

PROGRESS REPORT

(April-2018 to March-2019)

1. GENERAL INFORMATION ABOUT THE KVK

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

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

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





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


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

Name	Telephone / Contact		
	Mobile	Office	E mail
Dr . D. S. Hirpara	9426938235	02822-224853	dshirpara@jau.in

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

1.5. Faculty Information :(as on March 31, 2019)

No	Sanctioned post	Name of the incumbent	Discipline	If Permanent, Please indicate		Date of joining	If Temporary, pl. indicate the consolidated amount paid (Rs./month)	Passport Size Photograph
				Current Pay Band	Current Grade Pay			
1.	IC/ Senior Scientist and Head	Dr.D.S.Hirpara	Agronomy	37400-67000	9000	01/03/17	-	
2.	Subject Matter Specialist	D.A.Saradava	Plant Protection	15600-39100	7000	01/03/17	-	
3.	Subject Matter Specialist	Dr.Hemangi D. Mehta	Home Science	15600-39100	7000	01/08/17	-	
4.	Subject Matter Specialist	Vacant	-	-	-	-	-	
5.	Subject Matter Specialist	Vacant	-	-	-	-	-	
6.	Subject Matter Specialist	Vacant	-	-	-	-	-	
7.	Agriculture Officer	Gamansinh S.Zala	B.Sc. Agri.	Fix Pay	Fix Pay	03/08/18	-	
8.	Programme Assistant	Vacant	-	-	-	-	-	
9.	Computer Programmer	Vacant	-	-	-	-	-	

10.	Farm Manager	Vinuji V. Thakor	B.Sc. Agri.	Fix Pay	Fix Pay	31/07/18	-	
11.	Accountant/Superintendent	Vacant	-	-	-	-	-	
12.	Stenographer	Vacant	-	-	-	-	-	
13.	Driver 1	Vacant	-	-	-	-	-	
14.	Driver 2	Vacant	-	-	-	-	-	
15.	Supporting staff 1	Vacant	-	-	-	-	-	
16.	Supporting staff 2	Vacant	-	-	-	-	-	

1.6 Total land with KVK (in ha): 26

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

1.7 Infrastructural Development:

A) Buildings

No.	Name of Building	Source of funding	Stage					
			Complete			Incomplete		
			Completion Year	Plinth area (Sq.m)	Expenditure (Rs.)	Starting Year	Plinth area (Sq.m)	Status of construction
1.	Administrative Building	KVK	-	-	-	1-12-2017	575.32	Construction work completed
2.	Farmers Hostel	KVK	-	-	-	1-12-2017	443.96	Construction work completed
3.	Staff Quarters (6)	-	-	-	-	-	-	-
4.	Demonstration Units (2)	-	-	-	-	-	-	-
5	Fencing	-	-	-	-	-	-	-
6	Rain Water harvesting system	-	2018-19	-	2,00,000/-	2017-18	-	-
7	Threshing floor	-	-	-	-	-	-	-
8	Farm godown	-	-	-	-	-	-	-
9	ICT lab	-	-	-	-	-	-	-
10	Other	-	-	-	-	-	-	-

B) Vehicles :- Nil

C) Equipments & AV aids

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

2. DETAILS OF MORBI DISTRICT

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

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

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

A. Soil type

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

B. Topography

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

2.3 Basic information Of Morbi District:

Sr. No.	Details	Morbi
	Nickname(s):	Paris of Saurashtra
1	Total geographical area	481958 ha.
2	Forest land	26058 ha.
3	Net Sown Area	309369 ha
4	Gross Cropped Area	329654 ha
5	Net Irrigated Area	111661 ha
6	Average annual rainfall	608 mm.
7	Soil type	Black & Loamy, Salty, Rocky, Shallow Sandy loam

8	Major Crop	Groundnut
		Cotton
		Wheat
		Cumin
		Sesame
		Vegetables
9	Other Crop	Chick pea
		Garlic
		Onion
		Chilly
12	Number of Taluka(Five),	Morbi
		Maliya
		Tankara
		Halvad
		Wankaner
	Total number of villages Villeges	407
	Total population	10.08 lakh

2.4 Details of Operational area / Villages

Taluka	Name of the block	Name of the village	Major crops & enterprises	Major problem identified	Identified Thrust Areas
Morbi	Morbi	Gorkhijadia Jepur, Lutavadar, Bharatnagar, Laxminagar, Jetpar, Amreli, Jodhpar	*Groundnut, Cotton, Sesame, Wheat, Cumin, Gram, Chickpea, Onion. *Enterprises are dairy business, Vermi composting, preparation of roasted groundnut and chikki from groundnut seed	Pink ball worm in Cotton, Heavy infestation of sucking pest in cotton , <i>phytophthora</i> disease in sesame and white grub infestation in groundnut.	*IPM and INM in major crops of this area *Increase drainage of soil *Motivate the farmers for arid Horticultural crops. *Efficient use of irrigation water

Tankara	Tankara	Sajjanpar, Jabalpur Hadmatiya, Harbattiyali, Nasitpar,	*Groundnut, Cotton, Sesame, Wheat, Cumin, Gram, Chickpea, Garlic, Onion. Vermi composting, preparation of roasted groundnut and chikki from groundnut seed	Pink ball worm in Cotton, Heavy infestation of sucking pest in cotton , <i>phytophthora</i> disease in sesame and white grub infestation in groundnut. Nutritional deficiency in animal feed and fodder, Less area under Horticultural crops	*IPM and INM in major crops of this area *Increase drainage of soil *Efficient use of irrigation water
Wankaner	Wankaner	Devipur, Devalia,	*Groundnut, Cotton, Sesame, Wheat, Cumin, Gram. *Enterprises are dairy business, Vermi composting, preparation of roasted groundnut and chikki from groundnut seed	Pink ball worm in Cotton, Heavy infestation of sucking pest in cotton , <i>phytophthora</i> disease in sesame and white grub infestation in groundnut. Long inter- calving period in Buffalo, Nutritional deficiency in animal feed and fodder, Less area under Horticultural crops	*IPM and INM in major crops of this area *Reducing the inter- calving period in Buffalo *Motivate the farmers for arid Horticultural crops. *Efficient use of irrigation water

2.5 Priority thrust areas

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

3. TRAINING ACHIEVEMENT

A Details of Target and Achievements of Mandatory Activities by KVK during 2018-19

OFT				FLD			
1				2			
Number of OFTs		Number of Farmers/Children		Number of FLDs		Number of Farmers	
Targets	Achievement	Targets	Achievement	Targets	Achievement	Targets	Achievement
3	3	28	28	50	50	50	50

Training (including sponsored, vocational and other trainings carried out under Rainwater Harvesting Unit)						Extension Activities			
3						4			
Number of Courses			Number of Participants			Number of activities		Number of Participants	
	Targets	Achievement	T	A	T	A	T	A	
Farmers	30	30	750	1050	-	488	-	24275	
Rural youth	-	-	-	-	-	-	-	-	
Extn. Functionaries/ Input Dealer	1	3	25	241	-	-	-	-	
Total	31	33	775	1291	-	237	-	24275	

4. ON FARM TRAILS(OFTs)

A. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL PEST AND DISEASE MANAGEMENT

Problem definition: Heavy infestation of white grub in groundnut effecting in a yield loss 10 to 12 % according to area specific.

Technology Assessed or Refined (as the case may be): Management of white grub in groundnut crop.

Table :Effect of chlorpyriphos in control of white grub in groundnut.

Technology Option	No.of trials	Incidence of infested plant(%)	Yield (kg/ha)	B:C
Sowing of groundnut without Seed treatment. (Farmers practice)	10	6.2	1910	2.35
Seed treatment with chlorpyriphos 25 E.C.@ 25 ml/kg seed.(GAU Reco.)		2.1	2038	2.65

B. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL PEST AND DISEASE MANAGEMENT

Problem definition: Heavy incidence of wilt disease in cumin effecting yield loss of up to 9 to 20 % and monetary loss of Rs. 15000/- to 20000/- per ha.

Technology Assessed or Refined (as the case may be): Use of Trichoderma for wilt disease management in cumin

Cumin is an importance commercial spice crop of northern saurashtra. There is high incidence of wilt disease resulting in yield loss. KVKs Morbi) conducted on farm trial to refined the control measure. The refined technology of application of Trichoderma 5 Kg/ha with organic compost 1000 Kg/ha at time of sowing and second application 15 days after germination reduce the percentage of disease incidence from 9 to 13.5 and yield was increased by 18.2 percent.

Table Effect of Trichoderma for management of wilt in cumin.

<i>Technology Option</i>	<i>No.of trials</i>	<i>Wilt (%)</i>	<i>Yield (kg/ha)</i>	<i>B:C</i>
<i>No use of trichoderma or fungicide at the time of sowing. But they use fungicides viz., carbendazim, hexaconazole, difenconazole, tebuconazole, propiiconazole, , etc after of initiation of diseases. (Farmers practices.)</i>	10	11.2	930	3.18
<i>Application of Trichoderma @ 5 kg /ha with organic manure @1000 kg / ha at the time of sowing.. (Recommended practices.)</i>		5.2	1040	3.39
<i>Application of Trichoderma @ 5 kg /ha along with organic manure @1000 kg / ha at the time of sowing and second application of Trichoderma @ 5 kg /ha along with organic manure by broadcasting method at 15 days after germination. (Intervention).</i>		3.4	1100	3.42

C. TECHNOLOGY ASSESSMENT AND REFINEMENT IN DETAIL

A reduce the malnutrition problem in preschool children (1 to 5 yr)

Definition of Malnutrition : The world Health Organized (WHO) Defines malnutrition as the cellular imbalance between the supply of nutrients and energy and the body's demand .

To ensure growth, maintenance and specific functions.

Title of Technology	Treatment	No. of Trial	Result	
			Percentage of weight up	Remarks
MALNUTRITION IN CHILDREN 1) To Study the effect high calorie and protein diet on the growth of preschool children 2) To reduce the malnutrition in children 3) To reduce the high malnutrition in children	1. Use of mixture of Dalia dal + Jaggery + Groundnut seed , Amla juice , banana ,soybean chips (per child 100 gram & juice 50 ml)	- 8 children (1.5-5 years)	15 % up	Only special disease affected
	2. Use of rise , pigeon pea, green grams, chickpea, Pomegranate, banana, potato, tomato (per child 100 gram & fruit 50 gram)	- 6 months Duration	45 % up	Malnutrition affected
	3. Use of wheat flour + Ghee + Jaggery or til, Milk, carrots, rise, pigeon pea, green grams, Potato, tomato and green vegetables or Pomegranate. (per child 100 gram & fruit 50 gram)	- EveryMonth BodyWeight (WHO- New Body mass index chart, male & female)	63 % up	High Malnutrition affected

5. FRONTLINE DEMONSTRATION

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

List of technologies demonstrated during previous year and popularized during *Kharif 2018& Rabi 2018-19* 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 villa.	No. of farmer	Area in ha
1	2	3	4	5	6	7	8
1	Groundnut	Diseasemanagement	IPM	stem rot management in Groundnut	3	10	4.0
2	Cotton	Crop Production	INM (Bt. Cotton)	Nutrient management in Bt. cotton	4	40	16.0
3	Cotton	Pest management	IPM (Bt. Cotton)	Pinkball warm managent in Bt. cotton	4	10	4.0
4	Cumin	Pest Management	IPM	Management of wilt through bio agent	5	10	4.0

**b. Details of FLDs implemented
Oilseeds**

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ Demonstration			Reasons for short-fall
					Proposed	Actual	SC/ST	Others	Total	
1	Groundnut	Crop Impr.	New Variety	Kharif -2018	4.0	4.0	-	10	10	-

Others

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ Demonstration			Reasons for short-fall
					Proposed	Actual	SC/ST	Others	Total	
1	Cotton	Pink ball worm management in cotton	IPM	Kharif -2018	4.0	4.0	1	9	10	-
2	Cotton	Nutrient management in cotton	INM	Kharif -2018	4.0	4.0	-	10	10	-
3	Gram	New variety of gram GG-5	Crop Impr.	Rabi-2018	4.0	4.0	1	9	10	-

Commercial crops (Cumin & Wheat)

Sr. No.	Crop	Thematic area	Technology Demonstrated	Season and year	Area (ha)		No. of farmers/ Demonstration			Reasons for short-fall
					Proposed	Actual	SC/ST	Others	Total	
2	Cumin	Wilt management	IPM	Rabi-2018	4.0	4.0			10	-

c. Technical Feedbacks

Technical Feedback on the demonstrated technologies

No.	Feed Back
1	To enhance the farmers to use recently developed certified varieties of different crops.
2	Proper use of fertilizers, Irrigation, insecticides and fungicide as per recommendation to reduce the production cost.

Farmers' reactions on specific technologies

S. No.	Feed Back
1.	White grub problem in groundnut
2.	Pink boll worm in cotton
3.	Research needed for control of insect-pests and diseases in organic farming
4.	Wilt disease in cumin.
5.	Cracking of pomegranate fruit.

d. Performance of Frontline demonstrations
FLD on oilseed crops

Crop	Thematic Area	technology demonstrated	Variety	No. of Farmer	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
						Demo			Check		Gross Cost	Gross Return	Net Return	BCR (R/C)	Gross Cost	Gross Return	Net Return	BCR (R/C)
						High	Low	Average										
Groundnut	CI	New variety	GJG-22	10	4.0	19.40	5.25	16.14	15.00	7.3%	46300	79560	33260	1.72	46300	74640	28340	1.6

FLD on Other crops

Category & Crop	Thematic Area	Name of the technology	No. of Farmer	Area (ha)	Yield (q/ha)				% Increase in yield	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
					Demo			Check		Gross Cost	Gross Return	Net Return	BCR	Gross Cost	Gross Return	Net Return	BCR
					High	Low	Average										
Cotton	Nutrient management	INM	10	4.0	25.2	2.3	11.5	10.4	10.2	48120	58446	10326	1.21	46900	52989	6089	1.12
Cotton	Plant protection	IPM	10	4.0	21.0	10.5	15.1	14.4	4.5	45400	75400	30000	1.66	44400	72150	27750	1.6
Cumin	Pest Management	GC-4	10	4.0	12.4	6.2	11.1	10.0	11.3	41750	144690	102940	3.47	39400	130000	90600	3.3

Note : * (1) No of ball/plant

*** (2) No of damage ball/plant**

*** (3) Percentage of infested plant**

6. FARMERs TRAINING PROGRAMMES

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

Thematic Area	No. of Courses	No. of Participants						
		Others			SC/ST			Grand Total
		Male	Female	Total	Male	Female	Total	
(A) Farmers & Farm Women								
I Crop Production								
Integrated Nutrition management	1	75	0	75	15	0	15	95
Soil Fertility management	1	22	0	22	03	0	03	25
Integrated Crop Management	1	28	0	28	02	0	02	30
Soil & Water testing	1	23	0	23	02	0	02	25
II Horticulture								
a) Vegetable Crops								
Kitchen Gardening	1	0	23	23	0	02	02	25
Cultivation of Vegetable	1	0	05	05	0	20	20	25
III Soil Health and Fertility Management								
	-	-	-	-	-	-	-	-
IV Livestock Production and Management								
	-	-	-	-	-	-	-	-
V Home Science/Women empowerment								
Design and development of low/minimum cost diet	1	0	27	27	0	04	04	31
Value addition	3	00	55	55	00	19	19	74
Income generation activities for empowerment of rural Women	7	00	149	149	00	53	53	202
Rural Crafts	1	00	32	32	00	00	00	32
Women and child care	2	00	77	77	00	08	08	85
VI Agril. Engineering								
Secondary Agriculture	1	23	00	23	03	00	03	26
VII Plant Protection								
Integrated Pest Management	3	79	26	105	08	03	11	146
Safe use of Pesticide	2	47	00	47	05	00	05	52
Integrated Disease Management	1	23	00	23	02	00	02	25
Bio-control of pests and diseases	1	22	00	22	04	00	04	26
Production of bio-control agent & bio pesticides	2	117	00	117	15	00	15	132
VIII Fisheries								
	-	-	-	-	-	-	-	-
IX Production of Inputs at site								
	-	-	-	-	-	-	-	-

X Capacity Building and Group Dynamics	-	-	-	-	-	-	-	-
XI Agro-forestry	-	-	-	-	-	-	-	-
TOTAL	30	459	394	853	59	109	168	1056
(B) RURAL YOUTH	-	-	-	-	-	-	-	-
TOTAL	00	00	00	00	00	00	00	00
(C) Extension Personnel								
Any other (Pl. Specify)								
Irrigation management in <i>Rabi</i> crop	1	143	00	143	22	00	22	165
Organic Farming	1	35	00	35	06	00	06	41
Total	2	178	00	178	28	00	28	206
G. TOTAL(A+B+C)	32	637	394	1031	87	109	196	1262

Training programmes for Input Dealer including sponsored training programmes

Area of training	No. of Courses	No. of Participants						Grand Total
		General			SC/ST			
		Male	Female	Total	Male	Female	Total	
Input Dealer Training	1	30	00	30	05	00	05	35
TOTAL	1	30	00	30	05	00	05	35

7. EXTENTIOM ACTIVITIES

No.	Activities	No. of programmes	No. of farmers	No. of Extension Personnel	TOTAL
1	Kishan mela	4	3082	62	3148
2	Field Day	4	101	4	109
3	Field Advisory Services	7	49	3	59
4	Farmers visit to KVK	7	3487	60	3621
5	Farmer Shibir/Group Discussion/Night mitting	33	741	22	796
6	Kishan Mobail Advisories	7	2816	20	2914
7	Advise By Latter	0	0	0	0
8	Kishan Goshthi/Seminar	21	238	19	278
9	Farmer's mitting	28	241	19	288
10	Vedio Show/Film Show	21	879	22	922
11	Plant/animal health camps	0	0	0	0
12	Distribution Of Extension Literature	8	1456	33	1624
13	Lectures Delivered	26	6149	35	6210

14	Field Diagnosis	4	15	0	19
15	Scientists' visit to farmers field	1	6	0	7
16	Subscription of krushi Gau Vidhya	0	0	0	0
17	Diagnostic Team Visit	0	0	0	0
18	Celebration of Technology week	1	175	5	181
19	Celebration of Prime Minister Crop Insurance Plan	1	26	1	28
20	No. of Soil & Water Sample Tested	1	36	3	40
21	Exhibition	5	3257	69	3331
22	Other Ex. Activies	44	630	26	700
	Total	223	23384	403	24275

a. Details of other extension programmes

Particulars	Number
Electronic Media (CD./DVD)	0
Extension Literature Publish	0
News paper coverage	9
Popular articles	1
Radio Talks	1
TV Talks	3
Animal health camps (Number of animals treated)	0
Others (pl. specify)	-
Total	14

b. Message Advisory Service

Name of KVK	Message Type	Type of Messages						Total
		Crop	Livestock	Weather	Marketing	Awareness	Other enterprise	
Morbi	Text only	5	-	-	-	-	-	5
	Voice only	1123	102	75	603	705	306	2914
	Voice & Text both	-	-	-	-	-	-	-
	Total Messages	5	-	-	-	-	-	5
	Total farmers Benefitted	1128	102	75	603	705	306	2915

8. PRODUCTION OF SEED/PLANTING MATERIAL AND SALES OF BIO-PRODUCTS

A. Seeds Production

No.	Crop	Variety	Quantity(kg)	Provided to No. of Farmers
1	Groundnut	GJG – 22	930	-
2	Sesame (Breeder)	GT – 2	310	-
3	Blackgram	GG - 1	285	-
Total			1525	-

B. Sale of Bio-Products by the KVKs

Bio Products (Only Sales)	Name of the bio-product	Quantity	Value (Rs.)	No. of Farmers
		Kg/Lit		
Bio-pesticide	Trichoderma (Savaj)	2400 kg	1,60,880/-	450
	Beauveria (Savaj)	6897 kg	10,24,050/-	1300
Bio-Fertilizer	Azotobactor	50 Lit.	6000/-	37
	PSB	50 Lit.	6000/-	24

C. PUBLICATIONS

Category	Number
Research Paper	3
Technical bulletins	-
Technical reports	3
Others (Abstract)	1

9. SUCCESS STORY

Success Story :- 1

Farmers doubling income through crop diversification – through Palma Rosa Grass

1. **Name** :- Prabhubhai Ghodasara
2. **Address** :- Sajanpar , Ta. :- Tankara ,
Dist. :- Morbi
3. **Date of Birth** :- 27-10- 1955
4. **Education** :- 5th Standard Pass
5. **Source of Income** :- Farming Palma Rosa



Brief information about an individual

Prabhubhai Ghodasara is an innovative farmer who belongs to Sajanpar village of Morbi district (Gujarat). Groundnut and Cotton are main crops in kharif while Wheat is a main crop in rabi under irrigation conditions, on the advise of agricultural scientists(KVK Morbi-Rajkot-1) Prabhubhai started Palma rosa grass cultivation with drip irrigation in 10 Ha area. to overcome the market availability for sale and transportation of grasses ,he also installed an extraction plant on his farm for extraction of oil from Palma rosa grass.

Economics of Palma Rosa Cultivation

Cultivation Cost (Inputs , Labour , seed , extraction & other expenses)	:	Rs. 1,80,875/- Per ha.
Income of first year 120 litres oil/Ha (3 cuttings) price Rs. 2700/litre	:	Rs. 3,24,000/- Per ha.
Income of second year 135 litres oil/Ha (3 cuttings) price Rs. 2650/litre	:	Rs. 3,57,750/- Per ha.
Average annual income	:	Rs. 3,40,875/- Per ha.
Net income per year/Ha	:	Rs. 1,60,000/- Per ha.

Low cost of cultivation and high revenue as compared to other crops. hence this will be helpful to farmers to double their income.

Spread of innovation

By seeing Palma rosa farming more than 30 ha new cultivation nearby the village by 4 farmers.

Recognition

Prabhubhai is known as innovative farmer in this area.

