Cultivation of new high-yielding variety of green gram became popular among the farmers of Dang district

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

In India, green gram, also known as mung bean or moong, is a plant species in the legume family with the scientific name *Vigna radiate* L. Its principal place of origin is India, and it is primarily grown in East Asia, Southeast Asia, and the Indian subcontinent. It is the third important pulse crop farmed in India, making up approximately 16% of the nation's total pulse acreage. It has 20–25% protein-rich seeds, and occasionally, plants are chopped down and ploughed into the ground to increase the nitrogen content of the soil.

India is the world's top producer of green gram, and it is grown in practically every State. It is farmed on around 4.5 million hectares, producing 2.5 million tonnes at a productivity of 548 kg/ha, accounting for 10% of the world's production of pulses. The Government of India's third advance projections place the production of green gramme at 2.64 million tonnes for the years 2020–21.

1. Situation analysis/ Problem:

Green gram productivity in the dang district is low as a result of farmers' ineffective land management and usage of indigenous seed varieties. Due to this severe disease of yellow mosaic virus in indigenous and low yielding varieties seeds of green gram which ultimately affect the growth and yield of green gram. For growth and development, green gram needs line sowing and well-tended land. The crop production is ultimately decreased by improper cultivation using indigenous seeds that produce plants with fewer branches, slower growth, and severe yellow mosaic virus disease. The majority of farmers broadcasting green gram seed, which required more seed than was recommended, ultimately driving up the price of seed. Because most of the farmers are impoverished and tribal, they lack understanding about modern green gram varieties and modern agricultural practices.

2. Plan, implement and support:

The KVK team of scientists conducted a survey in the village to determine the socioeconomic position, adoption gap, and technology requirements of farmers. The village's development plan has been created for several TOT activities. The KVK scientists have filled in a number of technological gaps, including those related to farmers' awareness of new, improved varieties, sowing techniques, seed rate, and the use of organic fertilizers in green gram. Dr. P. P. Javiya, a scientist who specialises in crop production, decided to intervene on this point and given demonstration of new variety of green gram (GM 6) to the farmers. The green gram package of practices has been taught to the farmers. The KVK science team visited the farmer's field on a regular basis and guided them accordingly for various operations.

Tribal-dominated villages Sati, Gundiya, Zavda, and Bhadarpada are located 20 to 50 kilometres from Krishi Vigyan Kendra's headquarters in Waghai, Dist. Dangs. These villages' farmers have poor resources and undulating, fragmented land. The majority of farmers are marginal farmers. The farmers used their own seeds. Then the Krishi Vigyan Kendra intervened and trained the farmers of these villages about the land selection, new variety seed, seed rate, spacing, rouging of infected plant, use of organic fertilizer, harvesting and post-harvest handling of seeds and also provides seed of new variety Gujarat moong 6 (GM 6) of green gram, biofertilzer and novel organic liquid nutrient to farmers under the scheme of TSP-megaseed (B.H. 2068-B).

3. Output:

Economics:

Details of	No. of Area		Yield	(kg/ha)	9/ 1		
Technology	Farmers /Demos	(ha)	Demo		Check	- % Increase in yield	
			Highest	Lowest	Average		
Green gram(GM 6)	50	10	872	753	807	552	46.33

Details	No. of Farmer	Area	Economics of demonstration (Rs./ha)				Economics (Rs./			
	s /demos	(ha)	Gross Cost	Gross Return	Net Return	CBR	Gross Cost	Gross Return	Net Return	CBR
Green gram(GM 6)	50	10	20000	58127	38127	2.91	16500	39723	23223	2.41

The farmers' practices allowed them to harvest an average of 552 kg/ha of green gram, compared to the demonstration's 807 kg/ha, a 46.33 percent increase. In the demonstration green gram plot, the net profit was Rs. 38127 per hectare.



Input distribution



FLD visit at Sati





Off campus training

FLD visit at Bhadarpada

4. Outcome

As a result of intervention, Farmers now have more branches, flowering, and fruiting in the new variety of green gram (GM 6), as well as less yellow mosaic virus disease infection. Additionally, they receive more family income thanks to line sowing, the application of organic fertilizers, weeding, and other operations in accordance with scientific cultivation methods, which ultimately increased the farm family's standard of living.

5. Impact

By doing this, farmers are made aware of the significance, advantages, and productivity of the recently introduced new variety of green gram. due to the increased yield of the demonstration plots, which reached 46%. In comparison to the control plot, which had a net return of Rs. 23223/ha and a cost-benefit ratio of 2.41, the demonstrated plots' green gram yield was Rs. 38127/ha and cost benefit ratio is 291.

Higher Income through watermelon cultivation in the Dang District

Name of farmer	Shri. YogeshbhaiBhivsen
	At: Malin
	Ta: Waghai,
Village	Dist: Dang
	State: Gujarat
Education qualification	9 th pass
Land holding	3.0 ha



Situation Analysis/Problem Statement:

YogeshbhaiBhivsen is a farmer of village: Malin,Taluka:Waghai,District:Dangs in the Gujarat, educated up to 9th standard and having 3.0 ha land. Initially, he worked as a farm laborer in grape and onion fields in Maharashtra dna somehow, they were earning their livelihood by practicing rainfed agriculture in their land. Use of the local varieties of various crops could not give the proper remuneration to iahbhsegoY. Under such situation, it was difficult to sustain economic security and standard of living of his family. Therefore iahbhsegoYwas in search of farming system which gives a proper remuneration to his family.

Plan, Implement and Support:

By somehow, he came to know about KrishiVigyan Kendra, Dang. Shri. iahbhsegoY started to visit the KrishiVigyan Kendra in order to get proper guidance about scientific cultivation of nolemretawcrops. Horticulture scientist impressed to see his keen interest in scientific cultivation of horticultural crops. The Scientist of KrishiVigyan Kendra guides him properly andtells him to grow a nolemretawcrops with a scientific approach. The scientist of KVK started a series of activities *i.e.*training, scientist visit to farmer's field, *etc.*, to deal with the existing problems and observed a positive impact.Shri. nolemretaw rof dnal eht eraperpiahbhsegoYcultivation in his farm and decided to do a proper management of watermelon crops due to the continuous efforts of KVK.

Output:

At present Yogeshbhai has adopted scientific approach regarding the cultivation of watermeloncrop. 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, ShriYogeshbhai realizes the importance of uses of scientific cultivation practices and also motivated to other farmers by making awareness about this technology in terms of:

- \checkmark 30 to 40 % water &5 to 10 % fertilizer saving with increase in their efficiency.
- ✓ Increase in yield and net profit.
- \checkmark Low incidence of pest and diseases.
- ✓ Reduce the spray of Insecticide.



Watermelon field

ડાંગ જિલ્લાનાં મલીન ગામનો મહેનતકશ

ુપબાના વાડાના વાઉ વ્યુ આવ્યું, ઠાઢસા બસો રૂપિયાની મજુરી કરતા કરતા અનુભવ્યુ, કે જો તેની બાપિકી જમીનને સુધારીને પરસેવો પાડવામા આવે, તો મજુરમાંથી માલિક બની શકાય છે, અને

આ વિચાર સાથે તેણે તેના મહારાષ્ટ્રીયન શેઠ પાસેથી દસ હજાર રૂપિયા ઉધાર

રાઠ પાસવા દસ હજાર રૂપપા ઉપાર ઉછીના લઈ, મલીનની વાટ પકડી. શરૂઆતમા જમીન સુધારણા સાથે એક ગાય લઈ પશુપાલનને પણ સાથે રાખી, રાતદિવસ પરિવારજનો સાથે કાળી મજુરી કરીને, તેણે એકમાંથી સાત ગાયો કરી. પોતાની જમીનમા ડાંગર,

ચણા, અને રીંગણાની પરંપરાગત ખેતીને સ્થાને પ્લાસ્ટિક મલ્ચિંગ, ડ્રીપ



Diagnostic visit

મલીનનો મહેનતકશ યુવાન મજુરમાંથી માલિક બન્યો મધમીઠા તડબૂચની આધુનિક ખેતી અપનાવી ૮૦ દિવસમાં ૮ લોખનો નર્ફો મેળવતો ડાંગનો ખેડૂત

• વારસલ્ટામ સમાચાર • મહ્ત વૈધ્ધાવ ડાંગ મહારાષ્ટ્રની સરહદને અડીને આવેલા ડાંગ જિલ્લાના વધર્ઠ તાલુકાના મલીન ગામનો યુવાન, દ્રાક્ષ અને ગંળાનીના વાડીમા ખેતમથુટ્ટ તરીકે મહારાષ્ટ્રના ખેતરો ખુંદતો હતો. જ્યા મર્યાદિત જમીનમા તેથ્ર ઓછા પાજ્ઞીએ આધુનિક ખેત પહેતીના પરિશામે સફળતા મેળવતા ખેડૂતોને જોઈને, મનમાં જ મજુરમાંથી માલિક બનવાનો કેકલ્પ કર્યો. અને તેને સાકાર કરવા સંકલ્પ કર્યો, અને તેને સાકાર કરવા માટે ફરી એકવાર વતનની વાત પકડી. મલીન ગામના યુવા ખેડૂત યોગેશ ભિવસેને ચાર હેક્ટરમા માત્ર ૮૦ ાયવસત્ત ચાર હક્ટરમાં માત્ર ૮૦ દિવસની તડબુચની ખેતી કરીને, બધો ખર્ચ કાઢતા અંદાજિત રૂપિયા આઠેક લાખનો નફો રળીને ખેતી-બાગાયત વિભાગના અધિકારીઓ, કૃષિ કેન્દ્રોના તજજ્ઞો, અને અન્ય ખેડુતો માટે પ્રેરણાસ્ત્રોત બન્યો છે.

પ્રરહાસ્થાત બન્યા છ. આધુનિક ખેતીને સમર્થન આપતા આ યુવા ખેડુતે એક મુલાકાતમા જણાવ્યુ હતું કે, પરંપરાગત ખેત પદ્ધતિમા વધુ મહેનતે પણ, જોઈએ એવુ વળતર નહીં મળવાને કારણે, ખેડુતો એ રીથી વિપાય કરા જાય તે જ્યારે ખેતીથી વિમુખ થતા જાય છે. જ્યારે કૃષિ વૈજ્ઞાનિકોના માર્ગદર્શન હેઠળ, આધુનિક ખેત ઉત્પાદન ખેડૂતોને ફરીથી

ચુવાન મજુરમાંથી માલિક બન્યો ખેતી તરફ વળી રહ્યા છે. ઇરીગેશન જેવા નવા આયામો ઉમેરી, માસા પરંચ વળા રહ્યા છે. મલીન ગામે બાપદાદાની ખડકાવ, ડુંગરાળ જમીનમા માત્ર ઘાસ થતુ હતુ. પરંતુ યોગેશે મહારાષ્ટની દ્રાક્ષ અને ડુંગળીની વાડીમા પ/૭ વર્ષ, દોઢસો

ઓછા પાણીએ ચાર હેક્ટરમા તડબુચ કરીને, સફળતાના બીજનુ વાવેતર કર્યુ.

૪ ૩ ડિગ્રી તાપમાન વચ્ચે પોતાના મલીનના ખેતરમા ચર્ચા કરતા યોગેશ ભિવસેને જણાવ્યુ કે, આહવાની ખેતીવાડી અને બાગાયત કચેરી સાથે, વઘઇના કૃષિ વિજ્ઞાન કેન્દ્રના તજજ્ઞોના માર્ગદર્શનને કારણે, તેણે મલીનમા ચાર હેક્ટર જમીનમા તડબુચની ખેતી કરીને માત્ર ૮૦ દિવસમાં જ ૧૨૦ ટનથી માત્ર ૮૦ ાદવસમા જ ૧૨૦ ટનવા વધુ તડબુચનો પાક લણી લીધો, જેને ૧૧ હજાર રૂપિયાના ભાવે વેપારીઓ દ્વારા ખેતર બેઠા ખરીદી લેવાયા. આજે યોગેશ પોતે તો તડબુચની ખેતી કરે જ છે, પણ સાથે આસપાસના ગામોના પેટ્રોને પણ આ થયે આસપાસના ગામોના ખેડતોને પણ આ માટે તૈયાર કરી રોકડીયા પાકથી પ્રગતિ તરફ વળી રહ્યો છે.

Press release

Outcome:

Due to adoption of scientific cultivation practices, his constant effort and hard work and timely support from KVK & NGOs and another line department, he could achieve very impressive growth in scientific cultivation of watermelon crops.Press media also note down his efforts towards the watermelon crop cultivation.

Impact

Before kvkinterventationshriYogeshbhaiworked as a farm laborer in other state and grow only traditional crops like Paddy and Gram. Yogeshbhai'snet woth per annum is hardly Rs50000.00 toRs.150000.00 (approx.) and after kvk intervention his net worth per annum is 5.00 to 8.00 lakh(approx.).

Sr. No.	Crop name	Production (t)	Area (ha)	Cost of cultivation (Rs.)	Gross return (Rs.)	Net return (Rs.)
	Year : 2021					
1.	Wateremlon	87.5	2.5	175000	700000	525000

	Year : 2022					
2.	Wateremlon	120	4.0	280000	1100000	820000
	Year : 2023					
3.	Wateremlon	100	3.0	210000	650000	440000

For the success of watermelon 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 Yogeshbhaifrom poor farmer to happy progressive farmer. The success of watermelon cultivation in resource poor areas is a unique example to generate the employment as well as empower the tribal economy in the country.

Increase standard of living by Mushroom cultivation

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

1. Situation analysis/ Problem:

Mushrooms are gradually becoming popular as they are rich in minerals, vitamins, very low on fat and sugar. They are good source of protein and contain many essential amino acids. It is also known to have medicinal value and certain varieties of mushrooms can inhibit growth at cancerous tumor. Mushroom production is labour and management intensive. There is ample scope for mushroom industry to thrive successfully and can become a lucrative business for the unemployed rural youth, self-help groups, farm women who are in search of viable activities which are promising and giving good returns and an additional income source for the farmer. Mushroom cultivation can effectively utilize the agro residues for production of protein rich food and plays crucial role in management of agro residues. Mushroom cultivation is an eco-friendly activity, as it utilizes the wastes from agriculture which are available in huge quantities in every corner of the state and in turn produces fruiting bodies with excellent nutritional and medicinal attributes.

In dang district, production of mushroom is very low and many times attack of pest and disease faced by farmers. Due to sever problem in cultivation practices affect the growth and yield of mushroom. Improper sterilization and inappropriate mushroom unit ultimately reduce the yield. Most of the farmers are tribal and resource poor, so they have not knowledge regarding scientific cultivation practices of mushroom.

2. Plan, implement and support:

The 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 preparing mushroom unit, cutting of straw, day by day activity because if mushroom spawn are not filled within week than chances of growing deformed mushroom are more. The scientist, Mr. Bipin M. Vahunia, (Plant Protection) decided to intervene on this point and given demonstration of mushroom to the farmers. The team of KVK scientist made frequent visits of the farmer's field and guided them accordingly for various operations.

	Activity	Bebeficiary
Mushroom kit	Adaptive trail FLD	38 Farmers (Sajupada, Chinchod, Rajendrapur, Dokpatal)
	5 Days Vocational Training	20 Farmers of chinchod
Training	1 day Training	18 Farmers of sajupada, Rajendrapur, dokpatal
	1 off campus Training	30 farmers of dang district

Extention activity	Different extension activities like method demonstration , visit mushroom unit, phone
	calls, whats up message etc are carried out during this time.

3. Output:

Economics:

	N. CE		Economics of demonstration (Rs./ha)				
Details	Details No. of Farmers /demos	Demonstrat - ion	Gross Cost	Gross Return	Net Return	CBR	
Oyster Mushroom	38 (5 kg / farmer)	10kg/1kg spawn	300	1600	1300	5.38	

Farmer practices result in inconsistent and perhaps nonexistent yield. Lack of information and improper handling techniques increase the likelihood of failure. However, after ongoing monitoring, our KVK gave farmers training and demonstrations, and they now receive 10kg of output for every kg of spawn planted. After investing 300, the net benefit was 1300, making the CBR 5.38.



Off campus training



Kit distribution





visit

4. Outcome

Initially they used to prepare 20-30 kg of mushroom per month. After training and guidance from our KVK, she is now producing 130-140 kg of mushroom per month. Now she is selling fresh mushroom both locally and preparing powder from mushroom and try to sell them too. They expand their mushroom cultivation after getting proper guidance.

5. Impact

Now, a few of the farmers among them have begun to sell fresh mushrooms at melas held by governmental and non-governmental organizations. To begin with, they trained several SHG members. Three to four members began producing mushrooms on a modest scale after receiving guidance from her.

Dairy Industry: A regular income generating business for tribal farmer

Situation Analysis/Problem Statement

Govindbhai Babajubhai Machhi is a farmer of Village- Uga-chichpada, Taluka-Waghai, District-Dangs in Gujarat, educated up to 10th standard and having 2.2 Acre of land. His wife is a housewife. He has 45 year experience in farming. They have Two children. 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, 2 cows of local origin and 1 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 economic security and standard of living of his family. Therefore, he was in search of some alternate sources of income.





Govindbhai Babajubhai Machhi and his wife

Village: Uga-chichpada, Taluka-Waghai, District Dangs -394 730 (Gujarat)

Education: 10th., Size of Land holding: 2.5 Acre

Plan, Implement and Support

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

Meanwhile his village, Uga-chichpada 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. Govindbhai B. Machhi and other interested farmers had purchased HF cross-bred cow. They also good mange co-operative dairy.

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, method demonstration, Diagnostic visit, Farmer scientist interaction, Film show, Scientist visit to farmers field, group meeting, frontline demonstration** etc. to deal with the existing problems and observed a positive impact.

Output

At present, Govindbhai 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 4 milking HF crossbred cows, 3 heifers and 1 calf. He has constructed a Pakka house with manger and a locally made automatic water supply device. 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, artificial insemination and diagnosis as per the guidance provide by the scientists of KVK through training, demonstrations and very frequent farm 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	2-Desi cows	4- HF cows
		2- Desi Bullocks	3-Heifers
		1 Cross breed	2- Bullocks
2	Vaccination & De-worming	Not proper	Regular

3	Milk production (day)	Initial 2-3.5 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	3 lit/day	Up to 14.5 lit/day/animal
	per day		
5	Anoestrus and repeat breeder problems	Yes	No
6	Inter-calving interval	More than 24-30 months	12-16 months
7	Service period	Average-120-150 days	90 -110days
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)	Not good	Rs.16,000-22,000 per month
	Income through selling of self reared HF animals	Nil	Planned in future
12	Modern assets in the house because		Freeze – 1
	of dairy farming		TV - 1
		Nil	Mobile - 1
			Motorcycle - 1
			Tractor-1
13	Bank loan		
14	C.B. Ratio		1: 1.59

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 Govindbhai Babajubhai Machhi & his wife 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 a regular income generating business as well as empower the tribal economy in the country.

Adoption of integrated farming system through proper water harvesting

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1. Situation analysis/Problem statement:

A tribal farmer of Chikhli village of dang distric Shri Sukiravbhai Lahnubhai Gaikwad has provided a noble example of how agricultural land can be irrigated even without the use of any kind of chemicals. Chikhli village is a hinterland village in Lavachali group panchayat in Subir taluk of Dang district. The village has a population of around 1000 people including Bhil, Kunbi etc. 80 percent of the people are farmers, rest of the families are migrant labourers. Today more than 50 farmers of the village are engaged in organic farming only. In their fields they grow paddy (rice), groundnut, mung bean, pigeon pea, peas, maize, finger millet (ragi), Sorghum black gram etc. He first adopted natural farming in his paddy crop. In this village water shortage is a major problem.

2. Plan, Implement and Support:

Nine years ago they were using chemical fertilizers and pesticide in their farming, but with the guidance of local level voluntary organization, Krishi Vigyan Kendra, ATMA Project of district agriculture department, etc., they have abandoned chemicals and adopted completely natural farming. In order to protect his farm from the chemical, Suki Rao Bhai himself made a nick near the farm and diverted the water to the wasteland ahead. Thus, he saved his farm from chemical contamination by stopping the chemicals coming from other farms. With the help of training, awareness programme and other extension activities of KVK dangs, Suki Raobhai has always cultivated in a planned way, so he rarely suffers losses in farming. Also, he has become an example to dangs farmers in terms of natural farming. Instead of contenting himself with paddy, groundnut, finger millet crops, he has also adopted a substantial income from agriculture by growing mango trees. With the help of Krishi vigyan kendra, waghai, he has raised more than 100 mangoes of different varieties like saffron, langdo, dasheri, rajapuri *etc.* With the help of KVK, Waghai he has formation one organization as 'Shri Prazpan Gram Vikas Mandal'. Now there are 297 members in this organization. Under the auspices of this organization, all the members work together for the preservation of natural resources and overall development in the village.



3. Output:

He has stopped using any kind of synthetic chemicals in their land and adopted only natural farming and has increased their farm income. His farming land was steep. He painstakingly leveled it and made the barren land fertile. They use only organic fertilizers like cow dung, vermicompost and biocides in all their land. Today, seeing the success of their farming, many farmers in the village have now switched to natural farming. They train farmers in Dangi language itself, so farmers quickly understand and get inspired to practice natural farming. Also, they have shown efficient use of water in agriculture. Suki Raobhai has been earning more than two lakhs annually from agriculture. Also, it is truly remarkable that they have earned one lakhs of rupees from the sale of mangoes. With this water conservation effort, now even if 15 motors are placed in the village well at once, there is no shortage of

water. Earlier, water was barely available even at 60 feet. Cultivation of different types of fishes in resourcefully constructed farm pond. Water reaches the fields of 23 farmers of Chikhli village through this pipeline by creating irrigation facility from the farm pond.



4. Outcome:

The water available from the check dam repair has been effectively used in agriculture. Due to water conservation the infertile land is shown to be planted with crops. Many rural people are leading by Sukiravbhai Lahnubhai Gaikwad the way to make agriculture chemical free. As water is available in agriculture, there is no need to buy and bring vegetables from outside the village. Always practices planned farming so there is hardly any loss in farming. He has trained more than 200 farmers in Dangs district on natural farming as a master trainer. In the first year production of paddy crop decreased, but still he made up his mind not to use any kind of chemical. Then from the second year itself he started getting good production in natural farming. So my courage grew and other farmers in the village also started coming to see his natural farming. Suki Raobhai has today become committed to protecting his farm as well as the soil of all the villages of Dangs against the scourge of chemicals. He says, he himself do not apply any kind of chemical fertilizers or pesticides to his farm land and also convince many other farmers not to poison the mother earth. He inspires many other farmers as a progressive farmer. Now the entire village grows abundant vegetables due to the availability of potable water. So the people of the village do not have to bring any vegetables from outside.



5. Impact:

By integrated and natural farming system the standard of living of the farmers is significantly improved. Although he initially suffered financial losses due to the decision of natural farming, but due to one of his virtues, he has defied the losses and is now making substantial profits. Farmers likes Sanduribehan rambhai mahala, Tulsiben anadbhai choudhary, Avshubhai maniyabhai choudhary, Rameshbhai gahubhai ahir, Vanubhai choudhary, Soniabhai tanubhai choudhary etc. of their village have now started using natural farming instead of conventional farming. Due to the water storage structure, 20 bores of the village were also recharged. The development of water harvesting works in the village has led to the development of agriculture and as a result migration of villagers was stopped. He has reared different types of fish like Meergal, Pangasius, Rahu, Common craft in this farm made with his resourcefulness. Thus, apart from agriculture, they have also generated additional income from fisheries. The water used for bathing near the well reached to mango through a small channel." Thus, without effort, the mango of Sukiravbhai blossomed and its fruits were obtained by Sukiravbhai.

