

Success Story:01

Dr. P. P. Javiya, Dr. H. A. Prajapati, Dr. B. M. Vahunia, Dr. S. A. Patel, Mr. Gaurang B. Padsala, Dr. Jeni H. Lalwani, Dr. J. B. Dobariya

Name of KVK: Krishi Vigyan Kendra

1	Name	Budhyabhai Balubhai Pawar
2	Address	Lahandabas, Ahwa, Dang
3	Education	3rd standard
4	Mobile No.	9428494198
5	Age	55
6	Total Land Holding	1.08 ha
7	Cultivated Crops	Paddy, Finger millet, Vegetables



8 Situation Analysis & Problem Statement

In the past, Budhyabhai practiced conventional farming and employed pesticides, fertilizer and other tools. As a result, he invested a lot of money in this approach and received little profit. He subsequently turned to organic farming after Gujarat named Dang District an organic district. However, compared to conventional farming, the cost of inputs is high in organic farming and sometimes uneasy to manage it too. He initiated Natural Farming in one hectare land.

9 Plan, Implement and Support

He actively participated in training, kishan mela and other activities organized by Krushi Vigyan Kendra. Also come to KVK for various field related issues and always connected with KVK by what's app and other social media. A team of scientist guided him for practicing the natural farming.

- Adopted natural farming since last three years.
- Cultivated paddy and vegetables under natural farming.
- Used desi cow based and plant-based products like beejamrit, jivamrit, nemastra and agniastra for crop health and plant protection.
- Practiced water conservation technologies including mulching of crop residue, bed sowing and ridge sowing.

10 Outcome

Parameters	Natural Farming (Area in ha)	Conventional Farming (Area in ha)
Name of Crop	Paddy (Devlikolam)	Paddy (Bangalo)
Cost of cultivation (Rs)	20000	24500
Production (q)	20.30 q	18.59 q
Gross return (*)	38570	35321
Net return (*)	18570	10821
BC ratio	1.93	1.44

11 Impact

After using Natural farming budhyabhai earn higher income because of reduced expenditure of costly inputs and getting premium price of his product.



Jeevamrut Preparation



Natural Farming in paddy

Success Story: 02

Natural Farming of Green Gram

Dr. H. A. Prajapati, Dr. B. M. Vahunia, Dr. S. A. Patel, Mr. Gaurang B. Padsala, Dr. Jeni H. Lalwani, Dr. J. B. Dobariya, Dr. P. P. Javiya
Krishi Vigyan Kendra, Waghai (Dangs)

Name of Farmer : Maganbhai Kalubhai Gayakwad

Village : Chichond

Taluka : Waghai

District : Dang

Education : 10th



Introduction

Maganbhai Kalubhai Gayakwad is a farmer of village: Chichond, Taluka: Waghai, District: Dangs in the Gujarat, educated up to 10th standard and having 1.39 ha land.

Training and guidance of KVK

By somehow, he came to know about Krishi Vigyan Kendra, Dang. Shri. Maganbhai started to visit the Krishi Vigyan Kendra in order to get proper guidance about Natural farming of various crops. Horticulture scientist impressed to see his keen interest in natural farming. The scientist from Krishi Vigyan Kendra advises him on how to raise a pulse crop (green gram) using a scientific natural farming approach. To address the current challenges, KVK scientists initiated a series of activities such as training, scientific visits to farmer's fields, field visits, FLD visits, and so on, and the results were positive.

Practices adopted

- Cultivated Green Gram during summer season by Natural farming
- Prepared and used beejamrit for seed treatment and jivamrit for nutrition management
- Prepared and used Agniastra for controlling pests.
- Reared 04 cows Desi (02) and Crossbreed (02)
- Used ICT mechanism (WhatsApp and face book).
- Participated in exhibitions / workshops and forums regularly

Comparison between Natural Farming and Conventional Farming

Parameters	Natural Farming	Conventional Farming
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	(0.15 ha)	(0.15 ha)
Name of Crop	Green Gram	Green Gram
Cost of cultivation (Rs)	14200	21500
Production (q)	5.7	6.5
Gross return (₹)	37050	39000
Net return (₹)	22850	17500
BC ratio	2.60	1.81

Benefits and achievements

- Improved Soil Health
- Improved Soil Fertility
- Utilize Crop Residue
- Utilizeweed (without seed) for Mulching
- Reduced input cost.
- Reduced cost of cultivation
- Generated Higher income compare to others system
- Increased net income with the use of natural fertilizers and insecticides.
- Consumed and sold chemical-free food to the community.

Impact of the Technology

Maganbhai grew green gram using a natural farming approach following KVK involvement. Maganbhai witnessed an improvement in soil health, yield quality, and cultivation expense reduction. Maganbhai also acknowledged that the first-year production in natural farming may be lower, but the produce fetches a high price due to its quality standards.



Germination in natural farming Plot



Green Gram “GM 6”



Maganbhai in Natural Farming Plot



High quality Natural farming produce

Success Story: 03

Title: Dairy Farming-A boon for tribal women

Dr. S. A. Patel, Mr. Gaurang B. Padsala, Dr. Jeni H. Lalwani, Dr. J. B. Dobariya, Dr. P. P. Javiya, Dr. H. A. Prajapati, Dr. B. M. Vahunia

1. Situation analysis /Problem Statement

Kamaduben Bhavanbhai Bhoye is a woman farmer of Village Guarya, Taluka- Ahwa, District Dangs in Gujarat, educated up to only 3rd standard and having 5.0 hectre of land. Dang district is a predominantly tribal area where agriculture and livestock are the main sources of livelihood. Earlier many tribal families had very limited income and employment opportunities. Her husband is also a farmer. They have two children a son and a daughter. Somehow, they were earning their livelihood by practicing rain fed agriculture in their land. She was growing local and old varieties of Paddy, Vari, Ragi and some vegetable during Kharif season. She had two bullocks and cows of local origin. These animals were a burden rather than a source of income due to the meagre productivity; however the bullocks were used for the agricultural operations. Under such situation, it was difficult to sustain house hold food and nutritional security of her family. Therefore, she was in search of some alternate sources of income.





Kamaduben Bhavanbhai Bhoye

Village: Guarya, Taluka-Ahwa, District Dangs - (Gujarat)

Age: 59 years, Education: 3rd standard, Size of Land holding: 5.0 Hectre

2. Plan, Implement and Support

By some sources, she came to know about some welfare schemes for tribal. First of all she visited a co-operative dairy in a nearby village and she also decided to join co-operative dairy. Meanwhile her village, Guarya was care by KVK and ATMA -Dang of the district. A series of animal husbandry activities like meetings, trainings, kisan gosthis, field visits, farm school, visit to a dairy co-operative has been started by KVK scientists. Kamaduben and other interested farmers had purchased HF cross-bred cow. As cross bred cow was a new enterprise for them, they often faced so many troubles for proper guidance. In the beginning she was not able to maintain the proper health of her animals. she came in contact with Krishi Vigyan Kendra, through ATMA, Dang and was inspired to abandon conventional dairy practices and adopt animal husbandry in a scientific manner as per the guidance of scientists. Scientist of KVK was impressed to see her keen interest in dairy farming. It was found that the farmers of this village were rearing the animals with traditional method, imbalance in use of feeds and fodder as well as facing the chronic problem of anoestrus, repeat breeder and poor growth. The Scientist of KVK started a series of activities i.e. training, demonstration, farmer's scientist interaction etc to deal with the existing problems and observed a positive impact.

3. Output

At present, Kamaduben Bhavanbhai Bhoye has adopted scientific concepts to rear her animals as per the suggestions given by KVK scientists. She has extended her farm and today she owned 9 milking HF crossbred cows, 3 heifers and 2 calves. She has constructed a pakka house with manger and water tank. She uses proper concentrate feed, green and dry fodder, mineral mixture, timely vaccination, deworming and diagnosis as per the guidance provide by the scientists of KVK through training, demonstrations and very frequent farm visits. The beneficiary has purchased a chaff cutter and is actively

using it for fodder cutting. As result, a strong competition between various farm women to get more and more milk production developed.

4. Outcome

Due to adoption of improved practice, her constant efforts and hard work and timely support from KVK, ATMA Dang & other line departments and Vasudhara dairy, she could achieve very impressive growth in dairy farming as per the table-1.

5. Impact

Sr. No.	Particulars/ Items	Before KVK intervention	After KVK intervention
1	Animals own	2-Desi cows 2- Desi Bullocks	2022-23 7- HF cows 2-Heifers 1 - Calves 2- Bullocks 2023-24 9- HF cows 2-Heifers 1 - Calves 2024-25 9- HF cows 3-Heifers 2 - Calves
2	Vaccination & De-worming	Not proper	Regular
3	Milk production (day)	Initial 3-4 lit/day	Average-30 lit/day highest income up to Rs. 80,345/- per month
4	Highest milk production per animal per day	2.0 lit/day	Up to 10 lit/day/animal
5	Anoestrus and repeat breeder problems	Yes	No
6	Inter-calving interval	More than 2 yrs	12-16 months
7	Service period	Average-170 days	90-95 days
8	No. of service per conception rate	7-8	1-2
9	Growth of calves and heifers	Poor	Good
10	Age of first calving	5-6 yrs	30-48 months
11	Economics enhancement Income per month(Net profit)	Not good	Rs.30,000-45,000 per month
	Income through selling of self reared HF animals	Nil	Planned in future
12	Modern assets in the house because of dairy farming	Nil	Freeze – 1 TV - 1 Mobile - 2 Motorcycle – 1 Tractor -1

Milk production Data

Sr. No.	Year	Annual Milk production	Annual income (Rs)
1	2022-23	9305 liter	3,37,341
2	2023-24	22343 liter	8,70,674
3	2024-25	19991 liter	7,99,588

For the success of dairy farming in tribal areas she believes that it is due to intensive guidance provide by the Scientist of KVK and ATMA-Dang. In addition to this, humble support made by Vasudhara dairy as well as state government to provide subsidy for purchasing the cross bred cows and proper marketing facility, respectively.

She feels that having good genetic potential and dairy characters of HF cross bred animals plays an important key role in dairy business. She also emphasized that after starting the dairy farming she need not to go anywhere for earning employment as well as she could make herself away from the money lender's clutch to satisfy her needs. Now she can easily manage her all needs and able to think in advance for the sake of better education to her children due to dairy farming. This impressive result of dairy farming turned Kamaduben Bhavanbhai Bhoje & her husband from poor farmer to a happy progressive dairy farmer. The success of dairy farming in resource poor areas is a unique example to generate the employment as well as empower the tribal economy in the country.

Success Story: 04

Empowering Tribal Women through FPO Leadership: The Journey of Rasilaben Diva

Dr. Jeni H. Lalwani, Dr. J. B. Dobariya, Dr. P. P. Javiya, Dr. H. A. Prajapati, Dr. B. M. Vahunia, Dr. S. A. Patel, Mr. Gaurang B. Padsala J.H.Lalwani¹, G.B.Padsala² and J.B.Dobariya³

Profile (in brief):

- **Name:** Ms. Rasilaben Yogeshbhai Diva
- **Age:** 37 years
- **Education:** M.A., B.Ed.
- **Village:** Vanarchond
- **District/State:** Dang, Gujarat
- **Enterprise:** Women-led Farmer Producer Organisation (Agri-marketing, Input Supply & Collection Centre)
- **Affiliation:** Shri Atmanirbhar Adivasi Mahila Khedut Producer Company Limited, Waghai



1. Situation Analysis / Problem Statement

The tribal farming community of Waghai taluka, Dang, faced severe systemic challenges in agricultural marketing. Farmers were heavily dependent on middlemen who engaged in unfair weighing practices, offered low prices, and delayed payments. High transportation costs to distant mandis, such as Vyara, further eroded net income.

Women farmers faced unique constraints, including a lack of social mobility and a total dependence on male family members for transporting produce. This often resulted in delayed sales and significant post-harvest losses. Furthermore, there was an initial lack of awareness and trust regarding the Farmer Producer Organisation (FPO) model.

2. Plan, Implement and Support

To address these issues, Shri Atmanirbhar Adivasi Mahila Khedut Producer Company Limited was established in 2021. KVK Waghai spearheaded the implementation through several key activities:

- **Capacity Building:** Training programs, workshops, and exposure visits were organized to teach collective marketing, quality produce handling, and leadership development.
- **Extension Efforts:** Continuous technical support was provided to enhance managerial skills and confidence among members.
- **Critical Inputs & Facilitation:** The FPO was supported with equity and management grants, along with licenses for seeds, fertilizers, pesticides, and FSSAI.
- **Infrastructure Support:** With backing from the Axis Bank Foundation, the Vanarchond Collection Centre was established in 2023 on Rasilaben's own premises to decentralize the market.

3. Output

The intervention, led locally by Rasilaben Yogeshbhai Diva, achieved significant measurable results:

- **Knowledge & Skills:** Rasilaben and fellow members gained expertise in procurement, sales operations, and record-keeping.
- **Economic Gains:** Farmers now receive ₹20–30 more per kg of produce compared to middlemen rates.
- **Procurement Volume:** Rasilaben currently facilitates annual procurement worth ₹10–15 lakh and sales worth ₹3–4 lakh.
- **Operational Efficiency:** The establishment of the local collection center has significantly reduced transportation costs and post-harvest losses.

4. Outcome

The horizontal spread and economic shift since 2021 include:

- **Horizontal Spread:** Rasilaben successfully mobilized 57 farmers from her village to become active FPO members.
- **Financial Growth:** The FPO's turnover grew exponentially from ₹1.4 lakh (2021–22) to over ₹1 crore (2025–26).
- **Market Transparency:** The shift to immediate payment systems and transparent pricing has improved the cash flow and trust within the tribal community.
- **Access to Inputs:** Members now benefit from discounted agricultural inputs, including seeds, agro-tools, and animal feed.

5. Impact

At the macro and social level, the following benefits have been observed:

- **Social Empowerment:** Rasilaben has emerged as a role model, leading to increased participation of women in market-linked activities and enhanced decision-making power within households.
- **Institutional Development:** The successful management of the Vanarchond Collection Centre serves as a blueprint for women-led tribal FPOs in the district.
- **Economic Contribution:** By strengthening the collective bargaining power of tribal farmers, the FPO is contributing to the stabilization of the local agricultural economy.
- **Recognition:** Rasilaben's leadership was highlighted during high-level interactions, including a meeting with the Prime Minister, showcasing the state-level significance of this model.



Meeting with prime minister



Meeting with prime minister



At Collection Center



BOD Meeting



Exhibition



Training

Success Story: 05

Increase the production through line sowing methods & Hand Weeder (Karbadi)

Mr. Gaurang B. Padsala, Dr. Jeni H. Lalwani, Dr. J. B. Dobariya, Dr. P. P. Javiya, Dr. H. A. Prajapati, Dr. B. M. Vahunia, Dr. S. A. Patel

- **Background/Problem statement**

In dang district, production of every crop is low because of not maintaining proper spacing and sowing method by farmers lack of knowledge use of Hand Weeder. Due to this, severe weed and in the area which ultimately reduces the yield and income of the farmers. Most of the farmers were sowing seed in every crop with broadcasting method of sowing, so that more seed use as compared to method of line sowing which ultimately increase the seed cost and weeding is not possible in broadcasting method. Most of the farmers are tribal and resource poor, so that they have not knowledge regarding line sowing methods of every crop and about the use of Hand Weeder.

- **Intervention of KVK**

KVK Waghai, Dang given FLD (Adaptive Trial) – Hand Weeder and Proper Guidance of line sowing methods and Hand Weeder through Field Visit, Scientist Visit to Farmers Field, Farmers Scientist Interaction & on and off campus training and exhibition of every crop in each and every krushi mela in dang district.

- **Input**

1. Hand Weeder given through FLD (Adaptive Trial) No. of farmers : 50 (including small and marginal farmers)
2. Providing the knowledge about importance of line sowing methods and using the Hand Weeder for Weeding.

- **Outcome**

1. With the use of line sowing methods and Hand Weeder for Weeding every crop yields improved significantly in Dang district.
2. Farmers witnessed an increase in income due to better yields and contributing to the economic sustainability of rural households.
3. 40 to 50 % less incidence of weeds in the field using the line sowing methods and use of Hand Weeder for Weeding
4. Saving of time & money for weeding operations.

- **Horizontal Dissemination:**

1. **Farmer-to-Farmer Knowledge Transfer:** Successful farmers trained by KVKs shared their knowledge with other farmers in their communities, creating a ripple effect and spreading best practices of using the line sowing methods and use of Hand Weeder for Weeding across regions.
2. **Farmer-Focused Platforms:** Platforms like KVK-run demonstrations, agricultural fairs, and online resources spread importance of line sowing methods and using the Hand Weeder for Weeding to a wider audience.



FLD (Adaptive trial) – Hand Weeder use in line sowing crop

Success Story: 06

Mixed cropping system and introduction of new crops

Dr. J. B. Dobariya, Dr. P. P. Javiya, Dr. H. A. Prajapati, Dr. B. M. Vahunia, Dr. S. A. Patel,
Mr. Gaurang B. Padsala, Dr. Jeni H. Lalwani

Name of KVK, NAU, Waghai (Dangs)

1	Name	ManasyabhaiJanubhaiRavut	
2	Address	At Village: Gurudiya, Po. Khabhla, Tal: Subir, Dist: Dangs	
3	Education	10 th Pass	
4	Mobile No.	9428424258	
5	Age	58 year (03-06-1966)	
6	Total Land Holding	2-89-08	
7	Cultivated Crops	0.48 ha	
8	Situation Analysis & Problem Statement	Traditional farming practices were followed based on ancestral knowledge. For instance, the “Adar method” involved using tree branches and leaves to support crop growth. Sowing was carried out without scientific guidance and without adopting the line-sowing method, leading to uncertainty in crop production. Farmers mainly cultivated local varieties of paddy and nagli; however, due to the lack	

9 Plan, Implement and Support

of improved agricultural techniques, overall productivity remained low. Additionally, limited knowledge of marketing meant that farmers were unable to secure fair prices for their produce.

After joining the Krishi Vigyan Kendra (N.A.U.), Waghai, he got the opportunity to participate in a training program on natural farming organized by the center. The training was conducted under the guidance of experienced staff and experts. During the program, scientists provided detailed information about important natural farming practices such as Bijamrut, Jivamrut, GhanJivamrut, Achhadan (mulching), and mixed cropping systems. They also explained the use of natural crop protection methods like Neemastra, Brahmastra, Agniastastra, and Dashparni Ark. Additionally, the farmer learned about the benefits of maintaining indigenous cows for sustainable farming. Inspired by this training, he adopted natural farming methods on his farm and felt encouraged by the positive initial results.

10 Outcome

1. Raised Bed Preparation: He prepared raised beds for paddy seedling cultivation and enriched them using GhanJeevamrut.

2. Adoption of Natural Farming: He began practicing natural farming using indigenous cows.

3. Mixed Farming: Implemented mixed farming techniques, allowing multiple crops to be grown together.

4. Shift from Adar Practice: Replaced the traditional Adar practice with the raised bed system, resulting in faster and healthier paddy seedlings.

5. Use of Indigenous Seeds: By using indigenous seeds, he eliminated the need to purchase seeds annually.

6. Row Planting of Rice: Planting rice in line protected seedlings and enhanced yields.

7. Simultaneous Cropping: Mixed farming enabled 2–3 crops to be cultivated simultaneously on the same plot.

8. Cost Reduction: Natural farming based on indigenous cows significantly reduced cultivation costs.

11 Impact

1. Farmers from his village and nearby areas have started visiting his farm to learn from his practices.

2. Observing the successful cultivation of local paddy varieties through natural farming, other farmers have also begun adopting these varieties.

3. Inspired by his success, farmers in his village and surrounding regions have started implementing mixed farming systems.

4. He has now established a strong identity as a progressive natural farmer.

5. The indigenous cow-based farming system effectively meets the nutritional requirements of crops.

6. There has been a significant improvement in soil fertility, moisture retention capacity, and overall productivity.

Parameters	2021-22			2022-23			2023-24		
Season	Kharif	Rabi	Summer	Kharif	Rabi	Summer	Kharif	Rabi	Summer
Name of Crop	Paddy (Devlicolum)	Gram	--	Paddy (Idrani)	Pea (Deshi)	--	Paddy (Ambamror)	Maize	Green Gram
Total Area (Hector)	0.60	0.20	--	0.80	0.20	--	0.80	0.30	0.20
Production (Kg)	2000	170	--	3000	150	--	33000	1200	250

Gross return (₹)	50000	6800	--	75000	7500	--	132000	26400	17500
Total Expenditure (₹)	10500	1900	--	13000	2500	--	15000	3000	3500
Net return (₹)	39500	4900	--	62000	5000	--	117000	23400	14000



Preparation of Jivamrut



Preparation of Jivamrut



Intercropping (maize, groundnut)



Intercropping (pulses with maize)



Paddy



Chickpeas



Peas(native)



Corn



Best ATMA Farmer Award 2022-23