *kadakhnath* chicken

### **11. Technology Week celebration during 2021: Yes/No, If Yes**

#### **11.1 Technology Week celebration.**

Period of observing Technology Week	: 22/12/2021 to 28/12/2021
Online / Offline	: Offline
Total number of farmers visited	: 501
Total number of agencies involved	: 04
Number of demonstrations visited by the farmers within KVK campus	: 24

Types of Activity		Date	Number of Participants	Related crop/ livestock technology
22/12/2021 to 28/12/2021	Promoting clean & green technologies and Organic farming practices in kitchen gardens	22/12/2021	70	Kitchen garden
	Natural farming under azadi ka amrut utsav	23/12/2021	75	Natural farming
	IPDM of rabi crops under unnat kheti – uttam kisan	24/12/2021	50	Integrated pest and disease management
	Agro-based employment generation programme	25/12/2021	60	Employment generation programme
	Post harvest technologies of lemon crop and other crop	27/12/2021	44	Post harvest technologies
	Seminar on horticulture	28/12/2021	274	Fruit and vegetable exhibition cum seminar
<b>Total</b>			<b>501</b>	

### **12. Interventions on drought mitigation (if the KVK included in this special programme)**

A. Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
Gujarat	Ajawain	6	50
	Indian bean	20	50

B. Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	30	75
Pulses	42	105
Cereals	209	520
Vegetable crops	50	50
Cotton (KVK)	20	50
Plant Protection (KVK)	29	74
Horticulture (KVK)	52	155
Women Empowerment (Farm Implements and Machinery) (KVK)	52	72
Animal Science (KVK)	225	225
<b>Total</b>	<b>709</b>	<b>1326</b>

C. Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
Gujarat	-	-	-
<b>Total</b>			

D. Animal health camps organized

State	Number of camps	No. of animals	No. of farmers
Gujarat	2	47	47
<b>Total</b>	<b>2</b>	<b>47</b>	<b>47</b>

E. Seed distribution in drought hit states (Seed distribution/sold by KVK)

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
-	-	-	-	-
<b>Total</b>				

F. Large scale adoption of resource conservation technologies

State	Crops/cultivars and gist of resource conservation technologies introduced	Area (ha)	Number of farmers
-	-	-	-
<b>Total</b>			

G. Awareness campaign

State	Meetings		Gosthies		Field days		Farmers fair		Exhibition		Film show	
	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers	No.	No. of farmers
-	-	-	--	-	-	-	-	-	-	-	-	-
<b>Total</b>												

### 13. IMPACT

#### Impact of Training programme on Mushroom grower

Sr. No.	Technical practice	No. of Participants	Knowledge of Participants	
			Before training (%)	After training (%)
1	Mushroom is a fungi	20	25	95
2	Mushroom cultivation was started from China		15	90
3	Directorate of mushroom Research is located at Solan		15	95
4	Mushroom contain highest source of Protein		10	100
5	Button mushroom share highest production in India		15	85
6	Solan city is known as mushroom city in India		20	85
7	Punjab state is the highest producer of mushroom in India		15	75
8	Mushroom used for both health and nutrition		25	85
9	Mushroom mostly used for the patients suffered from heart diseases, diabetes and for metabolism		10	75
10	Shitake mushroom richest source of medicinal properties		5	70
11	For the mushroom cultivation there is no need of soil and sunlight		20	100
12	Mostly wheat grains are used for preparation of mushroom spawn		10	100
13	Oyster mushroom spawn can be stored up to one month		5	80
14	Oyster mushroom spawn can be stored at 4°C		10	70
15	Generally, paddy and wheat straw are used as media for oyster mushroom cultivation.		20	70
16	25 to 30°C Optimum temperature for the cultivation of oyster mushroom		10	75
17	40-50 days crop period is required for oyster mushroom cultivation		15	75
18	35-40°C is the Optimum temperature for milky mushroom cultivation		5	60
19	15-18°C is the Optimum temperature for button mushroom cultivation		10	60
20	80-100 days crop period is required for button mushroom cultivation		10	60
			<b>13.5</b>	<b>80.25</b>

#### Impact of Training programme on Integrated Pest and Disease management

Sr. No	Technical practice	No. of Participants	Knowledge of Participants	
			Before training (%)	After training (%)
1	Give name of three major important pests of paddy	25	20	85
2	Give name of three major important diseases of paddy		35	75

Sr. No	Technical practice	No. of Participants	Knowledge of Participants	
			Before training (%)	After training (%)
3	Yellow stem borer is the major pest of paddy which causes dead heart		60	85
4	White ear head caused by yellow stem borer in paddy		15	80
5	Management practices of yellow stem borer		25	75
6	Female of yellow stem borer lay eggs on top portion of leaf		0	80
7	Female of yellow stem borer lay eggs in mass		20	90
8	Transplanting of paddy should be done by cutting of top portion of leaf		25	75
9	Gundhi bug pest damages rice panicle		0	65
10	Sex pheromone trap technology used for the management of lepidopteron pests		5	95
			<b>20.5</b>	<b>80.0</b>

## B. Cases of large scale adoption

B. Cases of large-scale adoption-						
Adoption of Technologies by the farmers (%)						
Sr. No	Name of Technologies (minimum 5 promising/ successful technologies including for areas like crops, horticulture, livestock, fisheries etc.)	Area of technology (Ex. crops, horticulture, livestock, fisheries etc.)	Name of activity through which the particular technology given to farmers (i.e., by OFT, FLDs, trainings, etc.)	No. of Farmers provided technology	Continued adoption of technology by percentage (%) of farmers	Remark if any
<b>Year 2021</b>						
1	Improved variety - Purna	Crop Paddy	Training, FLDs, Field Day, Technology Week, Awareness Programme	25	9%	Drilled paddy
2	Integrated pest management - Pheromone trap	cotton Crop	Training, FLDs, Field Day, Technology Week, Awareness Programme	32	15%	
3	Integrated nutrient management - Basel Dose	Crop Paddy	Training, FLDs, Field Day, Technology Week, Awareness Programme	91	35%	
4	Hand weeder	Drudgery reduction - Small Scale Farm Mechanization	Training, FLDs, Field Day, Technology Week, Awareness Programme	34	3%	

5	Mineral Mixture	Livestock - Animal Nutrition	Training, FLDs, Field Day, Technology Week, Awareness Programme	50	45%	
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**C. Details of impact analysis of KVK activities carried out during the reporting period**

S. No.	Item	Unit	Prior to KVK	Post KVK activities
1.	Change in cropping intensity 1 Indian bean 2 sesame	Introduction of new variety	--	Getting momentum
2.	Change in productivity of 1. Drill Paddy (purna) 2. T.P Paddy (GMR-2) 3. Soybean 4. Ground nut 5. Pigeonpea	(kg/ha)	100-150 2000-2500 700-1000 700-900 700-1000	400-600 2800-3800 1500-2000 1000-1500 1500-1700
3.	Use of HYV (high-yielding varieties) 1. Cotton BT (irrigated) 2. Cotton Unirrigated	(kg/ha)	700-1000 250-400	1500-1800 500-600
4.	Use of fertilizers (NPK) (nutrient) 1. Rice 2. pigeon pea 3. cotton 4. Soyabean 5. Ground nut	(kg/ha) Imbalance use of fertilizer and no basal dose	Imbalance use of fertilizer and No basal dose	Farmers have started to apply fertilizer as Basal dose and other important stages
5.	Use of FYM and other biofertilizers	(kg/ha)	1.Improper method to prepare of FYM 2.use of undegraded FYM	1.Farmers have started to prepare FYM in pit 2. used quality FYM
6.	Tractor/machinery 1. Paddy thresher	Time saving	No use	70 % time saving
7.	(a) Change in economic indicators (in adopted villages) (b) Net return/ha/yr (by crop/enterprise) 1. Drill Paddy (purna) 2. T.P Paddy (GMR-2) 3 Soybean 4. Ground nut 5.Pigeonpea	(No) Rs.	10000-13000 35000-38000 25000-30000 25000-30000 37000-40000	13000-16000 45000-49000 35000-37000 35000-40000 52000-55000

#### 14. Kisan Mobile Advisory Services

Month	No. of SMS sent	No. of farmers to which SMS was sent	No. of feedback / query on SMS sent
Jan 2021	03	8079	-
Feb 2021	02	5386	-
March 2021	02	5386	-
April 2021	03	8079	-
May 2021	08	21544	-
<b>Total</b>	<b>18</b>	<b>48474</b>	<b>-</b>

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
Narmada	Text only	8	2	6	0	2	0	18
	Voice only	0	0	0	0	0	0	0
	Voice & Text both	0	0	0	0	0	0	0
	<b>Total Messages</b>	8	2	6	0	2	0	18
	<b>Total farmers Benefitted</b>	21544	5336	16158	00	5336	0	48474

#### 15. PERFORMANCE OF INFRASTRUCTURE IN KVK

##### A. Performance of demonstration units (other than instructional farm) 2021

Sl. No.	Demo Unit	Year of establ	Area Ft.	Details of production			Amount (Rs.)		Remarks
				Variety	Produce	Qty.	Cost of inputs	Gross income	
1	Mushroom Cultivation Unit	2020	20X40	Oyster sadar kaju	Mushroom	140 kg	4500/-	14000	-
2	Vermi compost Unit under shed net house	2020	40X40	-	Vermi - Compost	13250 kg.	30000/-	92750/-	-
3	Goat breeding unit	2020	100X100	Surti goat	kids	20	30000/-	42000/-	-
4	Azolla Unit	2020	20X20	-	Azolla	25 kg	2500/-	5000/-	
5	Mango orchard	2017	0.25 ha	29 variety	-	500 graft 3year old	60000/-	15000/-	-
6		2020	0.32 ha	04 variety		200 graft 1 year old	75000/-	Growing phase	-

7	Fruit orchard	2017	0.10 ha	26	-	78 plant 3 year old	10000/-	Growing phase	-
8		2020	0.17 ha	03 variety	-	125 plant 1 year old	15000/-	Growing phase	-
9	Poly house and net house	2017	0.25 ha	-	Brinjal seedlings	30000	8000	18000	
					Tomato seedlings	30000		18000	
					Chilly seedlings	25000		15000	
					Broccoli seedlings	700		420	
					Cabbage seedlings	15000		9000	
					Other Vegetable	15000		9000	
					Custard apple	200		6000	
					Mango	2476	10000	148560	
					Moringa	3000	25000	90000	
					Little gourd	800	4000	12000	
					Paraval	500	2000	7500	
					Spine gourd	200	800	3000	
10	Plant Protection Technology Information Park	2020	30X30	-	-	-	01.00 lakhs	Exhibit the information	-
11	Animal Husbandry information Technology Park	2020	10X30	-	-	-	01.00 lakhs		-
12	Horticultural information Technology Park	2020	20X30	-	-	-	0.50 lakhs		-
13	Small scale Farm Mechanization information Park with processing unit	2020	15X30	-	-	-	01.00 lakhs		-
14	Roof water harvesting	2012	10 Sq. m.	-	-	-	01.00 lakhs	Life saving irrigation	-
15	Farm pond	2011	100 m X 50 m	-	-	-	10 lakhs lit.		-
16	Solar pump	2020	24 panel		Electricity	8.5 kv	3.5 lakhs	Life saving irrigation	-

**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.	Cost of inputs	Gross income	
Cereals									
Paddy	16/01/2021	11/05/2021	0.70	GNRH-2	Seed	474kg	95140	94800/-	
Paddy	25/06/2021	28/10/2021	0.66	GAR-13	Seed	3360kg	77318	109880/-	
	6/7/2021	31/10/2021	0.4	GNR-2	Seed	1330 Kg	42920	43460/-	
	13/7/2021	15/10/2021	0.2	GNR-6	Seed	560kg	16460	17160/-	
	9/7/2021	25/10/2021	0.50	GNR-9	Seed	1750kg	50150	57400/-	
	5/7/2021	19/10/2021	0.50	GR-17 (Sardar)	Seed	2900kg	58150	90480/-	
	17/7/2021	18/10/2021	1.05	GR-16 (Tapi)	Seed	3150kg	91915	98280/-	
	20/7/2021	28/10/2021	0.30	Devali Kolam	Seed	1050kg	39690	103320/-	
	14/7/2021	19/10/2021	1.70	Purna	Seed	5740kg	104910	178620/-	
	12/7/21	15/11/2021	0.15	Heerakasi	Seed	300kg	19845	9360/-	
Wheat	5/11/2020	18/3/2021	0.25	GW-451	Seed	530 kg	6580	18550/-	
Pulses									
Gram	26/11/2020	12/03/2021	1.10	GG-5	Seed	1225 kg	10720	85750/-	
	29/11/2020	15/2/2021	2.20	GG-3	Seed	1600 kg	18864	112000/-	
Green Gram	4/2/2021	13/5/2021	2.00	GM-6 (T.F)	Seed	1000kg	27044	100000/-	
	23/3/2021	22/5/2021	0.80	GM-6 (Foundation)	Seed	550kg	20100	66000/-	
	18/3/2021	24/5/2021	0.30	GM-5(T.F)	Seed	150kg	5360/-	15000/-	
Soyabean	11/6/2021	17/10/2021	0.40	KDS-344	Seed	270kg	14472	16200/-	
Soyabean	12/7/2021	10/11/2021	0.20	NRC-37	Seed	30kg	7504	1800/-	
Soyabean	12/7/2021	10/11/2021	0.10	NRC-127	Seed	17kg	6164	1020/-	
Oilseeds									
Niger	10/7/2021	30/10/2021	0.40	GN-3	Seed	60 kg	12060	4200/-	
Fibers									
Spices & Plantation crops									
Floriculture									



Fruits									
Vegetables									
Others (specify)									
Sunhem p	21/2/2021	26/4/2021	2.00	-	Seed	700kg	12576	24500/-	
Nagali	23/7/2021	26/10/2021	0.10	-	Seed	30kg	5628	1200/-	
Vari	23/7/2021	26/10/2021	0.10	-	Seed	60kg	7236	2400/-	

### 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	-	-	-	-	-
2	Bio- Fungicides	-	-	-	-	-
3	Bio- pesticides	-	-	-	-	-
4	Bio-Agents	-	-	-	-	-
5	Vermicompost	Vermicompost	13250	30000	92750	

### D. Performance of instructional farm (livestock and fisheries production)

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
1.	Goat breeding unit	Surati	Kids	20	31000	-	For breeding

### E. Utilization of hostel facilities

Accommodation available (No. of beds): 12

Months	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
January 2021	10	01	-
February 2021	15	01	-
March 2021	35	01	-
April 2021	00	00	-
May 2021	00	00	-
June 2021	10	01	-
July 2021	05	01	-
August 2021	00	00	-
September 2021	00	00	-
October 2021	14	01	-

November 2021	19	01	-
December 2021	12	01	-

#### F. Database management

S. No	Database target	Database created
1	Phone number from all villages	60 villages (2678 Phone number)

#### 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 liters	Area irrigated / utilization pattern
			No. of Training programmes	No. of Demonstrations	No. of plant 138 material produced	Visit by farmers (No.)	Visit by officials (No.)		
1.00	0.99	Drip irrigation system	5	5	-	750	12	-	1.0 ha
-	-	farm pond	-	-	-	750	12	10,00,000	2.0 ha

#### H. Performance of Nutritional Garden at KVK farm

If Nutritional Garden developed at KVK farm/Village Level? Yes

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
0.1	Vegetable crops	15	3251
	Fruit crops	3	
	Others if any	-	
	Medicinal	6	

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
15	Vegetable crops	15	1242
	Fruit crops	3	
	Others if any	-	
	Medicinal	6	

## H. Details of Skill Development Trainings (ASCI) 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
1	Narmada	Mushroom grower	200	12	08	0	0	12	08
2		Small Poultry Farmer	200	43	07	0	0	43	07
Total				55	15	0	0	55	15

## 16. 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	Dediapada	07787	Navsari Agriculture university K.V.K.S.	30140660644	-	SBIN0007787
With KVK	-	-	-	-	-	-	-

### B. Utilization of KVK funds during the year 2021-22 (Rs. in lakh) (Till Dec, 2021)

Sr. No.	Particulars	Sanctioned	Released	Expenditure
<b>A. Recurring Contingencies</b>				
1	Pay & Allowances	99.00	57.80	67.75
2	Traveling allowances	01.25	01.25	00.19
3	Contingencies	18.00	12.03	07.92
<b>TOTAL (A)</b>		118.25	71.08	75.86
<b>B. Non-Recurring Contingencies</b>				
4	Farm development	00	00	00
5	Library (Purchase of assets like books & journals)	00	00	00
6	Vehicle (Motorcycle)	00	00	00
<b>GRAND TOTAL (A+B)</b>		118.25	71.08	75.86

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

<b>Year</b>	<b>Opening balance as on 1<sup>st</sup> April</b>	<b>Income during the year</b>	<b>Expenditure during the year</b>	<b>Net balance in hand as on 1<sup>st</sup> April of each year</b>
April - 2019 to March - 020	23.48	06.58	03.19	26.87
April - 2020 to March - 2021	26.87	12.23	09.33	29.77
April - 2021 to December - 2021	29.77	20.15	07.09	42.83

**17. Details of HRD activities attended by KVK staff during year**

<b>Name of the staff</b>	<b>Designation</b>	<b>Title of the training programme</b>	<b>Institute where attended</b>	<b>Mode (Online/Offline)</b>	<b>Dates</b>
Dr. H. R. Jadav	Scientist (Entomology)	Webinar on invasive pest and diseases problem in Indian agriculture	COA, NAU, Bharuch	Online	07 August 2021
		Capacity building programme for KVKs scientists of south Gujarat	DEE, NAU, Navsari	Off line	23 to 25 Sept. 2021
		Natural farming training	ATMA, Gandhinagar	Offline	26-11-21 to 02-12-21
Dr. J. H. Gohil	Scientist (Horticulture)	Capacity building programme for KVKs scientists of south Gujarat	DEE, NAU, Navsari		23 to 25 Sept. 21
Dr. D. B. Bhinsara	Scientist (Animal Science)	Capacity building programme for KVKs scientists of south Gujarat	DEE, NAU, Navsari	Online	23 to 25 Sept. 21
		Online Orientation Training for Newly Recruited Subject Matter Specialists of KVKs	ICAR-ATARI, Pune & Anand Agricultural University, Anand	Online	03 to 05 May 2021
		National Online Training Programme on "Nutritional Interventions for Livestock and Poultry"	Maharashtra Animal and Fishery Sciences University, Nagpur	Online	06 to 08 April 2021
		"Application of Novel Methods in Prevention and Control of Zoonoses and Ensuring Food Safety"	Nanaji Deshmukh Veterinary Science University Jabalpur - 482004(M.P.)	Online	18-02-2021 to 10-03-201
		Recent Advances in Veterinary Parasitology: A paradigm shift"	Nanaji Deshmukh Veterinary Science University Jabalpur - 482004(M.P.)	Online	01 to 15 February 2021
		Attended Webinar on "Sensitizing Extension Professionals for Successful Livestock Farming Models to develop Aatmnirbhar Kisan" organized by IVRI KVK in collaboration with NABARD	Indian Agricultural Research Institute: ICAR	Online	19 to 20 February 2021

Dr. M. V. Tiwari	Scientist (Home Science)	Sustainable Development of Secondary Agriculture: Economical, Food & Nutritional and Livelihood Perspective		Online	16-01-2021 to 05-01-2021
Shri. V. R. Jinjala	Training Assistant	Capacity building programme for KVKs scientists of south Gujarat	DEE, NAU, Navsari	Online	23 to 25 Sept. 21
Shri. M. L. Visat	Farm Manager	Capacity building programme for KVKs scientists of south Gujarat	DEE, NAU, Navsari	Online	23 to 25 Sept. 21
		Sorghum technical programme rabi 2021-22	MSRS, NAU, Surat	Online	29 Oct. 2021
Dr. P. D. Verma	SS&H	Capacity building programme for KVKs scientists of south Gujarat	DEE, NAU, Navsari	Online	23 to 25 Sept. 21

#### 18. 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
Almawadi	400	<ul style="list-style-type: none"> <li>•Varietal replacement</li> <li>•Production technology of major crops especially INM</li> <li>•Eco-friendly plant protection measures</li> <li>•Water conservation</li> <li>•Arid horticulture</li> <li>•Dairy management through feeding, housing and Health management</li> <li>•Drudgery reduction</li> <li>•Women empowerment</li> </ul>	125	25,000/- to 50,000/-	35,000/- to 70,000/-
Soliya	414		133	25,000/- to 50,000/-	35,000/- to 70,000/-

#### 19. Details of activities planned under NARI /PKVY / TSP / KKA, etc.

S. No.	Name of the programme	No. of villages adopted	Key activities performed	No. of activities carried out	No. of families covered
1	Training on DFI through animal husbandry and through poultry farming, by diversified cropping practices, Nursery management in horticultural crops, Marketing and value addition in ragi and vari, Scientific cultivation of Pulses	2	On and Off campus trainings	25	258

	– IPDM of Pulses and Cereals crops.				
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## 20. Details of Progress of ARYA Project

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	
-	-	-	-	-	-	-	-	-

## 21. 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
01	Training on Swachhta Pakhwada, Cleaning, Awareness shibir, Microbial based Agricultural Waste Management by Vermicomposting etc.	08	322
02	Distribution of Vermicompost bed	05	5

## 22. Please include any other important and relevant information which has not been reflected above (write in detail). – Nil-

## APR SUMMARY

### 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total participants
Farmers & farm women	115	2064	2760	4824
Rural youths	06	38	153	191
Extension functionaries	01	01	35	36
Sponsored Training	12	373	324	697
Vocational Training	10	46	161	207
<b>Total</b>	<b>144</b>	<b>2522</b>	<b>3433</b>	<b>5955</b>

### 2. Frontline demonstrations

Enterprise	No. of Farmers	Area(ha)	Units/Animals
Oilseeds	75	30	-
Pulses	105	42	-
Cereals	490	197	-
Vegetables	-	-	-
Other crops	279	101	-
Hybrid crops	30	12	-
<b>Total</b>	<b>979</b>	<b>382</b>	<b>-</b>
Livestock & Fisheries	225	-	225
Other enterprises	122	-	102
<b>Total</b>	<b>347</b>	<b>-</b>	<b>327</b>
<b>Grand Total</b>	<b>1326</b>	<b>382</b>	<b>327</b>

### 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
<b>Technology Assessed</b>			
Crops	03	15	15
Livestock	01	04	04
Various enterprises	-	-	-
<b>Total</b>	<b>04</b>	<b>19</b>	<b>19</b>
<b>Technology Refined</b>	04	19	19
Crops	-	-	-
Livestock	-	-	-
Various enterprises	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Grand Total</b>	<b>04</b>	<b>19</b>	<b>19</b>

### 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension activities	543	45255
Other extension activities	-	-
<b>Total</b>	<b>543</b>	<b>45255</b>

## 5. Mobile Advisory Services

Name of KVK	Message Type	Type of Messages						
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	Total
Narmada	Text only	8	2	6	0	2	0	18
	Voice only	0	0	0	0	0	0	0
	Voice & Text both	0	0	0	0	0	0	0
	<b>Total Messages</b>	8	2	6	0	2	0	18
	<b>Total farmers Benefitted</b>	21544	5336	16158	00	5336	0	48474

## 6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	268.36	1179292/-
Planting material (No.)	122876	336480/-
Bio-Products - Vermicompost (kg)	13250	92750/-
Livestock Production (No.)	20	42000/-
Fishery production (No.)	-	-

## 7. Soil, water & plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	251	75300/-
Water	-	-
Plant	-	-
<b>Total</b>	<b>251</b>	<b>75300/-</b>

## 8. HRD and Publications

Sr. No.	Category	Number
1	Workshops	14
2	Conferences	06
3	Meetings	10
4	Trainings for KVK officials	15
5	Visits of KVK officials	12
6	Book published	0
7	Training Manual	03
8	Book chapters	0
9	Research papers	07
10	Lead papers	0
11	Seminar papers	0
12	Extension folder	0
13	Proceedings	01
14	Award & recognition	0
15	On going research projects	0