

ANNUAL REPORT – 2013-14

(01.04.2013 TO 31.03.2014)

KVK, NAU, Dediapada, Dist: Narmada

1. GENERAL INFORMATION ABOUT THE KVK

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

Address	Telephone		E mail
	Office	FAX	
Krishi Vigyan Kendra, NAU, Parsi Tekra, Dediapada- 393 040, District: Narmada, Gujarat	(02649) 234501	-	kvk_narmada@yahoo.in

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

Address	Telephone		E mail	Web Address
	Office	FAX		
Navsari Agricultural University, Eru Char Rasta, Navsari-396 450, Gujarat	(02637) 282771 to 75	-	vc_nau@yahoo.co.in deenaunvs@yahoo.co.in	www.nau.in

1.3. Name of the Programme Coordinator with phone & mobile No

Name	Telephone / Contact		
	Residence	Mobile	Email
Dr. J. H. Rathod		094278 25427	hariom.janaksinh@gmail.com

1.4. Year of sanction: 2006

1.5. Staff Position (as on 31st March, 2014)

Sl. No.	Sanctioned post	Name of Person	Designation	Discipline	Pay Scale (Rs.)	Date of joining	Category (SC/ST/OBC/Other)
1	Programme Coordinator	Dr. J. H. Rathod	Programme Coordinator	Entomology	37400-67000	21-01-12	Other
2	Subject Matter Specialist	Prof. S. R. Kumbhani	SMS	Extension Education	15600-39100	22-01-13	Other
3	Subject Matter Specialist	Dr. H. R. Jadav	SMS	Entomology	15600-39100	30-01-12	SC
4	Subject Matter Specialist	Dr. Vikas Yadav	SMS	Horticulture	15600-39100	07-05-13	Other
5	Subject Matter Specialist	Dr. A. D. Raj	SMS	Agronomy	15600-39100	02-05-11	SC
6	Subject Matter Specialist	Vacant	SMS	Home Science	15600-39100	--	--
7	Subject Matter Specialist	Dr. R.M. Patel	SMS	Animal Science	15600-39100	03-01-14	Other
8	Programme Assistant	Mr. Y. D. Patel	Programme Assistant	--	10,000fix	21-10-11	Other
9	Computer Programmer	Mr. C. D. Lad	Computer Programmer	Computer	10,000fix	16-07-12	OBC
10	Farm Manager	Mr. A. N. Lad	Farm Manager	--	10,000fix	20-10-11	OBC

11	Accountant / Superintendent	Smt. Jaimini A. Shastri	Office Superintendent cum Accountant	--	9300-34100	07-05-13	Other
12	Stenographer*	Mr. J. S. Mehra	Jr. Steno Grade-3	--	5200-20200	22-08-13	OBC
13	Driver	Mr. S. M. Sayaid	Driver cum Mechanic	--	5200-20200	23-08-07	Other
14	Driver	Vacant	Driver cum Mechanic	--	5200-20200	--	--
15	Supporting staff	Mr. D. M. Patel	Supporting staff	--	4440-7440	22-08-07	OBC
16	Supporting staff	--	Supporting staff	--	--	--	--

* On deputation at Kamdhenu University, Gandhinagar (Gujarat) from 01.09.2012.

1.6. Total land with KVK (in ha): 21.60

Sr. No.	Item	Area (ha)
1	Under Buildings	0.5
2.	Under Demonstration Units	1.0
3.	Under Crops	17.5
4.	Orchard/Agro-forestry	-
5.	Others (specify)	2.60
	Total	21.60

1.7. Infrastructural Development

A) Buildings

Sr. No.	Name of building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Date	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Date	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	ICAR	-	-	-	October 2008	550	Complete
2.	Farmers Hostel	ICAR	-	-	-	April 2010	320	Complete
3.	Staff Quarters (4)	ICAR	-	-	-	Jan. 2010	400	Complete
4.	Demonstration Units (2)	ICAR	-	-	-	-	-	-
5	Fencing	ICAR	-	-	-	-	-	Complete
6	Rain Water harvesting system	ICAR	-	-	-	-	-	-
7	Threshing floor	ICAR	-	-	-	-	-	Not available
8	Farm godown	ICAR	-	-	-	-	-	Complete

B) Vehicles

Type of vehicle	Year of purchase	Cost (Rs.)	Total kms. Run	Present status
Jeep (Bolero)	2007	4,78,482	2,01,341	Good
Bike	2012	49000/-	9406	Good

C) Equipments & AV aids

Name of the equipment	Year of purchase	Cost (Rs.)	Present status
Trailer	26.03.2007	80,000	Working
Cultivator	26.03.2007	15000	Working
Plough	22.10.2008	4300	Working
Electronic balance	20.08.2009	8000	Working
Scale balance	09.03.2009	6000	Working
Rotavator	02.03.2009	63,000	Working
Disc harrow	09.03.2009	57120	Working
Submersible pump	13.03.2009	41105	Working
Plough	18.03.2009	19000	Working
Leveler	18.03.2009	13500	Working
Pump sprayer	21.03.2009	20700	Working
Thresher	21.03.2009	105000	Working
Bund former	26.03.2009	12348	Working
Seed drill	26.03.2009	11500	Working
V ditcher	28.03.2009	20400	Working
Ridger	28.03.2009	15000	Working
Computer with accessories	28.03.2009	36735	Working
Submersible pump	30.03.2009	41075	Working
Honda Portable generator	31.03.2009	38000	Working
Digital camera	06.03.2010	25000	Working
Fax machine	20.03.2010	14900	Working
Digital Copier	29.03.2010	66600	Working
Multi crop thresher	26.03.2010	145000	Working
Castor Thresher	26.03.2010	15500	Working
Bag sewing machine	27.03.2010	5040	Working
A&V sound system	10-12-2010	42898	Working
Portable Sound system	10-12-2010	22784	Working
Multimedia projector with trolley and screen	10-12-2010	64997	Working
Seed cum fertilizers drill	16-03-2011	36100	Working
Winnower	16-03-2011	26500	Working
LCD TV	21-03-2011	54890	Working
Lap top	24-03-2011	37850	Working
Computer with accessories	17-03-2011	73690	Working
Water cooler with RO system	19-03-2011	43900	Working
Motor Cycle	22-03-2010	49650	Working
Solar Water Heater	22-03-2012	75025	Working
LCD TV	22-03-2012	40860	Working
Refrigerator	22-03-2012	20100	Working
Water Cooler with RO System	22-03-2012	42000	Working
Magazine Stand Model T-9309	12-03-2014	4465	Working
Acrylic Specimen Box	12-03-2014	840	Working
Acrylic Table Top/Desk ped	12-03-2014	4952	Working
Acrylic Door Name Plate	12-03-2014	656	Working

1.8. A). Scientific Advisory Committee (SAC) meeting conducted.

S.N	Date	Name and Designation of Participants	Salient Recommendations	Action Taken
1	11-4-13	Dr. A. R. Pathak Vice Chancellor Navsari Agricultural University, Navsari	KVK with ATMA Narmada jointly arranged exposure visit to places in District and outside of Zone	Exposure visits to N.A.U, Navsari and other places (Progressive Farmer) were arranged by us. No. of Exposure Visit :4 No. of Beneficiary: 190
2		Dr. A. N. Sabalpara Director of Research , Navsari Agricultural University, Navsari	Training to the SHGs of Sagbara taluka arranged by KVK.	Training, Women shibir, Exposure visit etc were organized for SHGs Sagbara No. of Training/Shibir: 3 No. of Beneficiary: 0+124=124
3		Dr. H. J. Derashri Director of Extension Education, Navsari Agricultural University, Navsari	Sewing and Kitchen Garden Training especially for women were organized.	Training to Women were organized for SHGs Sagbara No. of Training: 1+2 No. of Beneficiary:0+75 =75
4		Dr. P. P. Rhohile Representative of Zonal Project Director, Zone- VI, Jodhpur	Training and information organized for Dadar Sorghum and Cultivation practice for Pumpkin	No. of Training: 2 No. of Beneficiary:47+33 =110
5		Shri. Fatehsingbahi Ramjibhai Vasava Chairmen, Irrigation department, Taluka Panchayat, Dediapada	Provide Information on marketing of vegetable like Pigeon and Indian bean.	Yes, Information related to marketing of vegetable like Pigeon and Indian bean was given during training at nanadoramba.
6		Shri. Sankarbhair N. Vasava Chairmen, Construction department, Taluka Panchayat, Dediapada	Organize more No of Trainings on Vermi-Compost.	Yes, we organized Training on Vermi-Compost with DWDU, Narmada. No. of Training: 10 No. of Beneficiary: 500
7		Dr. V. M. Kaushik President, INRECA sansthan, Dediapada	Experiment on Banana and papaya were arranged at KVK farm	Arranged FLDs on banana & papaya from next season.
8		Smt. Sharashvatiben R. Vasava Chairmen, Women-Child development department, Taluka Panchayat,	Training Organized related to Soil Fertility.	During each training, special emphasize given to improve soil fertility by SMS Agronomy.
9		Dr. P. R. Pandey Principal, Agri Engg.Polytech,NAU, Dediapada	Organize training related to cultivation practices of Cluster Bean, Cotton, and Sesamum.	Trainings on Cluster bean at Bujetha, Cotton at Bitada & Sesamum at Nanadoramba were arranged.

10	Mr. B. L. Desai Project Director, Watershed project, Rajpipla	Create awareness on Ideal use of chemical fertilizers.	During agronomical Trainings, advise farmers about use of chemical fertilizers as per university recommendation.
11	Dr. G. R. Patel Associate Ext. Edu., NAU, Navsari	Suggest to adopt Drip irrigation, Soil Sampling related to Nutrient management of various crops.	Demonstration on Drip arranged at KVK & a special lecture also arranged during Technology week. Farmers also advised to analyze their soil and use nutrients accordingly.
12	Shri. B. B. Kothiwala Head District Manager, Narmada.	To establish demonstration unit of Goat farm and information related to that given to the farmer.	We put a project on livestock unit at NABARD. Process is going on.
13	Mr. Maheshbhai Patel D. A.O. Rajpipala, Narmada		
14	Dr. Divyakant Chaocha, Veterinary Officer,. Dediapada		
15	Mr. B. K. Bhatt PD,.ATMA.Narmada		
16	Shri. V. I. Patel Assit. Director of Agri. Rajpipla		
17	Mr. D. T. Patel Forest Officer, Dediapada		
18	Mr.Chirag N.Patel DDA, Extension,.Rajpipla		
19	Smt. Anilaben R. Vasava AKRSP,.Dediapada		
20	Smt. Ushaben D. Vasava, Navjivan aadivasi mahila vikas manch, Sagbara		
21	Smt. Jasodaben. Vasava Jagruti Mahila Manch,. Samarpada		
22	Shri.Sumenbhai R. Vasava Adivasi Gram Vikas Mandal, Moti Bedvan		
23	Shri Kale Bhushal H.Assistant Research Scientist cotton research substation, Achhalia		
24	Shri. H. B. Tadvi District Registrar Sahakari Mandal, Narmada		
25	Shri. Madhusinh C. Tadvi A.I., Dediapada		
26	Dr. Diptiben Veterinary officer, Mobile dediapada		
27	Mr. C. K. Rathod, Press Reporter, Sandesh and Gujarat Samachar		
28	Mr. Sajith V. Soman, District Co-ordinator,. MART Narmada		
29	Smt. Jermaben Vasava President of tribal women credit co-operative society		
30	Mr. Damjibhai Vasava Progressive Farmer Chikada		
31	Mr. Govindbhai M. Tadvi Progressive Farmer,.Vadi Ta:Nandod		
32	Shri. Narsingbhai Radviyabhai Vasava, Farmer AT :Motasuka amba, Ta : Dediapada Dist : Narmada		
33	Shri Champakbhai D. Tadvi, AT :Kukarda, Ta : Dediapada Dist : Narmada		

Proceeding of Fifth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Dediapada held on 11/04/2013.

The Fifth Scientific Advisory Committee Meeting of Krishi Vigyan Kendra, NAU, Dediapada was held at KVK, Dediapada on 11th April, 2013 to review the progress made by KVK during last year (August - 2012 to March 13) and discuss the future action plan for the next year (April'13 to September'13). The meeting was inaugurated by Dr, A.R. Pathak, Vice-Chancellor, NAU, Navsari and Chairman of Scientific Advisory Committee, KVK, Dediapada. Dr. J. H. Rathod, Member Secretary & Programme Coordinator, Krishi Vigyan Kendra, Dediapada welcomed the dignitaries, committee members, farmers and other invitees.

Dr. J. H. Rathod presented the report on work done by Krushi Vigyan Kendra, Dediapada during the period of August - 2012 to March 13. The Scientific Advisory Committee discuss on the topic that how make better activity of Krushi Vigyan Kendra and take valuable suggestion of committee members

Dr. H. J. Derashri, Director of Extension Education, NAU, Navsari was explained brief information on objectives of Scientific Advisory Committee, Krushi Vigyan Kendra Mandates, Front line demonstration, On Farming Testing and Training.

Dr. A. R. Pathak, Vice- Chancellor, NAU, Navsari and Chairman of Scientific Advisory Committee suggested provided large number of quality seed to the farmers by using seed village project and also provide training various aspects under RKVY project. Training on vermi-compost, cultivation practice of Cotton, Pigeon pea and Paddy more focus, Demonstration of pulses like Mung, Pigeon pea, Cluster bean on huge area. Arrange the exposure visit celebration with ATMA project and get benefit for the farmer. Especially for Narmada District Sorghum cultivation of variety GJ-38 is good so more number of demonstrations given to the farmer. More over that FLD on Turmeric and Banana, Drip irrigation and Kitchen Garden also included and provide training. OFT on urea treatment for paddy straw implemented at KVK.

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

5.1	Approval of the minutes of Fifth Scientific Advisory Committee
	The action taken report of the minutes of Forth SAC meeting (Held on 02-09-2012) was presented before the house and it was approved by the Scientific Advisory Committee.
5.2	Progress made by KVK during April 2011 to July 2012
	Programme Coordinator, KVK, NAU, Dediapada presented the report on progress made by KVK, for the period of April-2011 to July-2012. The committee was satisfied with the activities and achievements made by the KVK.
5.3	Action plan for the period of April-2013 to March -2014.
	Discussion was made on the Action Plan for the period of April-2013 to March-2014 which was approved by the house. However, few suggestions were made by the house to strengthen the action plan.
5.3.1	KVK with ATMA Narmada jointly arranged exposure visit to places in District and outside of Zone
5.3.2.	Training to the SHGs of Sagbara taluka arranged by KVK

5.3.3.	Sewing and Kitchen Garden Training especially for women were organized.
5.3.4	Training and information organized for Dadar Sorghum and Cultivation practice for Pumpkin
5.3.5.	Information related to marketing of vegetable like Pigeon and Indian bean was given.
5.3.6.	More No of Training on Vermi-Compost organized.
5.3.7.	Experiment on Banana and papaya were arranged at KVK farm
5.3.8.	Training Organized related to Soil Fertility.
5.3.9.	Training Organized related to cultivation practices of Cumin, Cluster Bean, Cotton, and Sesamum.
5.3.10.	Training Organized related to Ideal use of chemical fertilizers
5.3.11.	Suggestion given on Drip irrigation, Sprinkle irrigation, Soil leveling, Soil Sampling related to Nutrient management various crop
5.3.12.	Training organized on vermin-Compost, Kitchen Garden, Drip irrigation, Animal Husbandry subject / Aspect
5.3.13.	To established demonstration unit of Goat farm and information related to that given to the farmer.

Approved

**Programme Coordinator
Krushi Vigyan Kendra
Navsari Agriculture University
Dediapada**

**Chairman & Vice Chancellor
Navsari Agriculture University
Navsari**

2. DETAILS OF DISTRICT

2.1 Major farming systems/enterprises

Sr. No	Farming system/enterprise
1.	Crop production
2.	Crop production and Horticulture
3.	Crop production and Livestock
4.	Crop production, Horticulture and Livestock

2.2 Description of Agro-climatic Zone & major agro ecological situations

Sr. No	Agro-climatic Zone	Characteristics
1	South Gujarat Zone, AES-I	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.

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.	80 %
2	Deep black soil- Plain	Deep black soil with high rainfall- plain	20 %

2.4 Area, Production and Productivity of major crops cultivated in the district.

Sr. No.	Season and crops	Area (ha)	Production (MT)	Yield (kg/ha)
KHARIF				
1	Paddy Drilled	13615	11572	850
2	Paddy TP	950	1995	2100
3	Groundnut	115	230	2000
4	Castor	412	1071	2600
5	Cotton	42315	105787	2500
6	Sorghum	5600	11200	2000
7	Maize	5384	16152	3000
8	Soybean	6515	11075	1700
9	Pigeon Pea (Arhar)	19089	31496	1650
10	Other pulses Black gram, cowpea, etc.	592	444	750
11	Green gram	452	384	850
12	Vegetables	4345	49967	11500
RABI				
1	Wheat	4000	9048	2262
2	Sorghum	6219	7463	1200
3	Sugarcane	5852	374528	64000
4	Gram	3430	2679	781

5	Maize	3015	5361	1778
6	Sunflower	195	174	891
7	Mustard	50	59	1180
8	Vegetables	5828	89168	15300
9	Fodder Crops	1863	16581	8900
SUMMER				
1	Ground nut	4001	6149	1548
2	Bajra	1472	2311	1570
3	Green Gram	2535	1965	775
4	Maize	1762	3436	1950
5	Vegetables	7337	84376	11500
6	Melons	629	21166	33650
7	Fodder Crops	3671	34599	9425

2.5 Weather data

Month	Rainfall (mm)	Temperature 0 C		Relative Humidity (%)
		Max.	Min.	
June	270	-	-	-
July	289	-	-	-
August	261	-	-	-
September	376	-	-	-

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

Category	Population	Production	Productivity
Cattle			
<i>Crossbred</i>	4226	45,000 Tone/year milk	7.094 lit/day (milk)
<i>Indigenous</i>	136637		2.518 lit/day (milk)
Buffalo	58951		3.462 lit/day (milk)
Sheep	131	-	863 gm/year (wool)
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	-	-	-
Goats	71897	19843 kg meat/year	0.316 kg/year (meat)
Pigs	-	-	-
<i>Crossbred</i>	-	-	-
<i>Indigenous</i>	74	-	-
Rabbits	73	-	-
Poultry			
Hens	-	-	-
<i>Desi</i>	138509	36,00,000 egg/year	0.2504 no. of egg/day
<i>Improved</i>	3887		0.6643 no. of egg/day
Ducks	913	-	-
Turkey and others	-	-	-

Category	Area	Production	Productivity
Fish	-	-	-
<i>Marine</i>	-	-	-
<i>Inland</i>	18.09	-	200 kg/ha
Prawn	-	-	-
Scampi	-	-	-
Shrimp	-	-	-

2.7 Details of Operational areas / Villages (2013-14)

Sl. No	Taluka	Name of the block	Name of the villages	Major crops & enterprises	Major problem identified	Identified Thrust Areas
1	Nandod	Nandod	Khuta amba, Motibhamri, Movi, Amali, Bitada,	Paddy, Pigeon pea, Sorghum Gram	<ul style="list-style-type: none"> • Use of local variety, • Imbalance use of fertilizer, • Low irrigation facility • Low animal productivity 	<ul style="list-style-type: none"> • Varietal replacement • Production technology of major crops, • Water conservation, • Arid horticulture, • Animal feeding and management,
			Wadi, Kasumbia, Samsherpura, Zer,	Paddy, Pigeon pea, Sorghum Gram, Cotton, Wheat, Vegetable	<ul style="list-style-type: none"> • Use of local variety, • Imbalance use of fertilizer, • Low irrigation facility • Low animal productivity • Insect pest problem in cotton • High use of input in cotton and vegetables 	<ul style="list-style-type: none"> • Varietal replacement • Production technology of major crops, • Arid horticulture, • Animal feeding and management, • Integrated pest management • Integrated Nutrient Management
2	Tilak-wada	Tilak-wada	Jesing-pura, Tilkavada, Nimpura, Katkoi, Bujetha	Cotton, Paddy, Pigeon pea, Maize, Gram, Wheat, Sorghum	<ul style="list-style-type: none"> • Insect pest problem in cotton • High use of input in cotton and vegetables • Use of local variety, • Imbalance use of fertilizer, • Low animal productivity 	<ul style="list-style-type: none"> • Integrated pest management • Integrated Nutrient Management • Production technology of major crops, • Promotion of vegetable crops, • Animal feeding and management

	Tilak-wada	Tilak-wada	Puchh-pura, Kunjetha, Jaloda	Cotton, Paddy, Pigeon pea, Maize Gram, Wheat Sorghum	<ul style="list-style-type: none"> • Insect pest problem in cotton • High use of input in cotton and vegetables • Use of local variety, • Imbalance use of fertilizer, • Low animal productivity 	<ul style="list-style-type: none"> • Integrated pest management • Integrated Nutrient Management • Production technology of major crops, • Promotion of vegetable crops, • Animal feeding and management,
3	Sagbara	Sagbara	Nani Devrupen Moti Devrupen Pat, Taval	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> • Use of local variety, • Imbalance use of fertilizer, • Low irrigation facility • Low animal productivity • Insect pest problem in cotton • High use of input in cotton and vegetables 	<ul style="list-style-type: none"> • Varietal replacement • Production technology of major crops, • Water conservation, • Arid horticulture, • Animal feeding and management, • Integrated pest management • Integrated Nutrient Management
			Nanadoramba, Motadoramba, Makram, Turavadi, Bodvav	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> • Use of local variety, • Imbalance use of fertilizer, • Low irrigation facility • Low animal productivity • Insect pest problem in cotton • High use of input in cotton and vegetables 	<ul style="list-style-type: none"> • Varietal replacement • Production technology of major crops, • Water conservation, • Arid horticulture, • Animal feeding and management, • Integrated pest management • Integrated Nutrient Management
4	Dedia-pada	Dedia-pada	Pansar, Navagam, Besana Kankala Mota sukamba Nivalda	Paddy, Pigeon pea, Sorghum Gram	<ul style="list-style-type: none"> • Use of local variety, • Imbalance use of fertilizer, • Low irrigation facility • Low animal productivity 	<ul style="list-style-type: none"> • Varietal replacement • Production technology of major crops, • Water conservation, • Arid horticulture, • Animal feeding and management,

			Zarnawadi, Almavadi, Jambar, Chuli, Ghodi Pamlapada	Paddy, Pigeon pea, Sorghum Gram, Cotton , Wheat	<ul style="list-style-type: none"> • Use of local variety, • Imbalance use of fertilizer, • Low irrigation facility • Low animal productivity • Insect pest problem in cotton • High use of input in cotton and vegetables 	<ul style="list-style-type: none"> • Varietal replacement • Production technology of major crops, • Water conservation, • Arid horticulture, • Animal feeding and management, • Integrated pest management • Integrated Nutrient Management
			Kakarpada, Amabavadi, Kalbi, Haripura,	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> • Use of local variety, • Imbalance use of fertilizer, • Low irrigation facility • Low animal productivity • Insect pest problem in cotton • High use of input in cotton and vegetables 	<ul style="list-style-type: none"> • Varietal replacement • Production technology of major crops, • Water conservation, • Arid horticulture, • Animal feeding and management, • Integrated pest management • Integrated Nutrient Management
			Vadivav Kukadada, Chikada	Paddy, Pigeon pea, Cotton, Maize, Gram, Wheat, Vegetables	<ul style="list-style-type: none"> • Use of local variety, • Imbalance use of fertilizer, • Low irrigation facility • Low animal productivity • Insect pest problem in cotton • High use of input in cotton and vegetables 	<ul style="list-style-type: none"> • Varietal replacement • Production technology of major crops, • Water conservation, • Arid horticulture, • Animal feeding and management, • Integrated pest management • Integrated Nutrient Management

2.8 Priority/thrust areas

Crops/Enterprises	Thrust areas
Paddy	Variety replacement, Seed treatment, use of bio-fertilizer
Cotton	Integrated Pest Management, Integrated Nutrient Management
Pigeon pea	Variety replacement, Integrated Insect pests and Disease management, Land configuration, Inter cropping
Sorghum	Variety replacement, production technology
Green gram	Variety replacement
Black gram	Variety replacement
Banana	Integrated Nutrient Management
Sugarcane	Integrated Nutrient Management, Integrated Disease management
Maize	Variety replacement, production technology

3. TECHNICAL ACHIVEMENTS

3.A. Details of target and achievements of mandatory activities by KVK during 2013-14

OFT (Technology Assessment and Refinement)				FLD (Oilseeds, Pulses, Cotton, Other Crops/Enterprises)			
1				2			
Number of OFTs		Number of Farmers		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
5	5	62	65	17	17	252	260

Training					Extension Activities			
3					4			
Number of Courses			Number of Participants		Number of activities		Number of participants	
Clientele	Target s	Achieve ment	Targets	Achieve ment	Targets	Achiev ement	Targets	Achievem ent
Farmers	72	76	1550	3332	61	968	10000	52056
Rural youth	4	4	100	125	--	--	--	--
Extn. Functionaries	4	4	60	66	--	--	--	--
Sponsored	20	26	1000	1138	--	--	--	--

Seed Production (Qtl)			Planting material (Nos.)	
5			6	
Crop-Target	Achievement		Target	Achievement
Cereals 40.00	74.50		--	--
Oilseed 1.00	2.04		--	--
Pulses- 10.00	30.72		--	--
Total 51.00	107.26		--	--

3. B. Abstract of interventions undertaken

Sr. No	Thrust area	Crops/Enterprises	Identified Problem	Interventions					
				Title of OFT	Title of FLD	Title of Training	Title of training for extension personnel	Extension activities	Supply of seeds, planting materials etc.
1	Increasing the production of major crops (Paddy, Pigeon pea, Wheat, Gram, Pulses and Cotton).	Paddy	Use of local variety, Imbalance use of fertilizers	--	Replacement of variety by introducing GR-5	<ul style="list-style-type: none"> • Cultivation practices of drilled paddy • SRI system of rice intensification • Pests of paddy and its management • Weed management in kharif crops • Cultivation practices of Kharif crops 	--	<ul style="list-style-type: none"> • Field day • Field visits • Diagnostic visit • Kisan gosthi • Crop • Symposium- • Kharif and Rabi • Exhibition • Literature publication and distribution 	Seeds

		Pigeon pea	Use of local variety, Imbalance use of fertilizer, Wilt problem	--	Replacement of variety by introducing Vaishali variety, Management of wilt through Trichoderma, Integrated management of <i>Helicoverpa</i>	• Pest and diseases of pigeon pea and IPM.	--	<ul style="list-style-type: none"> •Khedut sibir •Field visits •Diagnostic visit •Kisan gosthi •Crop symposium-Kharif and Rabi •Exhibition •Literature publication and distribution 	Seeds, Trichoderma, NPV
		Wheat	Use of local variety, Imbalance use of fertilizer	--	Replacement of variety by introducing GW-366		--	<ul style="list-style-type: none"> •Khedut sibir •Field visits •Diagnostic visit •Kisan gosthi •Crop symposium-Kharif and Rabi •Exhibition •Literature publication and distribution 	Seed

		Gram	Use of local variety, Imbalance use of fertilizer	--	Replacement of variety by introducing GG-2	<ul style="list-style-type: none"> • Scientific cultivation of gram 	--	<ul style="list-style-type: none"> •Field day •Field visits •Diagnostic visit •Kisan gosthi •Crop symposium-Kharif and Rabi •Exhibition •Literature publication and distribution •Khedut sibir 	Seeds
		Other Pulses	Use of local variety, Imbalance use of fertilizer	--	--	<ul style="list-style-type: none"> • Weed management in pulses • Use of bio-fertilizer in oilseed and pulses 	--	<ul style="list-style-type: none"> •Khedut sibir •Field visits •Kisan gosthi •Crop symposium-Kharif and Rabi •Exhibition •Literature publication and distribution 	

		Cotton	High input (pesticides and fertilizer) use	--	IPM	<ul style="list-style-type: none"> • Efficient use of fertilizer • Scientific cultivation of cotton 	--	<ul style="list-style-type: none"> • Khedut sibir • Field visits • Diagnostic visit • Kisan gosthi • Crop symposium- Kharif and Rabi • Exhibition Literature publication and distribution 	Pesticides, Pheromone traps
2	Arid Horticulture in Rainfed area.	--	No fruit trees in farm/ backyard	--	--	<ul style="list-style-type: none"> • Care and Management of mango orchard • Kitchen gardening 	--	•Khedut sibir	Seedlings of Alma and custard apples were provided in each of the adopted village. (200 plants in each villages –Six villages)

3	Fruit and vegetables in irrigated area	Brinjal Chili Tomato	High input use, Narrow spacing in Chili, Insect pest and Disease problems	Refinement of crop spacing in Chili	Integrated Nutrient Management in Brinjal, Chili and Tomato	<ul style="list-style-type: none"> • Nursery raising in <i>Rabi</i> vegetables) • Scientific cultivation of tomato • Pests of vegetable and its management • IPM in vegetable crops • Scientific cultivation of Brinjal and Chili Nursery raising in Low cost green house • pests of Brinjal • Low cost green house 	--	<ul style="list-style-type: none"> •Khedut sibir •Field visits •Diagnostic visit •Kisan gosthi •Crop symposium-Kharif and Rabi •Exhibition •Literature publication and distribution •Demonstration unit on kitchen gardening 	Seeds, Fertilizer
4	Creating awareness about Conservation of soil and water resources.	--	--	--	--	<ul style="list-style-type: none"> • Drip irrigation in vegetable crops. 	--	<ul style="list-style-type: none"> • Exhibition • Literature publication and distribution 	--
5	Income generation by imparting skill training.	Production of organic inputs	Traditional Method	Nil	Nil	<ul style="list-style-type: none"> • Production of 18 compost 	--	<ul style="list-style-type: none"> • Training and Shibir 	--

6	Women empowerment.	--	--	--	--	<ul style="list-style-type: none"> • Value addition in fruit crops 	--	<ul style="list-style-type: none"> • Mahila Gosthi • Mahila Shibir on Group formation and income generating activities • Demonstrations on preservation of fruit and vegetable 	--
7	Improved livestock management practices.	Animal Husbandry	<ul style="list-style-type: none"> -Poor housing - poor feeding - No use of mineral mixture and concentrate - Large population of non descript breeds -Low milk productivity 	<p>Effect of supplementing mineral mixture and concentrate on Body</p> <p>growth performance in calves</p>	Supplementation of mineral mixture	<ul style="list-style-type: none"> • Importance of mineral mixture in animal feed. • Urea treatment to paddy straw • Care and management of new borne calf • Care of milking animal • Importance of vaccination in dairy animal 	Storage and preservation of semen for AI	<ul style="list-style-type: none"> •Animal health camp •Khedut Shibir •Literature publication and distribution •Kisan gosthi •Diagnostic visit 	Mineral mixture and Concentrate

B. Details of each on Farm Trial

A. Technology Assessment

OFT 1: Livestock

- 1) Title : Effect of supplementing mineral mixture and concentrate on Body growth performance in calves
- 2) Problem diagnose/defined : Poor body growth performance in calves
- 3) Details of technologies selected for assessment
/refinement : T₁: Traditional Practice
T₂: Feeding of 15 gm mineral mixture + Deworming
T₃: T₂ + Concentrate feeding @ 1% of body wt.
- 4) Source of technology : Nutrition Department, AAU, Anand.
- 5) Production system : Nutrition Management
thematic area
- 6) Thematic area : Nutrition Management
- 7) Performance of the : On going
Technology with
Performance indicators
- 8) Final recommendation for : On going
micro level situation
- 9) Constraints identified and
feedback for research :
- 10) Process of farmers
participation and
their reaction : Farmers participation in planning, execution and monitoring.

Results of On Farm Trials

Crop/ enterprise	Farming situation	Problem Diagnosed	Title of OFT	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment	Feedback from the farmer
1	2	3	4	5	6	7	8	9	10
Live stock	Rain fed	Poor body growth performance in calves	Effect of supplementing mineral mixture and concentrate on Body growth performance in calves	12	T ₁ : Traditional Practice	Body wt at birth, 1st, 3rd, 6th and 12th month of age	Body wt at 1st : 26.80 3rd : 35.23 6th: 47.44 12th:90.35	Body growth was highest in Concentrate supplemented group.	Farmers reacted as the treatment improves the health of calves
					T ₂ : Feeding of 15 gm mineral mixture + Deworming		1st : 27.96 3rd : 40.46 6th: 57.36 12th:104.72		
					T ₃ : T ₂ + Concentrate feeding @ 1% of body wt		1st : 30.84 3rd : 42.67 6th: 63.52 12th:112.25		

Technology Assessed	Production per unit	Net Return (Profit) in Rs. / unit	BC Ratio
11	12	13	14
T ₁ : Traditional Practice	<i>Study continue</i>		
T ₂ : Feeding of 15 gm mineral mixture + Deworming			
T ₃ : T ₂ + Concentrate feeding @ 1% of body wt			

OFT 2: Plant Protection

1. **Title** : Assessment of stem application method of insecticide for management of sucking pests in cotton.
2. **Problem diagnose/defined** : To manage sucking pests in cotton, which leads problem and its hazardous to environment as well as human being.
3. **Details of technologies selected for assessment /refinement :**
 - T₁ : Stem Application of Acephate 75 WP (4:1 :: Water : Insecticide)
 - T₂ : Spraying of recommended insecticides: (Need based Foliarapplication Imidaclopride 17.8 SL and
 - T₃ : Farmers method as Check : (Frequently Foliar Application Imidaclopride 17.8 SL and 36EC) i. e. at Weekly interval.
4. **Source of technology** : GAU, Navsari
5. **Production system/ thematic area** : Rainfed
6. **Thematic area** : IPM
7. **Performance of the Technology with performance indicators** : On going
8. **Final recommendation for micro level situation** : On going
9. **Constraints identified and feedback for research** ---
10. **Process of farmers Participation and their reaction** Farmers participation in planning, execution and monitoring

Results of On Farm Trials

Treatments		Mean Population Numbers of Sucking pests /3 leaves/plant				Yield (Q/ha)	% increase	Gross Return (Rs/ha)	Cost of cultivation (Rs/ha)	Net Return (Rs/ha)	B:C ratio
		Aphids	Jassids	Whitefly	Thrips						
1 st Year 2011-12	T ₁	1.1	1.7	2.0	1.8	17.42	18.5	52260	12000	40260	3.355
	T ₂	8.0	9.6	11.9	10.2	15.66	6.54	46980	12100	34880	2.883
	T ₃	21.3	6.7	13.3	15.5	14.7	--	44100	12500	31600	2.528
2 nd Year 2012-13	T ₁	1.76	2.43	2.81	2.43	16.2	16.93	64800	13000	51800	3.98
	T ₂	10.05	11.04	14.78	12.74	14.96	7.98	59840	13500	46340	3.43
	T ₃	23.24	12.57	17.24	18.24	13.88	--	55520	14500	41020	2.83
3 rd Year 2013-14	T ₁	2.8	3.6	2.8	10.1	18.02	21.8	77486	14500	62986	4.34
	T ₂	11.8	12.2	14.5	15.1	15.98	8.20	68714	14600	54114	3.71
	T ₃	26.4	13.3	18.4	25.6	14.78	--	63554	14700	48854	3.32

Results of On Farm Trials

Assessment of stem application method of insecticide for management of sucking pests in cotton

Crop/ enterprise	Farming situation	Problem Diagnosed	No. of Farm ers*	Technology Assessed	Parameters of assessment	Data on the paramete	Results of assessment
1	2	3	5	6	7	8	9
Cotton (Bt)	Irrigated	To manage sucking pests in cotton, which leads residue problem and its hazardous to environment as well as human being.	10	T ₁ : Stem Application of Acephate 75WP (4:1 :: Water : Insecticide)	1. Numbers of Sucking pests /3 leaves/plant (Aphids, Jassids, Whitefly, Thrips)	2.8, 3.6, 2.8, 10.1 resp.	T ₁ were found 21.8 % and T ₂ (8.2 %) yield increase than T ₃ . Looking to the B:C ratio, T ₁ were found 4.34 and T ₂ (3.71) as compared to T ₃ (3.32).
					2. Yield Increase (%)	21.8	
					3. Yield Q/ha	18.02	
					4. B:C ratio	4.34	
				T ₂ : Spraying of recommended insecticides: (Need based Foliar application Imidaclopride 17.8 SL	1. Numbers of Sucking pests /3 leaves/plant (Aphids, jssids, Whitefly, Thrips)	11.8, 12.2, 14.5, 15.1 resly	
					2. Yield Increase (%)	8.2	
					3. Yield Q/ha	15.98	
					4. B:C ratio	3.71	
				T ₃ : Farmers method as Check : (Frequently Foliar Application Imidaclopride 17.8 SL and 36EC) i. e. at Weekly interval	1. Numbers of Sucking pests /3 leaves/plant (Aphids, Jassids, Whitefly, Thrips)	26.4, 13.3, 18.4, 25.6 resly	
					2. Yield Increase (%)	---	
					3. Yield Q/ha	14.78	
					4. B:C ratio	3.32	

OFT3: Plant Protection

1. Title : Management of *Helicoverpa armigera* in Indian bean by Non chemical means
2. Problem diagnose/defined : Farmers are frequently applying high doses of insecticides to manage *H. armigera*, this leads residue problem while export of Indian bean.
3. Details of technologies selected for assessment /refinement :
 - T₁: Bio intensive module :
 - (i)Monitoring through the pheromone traps
 - (ii)Spraying of Neem based pesticides
 - (iii)Hand piking of bigger larvae
 - (iv)Spraying of *HaNPV*
 - T₂: Chemical recommended insecticides: : (Need based Foliar application of Monocrotophos (36EC)
 - T₃: Farmers method: (Frequently Foliar application Imidaclopride 17.8 SL, Acephate 75 WP and Monocrotophos 36EC) i.e. at weekly interval.
4. Source of technology : GAU, Navsari
5. Production system/
Thematic area : Rainfed
6. Thematic area : IPM
7. Performance of the
Technology with
Performance indicators : On going
8. Final recommendation for
micro level situation : On going
9. Constraints identified and
feedback for research : ---
10. Process of farmers participation
And their reaction : Farmers participation in planning, execution and monitoring.

Results of OFT on Indian bean:

(2) Management of *Helicoverpa armigera* in Indian bean by non chemical means

Treatments		Mean No. larvae of <i>Heliothis/plan</i>	No. of damaged pods/ 1000	(%) Damaged pods	Pods/plant	Yield (kg/ha)	% increase	Gross Return (Rs/ha)	Cost of cultivation (Rs/ha)	Net Return (Rs/ha)	B:C ratio
1st Year 2011-12	T₁	1.496	133	1.33	38	1875	23.4	42187.5	9500	32687.5	3.44
	T₂	2.497	349	3.49	36	1610	5.9	36225.0	11500	24725	2.15
	T₃	2.563	569	5.69	32	1520	0.0	34200.0	13500	20700	1.53
2nd Year 2012-13	T₁	1.577	140	1.4	38	1880	23.70	42300.0	10000	32300	3.23
	T₂	2.588	350	3.5	36	1650	8.60	37125.0	12500	24625	1.97
	T₃	2.687	580	5.8	32	1530	0.70	34425.0	14700	19725	1.34
3rd Year 2013-14	T₁	1.990	195	1.95	38	1860	20.00	42300.0	10000	32300	3.74
	T₂	2.750	379	3.79	36	1725	11.30	37125.0	12500	24625	2.52
	T₃	2.970	666	6.66	32	1570	1.30	34425.0	14700	19725	1.72
Where, T₁-Bio Intensive Modules , T₂-Chemical base Recommended and T₃-Farmers method (Check)											

Results of On Farm Trials

Management of *Helicoverpa armigera* in Indian bean by non chemical means

Crop/ enterprise	Farming situation	Problem Diagnosed	No. of Farm ers*	Technology Assessed	Parameters of assessment	Data on the paramete	Results of assessment
1	2	3	5	6	7	8	9
Indian bean	Irrigated	Farmers are frequently applying high doses of insecticides to manage H. armigera, this leads residue problem while export of Indian bean.	10	T1: Bio intensive module : (i)Monitoring through the pheromone traps, (ii) Spraying of Neem based pesticides,(iii) Hand picking of bigger larvae, (iv) Spraying of HaNPV	1. Numbers of Heliothis larvae/plant	1.99	T1 were found 20.04 % and T2 (11.3 %) yield increase than T3. Looking to the B:C ratio, T1 were found 3.74 and T2 (2.52) as compared to T3 (1.72).
					2. Yield Increase (%)	20.04	
					3. Yield Kg/ha	1860	
					4. B:C ratio	3.74	
				T2: Chemical recommended insecticides: : (Need based Foliar application of Monocrotophos (36EC)	1. Numbers of Heliothis larvae/plant	2.75	
					2. Yield Increase (%)	11.3	
					3. Yield Kg/ha	1725	
					4. B:C ratio	2.52	
				T3 : Farmers method as Check : (Frequently Foliar Application Imidaclopride 17.8 SL, Acephate 75 WP and 36EC) i. e. at Weekly interval	1. . Numbers of Heliothis larvae/plant	2.97	
					2. Yield Increase (%)	---	
					3. Yield Kg/ha	1570	
					4. B:C ratio	1.72	

OFT 4: Crop Production

1. Title : Assessment of feasibility of hand operated automatic seed drill In hilly Area of Narmada district
2. Problem diagnose/defined : The farmers are and marginal with fragmented land. The tribal people are find it difficult to sow their crop in small piece of land with bullock drown sowing method.
3. Details of technologies selected for assessment /refinement : T₁: Sowing through hand operated automatic seed drill equipment
T₂: Hand sowing
4. Source of technology : GAU, Navsari
5. Production system/
thematic area : Farm mechanization
6. Thematic area : Farm mechanization
7. Performance of the Technology with performance indicators : On going
8. Final recommendation for micro level situation : On going
9. Constraints identified and feedback for research : ---
10. Process of farmers participation and their reaction : Farmers participation in planning, execution and monitoring.

Results of On Farm Trials

Assessment of feasibility of hand operated automatic seed drill in hilly area of Narmada district

Crop/ enterprise	Farming situation	Problem Diagnosed	No. of trials*	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessment
1	2	3	5	6	7	8	9
Fenugreek	Irrigated	The tribal people find it difficult to sow their crop in small piece of land with bullock drawn sowing implement. They are sowing their crop manually with hand. which is tiresome and labour consuming	10	T ₁ : Sowing through hand operated automatic seed drill equipment	1. Per cent germination	94.2	10.6 % yield increase in T ₁ than T ₂ ,
					2. No. of plant per unit area	21.4	
					3. Yield kg/ha	1130	
				T ₂ : Hand sowing	1. Per cent germination	91.4	
					2. No. of plant per unit area	17.5	
					3. Yield kg/ha	950	

OFT 5: Crop Production

1. Title : Assessment of different genotypes of chickpea in Narmada district.
2. Problem diagnose /defined : Productivity of pulses in the district is specially Sagbara, Dediapada and part of Nandod is low. The reason behind this may be due to varieties grown by the farmers are not suitable for this area. However, bold grain variety of chickpea is grown by many of the farmers in the region. In these situations it is necessary to assess the feasibility of various chickpea variety in the area.
3. Details of technologies selected for assessment /refinement : Three (3)
 1. GG-1
 2. GG-2
 3. PKV-2
4. Source of technology : GAU, Navsari
5. Production system/ thematic area : Rainfed / Sowing distance
6. Thematic area : Sowing distance
7. Performance of the Technology with performance indicators : On going
8. Final recommendation for micro level situation : On going
9. Constraints identified and feedback for research --
10. Process of farmers their reaction : Farmers participation in planning, execution and Monitoring participation and

Result: Assessment of different genotypes of chickpea in Narmada district

Crop/ enterprise	Farmi ng situati	Problem Diagnosed	No. of trial	Technology Assessed	Parameters of assessment	Data on the parameter	Results of assessmen t
1	2	3	5	6	7	8	9
Gram	Unirrigated	Productivity of pulses in the district is specially Sagbara, Dediapada and part of Nandod is low. The reason behind this may be due to varieties grown by the farmers are not suitable for this area. However, bold grain variety of chickpea is grown by many of the farmers in the region. In these situations it is necessary to assess the variety	10	T ₁ : GG-1	1. 100-seed weight 2. No. of pod/plant 3. Yield (kg/ha)	17.6 33.7 938	T ₂ is 18.7 % and 6.9 % yield increase than T ₁ than T ₃
				T ₂ : GG-2	1. 100-seed weight 2. No. of pod/plant 3. Yield (kg/ha)	30.1 31.7 1113	
				T ₃ : PKV-2	1. 100-seed weight 2. No. of pod/plant 3. Yield (kg/ha)	39.5 30.7 1041	

B. Technology Refinement: --- Nil ---

3.2 Achievements of Frontline Demonstrations

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

List of technologies demonstrated during previous year and popularized during 2013-14 and recommended for large scale adoption in the district

Sr. 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
1	Paddy	Varietal Evaluation	Drilled Variety GR-5 and IR- 28	Demonstration and good quality Seed availability	12	38	10
2	Pigeon pea	Varietal Evaluation	New variety Vaishali, GT-101, GT-103, GT-1 and GT-102	Demonstration and good quality seed availability	51	244	41.5
3	Paddy	Varietal Evaluation (Seed replacement)	NAUR-1, GNR-2	Demonstration and good quality seed availability	45	168	32
4	Soybean	Varietal Evaluation) Seed replacement)	JS-335	Distributed good quality seed availability	7	16	3.4
5	Maize	Varietal Evaluation	GM-6	Demonstration and good quality Seed availability	5	8	2
6	Gram	Varietal Evaluation	GG-2	Demonstration and good quality Seed availability	21	144	17.5
7	Wheat	Varietal Evaluation	GW-496	Demonstration and good quality Seed availability	14	51	10.2
8	Green gram	Varietal Evaluation	Meha	Demonstration and good quality Seed availability	28	265	69
9	Groundnut	Varietal Evaluation	GG-2 and J-11	Demonstration and good quality Seed availability	49	378	78.4
10	Sorghum	Varietal Evaluation	GJ-38, GJ-42	Demonstration and good quality Seed availability	21	32	13.95

b. Details of FLDs implemented during 2013-14.

Sl. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ demonstrations			Reasons for shortfall in achievement
					Proposed	Actual	SC/ST	Others	Total	
A	Oil seed :									
1.	Sesamum	Varietal Evaluation	G.T-2	Summer 13-14	2	2	6	--	6	--
B	Pulses									
1	Gram	Varietal Evaluation	Variety G.G-2	Rabi 2012-13	5	5	14	--	14	--
2	Pigeon pea	Varietal Evaluation	Variety Vaishali	Kharif 13-14	12	12.2	56	--	56	--
3	Pigeon pea	Varietal Evaluation	Variety G.T-101	Kharif 13-14	0.2	0.2	Failed due to heavy rain			
4	Soy bean	Varietal Evaluation	Variety J.S-335	Kharif 13-14	3.4	3.4	16	--	16	--
C	Others									
1	Paddy	Varietal Evaluation	GR- 5,	Kharif 13-14	5	5	18	--	18	--
2	Paddy	Varietal Evaluation	GNR-2	Kharif 13-14	6	6	30	--	30	--
3	Paddy	Varietal Evaluation	IR-28	Kharif 13-14	5	5	20	--	20	--
4	Paddy	Varietal Evaluation	NAUR-1	Kharif 13-14	6	6	30	--	30	--
5	Wheat	Varietal Evaluation	Gw -496	Rabi 2012-13	10	10	25	--	25	--
6	Maize	Varietal Evaluation	GM-6	Kharif 13-14	2	2	8	--	8	--
7	Brinjal	Integrated Nutrient Management	INM	Kharif 13-14	2.0	2.0	10	--	10	--

8	Chilli	Integrated Nutrient Management	INM	Kharif 13-14	2.0	2.0	10	--	10	--
9	Tomato	Integrated Nutrient Management	INM	Rabi 2012-13	2.0	2.0	5	--	5	--
D	Plant Protection									
1	Cotton (IPM)	Integrated Pest Management	IPM	Kharif 13-14	5.0	5.0	14	--	14	--
2	Paddy (IPM)	Integrated Pest Management	IPM	Kharif 13-14	5.0	5.0	14	--	14	--
3	Pigeon pea (Trichoderma)	Integrated Disease Management	Use of bio-agent (Trichoderma)	Kharif 13-14	5.0	5.0	14	--	14	--
4	Gram (Trichoderma)	Integrated Disease Management	Use of bio-agent (Trichoderma)	Rabi 12-13	5.0	5.0	14	--	14	--
5	Brinjal (Pseudomonas)	Integrated Disease Management	Use of bio-agent (Pseudomonas)	Kharif 13-14	5.0	5.0	14	--	14	--

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					
Oil seed :											
Sesamum	Rabi 12-13	Irrigated	-	-	-	-	Gram	20.02.2013 to 30.02.2013	20.04.2013 to 28.04.2013	--	--
Pulses											
Gram	Rabi 12-13	Rainfed/Irrigated	-	-	-	-	Paddy	02.11.2012 to 30.11.2012	01.02.2013 to 12.03.2013	--	--
Pigeon pea	Kharif 13-14	Rainfed	-	-	-	-	Pigeon pea	15.07.2013 to 31.07.2013	15.01.2013 to 28.01.2013	--	--

Pigeon pea	Kharif 13-14	Rainfed	-	-	-	-	Pigeon pea	25.06.2013 to 11.07.2013	--	--	--
Soy bean	Kharif 13-14	Rainfed	-	-	-	-	Pigeon pea	15.07.2013 to 31.07.2013	15.01.2013 to 28.01.2013	--	--
Other											
Paddy	Kharif 13-14	Rainfed	-	-	-	-	Gram	1.07.2013 to 14.07.2013	2.11.2013 to 23.11.2013	--	--
Paddy	Kharif 13-14	Rainfed	-	-	-	-	Gram	1.07.2013 to 14.07.2013	2.11.2013 to 23.11.2013	--	--
Paddy	Kharif 13-14	Rainfed	-	-	-	-	Gram	1.07.2013 to 14.07.2013	2.11.2013 to 23.11.2013	--	--
Paddy	Kharif 13-14	Rainfed	-	-	-	-	Gram	1.07.2013 to 14.07.2013	2.11.2013 to 23.11.2013	--	--
Wheat	Rabi 12-13	Irrigated	-	-	-	-	Paddy	10.11.2012 to 25.11.2012	16.3.2012 to 04.04.2012	--	--
Maize	Kharif 13-14	Rainfed	-	-	-	-	Cotton	05.07.2013 to 20.07.2013	04.11.2013 to 20.11.2013		
Brinjal	Rabi 12-13	Irrigated	-	-	-	-	Groundnut /sorghum	06.08.2012 to 10.08.2012	16.01.2013 to 6.01.2013	--	--
Chilli	Rabi 12-13	Irrigated	-	-	-	-	Groundnut/ paddy/tomato	06.08.2012 to 20.08.2012	22.01.2013 to 27.01.2013	--	--
Tomato	Rabi 12-13	Irrigated	-	-	-	-	Paddy	09.06.2012 to 09.12.2012	21.02.2013 to 02.09.2013	--	--
Plant Protection											
Cotton (IPM)	Kharif 13-14	Rainfed/ Irrigated	-	-	-	-	Cotton	18.06.2012 to 20.06.2012	18.01.2013 to 20.01.2013	--	--
Paddy (IPM)	Kharif 13-14	IPM	-	-	-	-					
pigeon pea (Trichoderma)	Kharif 13-14	Rainfed	-	-	-	-	Pigeon pea	12.06.2012 to 27.06.2012	12.01.2013 to 29.01.2013	--	--
Gram (Trichoderma)	Rabi 2012-13	Rainfed/ Irrigated	-	-	-	-	Paddy	10.11.2012 to 12.11.2012	18.02.2013 to 20.02.2013	--	--
Brinjal (Pseudomonas)	Kharif 13-14	Irrigated	-	-	-	-	Groundnut /sorghum	06.08.2012 to 10.08.2012	16.01.2013 to 06.01.2013	--	--
										932	52

Performance of FLD

Sr. No	Crop	Technology Demonstrated	Variety	No. of Farmers	Area (ha.)	Demo. Yield Qtl/ha			Yield of local Check Qtl./ha	Increase in yield (%)	Data on parameter in relation to technology demonstrated	
						H	L	A			Demo	Local
1	2	3	4	5	6	7	8	9	10	11	12	13
A	Oil seed :											
1	Sesamum	Variety	GT-2	6	2.0	4.7	4.2	4.6	3.9	16.7	30-45 Capsules/plant 40-48 g test weight	20-29 Capsules/plant 20-29 g test weight
B	Pulses											
1	Gram	Variety	GG-2	14	5	14.2	11.2	17.3	14.4	20.2	30-45 pods/plant 40-48 g test weight	20-29 pods/plant 20-29 g test weight
2	Pigeon pea	Variety	Vaishali	56	12.2	18.6	11.5	15.8	13	21.6	Branches/plant :7-15, Pods/plant:210-260	Branches/plant: 4-10, Pods/plant:110-180
3	Pigeon pea	Variety	GT-101	2	0.2	-	-	-	-	-	-	-
4	Soy bean	Variety	JS-375	16	3.4	19.0	15.0	16.4	14	17.8	Branches/plant :7-15, Pods/plant:210-260	Branches/plant: 4-10, Pods/plant:110-180
C	Other											
1	Paddy	New variety	GR-5	18	5	14.2	11.2	12.3	10.2	21.4	Panicle length: 29-35 cm No. of grain /panicle: 130-138	Panicle length: 24-29 cm No. of grain /panicle: 110-120
2	Paddy	New variety	IR-28	20	5	16.1	12.4	15.1	12.3	22.7	Panicle length: 29-35 cm No. of grain /panicle: 130-138	Panicle length: 24-29 cm No. of grain /panicle: 110-120

3	Paddy	New variety	NAUR-1	30	6	36.0	33.0	35.5	29.6	20.0	Panicle length: 29-35 cm No. of grain /panicle: 130-138	Panicle length: 24-29 cm No. of grain panicle: 110-120
4	Paddy	New variety	GNR-2	30	6	36.5	32.0	35.2	28.9	21.7	Panicle length: 29-35 cm No. of grain/panicle: 130-13	Panicle length: 24-29 cm No. of grain panicle: 110-120
5	Wheat	New variety	GW-322	25	10	42	33	38.8	32.4	19.8	Ear length : 8-11 cm Grain/ear : 32-40	Ear length : 7-9 cm Grain/ear : 26-32
6	Maize	New variety	GM-6	8	2	15.3	12.2	14.2	12.0	18.4	Plant height : 145-210 cm, Cob Length: 23-29 cm	Plant height : 135-195 cm, Cob Length: 18-28 cm
7	Brinjal	Variety	--	10	2	300	180	227	210	8.1	No. fruit/plant : 14-20 Wt. of fruit: 112-117 g	No. fruit/plant : 10-13, Wt of fruit: 111-114 g
8	Chilli	Variety	--	10	2.0	90	68	88	70	20.5	No. fruit/plant : 150-153, Length of fruit: 8.7-11.7cm	No. fruit/plant : 129-133, Length of fruit: 8.1-8.3 cm
9	Tomato	INM	GT-2	5	2	305	258	29.7	304	18.0	No. fruit/plant : 31-35	No. fruit/plant : 21-26
D	Plant Protection											
1	Cotton (IPM)	IPM	Bt	14	5	26.6	14.5	18.7	15.87	17.9	Jassids/3 leaf: 2-3	Jassids / 3 leaf: 5-13
2	Paddy (IPM)	IPM	Rainfed	14	5	13.2	11.2	12.7	10.65	20.9	Hoppers/ leaf: 2-3	Hoppers / leaf: 5-13
3	Pigeon pea (Trichoderma)	Use of bio-agent (Trichoderma)	Rainfed	14	5	17.5	14.5	16.6	13.49	25.1	No. of wilted plants : < 1%	No. of plants : < 10-12%
4	Gram (Trichoderma)	Use of bio-agent (Trichoderma)	-	14	5	19.0	16.7	17.5	14.40	21.6	Diseased plant : < 2%	Diseased plant : < 10-15%
5	Brinjal (Psuedommonas)	Use of bio-agent (Psuedommonas)	-	14	5	243	235	23.9	2.0	14	Diseased plant : < 2%	Diseased plant : < 10-15%

Economic Impact continuation of previous table

Average Cost of cultivation (Rs./ha)		Average Gross Return (Rs./ha)		Average Net Return (Profit) (Rs./ha)		Benefit-Cost Ratio (Gross Return / Gross Cost)		
Demonstration		Local Check	Demo	Local Check	Demonstration			Local Check
14		15	16	17	18	19	20	
Sesamum	11550	11850	31850	27300	20300	15450	2.8	2.3
Gram	11050	10000	37296	31093	26246	21093	3.38	3.11
Pigeon pea	12686	11486	48865	40311	36253	28908	3.9	3.5
Pigeon pea	--	--	--	--	--	--	--	--
Soy bean	12500	12500	52500	44600	40000	32100	4.2	3.6
Paddy	10596	9020	13539	11214	2943	2194	1.28	1.24
Paddy	9900	9050	16558	13500	6658	4450	1.67	1.49
Paddy	12900	11800	42604	32675	29704	20875	3.30	2.77
Paddy	13000	11500	42180	34668	29180	23168	3.24	3.01
Wheat	13000	12000	69796	58408	56796	46408	5.37	4.87
Maize	11559	10959	15654	13214	4095	2255	1.35	1.21
Brinjal	10180	9580	14852	12387	4672	2807	1:1.5	1:1.3
Chili	31000	27000	190200	160200	159200	138200	1:7.1	1:6.9
Tomato	37000	36500	100000	82800	63000	45500	1:3.7	1:3.3
Cotton (IPM)	15000	11534	80256	68247	65256	54747	4.35	4.06
Paddy (IPM)	14037	11719	14037	11719	3437	2219	1.32	1.23
Pigeon-pea-Trichoderma	12700	11600	49864	40479	37164	28879	3.93	3.49
Brinjal (Pseudomonas)	12500	11200	59768	52536	47268	41336	4.78	4.69
Gram-Trichoderma	10000	9500	39391	32416	29391	22916	2.93	2.41

Analytical Review of component demonstrations

Crop	Season	Component	Farming situation	Average yield (q/ha)	Local check (q/ha)	Percentage increase in productivity over local check
Oil seed :						
Seseamum	Summer 13	GT-2	Rainfed	4.6	3.9	17.5
Pulses						
Gram	Rabi 2012-13	GG-2	Rainfed/ Irri	17.3	14.4	20.2
Pigeon pea	Kharif 13-14	Vaishali	Rainfed	15.8	13	21.6
Pigeon pea	Kharif 13-14	GT-101	Rainfed	Failed Due to heavy rain		
Soy bean	Kharif 13-14	JS-375	Rainfed	16.4	14	17.8
Other						
Paddy	Kharif 13-14	GR-5	Rainfed	12.3	10.2	21.4
Paddy	Kharif 13-14	IR-28	Rainfed	15.1	12.3	22.7
Paddy	Kharif 13-14	NAUR -1	Rainfed	35.5	29.6	20
Paddy	Kharif 13-14	GNR-2	Rainfed	35.2	28.9	21.7
Wheat	Rabi 2012-13	GW-496	Irrigated	38.4	31.8	20.8
Maize	Kharif 12-13	GM-6	Rainfed	14.2	12	18.4
Brinjal	Rabi 2012-13	--	Irrigated	227	210	8.1
Chilli	Rabi 2012-13	--	Irrigated	88	70	20.5
Tomato	Rabi 2012-13	GT-2	Irrigated	297.4	304	18.0
Plant Protection						
Cotton (IPM)	Kharif 13-14	Bt	Rainfed/ Irri.	18.7	15.9	19.7
Paddy (IPM)	Kharif 13-14	--	Rainfed	12.8	10.7	20.9
Pigeon pea (Trichoderma)	Kharif 12-13	--	Rainfed/ Irri.	16.6	13.5	25.1
Gram (Trichoderma)	Rabi 2012-13	--	Rainfed/ Irri.	17.5	14.40	21.6
Brinjal (Psuedomonas)	Kharif 13-14	--	Rainfed / Irri.	23.9	2.1	14

Technical Feedback on the demonstrated technologies

- ⊙ Studies on suitable local rainfed paddy variety for this area.
- ⊙ High yielding varieties for rainfed farming situation (Jowar, Pigeon pea, Cotton)
- ⊙ Development of late *kharif* pigeon pea variety (Due to late sowing)
- ⊙ Development of varieties suitable for undulating land in Main crops - Paddy, Pigeon pea and Jowar..
- ⊙ Development of suitable mix cropping / intercropping module for rainfed area.
- ⊙ Suitable variety for Green gram and Urd bean cultivation.
- ⊙ Development of agro techniques for local paddy varieties
- ⊙ Seed production of paddy, sorghum and pulses is needed to mitigating the needs of the farmers.
- ⊙ Research should be focus on milch breed in the area
- ⊙ Suitable varieties of vegetables for undulating land
- ⊙ Research to be done on post harvest management (PHT) of custard apple.
- ⊙ Suitable *kharif* vegetables varieties for rain fed condition. (Brinjal, Papdi, tomato and Chilli)
- ⊙ Wilt resistance varieties for Brinjal.

Farmers' reactions on specific technologies.

Sr. No	Crop	Variety	Feed Back
1	Gram	GG-2	- High yielding variety - Bold seeded
2	Paddy (GR-5)	GR-5	- Good performance in water scarce condition - Good grain quality - High straw yield - Early maturity
3	Pigeon pea	Vaishali	- High yielding - Water tolerant
4	Wheat	GW 496	- Good tillering - Long ear - High yielding variety - Resistance against Rust
5	Chilli	--	- INM decrease the use of fertilizers - Improve soil condition - Better fruit quality

6	Brinjal	--	- INM decrease the use of fertilizers - Improve soil condition - Better fruit quality
7.	Tomato	--	- INM decrease the use of fertilizers - Improve soil condition - Better fruit quality

Extension and Training activities under FLD

Sl. No.	Activity	Activities organized		Date	No of participated M + F = T	Remarks
		Crop	No			
1	Field days	Brinjal	1	24-04-13	43+02=45	
		Sesamum	1	25-04-13	22+00=22	
		Tomato	1	30-04-13	14+05=19	
		Maize GM-6	1	28-08-13	14+04=18	
		Paddy IR-28	1	11-09-13	31+14=45	
		Paddy GR-5	1	22-09-13	18+00=18	
		Paddy NAUR-1	1	16-09-13	28+00=28	
		Soy bean JS-375	1	16-09-13	25+01=26	
		Paddy GNR-2	1	09-10-13	26+00=26	
		Cotton IPM	1	18-10-13	12+14=26	
		Paddy IPM	1	18-10-13	13+10=23	
		Brinjal (<i>Pseodomonas</i>)	1	13-11-13	22+05=27	
		Brinjal (<i>Pseodomonas</i>)	1	30-11-13	14+14=28	
		Indian Bean IPM	1	20-12-13	07+15=22	
		Pigeon Pea Vaisali	1	02-01-14	25+00=25	
		Gram (<i>Trichoderma</i>)	1	23-01-14	59+11=70	
		Brinjal & Tomato INM	1	22-01-14	70+06=76	
		Wheat 496	1	24-01-14	57+00=57	
		Gram GG-2	1	25-01-14	38+14=52	
		Vegetable Bio- Component	1	31-01-14	31+17=48	
Tomato INM	1	31-01-14	22+03=25			
Jowar GJ-38	1	16-02-14	21+00=21			

Ornamental fishes	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Others (pl.specify)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total	-----Nil-----																	

Other enterprises: Nil

Category	Name of the technology demonstrated	No. of KVKs	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				
					Demonstration	Check		Demonstration	Check	Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR	
Oyster mushroom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Button mushroom	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vermicompost	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sericulture	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apiculture	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Others (pl.specify)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total																		

Women empowerment: Nil

Category	Name of technology	No. of KVKs	No. of demonstrations	Name of observations	Demonstration	Check
Women	--	--	--	--	--	--
Pregnant women	--	--	--	--	--	--
Adolescent Girl	--	--	--	--	--	--
Other women	--	--	--	--	--	--
Children	--	--	--	--	--	--
Neonats	--	--	--	--	--	--
Infants	--	--	--	--	--	--
Children	--	--	--	--	--	--

Income generation activities for empowerment of rural Women	-	-	-	-	-	-	-	-	-	-
Location specific drudgery reduction technologies	-	-	-	-	-	-	-	-	-	-
Rural Crafts	-	-	-	-	-	-	-	-	-	-
Women and child care	-	-	-	-	-	-	-	-	-	-
VI. Agril. Engineering	-	-	-	-	-	-	-	-	-	-
Installation and maintenance of micro irrigation systems	-	-	-	-	-	-	-	-	-	-
Use of Plastics in farming practices	-	-	-	-	-	-	-	-	-	-
Production of small tools and implements	-	-	-	-	-	-	-	-	-	-
Repair and maintenance of farm machinery and implements	-	-	-	-	-	-	-	-	-	-
Small scale processing and value addition	-	-	-	-	-	-	-	-	-	-
Post Harvest Technology	-	-	-	-	-	-	-	-	-	-
VII. Plant Protection	-	-	-	-	-	-	-	-	-	-
Integrated Pest Management	2	-	-	-	48	3	51	48	3	51
Integrated Disease Management	2	-	-	-	30	26	57	30	26	57
Bio-control of pests and diseases	1	-	-	-	19	11	30	19	11	30

Management										
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
Soil and Water Testing	0	0	0	0	0	0	0	0	0	0
IV. Livestock Production and Management	0	0	0	0	0	0	0	0	0	0
Dairy Management	1	0	0	0	11	2	13	11	2	13
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
Disease Management	1	0	0	0	11	0	11	11	0	11
Feed management	2	0	0	0	148	1	149	148	1	149
Production of quality animal products	1	0	0	0	23	31	54	23	31	54
V. Home Science/Women empowerment	0	0	0	0	0	0	0	0	0	0
Household food security by kitchen gardening and nutrition gardening	1	0	0	0	0	40	40	0	40	40
Design and development of low cost diet	1	0	0	0	0	40	40	0	40	40
Designing and development for high	1	0	0	0	0	40	40	0	40	40

value addition										
IX. Production of Inputs at site	0	0	0	0	0	0	0	0	0	0
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
X. Capacity Building and Group Dynamics	0	0	0	0	0	0	0	0	0	0
Leadership development	0	0	0	0	0	0	0	0	0	0
Group dynamics	0	0	0	0	0	0	0	0	6	22
Formation and	3	0	0	0	141	8	149	141	6	150

Women and Child care	0	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	0
Production and use of organic inputs	0	0	0	0	0	0	0	0	0	0	0
Gender mainstreaming through SHGs	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4	0	0	0	55	11	66	55	11	66	

*Detail of above training programme is given in Annexure IV

(D) Vocational training programmes for Rural Youth:

Crop / Enterprise	Date	Training title*	Identified Thrust Area	Duration (days)	No. of Participants			Self employed after training			Number of persons employed else where
					Male	Female	Total	Type of units	Number of units	Number of persons employed	
-----NIL-----											

(E) Sponsored Training Programmes

Sl. No	Date	Title	Discipline	Thematic area	Duration (days)	Client (PF/RV/EF)	No. of courses	No. of Participants									Sponsoring Agency	Amount of fund received (Rs.)
								Others			SC/ST			Total				
								M	F	T	M	F	T	M	F	T		
1	17-4-13	Scientific cultivation of kharif crops	Agronomy	Integrated crop management	1	PF	1	00	00	00	27	13	40	27	13	40	ATMA	Expenditure borne by sponsoring agency
2	18-4-13	Soil fertility management	Agronomy	Soil health	1	PF	1	00	00	00	33	00	33	33	0	33	ATMA	Expenditure borne by sponsoring agency
3	19-4-13	IPM	plant protection	IPM	1	PF	1	00	00	00	56	6	62	56	6	62	ATMA	Expenditure borne by sponsoring agency

4	20-4-13	IPM	plant protection	IPM	1	PF	1	00	00	00	40	00	40	40	00	40	ATMA	Expenditure borne by sponsoring agency
5	24-4-13	Credit availability	Extension Education	Extension Education	1	Fw	1	00	00	00	00	27	27	22	27	27	ATMA	Expenditure borne by sponsoring agency
6	16-5-13	Farm implement	Agronomy	Farming system	1	PF	1	00	00	00	00	26	00	26	00	26	FTC	Expenditure borne by sponsoring agency
7	10-6-13	IDM	plant protection	plant protection	1	PF	1	00	00	00	8	48	56	8	48	56	FTC	Expenditure borne by sponsoring agency
8	12-6-13	Credit availability	Extension Education	Credit availability	1	PF	1	00	00	00	18	00	18	18	00	18	ATMA	Expenditure borne by sponsoring agency
9	15-6-13	Formation of SHGS	Home Science	SHGs	1	Fw	1	00	00	00	00	52	52	00	52	52	Mission Mungalam	Expenditure borne by sponsoring agency
10	17-6-13	Nursery Management	Horticulture	Nursery Management	1	PF	1	00	00	00	55	16	71	55	16	71	DWDU	Expenditure borne by sponsoring agency
11	25-6-13	Water Management	Agronomy	Water Management	1	FW	1	00	00	00	00	37	37	00	37	37	ATMA	Expenditure borne by sponsoring agency
12	27-6-13	Leadership development	Extension Education	Leadership development	1	PF	1	00	00	00	64	34	98	64	34	98	ICECD Ahmedabad	Expenditure borne by sponsoring agency
13	28-6-13	IPM	Plant protection	IPM	1	PF	1	00	00	00	26	00	26	26	00	26	ATMA	Expenditure borne by sponsoring agency
14	3-7-13	Formation of SHGS	Home Science	SHGs	1	Fw	1	00	00	00	00	29	29	00	29	29	Mission Mungalam	Expenditure borne by sponsoring agency

15	18-7-13	Kitchen Garden	Horticulture	Nursery Management	1	PF	1	00	00	00	71	00	71	71	00	71	DWDU	Expenditure borne by sponsoring agency
16	2-8-13	Water Management	Agronomy	Water Management	1	Pf	1	00	00	00	49	9	58	49	9	58	ATMA	Expenditure borne by sponsoring agency
17	7-8-13	Storage of food grain	Plant protection	IPM	1	PF	1	00	00	00	34	00	34	34	00	34	ATMA	Expenditure borne by sponsoring agency
18	8-8-13	IPM	Plant protection	IPM	1	PF	1	00	00	00	28	4	32	28	4	32	ATMA	Expenditure borne by sponsoring agency
19	12-8-13	Leadership development	Extension Education	Leadership development	1	PF	1	00	00	00	58	00	58	58	00	58	ICECD Ahmedabad	Expenditure borne by sponsoring agency
20	13-8-13	Kitchen Garden	Horticulture	Nursery Management	1	PF	1	00	00	00	45	00	45	45	00	45	DWDU	Expenditure borne by sponsoring agency
21	21-8-13	Dairy management	Animal Husbandry	Animal Husbandry	1	PF	1	00	00	00	40	00	40	40	00	40	ATMA	Expenditure borne by sponsoring agency
22	5-9-13	Feed management	Animal Husbandry	Animal Husbandry	1	PF	1	00	00	00	48	00	48	48	00	48	FTC	Expenditure borne by sponsoring agency
23	6-9-13	Kitchen Garden	Horticulture	Nursery Management	1	PF	1	00	00	00	27	00	27	27	00	27	DWDU	Expenditure borne by sponsoring agency
24	20-12-14	Maintenance and repairs of sprayers	Plant protection	Spraying implements	1	PF	1	00	00	00	39	28	67	39	28	67	ATMA	Expenditure borne by sponsoring agency
25	22-1-14	Leadership development	Extension Education	Leadership development	1	PF	1	00	00	00	50	00	50	58	00	58	ATMA	Expenditure borne by sponsoring agency

26	18-02-14	Soil fertility management	Agronomy	Soil health	1	PF	1	00	00	00	33	00	33	33	0	33	ATMA	Expenditure borne by sponsoring agency
Total											824	314	1138	824	314	1138		

3.4 Extension Activities (including activities of FLD programmes)

Sl. No.	Nature of Extension Activity	Purpose/ topic and Date		No. of activities	Participants											
					Farmers (Others) (I)			SC/ST (Farmers) (II)			Extension Officials (III)			Grand Total (I+II+III)		
					Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1	Field Day	Brinjal	24-4-13	1	00	00	00	43	2	45	00	00	00	43	2	45
		Sesamum	25-4-13	1	00	00	00	22	0	22	00	00	00	22	0	22
		Tomato	30-4-13	1	00	00	00	14	5	19	00	00	00	14	5	19
		Maize Gm-6	28-8-13	1	00	00	00	14	4	18	00	00	00	14	4	18
		Paddy IR-28	11-9-13	1	00	00	00	31	14	45	00	00	00	31	14	45
		Paddy GR-5	22-9-13	1	00	00	00	18	00	18	00	00	00	18	00	18
		Paddy NAUR-1	16-9-13	1	00	00	00	28	0	28	00	00	00	28	0	28
		Soy bean JS-375	16-9-13	1	00	00	00	25	1	26	00	00	00	25	1	26
		Paddy GNR-2	9-10-13	1	00	00	00	26	00	26	00	00	00	26	00	26
		Cotton IPM	18-10-13	1	00	00	00	12	14	26	00	00	00	12	14	26
		Paddy IPM	18-10-13	1	00	00	00	13	10	23	00	00	00	13	10	23
		Brinjal (Psydomanas)	13-11-13	1	00	00	00	22	5	27	00	00	00	22	5	27
		Brinjal (Psydomanas)	30-11-13	1	00	00	00	14	14	28	00	00	00	14	14	28
		Indian Bean IPM	20-12-13	1	00	00	00	7	15	22	00	00	00	7	15	22
Pigeon Pea Vaisali	02-1-14	1	00	00	00	25	00	25	00	00	00	25	00	25		
Gram (Trichoderma)	23-1-14	1	00	00	00	59	11	70	00	00	00	59	11	70		

		Brinjal & Tomato INM	22-1-14	1	00	00	00	70	6	76	00	00	00	70	6	76
		Wheat 496	24-1-14	1	00	00	00	57	00	57	00	00	00	57	00	57
		Gram GG-2	25-1-14	1	00	00	00	38	14	52	00	00	00	38	14	52
		Vegetable Boi-Compent	31-1-14	1	00	00	00	31	17	48	00	00	00	31	17	48
		Tomato INM	31-1-14	1	00	00	00	22	3	25	00	00	00	22	3	25
		Jowar GJ-38	16-2-14	1	00	00	00	21	00	21	00	00	00	21	00	21
	Total			22	00	00	00	612	135	747	00	00	00	612	135	747
2	Kisan Mela/ Exhibition participation	Kisan mela	4-5 /01/2014	1	0	0	0	2700	2100	4800	300	200	500	3000	2300	5300 Approx
3	Kisan gosthi / Interaction	IPM Summer	30-4-13	1	0	0	0	25	2	27	0	0	0	25	2	27
		IPM kharif	20-6-13	1	0	0	0	22	25	47	3	0	3	25	25	50
		Banking information	25-7-13	1	0	0	0	13	5	17	1	0	1	14	5	18
		TOT	6-8-13	1	0	0	0	11	9	20	00	00	00	11	9	20
		Awareness Programme	22-8-13	1	0	0	0	2	34	36	00	00	00	2	34	36
		Leadership development	26-9-13	1	0	0	0	15	00	15	00	00	00	15	00	15
		Winter crop	14-10-13	1	0	0	0	15	00	15	00	00	00	15	00	15
		Women in Ani. Husbandry	12-11-13	1	0	0	0	58	6	64	00	00	00	58	6	64
		IPM in Rabi	19-11-13	1	0	0	0	120	60	180	00	00	00	120	60	180
		IPM in Vegetable	19-12-13	1	0	0	0	38	4	42	00	00	00	38	4	42
		Total		10	0	0	0	257	111	375	4	00	4	261	111	379
4	Film Show	Crop cultivation, animal husbandry ,vermin compost, FYM, IPM and IDM		47	0	0	0	1258	776	2034	00	00	00	1258	776	2034
	Method	During Krishi Mohotsav-12		5	0	0	0	213	226	439	00	00	00	213	226	439

14	Popular Article		0	0	0	0	0	0	0	0	0	0	0	0	0	
15	Extension Literature	Distributed during various programmes--	20000 Total													
16	Advisory Services (Telephonic)	Telephone	456	0	0	0	400	56	456	00	00	00	400	56	456	
17	Scientific visit to farmers field	Visit	141	0	0	0	688	159	847	00	00	00	688	159	847	
18	Farmers visit to KVK	Visit	91	0	0	0	234	39	273	00	00	00	234	39	273	
19	Diagnostic visits	Paddy,Cooton, Pigeonpea, Brinjal, Tomato, Chilli,, Watermelon, Pointer gourd, Papdi,Mango	42	00	00	00	188	39	227	00	00	00	188	39	227	
20	Exposure visits	Progressive farmer, Workshop, Seminar etc...	25-6-13 06-09-13 26-11-13 26-01-14 18-02-14	6	0	0	0	30	148	178	0	0	0	30	148	178
21	Ex-trainees sammelan		0	0	0	0	0	0	0	0	0	0	0	0	0	
22	Soil health Camp		0	0	0	0	0	0	0	0	0	0	0	0	0	
23	Animal Health Camp Participation	During Technology week and Krushi Mahostav	21-1-14 22-1-14	2	0	0	0	116	10	26	00	00	00	116	10	126
24	Agri mobile Clinic		0	0	0	0	00	0	0	0	0	0	0	0	0	
25	Soil test Campaigning		0	0	0	0	0	0	0	0	0	0	0	0	0	
26	Farm Science Club Conveners meet	FSS 4-5-20/6/13,22-23-29/7/13 4/10/13, 17/12/13	12	0	0	0	250	50	300	0	0	0	250	50	300	

27	Self Help Group Conveners	SHGs		1	0	0	0	0	72	72	0	0	0	0	72	72
28	Mahila Mandals Conveners	Conveners meetings		0	0	0	0	0	0	0	0	0	0	0	0	0
29	Celebration of (Technology week)	As given below	20-1-14 to 26-1-14	1	0	0	0	1972	931	2902	00	00	00	1972	931	2902
30	Celebration of important days	Milk day	6-7-13	1	0	0	0	63	7	70	0	0	0	63	7	70
		Student Relly Parthenium Week	16-8-13	1	0	0	0	70	0	70	0	0	0	70	0	70
		Farmers Relly Parthenium Week	17-8-13	1	0	0	0	73	0	73	0	0	0	73	0	73
		Womens Relly Parthenium Week	22-8-13	1	0	0	0	0	34	34	0	0	0	0	34	34
		Kisan Day	23-12-13	1	0	0	0	39	12	57	0	0	0	39	12	57
		International women day	8-3-14	1	0	0	0	0	70	00	00	00	00	00	70	70
31	Krushu mahostav	Krushu mahostav-2013	15-31 /5 /13 15 Days	1	0	0	0	10000	5000	15000	0	0	0	0	0	0
Grand Total				968	0	0	0	24429	12394	36655	325	216	541	24763	12610	52056

Technology Week Programme (20/01/2014 to 26/01/2014)

Number of Technology weeks Celebrated	Types of Activity	No. of Activity	Number of Participants	Related crop/ livestock technology
1	Gosthies	9	2291	Related crop
	Lectures Organized	30	1972	Related crop
	Exhibition	2	348	livestock technology
	Film Show	4	1179	Related crop/Livestock
	Fair	0	0	-
	Farm Visit	11	469	Related crop/Livestock
	Diagnostic Practical	11	11	Related crop
	Distribution of literature	4	2000 Copies	-
	Distribution of seed	0	0	-
	Distribution of planting materials	0	0	-
	Bio- product Distribution	0	0	-
	Bio-Fertilizers	0	0	-
	Distribution of finger linings	0	0	-
	Distribution of livestock specimen	0	0	-
	Total number Farmers Visited	-	2902	Related crop/Livestock

Kisan Mobile Advisory: This Facility isn't available.

No.of Farmers registered: Nil

Details of SMSs

Content Category	No. of Messages	No. of Farmers	Feed back of farmers if any	
Crop Production	--	--	--	--
Crop Protection	--	--	--	--
Livestock & Fisheries Advisory	--	--	--	--
Weather Advisory	--	--	--	--
Market Information	--	--	--	--
Events Information	--	--	--	--
Input availability	--	--	--	--

Others (specify)	--	--	--	--
Total	--	--	--	--

INTERVENTIONS ON DROUGHT MITIGATION

Introduction of alternate crops/varieties

State	Crops/cultivars	Area (ha)	Number of beneficiaries
-	-	-	-
-	-	-	-

Major area coverage under alternate crops/varieties

Crops	Area (ha)	Number of beneficiaries
Oilseeds	-	-
Pulses	-	-
Cereals	-	-
Vegetable crops	-	-
Tuber crops	-	-
Total	-	-

Farmers-scientists interaction on livestock management

State	Livestock components	Number of interactions	No. of participants
-	-	-	-
Total			

Animal health camps organized

State	Number of camps	No. of animals	No. of farmers
-	-	-	-
-	-	-	-
Total			

Seed distribution in drought hit states

State	Crops	Quantity (qtl)	Coverage of area (ha)	Number of farmers
-	-	-	-	-
-	-	-	-	-
Total				

Large scale adoption of resource conservation technologies

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

Awareness campaign

KVK	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
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-

3.5 Production and supply of Technological products

SEED MATERIALS

Sr. No	Crop	Variety	Quantity in Kg	Rs	Provided to No of farmers
1	Pigeon pea	Vaishali	1628 kg	146520	co-operative Society ,Seed village, FLD and Farmers 407
2	Paddy	GR-5	3150 kg	74340	Kvk vyara, co-operative Society , FLD and Farmers- 262
3	Paddy	IR-28	4300 kg	101480	Coperative Society - 358
4	Soybean	JS-335	204 kg	10200	Farmers 16
5	Gram	GG-2	1045 kg	73150	seed village,farmers 65
6	Niger	Guj. Nig. -1	180 kg	--	ARS Vanarsi
7	Green Gram	Meha	195 kg	19500	Seed village- 50

SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	Cereals	7450	175820	620
2	Oilseeds	--	--	--
3	Pulses	3072	249370	538
4	Vegetables	--	--	--
5	Flower crops	--	--	--
6	Others	--	--	--
	TOTAL	10522	425190	1158

Planting Materials

Major Groups/class	Crop	Variety	Quantity(Nos.)	Value(Rs.)	Provided to No of Farmers
Fruits	--	--	--	--	--

Spices	--	--	--	--	--
Vegetables	--	--	--	--	--
Forest spices	--	--	--	--	--
Ornamental crops	--	--	--	--	--
Plantation Crops	--	--	--	--	--
Others(Sp)	--	--	--	--	--

SUMMARY

Sl. No.	Major group/class	Quantity (Nos.)	Value (Rs.)	Provided to No. of Farmers
1	FRUITS	--	--	--
2	VEGETABLES	--	--	--
3	SPICES	--	--	--
4	FOREST SPECIES	--	--	--
5	ORNAMENTAL CROPS	--	--	--
6	PLANTATION CROPS	--	--	--
7	OTHERS	--	--	--
TOTAL		--	--	--

BIO PRODUCTS

Major group/class	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			No	(kg)		
BIOAGENTS	-	-	-	-	-	-
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
BIOFERTILIZERS	-	-	-	-	-	-
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-
BIO PESTICIDES	-	-	-	-	-	-
1	-	-	-	-	-	-
2	-	-	-	-	-	-
3	-	-	-	-	-	-
4	-	-	-	-	-	-

SUMMARY

Sl. No.	Product Name	Species	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	(kg)		
1	BIOAGENTS	-	-	-	-	-
2	BIO FERTILIZERS	-	-	-	-	-
3	BIO PESTICIDE	-	-	-	-	-
	TOTAL	-	-	-	-	-

LIVESTOCK

Sr. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			(Nos)	Kgs		
Cattle	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
SHEEP AND GOAT	-	-	-	-	-	-
	-	-	-	-	-	-
POULTRY	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
FISHERIES	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
Others (Specify)	-	-	-	-	-	-
	-	-	-	-	-	-

SUMMARY

Sr. No.	Type	Breed	Quantity		Value (Rs.)	Provided to No. of Farmers
			Nos	Kgs		
1	CATTLE	-	-	-	-	-
2	SHEEP & GOAT	-	-	-	-	-
3	POULTRY	-	-	-	-	-
4	FISHERIES	-	-	-	-	-
5	OTHERS	-	-	-	-	-
	TOTAL	-	-	-	-	-

3.6. Literature Developed/Published.

(A) KVK News Letter: --

(B) Literature developed/published

Item	Title	Name of Author	Number of copies
Research papers	Effect of graded level of fertilizers and gypsum on growth, yield and economics of garlic (<i>Allium sativum</i> L.)”	A. N. Lad, A. M. Patel, A. D. Raj and Vikas Yadav*	Not applicable
Research Papers	Effect of graded level of fertilizers and gypsum on yield and nutrient content and uptake of garlic (<i>Allium sativum</i> L.)”	A. N. Lad, A. M. Patel, A. D. Raj and Vikas Yadav*	Not applicable
Research Papers	Effect of graded level of fertilizers and gypsum on yield and quality of garlic (<i>Allium sativum</i> L.)	A. N. Lad, A. M. Patel, A. D. Raj and Vikas Yadav*	Not applicable
Research Papers	Effect of Graded Level of Inorganic Fertilizers (N, P & K) with soil amendment on Soil Properties and Yield of Garlic (<i>Allium Sativum</i> L.)	A. N. Lad, A. M. Patel, A. D. Raj and Vikas Yadav*	Not applicable
Research Papers	Evaluation of front line demonstrations on the yield of pigeonpea [<i>Cajanus cajan</i> (L.)] in tribel region of gujarat	A.D. Raj, J. H. Rathod and V. Yadav*	Not applicable
Research Papers	Impact of front line demonstrations (FLD) on the yield of pulses	A.D. Raj ¹ , V.Yadav ² And J. H. Rathod ³	Not applicable
Research Papers	Evaluation of front line demonstrations on the yield of wheat (<i>Triticum aestivum</i> L.)	A.D. Raj, J.H. Rathod and V. Yadav*	Not applicable

Research Papers	Impact of integrated nutrient management on vegetables in narmada district of Gujarat through frontline demonstrations	A.D. Raj ¹ , V.Yadav ² And J. H. Rathod ³	Not applicable
Research Papers	Evaluation of front line demonstrations on the yield of drilled rice (<i>Triticum aestivum</i> L.)	A.D. Raj ¹ , V.Yadav ² And J. H. Rathod ³	Not applicable
Research Papers	Effect of phosphorus and bio-fertilizers on growth, yield and economics of summer green gram [<i>vigna radiata</i> (l.) wilczek]	R. J. Gajera, H. R. Khafi, A. D. Raj, V. Yadav* and A. N. Lad	Not applicable
Research Papers	Effect of phosphorus and bio-fertilizers on yield, protein content and uptake of nutrients of summer green gram [<i>vigna radiata</i> (l.) wilczek]	R. J. Gajera, H. R. Khafi, A. D. Raj, V. Yadav and A. N. Lad	Not applicable
Research Papers	Effect of bio-fertilizers and fertility levels on growth, yield and economics of cluster bean (<i>Cyamopsis tetragonoloba</i> (L.) Taub.)	S. B. Bade, H. R. Khafi, A. D. Raj, V.Yadav* and T. C. Poonia	Not applicable
Research Papers	Effect of bio-fertilizers and fertility levels on yield, quality, Nutrient content and uptake of cluster bean (<i>Cyamopsis tetragonoloba</i> (L.) Taub.)	S. B. Bade, H. R. Khafi, A. D. Raj, V. Yadav* And T. C. Poonia	Not applicable
Research Papers	Effect of potassium and sulphur on oil content, nutrient content and uptake of summer pearl millet (<i>Pennisetum glaucum</i> (l.))	N. N. Chaudhary, H. R. Khafi, A. D. Raj, V. Yadav*and P. Yadav	Not applicable
Research Papers	Effect of nutrients (K and S) on growth, yield and economics of summer pearl millet (<i>Pennisetum glaucum</i> (l.))	N. N. Chaudhary, H. R. Khafi, A. D. Raj, V. Yadav* and P. Yadav	Not applicable

Research Papers	Effect of foliar fertilization of boron, zinc and iron on fruit growth and yield of low-chill peach cv. Sharbati.	Vikas Yadav, P.N. Singh and Prakash Yadav (2013).	Not applicable
Research Papers	Effect of Foliar Micronutrients Sprays on Fruit Quality of Low-Chill Peach”	V. Yadav, P. Yadav and P. N. Singh	Not applicable
Research Papers	Foliar fertilization of micronutrients (B, Zn and Fe) improves the plant growth, leaf nutrient status, quality and yield of low-chill peach cv. Sharbati	Vikas Yadav, Prakash yadav and P.N. Singh	Not applicable
Research Papers	Response of Foliar Fertilization of Micronutrients on Fruit Growth and Yield of Low-Chill Peach cv. Sharbati	V. Yadav, P. Yadav and P.N. Singh	Not applicable
Research Papers	Precision farming: a sustainable approach for organic horticulture production	Vikas yadav and prakssh yadav	Not applicable
Research Papers	Constraints perceived and suggestion offered in adoption of coriander production technology	S.R.Kumbhani and H.P.Patel	Not applicable
Total	21	-----	-----
Technical Report	ZREAC Report Year 2013-14(Kharif- Rabi)	-----	-----
	AGRESO Report Year 2013-14	-----	-----
Total	3	-----	-----
Popular Articles	-----	-----	-----
Leaflets/Folders	23 folders of different disciplines on different aspects.		1000 each
Total	-----	-----	-----
Grand total	47	-----	-----

(C) Details of Electronic Media Produced

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

3.7 Success stories/Case studies

A. Success Story:

1. Improved technology- Empowering the tribal Farmers

Name of farmer: Shri Damji KhatriaVasava

Village: Chikda, **Ta:** Dediapada, **Dist.:** Narmada,

Age: 65 Years, **Education:** 4thstd,

Size of land holding: 8.00 Acr.

Motivation factor : Customary move toward KVK, Navsari Agricultural University, Dediapada.



It is well known fact that the tribal areas are very poor regarding resources availability including scarcity of water. The major crops of their livelihood are Paddy, Tur, Maize, Jowar, Cotton. In tribal areas generally the productivity of crops is very low. Besides, the farmers of tribal areas still are following the traditional methods of cultivation.

In spite of that a farmer of village Chikda name- Shri DamjiKhatriaVasava proved a proverb "Where there is will there is way" trure. He is 65 years old educated up 4thstd and having land about 8.00 acre. Earlier he was also doing the traditional cultivation .The production at that

time was not enough to survive his family. He was always in the search of suitable options to enhance the production and income. Some time he visited the farm of other areas and compared that situation with his field conditions. He thought that if those farmers doing well why I not. That situation turns him towards development in his farming conditions. In initial stage he got the seed of improved variety of Paddy GR-17. The results (10 time higher that traditional variety ie about 2500 kg /ha.) of this variety surprising for him and he decided to adopt the improved variety in all the crops. Not only was that he also interested to adopt all the new methods of cultivation to get more income. During this period Krishi Vigyan Kendra was

established in Dediapada in the year 2006-2007. A team of scientists visited the village Chikda and contact Damjibhai. The village was adopted by KVK. The major intervention for that village were

- (1) Replacement of traditional variety,
- (2) Showing methods,
- (3) Fertilizers management,
- (4) Plant protection and
- (5) Soil fertility management.
- (6) Seed production and Nursery rising

Through various programmes awareness were created about the importance of improved cultivation. Few demonstrations were given in the village including Damjibhai. As a result Damjibhai was come in the contact of KVK scientists regularly. With the timely guidance of KVK scientists Damjibhai started to change his cultivation pattern. Scientists advise them to adopt the method of SRI in Paddy with variety of Paddy GNR-2 and NAUR-1(Kharif-2011) along with all other recommendations. The results of these FLDs were highly praise worthy by the scientist of NAU as well as villagers too. The yield was in the range of 5500 to 7000kg/Ha.

Not only that with the proper guidance of KVK scientist and with the help of line department, he started to prepare seedlings of onion. It is interested to note that Damjibhai prepare onion seed himself with the guidance of scientist. Through this very short period activity he earns about 25000 through selling of seedling per year. Damjibhai is also having awareness about the soil fertility management. He used fertilizers and plant protection measures under the guidance of KVK scientists.



In nutshell, the earning income enhancement of Damjibhai is about 25-30% through the adoption of improved cultivation practices. This appreciated performance creating a momentum to adopt the scientific cultivation in this particular village and nearby villages. At present the village following transplanting method of rice instead of drilled paddy.

Summary

Intervention	Before KVK	After KVK
Method of Farming	Traditional farming	Adoption of SRI & Improved Practices
Seed	Local	GR-7 and SRI in GNR-2 and NAUR-1
Yield (kg/ha)	1000-1200	GR- 7 : 2500-3000 GNR-2 & NAUR-1 : 5500-7000
Improved Seed Produce & selling	---	GNR-2: 200 kg (25 Farmers) NAUR-1:200kg (30 Farmers) Rate: Rs. 20 per Kg.
seedlings of onion	---	Rs. 25,000

Benefit	---	Enhancement of income by 25-30 % (1) Replacement of traditional variety (2) Sowing methods (3) Fertilizers management (4) plant protection and (5) Soil fertility management (6) Seed production and Nursery raising
Our Target	Creating a momentum to seed production and adoption of SRI method of Rice cultivation in the district.	

2. Low cost Green House (LCGH)

Name of farmer		
	NarsingRadaviyaVasava	MohanbhaiJaniyabhaiVasava
Age (years)	65	50
Education	6	2
Land holding (Acr.)	3	2
Size of LCGH	10 x 5 meter	
Adoption period	4 years	
Major Crops	Tandaljanibhaji (Amaranth sp.)	
Income	Rs. 16000/year	
Parameters	Without Green house	With Green house
Quality	Moderate	very Good
Maturity days	25	15
Cutting Days	10-15 days	7 days
Number of cuttings	06	08

Customer Preference	Moderate	Extreme
Infestation of insect pest	High	Low
Life	More	Less
Income (in Rs.)	12000	16000

3. Vegetable based cropping pattern

Name of farmer: ShriVithalbhaiVasava



Village: Vadivav **Ta:** Dediapada, **Dist:** Narmada,

Age: 45 Years, **Education:** 4thstd,

Size of land holding: 10 Acr.


Motivation factor : KVK, Navsari Agricultural University, Dediapada.


Comparative study of 1 acre

					
Bitter gourd		Pointed gourd			
Year	Before 2009	2009	2010	2011	2012
Crops	Paddy drilled verity and Gram traditional (Rainfed)	Irrigation facility Okra, Cluster bean, Cowpea	Brinjal, Okra, Cluster bean, Cowpea	Brinjal, Okra, Cluster bean, Cowpea	Trellies/ bower (Structure of cement and wooden poles and wire) of Bitter gourd (ChuChu) and Pointed gourd (Anavali)

Income (Rs/Acre)	6500	10000	20000	35000	70000 and possibility to reach up to 100000 (harvesting continue)
	---	Paddy TP 1600kg/Acre.	Paddy TP 1600kg/Acre.	Paddy TP 2000kg/Acre.	---
Income (Rs/Acre)	---	12800	12800	16000	---
Total Income (Rs/Acre)	6500	22800	32800	51000	>100000 expected (harvesting continue)

4. Vocational trainings.

Name of Vocational training: Sewing and tailoring Duration of Training: 30 days Number of Courses : 03 Total number of trainees : 105					
Sr. No.	Name of Trainee	Village	Income generation per month		Remarks
			Before	after	
1	 SangeetabenChhaganbhaiVasava	Chikda	00	Rs. 400-500	1. Working with hired machine 2. Income based on availability of seasonal work.

2.	VaneetabenRavindrabhaiVasava 	Chikda	00	Rs. 700-800	<ol style="list-style-type: none"> 1. Working with own machine provided under TSP plan. 2. Income based on availability of seasonal work. 3. As the machine is electric, the electricity supply is also affecting the nature of work.
----	--	--------	----	-------------	--

5. Farm mechanization:

Wheel hand hoe – An effective tool for weed management

Name of farmer: ShriPrabhatsingVasava

Village: Soliya, **Ta:** Dediapada,

Dist: Narmada, **Age:** 62 Years,

Education: 5thstd,

Size of land holding: 0.80 ha

Cost of Implements: Rs.750/- ,

Motivation factor : Fair cum exhibition, Technology week and exposure visit to Suruchi Trust, Bardoliarrange at KVK, Navsari Agricultural University, Dediapada.



Intervention	Before KVK	After KrishiVigyan Kendra
Method of weed Management	Hand weeding by small Khurpi, sickle	Wheel hand hoe.

Labour Requirement	20 to 30 /ha.	7 to 10 /ha.
Time Required	6 days	2 days
Total cost (Rs./ha)	2500 to 3000	1000 to 1500
Benefit (Rs./ha)	-	1500 to 2000
Implement used by Other farmers	-	5
Farmers opinion	-	Good for weed management. They are also interested to purchase wheel hand hoe.

6. Awareness and adoption of Drip Irrigation system

Name of farmer: ShriChampakbhaiJeshingVasava(Adopted)

Village: Kukarda, **Ta:** Dediapada, **Dist.:** Narmada,

Age: 45 Years, **Education:** 4thstd,

Size of land holding: 8.0 Acr.

Motivation factor : KVK, Navsari Agricultural University, Dediapada.



Name of Crop	Cotton	Adopted
Number of farmers have already been applied for drip irrigation system	12	-
Number of farmers going to apply for drip irrigation system	05	-
Our target	Minimum 5 farmers in each adopted village	

7. Animal Husbandry

- Diagnostic visit, Health camps and Trainings-The torch bearer approach to reduce sexual health problems

Conditions:

- Poor health status of Animals.
- Poor adoption of rearing improved animal breed.
- Poor economic conditions of cattle owners.

Number of cases studied: 10

Activities		Before KVK	After KrishiVigyan Kendra
Major problems		Sexual Health- Repeat breeding, Anoestrus, Silent heat, Longer Service period, Post-partum syndrome. Lack of knowledge about Artificial Insemination, Heat detection, selection of milch animals.	Improved knowledge about sexual health, Artificial Insemination, Heat detection in farm animals and selection of milch animals.
Technology Adoption	Concentrate and Mineral Mixture	Improper	Adopted Partially (based on availability and purchasing power.)
	Fodder		Adopted Partially (based on availability of Green fodder)
	Vaccination		Scheduled
	Deworming		Scheduled
	Pregnancy Diagnosis		Timely-2.5 to 3 months post service

Benefits	Health of animals	Poor	Improved
	Animals reared	Nondescript	Mehsana buffalo and Crossbred cows
	Service Period	140-180 days	110-120 days
	Lactation length	120-150 days	130-180 days
Trend of animals rearing		Traditional and Discouraging	Improved scientific based and encouraging Five farmers have started rearing Mehsana buffalo
Knowledge Centre		Mainly-Laymen and Villagers Occasionally- Veterinarians	KVK Scientist and Veterinarians

8. Farm advisory / Diagnostics services about Plant Protection

Number Of farmers : 50







Crops : Cotton, Tomato, Brinjal, Chilli, Paddy, Pigeon pea,
Bitter gourd, Pointed gourd.



Intervention	Before KVK	After Krishi Vigyan Kendra
Contact	Agro Centre	Scientists of Krishi Vigyan Kendra
Diagnostics	Not Sure	Accurate/Proper
Frequency of using spray	>2	up to 2
Doses	Higher	Recommended
Incurable diseases	Using chemical for control	Avoid the use of chemical
Eco-friendly management	Disturbed/Unsafe	Provided/safe
Awareness about purchase of chemical	As per Agro-centre	As per Scientists of KVK
Benefit	Not Sure	35 to 60% reduction in Plant Protection expenditure



8. Our Awardees farmers

			
Farmer's Name	Dhamjibhai Kathariyabhai Vasava	Mohanbhai Janiyabhai Vasava	Ratilal Chandusing Deshmukh
Age	65	50	36
Education	4	2	7
Main Crop	Paddy	Vegetable	Vegetable
Land	8 Acr.	2 Acr.	3.5 Acr.
Award Prize	ATMA Best Farmer Award - 2011-12 Dediapada Taluka	Prize in District Level Fruits and Vegetables completion during Technology week at KVK, Dediapada	
First		Radish	Coriander
Second		Indian bean (variety Katargam)	---
Third		Sugar beat	---
			
Farmer's Name	Champakbhai Jeshing Vasava	Gulabsing Chhaganbhai Vasava	Narsing Radaviya bhai Vasava
Age	54	29	65
Education	4	11	6
Main Crop	Vegetable	Vegetable	Vegetable
Land	8.0 Acr.	2 Acr.	3 Acr.
Award Prize	Prize in District Level Fruits and Vegetables completion during Technology week at KVK, Dediapada		
First	---	---	---
Second	Onion (Agri found light red)	Brinjal pink (Variety Surti)	Pigeon Pea (Variety Vaishali)
Third	---	---	---

3.8 Give details of innovative methodology/technology developed and used for Transfer of Technology during the year: ---Nil---

- Name of farmer
- Title of innovations
- Description of innovation
- Practical utility
- Application of innovations
- Activities conducted for wise spread

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

S. No.	Crop / Enterprise	ITK Practiced	Purpose of ITK
-----NIL-----			

3.10 Indicate the specific training need analysis tools/methodology followed for

- Identification of courses for farmers/farm women
- Rural Youth
- In-service personnel

3.11 Field activities

- i. Number of villages adopted : 43
- ii. No. of farm families selected : Nil
- iii. No. of survey/PRA conducted: 10

3.12 Activities of Soil and Water Testing Laboratory: Yet not established.

1. Year of establishment :
2. List of equipments purchased with amount :

Sl. No	Name of the Equipment	Qty.	Cost
1	---	---	---
2	---	---	---
3	---	---	---
Total			

3.13 Details of samples analyzed so far: Nil

Details	No. of Samples	No. of Farmers	No. of Villages	Amount realized
Soil Samples	---	---	---	---
Water Samples	---	---	---	---
Plant Samples	---	---	---	---
Petiole Samples	---	---	---	---
Total	---	---	---	---

4.0 IMPACT

4.1. Impact of KVK activities

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Paddy GR-5 and IR-25	698	80	17482	21218
Paddy NAUR-1 and IR-28	85	60	32325	42092
Introduction New Variety(Vaishali) in Tur	352	65	49238	61407
Soybean	47	55	43845	51613
Maize	33	42	12688	15030
Gram	209	62	36731	43960
Wheat	188	65	44122	52918
Brinjal INM	10	50	155250	175350
Chilly INM	10	48	80967	95533
Tomato INM	25	40	91598	109700
Cotton IPM	68	43	186135	226071
Pigeon Pea -Trichoderma	43	42	48872	62538

4.2. Cases of large scale adoption

Name of specific technology/skill transferred	No. of participants	% of adoption	Change in income (Rs.)	
			Before (Rs./Unit)	After (Rs./Unit)
Gram-Package Demonstration	100	60	15	60
Tomato- Micro Nutrients	80	45	20	70
Brinjal- Micro Nutrients	90	40	15	60
Chilly- Micro Nutrients	40	43	22	70
Cabbage- Micro Nutrients	30	43	15	45
Indian Bean- Micro Nutrients	60	46	17	50
Gram- Organic Farming	150	50	30	65
Pigeon Pea -Organic Farming	150	55	17	50
Pigeon Pea – INM,IPM and Varietal	100	58	15	65
Gram– INM,IPM and Varietal	100	52	20	60
Green Gram– INM,IPM and Varietal	100	55	25	55
Black Gram– INM,IPM and Varietal	100	50	10	55

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

5.0 LINKAGES

5.1 Functional linkage with different organizations

Name of organization	Nature of linkage
Line Departments of Government of Gujarat Agriculture/ Horticulture/ Animal Husbandry/ Fishery / Forest department / ATMA	Khedut sibir, Animal health camp, Sponsored training. In-service trainings and other extension activities, technical support, Participation in meeting
AKRSP (I), NGO, Dediapada	Sponsored training, Mahila sibir, technical support
J. K. Trust, Rajpipla	Animal Health Camp, In-service training programme
Parivartan Radio programme, Netrang	Radio talk
Main Water Management Research Unit, NAU, Navsari	Collaboration-FLD on Low Cost Greenhouse
Research Stations, NAU	Participation-Farmers day, Seed-FLDs, etc.
FTC, Rajpipla	Experts lectures
Govt. of Gujarat	Collaboration – Krishi Mahotsav, ATMA, RKVY, etc.
Missionary – NGO	Sponsored training programme, extension activities
ANARDE Foundation	Extension activities
DWDU-Narmada	Sponsored training programme
Mission Manglam, Dediapada	Sponsored training programme
Aadi Aushdiy group, Dediapada	Technical support
ATMA, Rajpipla	Khedut sibir, Sponsored training. In-service trainings and other extension activities, Exposure Visit and Participation in meeting
Forest Department, Narmada	Sponsored training programme, extension activities
ICDS, Dediapada	Sponsored training programme, extension activities
Aagakhan- Dediapada	Sponsored training programme, extension activities
Jagruti Mandal, Dediapada	Sponsored training programme, extension activities
Aadivasi Mahila Mandal, Dediapada	Sponsored training programme, extension activities

6.2 Performance of instructional farm (Crops) including seed production Production Kharif -2013-14 -Rabi- 2012-13

Sr. No	Major group / class Crop	Crop	Variety	Quantity	Value	Showing date	Harvesting date	Area
Kharif -2012-13								
1	Cereals	Paddy	IR-28	4760 kg	Yet to sell	25/6/13	22/10/13	2.5ha
2	Cereals	Paddy	GR-5	3220 kg	Yet to sell	27/6/13	16/10/13	2.5ha
3	Pulses	pigeon pea	Vaishali	---	Yet to sell	28/6/13	6/2/13	2.0ha
4	Oilseed	Niger	G.UJ-1	100 kg	Yet to sell	04/09/13	24/12/13	0.5 ha
Rabi- 2012-13								
6	Pulses	Gram	G.G-2	1045 kg	73150	02/11/12	12/03/13	2.0 ha
Summer-2013								
7	Pulses	Green gram	Meha	195 kg	18500	27/02/13	03/06/13	1.0 ha

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

Sl. No.	Name of the Product	Qty	Amount (Rs.)		Remarks
			Cost of inputs	Gross income	
--	--	--	--	--	--
--	--	--	--	--	--

6.4 Performance of instructional farm (livestock and fisheries production): Nil

Sl. No	Name of the animal / bird / aquatics	Details of production			Amount (Rs.)		Remarks
		Breed	Type of Produce	Qty.	Cost of inputs	Gross income	
--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--

6.5 Rainwater Harvesting

Training programmes conducted by using Rainwater Harvesting Demonstration Unit

Date	Title of the training course	Client (PF/R/EF)	No. of Courses	No. of Participants including SC/ST			No. of SC/ST Participants		
				Male	Female	Total	Male	Female	Total
--	--	--	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--
							--	--	--

6.5 Utilization of hostel facilities

Accommodation available (No. of beds): 30

Months	Title of the training course/Purpose of stay	No. of trainees stayed	Trainee days (days stayed)	Reason for short fall (if any)
April 2013	--	--	--	--
Total	--	--	--	--
May 2013	--	--	--	--
Total	--	--	--	--
June 2013	--	--	--	--
Total	--	--	--	--
July 2013	--	--	--	--
Total	--	--	--	--
August 2013	--	--	--	--
Total	--	--	--	--
September 2013	--	--	--	--
Total	--	--	--	--
October 2013	--	--	--	--
Total	--	--	--	--
November 2013	--	--	--	--
Total	--	--	--	--
December 2013	--	--	--	--
Total	--	--	--	--
January 2014	--	--	--	--
Total	--	--	--	--
February 2014	--	--	--	--
Total	--	--	--	--
March 2014	--	--	--	--
Total	--	--	--	--
Grand total	--	--	--	--

7. FINANCIAL PERFORMANCE

7.1 Details of KVK Bank accounts

Bank account	Name of the bank	Location	Account Number
With KVK	State Bank Of India	Dediapada	30140660644
Revolving fund	State Bank Of India	Dediapada	30140661150

7.2 Utilization of funds under FLD on Oilseed (Rs. In Lakhs): Nil

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2014
	Kharif 2013-14	Rabi 2013-14	Kharif 2013-14	Rabi 2013-14	
Inputs	--	--	--	--	--
Extension activities	--	--	--	--	--
TA/DA/POL etc.	--	--	--	--	--
TOTAL	--	--	--	--	--

7.3 Utilization of funds under FLD on Pulses (Rs. In Lakhs): Nil

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2014
	Kharif 2013-14	Rabi 2013-14	Kharif 2013-14	Rabi 2013-14	
Inputs	--	--	--	--	--
Extension activities	--	--	--	--	--
TA/DA/POL etc.	--	--	--	--	--
TOTAL	--	--	--	--	--

7.4 Utilization of funds under FLD on Cotton (Rs. In Lakhs): Nil

Item	Released by ICAR		Expenditure		Unspent balance as on 1 st April 2014
	Kharif 2013-14	Rabi 2013-14	Kharif 2013-14	Rabi 2013-14	
Inputs	--	--	--	--	--
Extension activities	--	--	--	--	--
TA/DA/POL etc.	--	--	--	--	--
TOTAL	--	--	--	--	--

7.4 Utilization of KVK funds during the year 2013-14 (in Rs.)

Sr. No.	Particulars	Sanctioned	Released	Expenditure
A. Recurring Contingencies				
1	Pay & Allowances	41.85	41.85	4070399
2	Traveling allowances	1.10	1.10	109112
3	Contingencies	23.00	23.00	1761278
A	Stationery, telephone, postage and other expenditure on office running, publication of Newsletter and library maintenance (Purchase of News Paper & Magazines)	6.90	6.90	657684
B	POL, repair of vehicles, tractor and equipments			
C	Meals/refreshment for trainees (ceiling upto Rs.40/day/trainee be maintained)			
D	Training material (posters, charts, demonstration material including chemicals etc. required for conducting the training)	16.10	16.10	1103592
E	Frontline demonstration except oilseeds and pulses (minimum of 30 demonstration in a year)			

<i>F</i>	On farm testing (on need based, location specific and newly generated information in the major production systems of the area)			
<i>G</i>	Training of extension functionaries			
<i>H</i>	Maintenance of buildings			
<i>I</i>	Establishment of Soil, Plant & Water Testing Laboratory			
<i>J</i>	Library	--		--
TOTAL (A)		6595000	659500	5940787
B. Non-Recurring Contingencies				
1	Works	---	--	---
2	Equipments including SWTL & Furniture	---	--	---
3	Vehicle (Four wheeler/Two wheeler, please specify)	---	--	---
4	Library (Purchase of assets like books & journals)	---	--	---
TOTAL (B)			---	--
C. REVOLVING FUND		12.12371	--	586347
GRAND TOTAL (A+B+C)		7807371	--	6527134

7.5 Status of revolving fund (Rs. In lakhs) for the three years

Year	Opening balance as on 1st April	Income during the year	Expenditure during the year	Net balance in hand as on 1st April of each year
April 2011 to March 2012	9.27	1.10	0.94	9.43
April 2012 to March 2013	9.43	3.54	0.85	12.12
April 2013 to January 2014	12.12	2.56	3.86	10.82

Annexures

District Profile - I

1. General census

Geographic location : North Latitude 21 25'' 45''
East Longitude of 72 34''19''.

Temperature : 40 Centigrade
Rainfall : 1159 mm.
River : Narmada, Karjan etc
Area : 2800 sq.kms
District Headquarter : Nandod
Taluka : 5
Population : 514,404
Population Density : 187 persons/sq km.
Sex Ratio : Sex ratio is 949/1000 males
Literacy Rate : 59.86%
Language : Gujarati, Hindi, English
Seismic Zone :----

2. Agricultural and allied census

Total geographical area (ha.)	275536
Forest land (ha.)	1204973
Permanent pastures and grazing lands (ha.)	8600
Cultivable waste land (ha.)	3600
Current fallow (ha.)	3000
Net sown area (ha.)	114779
Total area available for irrigation (ha.)	48122
Area irrigated by canals/channels (ha.)	28429

3. Agro-climatic zones

Sr. No	Agro-climatic Zone	Characteristics
1	South Gujarat Zone, AES-I	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.

4. Agro-ecosystems

Sr. No	Agro- ecosystems	Characteristics
1	AES-I (Nandod, Dediapada and Sagbara Taluka)	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.
2	AES-IX (Tilakwada Taluka)	Type of Soil: Deep black soil. Soil Characteristics: Deep black soil with high rainfall. Soil fertility: Nitrogen-poor, Phosphorus medium, Potash High.

5. Major and micro-farming systems

Sr. No	Farming system/enterprise
1.	Crop production
2	Crop production and Horticulture
3	Crop production and Livestock
4.	Crop production, Horticulture and Livestock

6. Major production systems like rice based (rice-rice, rice-green gram, etc.), cotton based, etc.

Rice based	: Rice-Wheat, Rice- Sorghum, Rice- Maize, Rice- Chick pea
Cotton based	: Cotton- Cotton-Green Gram, Cotton- Cotton,
Pigeon pea based	: Pigeon pea- Pigeon pea, Pigeon pea-Green gram
Sugarcane based	: Sugarcane - Sugarcane,
Banana based	: Banana- Banana
Vegetable based	: Vegetable likes Brinjal, Tomato, Chilli, Okara, Cabbage and Cauliflower

7. Major agriculture and allied enterprises

- Sugar factories
- Dairy industries
- Banana based processing unit
- SHGs group formation
- Co- Operative Society

Agro-ecosystem Analysis of the focus/target area – II

1. Name of Villages, focus area, target area etc

Sr. No	Taluka	Village
1	Dediapada	Kukarda
2	Dediapada	Ambavadi
3	Dediapada	Chikda
4	Dediapada	Pansar
5	Dediapada	Navagam
6	Dediapada	Pangam
7	Dediapada	Almavadi
8	Sagbara	Nanadoraamba
9	Sagbara	Makran
10	Nandod	Taval
11	Nandod	Panchpipli
12	Nandod	Vadi
13	Nandod	Kasumbia
14	Nandod	Khutaamba
15	Nandod	Movi
16	Tilakvada	Tilakvada
17	Tilakvada	Nimpura
18	Tilakvada	Kuletha

2. Survey methods used:

Survey by questionnaire, PRA, RRA, etc.

3. Various techniques used and brief documentation of process involved in applying the techniques used like release transect, resource map, etc.

All methods are used.

4. Analysis and conclusions

After conducting PRA, thrust area was identified. Problems were prioritized. To overcome those extension strategies were prepared. Scheduling of activities was done and on those bases different mandatory activities were started in selected villages.

5. List of location specific problems and brief description of frequency and extent/ intensity/severity of each problem

- Undulating lands
- Fragmented land holdings
- Soil erosion
- High rainfall in monsoon but scanty of water in other seasons
- Weed problem
- Poor farm mechanization
- Incidence of hairy caterpillar

- Poor co-operative structure
- Poor infrastructure and marketing facility

6. Matrix ranking of problems: ---

7. List of location specific thrust areas:

- Crop production management
- Soil & water conservation and management
- Soil erosion
- Low cost technology
- Scanty of water for irrigation
- Indiscriminate breeding practices (use of non- descript, poor graded bulls used for natural matting)
- Low/ shrinking pasture land
- Allowing animals for grazing.

8. List of location specific technology needs for OFT and FLD

- Profitability of cropping system and the rate of return. In order to achieve the rate of return, long term family support is suggested.
- Market infrastructure and marketing opportunities, custom hire services and some of the policy issues related to subsidy.
- Development of IPM modules for vegetables crops,etc....
- Work plan and activities for landless and resource poor farmers.
- Feed-back regarding On-Farm and Off- Farm programmes and activities.

9. Matrix ranking of technologies: --

10. List of location specific training needs

- Crop diversification for more remunerative crops.
- Developing varieties of Pulses, Suitable for intercropping.
- Resource conservation technologies for sustaining and improving the productivity levels.
- Mechanization for increasing water use efficiency.
- Seed grading, treatment and enhancing seed replacement rate.
- IPM, INM and IWM.
- Increasing area under fruits and vegetable crops.
- Providing improved planting material of fruit crops.
- IPM and INM
- Encouraging income and employment generating vocations through agro based vocations *viz.* mushroom, vermin composting and food preservation etc.
- Demonstrations and trainings including farmers and field officials
- Mineral mixture feeding

- Deworming
- Fodder production and storage
- Balanced feeding

Technology Inventory and Activity Chart - III

1. Names of research institutes, research stations, regional centres of NARS (SAU and ICAR) and other public and private bodies having relevance to location specific technology needs
2. Inventory of latest technology available *

Sl. No	Technology	Crop/ enterprises	Year of release or recommendation of technology	Source of technology	Reference/ citation
1.	New Variety	Paddy- NAUR-1 GNR-2 GR-5 IR-28	2008 2011 1990 1975	NAU NAU GAU GAU	Res.Sts.NARP.Paddy Res.Sts.NARP.Paddy Res.Sts.NARP.Paddy Res.Sts.NARP.Paddy
2	New Variety	Tur –Vaishali GT-1 GT-102 GT-101	2006 1991 2000 2002	NAU GAU GAU GAU	Pulses Res.Sts.NAU,Navsari
3	New Variety	Maize -GM-6	2002	GAU	Main Res.STs. AAU,. Ghodhara
4	New Variety	Soybean-JS 335	--	---	-----
5	New Variety	Wheat-GW-496	1989	GAU	Wheat Research Station, JAU, Junagadh
6	New Variety	Gram GG-2	1998	GAU	Pulses Res.Sts.JAU,Junagadh
7	New Variety	Sorghum GJ-38 and GJ-42	1992 2009	GAU NAU	Main Sorghum Res. Sts. NAU, Navsari
8	INM	Binjal Tomato	2005 2005	GAU	Main Veg. Res.Station AAU, Anand
9	IPM	Cotton, Paddy	2010-11	NAU	NAU, Navsari
10	New crop introduction	Castor	2007	NAU	Res.Sci.(Soil Sci.) Navsari
11	Mineral Mixture				

3. Activity Chart

Crops/Animals/Enterprises	Problem	Cause	Solution	Activity	Reference of Technology
Gram	Poor yield	1. Use of local variety	1. New Variety	1.ON/OFF campus training on improved variety in Gram 2.Training of packages of practices	1.Pulses research station, NAU, Navsari
Paddy	Low yield	1. low yielding disease pest variety, 2. Use of local variety	1. introduction of new variety 2. IPM	1. ON/OFF campus training on Crop Production 2. ON/OFF campus training on IPM 3. Field day on improved variety	NARP,NAU, Navsari
Brinjal	Poor Yield	1.Use of local variety and high seed rate	1. IPM	1.ON/OFF campus training on IPM 2. FLD demonstration	NAU, Navsari
Pigeon pea	Low yield	1. Use of local variety 2. Improper method of cultivation	1. Introduction of new variety 2. Land configuration method of sowing	1.ON/OFF campus training on improved variety in Pigeon pea 2.Training of packages of practices 3. Field day on improved variety	Pulses Research Station, NAU, Navsari
Wheat	Low yield	1. Use of local variety	1. Introduction of new variety	1.ON/OFF campus training on improved variety in Wheat 2.Training of packages of practices 3. Field day on improved variety	Wheat Research Station, JAU, Junagadh
Maize	Low yield	1. Use of local variety	1. Introduction of new variety	1.ON/OFF campus training on improved variety in Maize 2.Training of packages of practices 3. Field day on improved variety	Main Maize Research Station, AAU, Anand
Soybean	Low yield	1. Use of local variety	1. Introduction of new variety	1.ON/OFF campus training on improved variety in Soybean 2.Training of packages	Oil seed Research Station, JAU, Amrali

				of practices 3. Field day on improved variety	
Cotton	Sucking pests and Low yield	Use of IPM techniques	1. Use of seed treatment 2. Use of foliar spray of acetamiprid 3. Installation of yellow sticky trap 4. Use of Bavaria bassiana	1.ON/OFF campus training on IPM of cotton 2. Diagnostic Field visits and Training of packages of practices 3. Celebration of Field day on IPM of Cotton	NAU, Navsari
Paddy	Stem borer, Leaf folder, Sucking pests and Low yield	Use of IPM techniques	1. Use of seed treatment 2. Use of foliar spray of acetamiprid 3. Installation of pheromone trap for stem borer 4. Use of Bavaria bassiana	1.ON/OFF campus training on IPM of paddy 2. Diagnostic Field visits and Training of packages of practices 3. Celebration of Field day on IPM of Cotton	NAU, Navsari
Brinjal	Wilting and Low yield	INM	1. Use of INM 2. Use of Bio-Fertilizers 3. Use of FYM	1.ON/OFF campus training on improved variety in Brinjal 2.Training of packages of practices 3. Field day on improved technology INM	Main Veg. Res.Station AAU, Anand

Tomato	Low yield & Poor Quality	INM	1. Use of INM 2. Use of Bio-Fertilizers 3. Use of FYM	1.ON/OFF campus training on improved variety in Tomato 2.Training of packages of practices 3. Field day on improved technology INM	Main Veg. Res.Station AAU, Anand
--------	--------------------------	-----	---	---	----------------------------------

4. Details of each of the technology under Assessment, Refinement and demonstration

A. Detailed account on varietal/breed characters for each of the variety/breed selected for FLD and OFT

Name of Crop and Variety	Maturation days	Productivity (kg/ha)	Characteristic
Gram (GG-2)	90-95	1500-1800	1. Round grain with reddish brown color 2. Resistance to Wilt and Heliothis
Paddy (NAUR-1) introduction of new variety	115-120 days	5998	1. Slender grain having a length of 9.30 mm and L/B ratio of 3.48 2. Non lodging habit with green and strong culm
Paddy(GR-5)	100-110	1700-2500	1. Salt tolerance variety 2. High yielding & disease resistance variety
Paddy(IR-28)	100-110	1700-2500	1. Dril Raib fed Variety
Paddy(GNR-2)	115-120	----	1. Salt tolerance variety 2. High yielding & disease resistance variety
Pigeon pea (Vaishali)	160-170	1647	1.Possess desirable seed colour and boldness 2.High degree resistance to SMD, wilt disease and low infestation of major pest
Pigeon pea (GT-101)	130-140	1400-1500	1. Early maturity 2. More production 3. Bold seed
Pigeon pea (GT-1)	150-175	2000-2500 (Grain) 5000-6000 (Pod)	1. Veg .purpose 2. More production 3. Bold seed
Maize (GM-6)	90-100	2400	1. Bold seed 2. More Production 3. Early variety
Pigeon pea (GT-102)	170-180	1400-1500	1. Veg .purpose 2. More production 3. Bold seed

Sorghum (GJ-38 &42)	110-120	4000-4200	1. Large Panicle 2. Bold seed 3. Res.to Moisture 4. Suitable to Rain fed
Wheat (GW-496)	110	5000	1. Light grain 2. Draught Resistance 3. More yield

B. Details of technologies that may include formulation, quantity, time, methods of application of nutrients, pesticides, fungicides etc., for technologies selected under FLD and OFTs

Crop	Technology
Paddy	IPM Pheromone Trap – Time of pest infection Acitampiride, Neem oil, Bevaria Bisina - Time of pest infection
Cotton	IPM Pheromone Trap – Time of pest infection Acitampiride, Neem oil, Bevaria Bisina - Time of pest infection
Pigeon pea	IDM Trichoderma
Gram	IDM Trichoderma
Brinjal	IDM Pseudomonas
Chilli	INM Compost, Azotobactor, PSB, Micro- Nutrients, DAP, Urea
Tomato	INM Compost, Azotobactor, PSB, Micro- Nutrients, DAP, Urea

C. Details of location/area specificity of recommended technology viz., for each of the variety/breed/technology selected for FLD and OFT

All technology demonstrated in FLDs are recommended for South Gujarat Region