Success Story - 1

Adoption of SRI technic for higher production and profit from paddy cultivation

P. P. Javiya, H. A. Prajapati, S. A. Patel, J. B. Dobariya & B. M. Vahuniya

Name of farmer	Shri Govindbhai Babajubhai Machhi
Village	Uga (Chichpada), Post:Rambhas, Ta: Waghai, Dis:-Dang, Gujarat
Education qualification	10th pass
Land holding	0.84 ha (Irrigated)

1. Situation Analysis/Problem:

Govindbhai Babajubhai Machhi is a farmer of village Uga (Chichpada), Ta: Waghai, Dang in the Gujarat educated up to 10th standard and having 0.84 ha land. He has 45 year experience in farming. Somehow, they were earning their livelihood by practicing rainfed agriculture in their land. He was growing local and old varieties of paddy, vari and ragi during the Kharif season and gram in rabi season. Use of traditional method (Random showing) in sowing of paddy and other crops, could not give the proper yield due to less tillering and high weed infestation to Govindbhai. Under such situation, it was difficult to sustain economic security and standard of living of his family. Therefore Govindbhai was in search of farming system which gives a proper remuneration to his family.

2. Plan, implement and support:

Uga was one of our adopted villages, team of KVK scientists had made survey of the village to identify the adoption gap and technological needs of farmers as well as their socio economic status. The development plan of village for various TOT activities has been prepared. Among various technological gaps, the KVK scientists have worked out the gap regarding method of sowing, seed rate and fertilizer application in paddy by the farmers. Scientist (Crop production) decided to intervene on this point and given demonstration of SRI technic to the farmers. The farmers have been given training on gram package of practices. The team of KVK scientist made frequent visits of the farmers' field and guided them accordingly for various operations.

Uga is tribal dominated villages situated 8 km away from Krishi Vigyan Kendra, Waghai, Dist. Dangs head quarter. The farmers of these villages are recourse poor with undulating, fragmented land. Majority of the farmers are marginal farmers. The farmers have purchased the paddy from private seed companies and showing by random method. Then the Krishi Vigyan Kendra intervened and trained the farmers of these villages about the land selection, sources of seed, seed rate, SRI technic, harvesting and post-harvest handling of seeds and also provides seed, biofertilzer and novel organic fertilizer to farmers, also gave demonstration, scientist visit to farmer's field, field day etc. Among the all farmers of uga, Govindbhai was an early adopter farmer. Shri. Govindbhai decided to do a proper management and adopt SRI technic in paddy crop due to the continuous efforts of KVK.

3. Output:

Economics:

Details of Technology	Name of Farmers	Area (ha)	Yield (q/ha)		% Increase in yield
			Demo	Check	
SRI Technic	Govindbhai Babajubhai Machhi	0.20	2430	2840	

Details	No. of Farmers /demos	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
		Gross Cost	Gross Return	Net Return	CBR	Gross Cost	Gross Return	Net Return	CBR
SRI Technic	Govindbhai Babajubhai Machhi	20000	51120	31120	2.56	25000	43740	18740	1.75

In random showing of paddy the farmer was able to harvest average of 2430 kg/ha seed yield as against 2840 kg/ha seed yield in demonstration (SRI technic) with an increase of 16.87 per cent. The net benefit incurred was Rs. 31120 per hectare in SRI technic plot of paddy.

4. Outcome

As a result of intervention, the seed rate has been reduced to 25 kg/ ha in SRI technic of paddy. Further due to SRI technic, the application of fertilizers, weeding and other interculturing operations were become easy for the farmers which in turn saved labour charges and increased family income which ultimately improved the standard of living of the farm family.

Seed, Biofertilizers and novel organic fertilizer distribution

Seed treatment

5. Impact

By implementing this, farmers become aware about the importance and benefits of SRI technic. Cost of cultivation was decreased in demonstration plots up to the tune of 15-20 per cent. Net return of seed in demonstrated plots was Rs. 31120/ ha and cost benefit ratio is 2.56, whereas, in control plot was Rs. 18740/ ha and cost benefit ratio is 1.75.

Training

FLD Visit

Photographs of Achievements / Innovation / technology / farm:

SRI Technic

Success Story - 2

Higher Income through Horticulture in the Dang District

H. A. Prajapati, P. P. Javiya, J. B. Dobariya, B. M. Vahuniya & S. A. Patel

Name of farmer	Shri. Manubhai Sabalbhai Bhoye	
Village	Vankan, Ta: Waghai, Dist: Dang State: Gujarat	
Education qualification	4th pass	
Land holding	1.0 ha (Irrigated)	

Situation Analysis/Problem Statement:

Manubhai Sabalbhai Bhoye is a farmer of village: Vankan, Taluka: Waghai, District: Dangs in the Gujarat, educated up to 4th standard and having 1.0 ha land. He has twenty five years experience in farming. Somehow, they were earning their livelihood by practicing rainfed agriculture in their land. He was growing local and old varieties of Paddy,Ponted Gourd, Littlegourd during the kharif season and gram and some pulses in rabi season. Use of the local varieties of various crops could not give the proper remuneration to Manubhai. Under such situation, it was difficult to sustain economic security and standard of living of his family. Therefore Manubhai was in search of farming system which gives a proper remuneration to his family.

Plan, Implement and Support:

By somehow, he came to know about Krishi Vigyan Kendra, Dang. Shri. Manubhai started to visit the Krishi Vigyan Kendra in order to get proper guidance about scientific cultivation of various cucurbitaceous crops. Horticulture scientist impressed to see his keen interest in scientific cultivation of horticultural crops. The Scientist of Krishi Vigyan Kendra guides him properly and tells him to grow a various cucurbitaceous crops with a scientific approach. The scientist of KVK started a series of activities i.e. training, demonstration, scientist visit to farmer's field, field day etc. to deal with the existing problems and observed a positive impact. Shri. Manubhai installed a low cost polyhouse for the seedling preparation in his farm and decided to do a proper management of various crops due to the continuous efforts of KVK.

Output:

At present Manubhai has adopted scientific approach regarding the cultivation of various cucurbitaceous crops and for the seedling preparation. He has adopted cucurbitaceous crops like Littlegourd, Pointed Gourd, Bottle gourd and seedling preparation of different crops. He uses proper scientific cultivation practices as per the guidance provide by the scientists of KVK through training, demonstrations and very frequent farm visit.

After getting success, Shri Manubhai realizes the importance of uses of scientific cultivation practices and also motivated to other farmers by making awareness about this technology in terms of:

- ✓ 10 to 20 % water & 5 to 10 % fertilizer saving with increase in their efficiency.
- ✓ Increase in yield and net profit.
- ✓ Low incidence of pest and diseases.
- ✓ Reduce the spray of Insecticide

	
Bottle gourd cultivation	Seedling preparation
	
Okra cultivation	Cowpea cultivation
	
Tomato cultivation	Turmeric cultivation

Outcome:

Due to adoption of scientific cultivation practices, his constant effort and hard work and timely support from KVK & NGOs he could achieve very impressive growth in scientific cultivation of cucurbitaceous crops and in seedling preparation. ATMA agency note down his efforts towards the cucurbitaceous crops cultivation and gave the District level best ATMA award with certificate and 25000 cash prize..

Impact

Before kvk interventation shri Manubhai grow only desi varieties of ragi, vari, rice & Gram. His net woth per annum is hardly Rs 87000.00 to Rs.88000.00 (approx.). After the kvk intervention his net worth per annum is 2.00 to 2.50 lakh (approx.).

Sr. No.	Crop name	Area (ha)	Cost of cultivation(Rs.)	Gross return (Rs.)	Net return (Rs.)
Year : 2018					
1	Littlegourd	0.20	11000.00	45000.00	34000.00
2	Ponted gourd	0.20	12500.00	34000.00	21500.00
3	Bottle gourd	0.20	13000.00	26400.00	13400.00
4	Chilli seedlings	5000 Nos.	2000	5000.00	3000.00
5	Brinjal seedlings	5000 Nos.	2000	5000.00	3000.00
6	Tomato seedlings	20000 Nos.	7000	20000.00	12000.00
	Total	**-**	**47500.00**	**135400.00**	**87900.00**
Year : 2019					
1	Littlegourd	0.20	14000.00	54000.00	40000.00
2	Ponted gourd	0.20	13000.00	38850.00	25850.00
3	Bottle gourd	0.20	14000.00	37500.00	12350.00
4	Chilli seedlings	30000 Nos.	20000.00	60000.00	40000.00
5	Brinjal seedlings	50000.00	20000.00	50000.00	30000.00
6	Drum stick plants	1200 Nos.	4000.00	12000.00	8000.00
7	Lemon Plants	1200 Nos.	5000.00	40000.00	35000.00
8	Tomato seedlings	20000 Nos.	5000.00	20000.00	15000.00
	Total	**-**	**95000.00**	**312350.00**	**217350.00**
Year : 2020					
1	Littlegourd	0.20	15000.00	72000.00	57000.00
2	Ponted gourd	0.20	14000.00	56000.00	42400.00
3	Bottle gourd	0.20	16000.00	54000.00	38000.00
4	Chilli seedlings	30000.00	18000.00	60000.00	48000.00
5	Brinjal seedlings	50000	18000.00	50000.00	32000.00
6	Pointed gourd plants	1000	2000.00	10000.00	8000.00
7	littlegourd Plants	2500	5000.00	25000.00	20000.00
8	Tomato seedlings	20000.00	5000.00	20000.00	15000.00
	Total	**-**	**93000.00**	**347000.00**	**254000.00**

For the success of Cucurbits cultivation in tribal areas he believes that it is due to intensive guidance provided by the Scientist Mr. H. A. Prajapati. This impressive result of scientific cultivation turned Manubhai from poor farmer to happy progressive farmer. The success of cucurbits cultivation in resource poor areas is a unique example to generate the employment as well as empower the tribal economy in the country.

Success Story – 3

Title – Popularizing cue lure trap for control of fruit fly trap in Bitterguard

B. M. Vahuniya, J. B. Dobariya, P. P. Javiya, S. A. Patel & H. A. Prajapati

Name – Budhyabhai Balubhai Pawar

Village – Lahandabas, **Ta. –** Ahwa**, Dist. -** Dang (Gujarat)

Mo. – 94284 94198

1. Situation Analysis/ Problem Statement:

Profile		
Age	45	Before contact with KVK, Waghai, he was not actively use plant protection measure. Economic condition is not strengthening after lot of work.
Education	Up to third standard	
Land Holding	2 Hectare	
Farming Experience	10 year	
Crop grown	Bitterguard, strawberry, Paddy, Nagli	
Animal own	03	

Budhyabhai Balubhai Pawar is a farmer of village Lahandabas, Taluka- Ahwa, District- Dangs in Gujarat. Budhyabhai complete his education up to 3Rd standard and having 1 Hactare of land. Somehow, he was earning his livelihood by practising rainfed farming in her land. He was growing local and old varieties of Paddy, nagli during Kharif season and Strawberry in rabi season. Under such situation, he needed some additional or supplementary income to increase income, food & Nutritional security of her family. Therefore, he was in search of some alternate sources of income.

By the some sources, he contacts KVK imparting knowledge and Training for Bitterguard cultivation and IPDM in Bitterguard. he got knowledge about scientific cultivation of Bitterguard and also get Folder and material of Bitterguard in Gujarati language by SMS of KVK. Earlier he was doing well in bitterguard cultivation but somehow in last few years he facing problem of fruit fly in her field and for that problem he get less price as well as less production in bitterguard due to fruit fly attack. Due adoption of cue lure trap technology for fruit fly management, hard work and timely support from KVK, he was able to increase income.

The success of cue lure trap in poor area is a unique example to generate income

2. Plan, implementation and Support

The team of KVK scientist had made survey of the village to identify adoption gap and Technology needs of farmers as well as their social economic status. The development plan of village for various activities has been prepared. Among various technology gaps, the KVK Scientist have worked out following activities-

- Training on role of IPDM
- Give Extra motivation to use cue lure trap
- Providing literature in local language
- Technical Guidance for pest management in Bitterguard
- Given cue lure trap in FLD
- Advisory service
- Follow-up visit

3. Output

After training he got cue lure trap and carried out cultivation on her own and with KVK intervention. Install cue lure trap 12/ha with scientific method and was able to manage fruit fly trap infestation.

4. **Outcome**

Budhyabhai get high production after installation of cue lure trap and KVK waghai also guide to buried infested fruit so, eggs and larva present in fruit may control easily. So how to break fruit fly cycle understood by budhyabhai easily.

5. **Economic Impact**

Details of Technology	No. of Farmers /Demos	Area (ha)	Yield (q/ha)				% Increase in yield
			Demo			Check	
			Highest	Lowest	Average		
Cue lure trap	01	0.2	103	91	96.02	74.04	22.95

Details	No. of Farmers /demos	Area (ha)	Economics of demonstration (Rs./ha)				Economics of check (Rs./ha)			
			Gross Cost	Gross Return	Net Return	CBR	Gross Cost	Gross Return	Net Return	CBR
Cue lure trap	01	0.2	52145	192057	139912	3.69	51007	148080	97072	2.91

Success Story-4

Title: Economic Empowerment through Innovative Dairy Business in Dang district

Situation Analysis/Problem Statement

S. A. Patel, B. M. Vahuniya, H. A. Prajapati, P. P. Javiya, & J. B. Dobariya

Arjunbhai Maharubhai Gayakwad is a farmer of Village-Dokpatal, Taluka-Waghai, District-Dangs in Gujarat, educated up to M.A. and having 5.0 Acre of land. His wife is a housewife. They have Two children a son and one daughter. Somehow, they were earning their livelihood by practicing rain fed agriculture in their land. He was growing local and old varieties of Paddy, Ragi and Ground nut during Kharif season. He had two bullocks, 3 cows of local origin and 2 Crossbreed cows. 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 his family. Therefore, he was in search of some alternate sources of income.

Arjunbhai Maharubhai Gayakwad and his wife Parvatiben
Village: Dokpatal, Taluka-Waghai, District Dangs -394 730 (Gujarat)

Age: 54 years, Education: M.A., Size of Land holding: 5.0 Acre

Plan, Implement and Support

By some sources, he came to know about some welfare schemes for tribal. First of all he visited a co-operative dairy & Progressive farmers in a nearby village and he also decided to extended & good mange co-operative dairy in his village. But for that he has to convince his villagers.

Meanwhile his village, Dokpatal was adopted by KVK of the district. A series of animal husbandry activities like meetings, trainings, kisan gosthis, field visits, Diagnostic visit, Farmer scientist interaction, Film show and visit to a dairy co-operative has been started by KVK scientists Arjunbhai and other interested farmers had purchased HF cross-bred cow. They also good mange co-operative dairy and Arjunbhai himself became a secretary.

As cross bred cow was a new enterprise for them, they often faced so many troubles for proper guidance. In the beginning he was not able to maintain the proper health of his animals. He started to visit the KVK in order to get the guidance for maintaining the dairy animals. Animal scientist of KVK was impressed to see his keen interest in dairy farming. KVK scientist noted that the farmers of this village were rearing their animals with traditional methods, 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, Diagnostic visit, Farmer scientist interaction, Film show, Scientist visit to farmers field** etc to deal with the existing problems and observed a positive impact.

Output

At present, Arjunbhai has adopted scientific concepts to rear his animals as per the suggestions given by KVK scientists. He has extended his farm and today he owned 6 milking HF crossbred cows, 4 heifers and 1 calf. He has constructed a Pakka house with manger and a locally made automatic water supply device. He has purchased Chaff cutter for cutting fodders. He used local materials like simple balties, PVC pipes, valves and PVC water tank for making such automatic watering device. He uses proper concentrate feed, green and dry fodder, mineral mixture, timely vaccination, de-worming and diagnosis as per the guidance provide by the scientists of KVK through training, demonstrations and very frequent farm and home visits.

Outcome

Due to adoption of improved practice, his constant efforts and hard work and timely support from KVK and other line departments and Vasudhara dairy he could achieve very impressive growth in dairy farming as per below table.

Impact of KVK

Sr. No.	**Particulars/ Items**	**Before KVK intervention**	**After KVK intervention (2018)**
1	Animals own	3-Desi cows 2- Desi Bullocks 2 Cross breed	6- HF cows 4-Heifers 2- Bullocks 15 poultry birds
2	Vaccination & De-worming	Not proper	Regular
3	Milk production (day)	Initial 1.5-2.0 lit/day	Average-5-8 lit/cow/day he could sold milk of about 19-24 lit/day i.e. highest income up to Rs. 20000/- per month

4	Highest milk production per animal per day	1.5 lit/day	Up to 14 lit/day/animal
5	Anoestrus and repeat breeder problems	Yes	No
6	Inter-calving interval	More than 2.5 yrs	12-15 months
7	Service period	Average-120-150 days	90 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	4-5 yrs	30-36 months
11	Economics enhancement Income per month(Net profit) Income through selling of self reared HF animals	 Not good Nil	 Rs.16,000-19,000 per month Planned in future
12	Modern assets in the house because of dairy farming	Nil	Freeze – 1 TV - 1 Telephone - 1 Motorcycle - 1 Tractor-1
13	Bank loan	-----	---
14	C.B. Ratio		1: 1.94

For the success of dairy farming in tribal areas he believes that it is due to intensive guidance provide by the Scientist of KVK, Dr. S. A. Patel and Other scientist as he considering me as a family member. 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.

He feels that having good genetic potential and dairy characters of HF cross bred animals plays an important key role in dairy business. He also emphasized that after starting the dairy farming he need not to go anywhere for earning employment as well as he could make himself away from the money lender's clutch to satisfy his family needs. Now he can easily manage his all needs due to dairy farming and able to think in advance for the sake of better life.

This outstanding result of dairy farming turned Arjunbhai Maharubhai Gayakwad & his wife Parvatiben from poor farmer to a happy progressive dairy farmer. The success of dairy farming with innovative technologies in resource poor areas is a unique example to generate the employment as well as empower the tribal economy in the country.

Success Story-5

Title: Stories of value addition

J. B. Dobariy S. A. Patel, B. M. Vahuniya, H. A. Prajapati & P. P. Javiya

Name: Kalpanaben Amrutbhai Gaekwad
Village: At. Nadagkhadi, Po. Pimpri, Ta. Ahwa, Dist. Dang
Phone No: 9429784805
Age: 36
Study: 10 passes
Main occupations: farming and bakery

Inspiration and guidance

"The ridhi siddhi sakhi mandal" established by entrepreneur women. They made toss of finger millet, finger millet butter, finger millet Biscuits and many more. They started this *Sakhi Mandal* just since three months apart from this routine house work e.g. homework, agricultural work, even though they have to take care of their children and still find a time for their new small business but all the members can't do this business & finally they had started to make backers produces from finger millet. They face lot of problems but overcoming all obstacles & success in backing product business. They want to make this business in large area and in multiple locations in future.

Success and achievement

After a month of training at Aga Khan Trust Waghai and Krishi Vigyan Kendra, N.A.U. Waghai they started their new venture. For the publicity & advertisement of their business they went up to Ahmedabad. They have done marvelous business at Ahmedabad. After this local people as well as touring people aware about their new venture, they were selling their bakery product at Ahwa Dang Darbar and public places by installing of stall. The villagers, teachers, visitors etc. started purchasing their product. They receive honors and award from N.A.U. as well as from other departments. They developed marketing as well as communication skills. They receives award on 8th march i.e. in Women's Day celebration for making organic products produces from finger millet. They are now role model for after women's as well as for after SHG of Dangs district.

Other activities

They now guide after women as well as offer SHG to make backers products In their own "Apna Backers" and how to market that. Now the group was become self-dependent and makes their own bakers.

Congregation's annual benefit

Bakery products are shipped to Surat, Saputara, Ahmedabad and Mumbai. Apart from the first year, the annual turnover of Apna Bakery has reached Rs. 2.50 lakhs. Jayeshreeben Bhoye, who works in a bakery, said we used to get a daily wage of Rs. 100 as a farm laborer, now we get Rs. 200 per day from this bakery.

Ridhi Siddhi Sakhi Mandal