



JAMNALAL  
KANIRAM BAJAJ  
TRUST





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# Glimpses of JKBT, Sikar Programme Area



Figure in parentheses () represents the achievements of the year under reporting i.e. 2017–18, all other figures represents the cumulative progress over the years.



## Diversified Agro Based Interventions

5,938 Acres Horticulture Plantation (227)  
 4,573 Families Adopted Kitchen Gardening  
 2,065 Acres Under Vegetables/Mini Drip with Overhead Tank/Cash Crops /Floriculture (80)  
 4,598 Families Adopted Natural Farming  
 6,082 Acres Crop Demonstrations of New and High Yielding Varieties  
 335 Azolla Units Established  
 305 Farmer Clubs, Youth Clubs, Village Development Committees Formed (50)  
 144 Onion Storage Units Installed  
 138 Grameen Fridge Constructed  
 3 Poly Green Shed Net Set Up  
 291 Cattle Feeding cum Drinking Water Systems Constructed (35)  
 506 Power Operated Chaff Cutter Installed (12)  
 6 Honey Bee Keeping Unit Set up  
 6 Agro-Product Processing Units Established



## Women Empowerment

912 Self Help Groups Formed (30)  
 1,2798 Families Benefited (426)  
 ₹5.91Crore Saving (₹1.47 Crore)  
 2,780 Families Benefited under Rural Enterprise  
 3,910 Families Benefited under Indigenous Cows Programme



## Promotion of Non-Conventional Energy Sources

1,473 Biogas Plants Constructed (40)  
 225 Domestic Solar Light Units Installed (8)



## Soil–Water Conservation and Management

38 Ground Water Recharge through Bore well/Open Well (36)  
 52 Farm Pond/Percolation Tank and Check Dam Constructed  
 817 Roof Rain Water Harvesting Structures Constructed (20)  
 1,235 Acres Uncultivable Land Developed through Land Levelling (50)  
 3,621 Acres Micro Irrigation Systems Installed (78)



## Skill Training and Capacity Building Programme

1,920 Training and Capacity Building Programme Conducted (65)  
 12 Projects completed by School Children and under Design For Change (10)  
 75 Families benefitted under Neediest Families Upliftment Programme (53)



## Our Partners

- Local Community
- Government of Rajasthan
- Kamalnayan Jamnalal Bajaj Foundation (KJBF)
- National Bank for Agriculture and Rural Development (NABARD)
- Maharana Pratap University of Agriculture and Technology (MPUAT)
- Nehru Yuva Kendra, Sangthan, Ministry of Youths Affairs and Sports, Govt. of India
- Aravali, Jaipur
- Unnati, Ahmedabad
- Krishi Vigyan Kendra, Fatehpur
- International Horticulture Innovation and Training Center, Jaipur
- Lead Bank and Local Banks, Sikar

## HISTORICAL LINEAGE

# KANIRAM BAJAJ



Kaniram Bajaj was a farmer in the small village Kashi-ka-Baas in Sikar District of Jaipur State of Rajasthan. Though of ordinary means, Kaniramji was a man of self-respect and did not compromise on principles even in adverse circumstances. He was hard working and courageous and would cover vast distance on the back of camel, even standing on one leg. Once he picked up a quarrel with Rajput Thakkur who drew out a sword to settle the matter. But Kaniram did not yield and stood undaunted and unruffled. Eventually, the Rajput accepted his mistake and apologised. This was the stuff Kaniramji was made of. His wife, Birdibai was a pious and devoted lady who bore him three son of whom Jamnalal was second.

# JAMNALAL BAJAJ

1889 ■ 1942



*Freedom fighter, social reformer, humanitarian and a devoted follower of Mahatma Gandhi, Jamnalal Bajaj was born in Kashi-ka-Bas in Rajasthan on November 4, 1889. In 1920, at Jamnalalji's request, Gandhiji accepted him as his 'fifth' son. In Gandhiji's own words;*

*"Jamnalalji dedicated himself and his resources, without reservation. There is hardly any activity of mine in which I did not receive his full hearted co-operation and in which it did not prove to be of the greatest value. He placed at my disposal his ample possessions. He became a guardian of my time and health and he did it all for the public good."*

From an early age, destiny carved out a unique role for young Jamnalal. At the age of five, he was adopted by Shri Bachhraj Bajaj, a wealthy merchant in Wardha. Throughout his life, he was a staunch follower of Mahatma Gandhi who also inspired Jamnalal to initiate Hindusthan Sugar Mills in 1931. Jamnalal was the founding father of the present-day Bajaj Group of Companies.

He joined in Gandhiji's programmes and India's freedom struggle in 1915. He was elected Treasurer of the Congress party in 1920. Jamnalalji took active part in the Non-Co-operation Movement in 1921, the Salt Satyagraha in 1930 and the individual Satyagraha at Nagpur to uphold the honour of our National Flag. He also led the Jaipur Satyagraha in 1939. In all he was imprisoned for over five years.

It was in implementing the Constructive Programme of Gandhiji that Jamnalalji's contribution was of an enduring nature. As inspired by Gandhiji, he opened the doors of his family temple, the Lakshmi Narayan Mandir at Wardha, to all, including Harijans in 1928. It was the very first temple in India to welcome Harijans. Jamnalalji established the Gandhi Seva Sangh in 1921 and was its Founder-President. Also Chairman of the All-India Khaddar Board. He was also closely associated with the All-

India Village Industries Association, Talimi Sangh and Hindi Sahitya Sammelan. He not only played an active part in establishing and conducting these organisations, but also supported a large number of workers who dedicated themselves to these activities.

Jamnalal made Wardha the centre for Gandhiji's economic and social development programmes. He established the Satyagraha Ashram in Wardha in 1921. He brought Vinoba Bhave to the Wardha Ashram to nurture it into national institution. In 1936, Gandhiji wanted to shift to a rural habitat. Jamnalal then offered a large piece of his land in Segaon to build his Ashram which is known as Sevagram. Bajajwadi in Wardha was like a home for all eminent national leaders visiting Gandhiji. The meetings of the Congress Working Committee were also frequently held there. The famous Quit India resolution was adopted by the Congress Working Committee at its meeting in Bajajwadi in 1942. Jamnalalji was thus the main pillar of strength to Gandhiji. Gandhi himself admitted that "It was an easy thing for me to rely on Jamnalal to carry out my wishes. No one has identified himself so much with every one of my activities as he". On 11th February 1942, at the age of 53, Jamnalalji passed away suddenly.

# CHAIRMAN'S MESSAGE



*"I am feeling elated that people of Sikar are coming forward and taking meaningful steps for their sustainable development."*

**- Shishir Bajaj**

My grandfather Jamnalal Bajaj wrote on Lakshmi Pujan Day, October 20, 1922, Prayed Goddess Lakshmi to grant me wisdom to carry on business with honesty and grant me prosperity in business and the good sense to utilize it for the benefit of the country and the afflicted people. His charity knew no boundaries; calculations indicate that his total charities added up to 5 times the value of the wealth which he originally inherited.

To carry forward philanthropy and legacy inherited, a small beginning made in 11 villages has reached to 300 villages in Sikar district. Rural development is the process of improving the quality of lives and economic well-being of the rural community. To lead this development we are striving to manage natural resources in partnership with community. We are making successful efforts to address immediate needs of the community through co-designing and co-implementation of the interventions in consultation with the community. This also has socio-economic and environmental impact. I am happy to share that people of Sikar are coming forward to take charge of their own development through meaningful steps.

Efforts exerted for women empowerment through entrepreneurship development among 12,798

members of 912 Self-Help Groups (SHGs) has not only improved their social and economic status but also strengthened their decision making power and their say in household as well as farming decision makings. They have identified and established 123 different types of need based income generation activities.

An ancient way of farming was a sustainable and eco-friendly way but in past few decades excessive use of chemicals in farming has adverse effect on soil productivity and probing a health risk to mankind. Decline in agriculture income has made the economic conditions of farmers even worst. Natural farming is the best option to revert the situation. To address the availability of input for Natural Farming Indigenous breeds of cows were promoted. 3,910 families in 226 villages supported for rearing indigenous breed of cow are reaping its benefits in terms of availability of farming inputs and dairy income. Tapping a need to establish agro based enterprises, 6 such enterprises were developed which are owned by the local community.

4,598 families in Sikar has been successfully adopting Indigenous cow based natural farming Significant results have been achieved with

substantial reduction in input cost, increase in quality yields, appropriate price and increased fertility of soil, savings in volume of irrigation water by natural way of moisture retention using locally available resources.

Biogas and solar energy have been proved cost effective and environment friendly alternative energy resources. The slurry from Biogas acts as effective natural manure for farmers. I feel proud to note that 1,473 families have successfully adopted biogas plants which is largest among all the districts in Rajasthan state.

With our support, progressive farmers in Sikar have achieved increased income with adoption of natural farming and have established network of farmers for sharing experiences and learning. These farmers are also sharing their enriched experiences as resource persons to promote the best practices for the larger benefit.

There is great potential of developing national network of such innovative and progressive farmers which can bring prosperity to distressed agrarian community. It is necessary to adopt climate resilient cropping pattern and grow more number of trees on farming lands to cope up the climate change effects. JKBT is promoting

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horticulture as well as forestry plantation with this concern. Farmers are supported for shifting their cropping patterns and adopting water harvesting measures as well as for judicious use of natural resources.

There is a tremendous potential to develop our natural and human resources. We aim to develop these resources for strengthening the socio-economic condition of the community in Sikar District with active involvement of all the stakeholders.

I would like to extend my heartfelt acknowledgment to the local community and all the stakeholders who have supported and joined our journey of bringing prosperity to the people of Sikar district.



# FOREWORD



*"I am happy to share with you that with the active support of our Trust, our Sikar programme villagers and youth have been actively engaged to resolve the problem of water by using their traditional wisdom."*

**- Kushagra Nayan Bajaj**

Trustee

The economy of Sikar in particular and Rajasthan in general is largely agrarian in nature and with major portion of the state being parched, the risk and instability in agricultural production and productivity are quite high. A balanced agricultural growth is pre-requisite for inclusive growth, reduction of poverty levels, development of the rural economy and enhancing of farm incomes.

Addressing the need of availability of water for drinking, household use as well as for agriculture is of prime importance to the communities we work with. In many areas the ground water available is not potable because of high salinity and fluoride content. We have initiated construction of Roof Rain Water Harvesting structure which is proved as very cost effective, one-time investment and permanent solution to have pure, fresh and safe drinking water at the door step. Our active efforts for harvesting rain water for recharging ground water table has significantly shown impact on agriculture output.

As envisioned by Hon. Prime Minister, there is a tremendous potential to develop India's human and natural resources through participatory approaches to doubling the income of farmers from agriculture.

Due to excessive use of chemical fertilisers, insecticides and pesticides, human health, cattle health and health of soil is increasingly deteriorating. To overcome these problems, we are reviving our ancient sustainable agriculture practices like indigenous cow based Natural Farming. Traditional cropping pattern is also one of the major problems the agrarian community has been facing since decades. The way out to overcome this problem is demand driven and market oriented diversified cropping pattern. Continuous training, demonstrations, exposure visits and capacity building are integral and indispensable parts of the development process to empower the farming community. Need based innovative and integrated agricultural development interventions were identified through Participatory Rural Appraisals (PRAs), encouraging results are being achieved with active participation of the community in all stages of the development interventions.

As a result of our continuous training and capacity building programmes, a total 4,598 farming families have shifted from chemical farming to indigenous cow and locally available biomass based Natural Farming. 5,938 families have shifted from traditional cropping pattern

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to market driven horticulture plantations. To fulfil the vegetables requirement of families and surplus to sale in the market, 6,638 families have successfully initiated vegetable farming and Kitchen gardening. 6,417 farmers shifted from traditional crops to new integrated diversified cropping pattern. 1,091 farmers have adopted innovative technologies like Grameen fridge, cattle feeding cum drinking water systems, Onion storage, Chaff cutters, bee keeping, shed net etc. For efficient and judicious use of available ground water, we have promoted 3,621 micro irrigation systems. Looking to the ground water depletion scenario the village community has come forward and completed 38 ground water recharge systems through bore wells and open wells with our technical and financial support. Similarly, 52 farm ponds/ Percolation Tanks and Check Dams have also been constructed. To make above interventions participatory, active involvement of all the stakeholders in planning, implementation and management of development interventions, we have formed and strengthened 305 village level institutions like Farmers Clubs, Youth Clubs and Village Development Committees. With these integrated efforts overall 15,514 acres of land of 26,319 families benefited in 300 villages in Sikar

Undulating fallow land is lying ideal without cultivation, in partnership with farmers, we have developed 1,235 acres of uncultivable land and brought under cultivation through land levelling intervention. There is a need to initiate collaboration with Govt of Rajasthan for the larger coverage for the benefit of farming community.

It is globally said that when women and men

have relative equality, economies grow faster. In Sikar, capacities of women have been continuously built through SHGs so that they could raise their voice for achieving overall development of the community. 12,798 families have joined towards their self-empowerment through formation of 912 Self Help Groups. Their combined saving has reached up to Rs. 6 Crore. 6,690 families have initiated 123 types of rural enterprises including rearing of indigenous cows under which their additional monthly income has increased up to ₹ 6,500.

The need-based interventions has boosted the confidence of farmers and developed direct consumer linkages for naturally grown food. For example, Bansi wheat variety promoted among the farmers has been in great demand because of its taste and farmers have realised increased income by cultivating this variety. Similarly, several clusters of Natural Farming have been developed.

Along with socio-economic development, cleanliness drive is essential for healthy and happy society. As inspired by the Honourable Prime Minister, we are in the continuous process to accomplish "Swachh Bharat Abhiyan" in our programme area through active involvement of the villagers. Our youth Self Help Group members, women members and Youth Mandals are regularly involved in cleanliness drives in the villages of Sikar programme area.

I wish to thank all our villagers, team members, village volunteers and all the stakeholders for their unstinted efforts and cooperation to reach out to 300 villages with coverage of 72,299 families and 3,61,495 people in Sikar District.

# P R E A M B L E



*" My every trip to Sikar inspires me as I feel I am returning to my Matri Bhumi (Home Land)"*

**- Apoorv Nayan Bajaj**

Trustee

## Warm greetings !

Community of Sikar has diverse perspectives as they withstand the extreme adverse situations. Making effort to help them prosper is a co-learning process for me.

Rajasthan receives low and variable rainfalls and thereby is prone to droughts. There was even less rainfall than average since last 2 years. Problem of availability of water for drinking, household purpose and for agriculture has been intensified making the farming economy more vulnerable. Ground water table is rapidly depleting with most of the district being declared a dark zone where no more wells/tube-wells are allowed to be dug for irrigation purpose. Salinity problem also exist in many areas making agriculture very difficult. People have to purchase water for drinking from neighbouring villages at the rate of ₹.700 for 5000 lit of water which is sufficient for family of 5 to 7 members for 8 to 10 days. The poor families suffer most as they could not afford to buy water at this high rate.

It was essential to articulate local wisdom and relevant technologies to resolve water scarcity. The farmers were sensitized for collective efforts

for recharging ground water table through construction of 38 rain water harvesting structures. Villagers used their own intelligence to designed and constructed water recharge structures at common point of the village, harvesting roof rain water of the adjoining houses for recharging common bore well. Omprakash living in the village Ramsinhapura shared that, "Recharging of bore well with roof rain water had reduced the concentration of total dissolved solids from 2600 ppm to 1900 ppm." Many of farmers reaped the benefits of water recharging for farming. Sukan Chand of village Sinhhhot Chhoti is one of them. He shared that, "I could cultivate vegetables as water was made available for irrigation through bore well recharge." These efficient recharge structures have a potential of resolving water crises and can be replicable at state level.

Challenges today are far more wide spread and severe than any one organization or group of individuals can solve. Only the collective efforts of the entire community and village institutions can lead us towards meaningful and sustainable transformations. Building capacities of the community is the key for sustainability of any intervention. Jamnalal Kaniram Bajaj Trust always been in a role of inspiring people to come forward

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and contribute for their holistic development. JKBT also provided technical and financial support wherever needed. Women and youth are now contributing for sensitizing community on the prevailing issues like harvesting rain water, saving water through judicious use, etc and making them aware of different government schemes.

A great awareness and education of natural farming practices needs to be inculcated among the majority of farmers. Padmashri Shri Subhash Palekarji conducted his first workshop for about 500 farmers in Sikar District in 2012. Since then JKBT has been conducting training and demonstration of Zero Budget Natural Farming in Sikar. Over 4,598 farmers adopting techniques of zero budget natural farming have reduced their input cost and improved their profits by changing cropping patterns and growing indigenous varieties of seeds. Revival of traditional varieties pulses (Gauri Moth, Gram, Green Gram), vegetables (Spinach, Cluster Bean, Tomato, Deshi Kachari etc.), Pearl Millet (Jakhana, Dodsar) and Wheat (Bansi, Sharbati) have resulted in doubling income and reduction in risk of crop failure for the farmers due to adverse weather conditions. These varieties also have increased demand in neighbouring districts by the consumers.

It was essential to help farmers building direct consumer linkages to gain profitable rates. Farmers were facilitated to organize themselves into committee and Grain festival was organized in collaboration with NABARD for making an effort for forward linkages. The results are quite inspiring. Farmers gain confidence that they can decide over the rates of their farm produce.

On the other hand consumers became aware of health benefits of consumption of naturally grown food. We are thankful to District Collector Shri.Nareshkumar Thakral for motivating farmers through personal interactions.

Strengthening the livelihood of poor families is our prime desire. Such families were identified through wealth ranking exercise of participatory rural appraisal (PRAs). Village level institutions helped us to reach out poorest of poor families. We could reach out to 53 needy families who are supported for having income generating activities with support for purchase of accessories like Harmonium, Carpentry Tools, Pottery Tools, Welding Machines, etc. Few of them were also assisted for medical access and having woollen cloths to protect them from severe cold.

Design for change is a unique initiative where the children gain a confidence that they can lead a desire change and achieve their dreams. Children from various schools participated in an "I CAN" gathering organized at Sikar. Their enthusiasm and achievements were quite encouraging for us.

We are thankful to Aravali for helping us in developing perspective plan for JKBT. I would like to render my sincere thanks to the community of Sikar, Government of Rajasthan, National Bank for Agriculture and Rural Development, Maharana Pratap University of Agriculture and Technology Udaipur, Nehru Yuva Kendra and Lead Bank- Panjab National Bank for joining the journey of co-designing the process of sustainable development.





# Overview of Interventions

as per the last census (2011) is 26,77,333 comprised 13,74,900 males and 13,02,347 females. Two third of the population (76.32%) resides in the villages, composed of males 10,47,469 and 9,95,958 females with a sex ratio of 951 females per 1,000 males. The district experiences climatic extremes with very dry and hot summers and intensely cold winters. The average maximum and minimum temperatures recorded as 48°C and 0°C, respectively. In most of the years, rainfall is merely 466 mm which makes it one of the most water scarce districts of Rajasthan.

With poor and scanty monsoon, the agriculture remains mainly rainfed. The major crops grown are Pearl Millet, Green Gram, Moth Bean, Cluster Bean (Gawar), Sorghum etc. During Rabi season, Wheat, Gram, Mustard and Barley are grown. Bore wells are the major source of irrigation in the district. However, rapid withdrawal of ground water from bore wells and frequent deepening of them have led to drastic reduction in the ground water levels.

Agriculture is the mainstay of the people of the area. Dairy farming is also common among the more progressive farmers of the district. The major issue of the region is scarcity of water, especially drinking water and water for irrigation. People of the area are not well conversed in water harvesting techniques. Looking to the potential, JKBT has initiated 'Roof Rain water Harvesting Structures' with people's participation. Another major need of the area is for conservation structures for irrigation.

## The Approach

JKBT is realizing the value of sincere relationships and that of wants to help communities build relationships on mutual trust and cooperation so that they enjoy strong community spirit and build community institutions in order to meet their community needs. The needs and necessities of the poorest of the poor must always be given first priority. JKBT's various engagements and interventions are based on following approach :

- Build long-term relationship with the local community based on mutual respect, understanding, affection and trust. For this to achieve, regular individual, group based and community level interactions are made to build foundation for meaningful interventions for lasting results
- Revive community spirit and empower community to create new and responsive institutions to meet common objectives

## The Beginning

Jamnalal Kaniram Bajaj Trust, Sikar was established in Sikar district of Rajasthan in 1963 in commemoration of the memories of Shri. Jamnalal Bajaj and his father Shri. Kaniram Bajaj. The Trust was founded on a deep rooted commitment to contribute significantly towards a social well being of the less privileged. Since its inception, Jamnalal Kaniram Bajaj Trust has been working with indefatigable commitment for the uplift and betterment of the rural community of Sikar district in Rajasthan.

## The Programme Area

Since 1963 JKBT has been steadily progressing towards its goal of an empowered and efficient rural society, through its various community based interventions in Sikar district, the Door to the Thar Desert, which lies in the north-eastern region of state of Rajasthan. The district comprises 1,192 villages, 343 Gram Panchayats grouped under 9 blocks namely Laxmangarh, Dantaramgarh, Dhod, Piprali, Fatehpur, Neem Ka Thana, Khandela, Shri Madhopur and Patan. The population of the district





Shishir Bajaj interacting with members of Women Self Help Groups and village leaders

- For this, village communities are sensitized to undertake need based collective actions.
- Community empowerment is at the core of institution building process and initiatives like safe drinking and irrigation water, sustainable agriculture encourage socially accepted interactions
- Strengthening network with various like-minded individuals and institutions for coming together to join hands for exploring sustainable solutions with the human and natural resources development of the area

### Situational Analysis : Community core issues, worries and reflections

During an initial phase of 2017-18, JKBT held continuous interactions and reflections with communities from different villages at village and block levels and among the team to better appreciate and underline the core issues, apprehensions, needs to reflect and relate with current programmes, approach and strategies.

Community of Sikar deals with varied issues related to their livelihoods. Since inception, JKBT has been making efforts to help rural community to evolve relevant solutions through various need based interventions.

During interactions with local community, many mal-practices were observed including extreme exploitation of ground water leading to declaration of the area as Dark Zone. But there were very few examples in the area demonstrating good practices of water harvesting and conservation. JKBT team concentrated their efforts in creating awareness about importance of water harvesting and management of water resources. The trainings and exposure visits were organized for village level institutions for appropriate management of available water resources.

In many areas the ground water has high levels of fluoride, TDS and salinity contents and so it is not

potable. Harvesting and using roof rain water is a simple solution to this problem. Hence, attempts were made to help community to develop roof rain water harvesting structures at household as well as at community levels. Besides, efforts were made for construction of efficient water recharge structures.

It was also noticed that natural vegetation had been removed by the community for making roads to their farms and to other places in the villages. On the other hand, negligible efforts were being made for plantation of trees. JKBT has been making efforts for developing green cover by planting trees on the farms of the farmers as well as in the village area.

JKBT has been creating awareness about building capacities of the farming community for adoption of zero budget natural farming practices as guided by Padmashree Subhash Palekar. Zero budget natural farming provides a sustainable solution to resolve the distressed situation prevailed in farming.

The burden of credit for the farmers in this region increases with the tradition of organization of big family ceremonies which could not be repaid out of the lowered earnings from farming and so the vicious cycle of credit and debt continues. Hence, JKBT focuses discussion over this issue during community meetings so that people spend less on such functions. On the other hand, the youngsters are living in isolated life. With organization of Mass Gatherings, JKBT is trying to strengthen social interactions in some of other way.

JKBT has selected 150 villages for creating awareness about the issues mentioned above and 40 villages for evolving actual interventions in the coming years.





# Community Awakening, Organizing and Action

During the year, a series of reflections led to identify and build community based organizations imbued with the spirit "Of the people, for the people, by the people". Communities had identified their problems and resolved them through participatory approach with facilitation from JKBT which engaged them in planning, implementation and management of various development interventions. The process received overwhelming support from people, individuals and

*Revival of our traditional sports-Kabaddi with the formation of team of 13 villages by Youth Mandal*

institutions like ARAVALI, Jaipur, UNNATI, Shikashantar and Riverside School, Ahmedabad.

Many meetings were organized to understand community concerns, village dynamics, and identify ways to engage with them, decode inter-community relationships and then design the concerned programmes. This elaborate process was initiated in 40 villages keeping in mind the team strength and wherever required necessary trainings were imparted

to individuals and groups. Apart from the focused process in 40 villages, JKBT also continued previous programmatic interventions in adjoining 150 villages.

**Community Relationship : Building awareness, strengthen village institutions and people's action**

## Dhod Cluster

In Dhod block, villages like Khurdi, Fagalwa, Pardoli Chhoti and Badi were facing problem of high content of fluorides in drinking water. As discussed by the people, one of the major reasons was use of high quantity of chemical fertilizers in the farming. To overcome the problem, they were helped to have roof rain water harvesting structures and awareness was spread on eco-friendly practices of zero budget natural farming. In order to build community relationships and increase effectiveness of awareness creation, 'Yuwa Mandal' and 'Self Help Groups' were formed in Fagalwa and Pardoli villages. As a result, youth got themselves involved in the process which resulted in adoption of natural farming practices by many farmers in the respective villages.

With the similar concern, 'Village Development Committees' were formed in Sujanpura, Sewa, Fatehpura, Mandoli and Chudoli Ki Dhani villages. Declining ground water table due to over exploitation of water for chemical farming was the main concern of these VDCs. In Sewa and Fatehpura villages farmers were convinced with natural farming practices and use of biogas technology, and so, were tending to adopt the practices in more numbers. They also expressed their desire for undergoing training and more exposure over better water harvesting and conservation practices. Special attempts were made by JKBT to involve women and children in the drawing plans for overall village development.





*Apoorv Bajaj (extreme left) interacting with village development committee members on rain water harvesting structures and recharging of borewells*

Similarly, VDC of Sujanpura worked to resolve the issues related to village sanitation, putting up roof rain water harvesting units for drinking purpose, caring cattle, installation of street lights and establishment of village knowledge centre. VDC of Mandoli village constructed a common water recharge structure where the village sewage water as well as rain water has been harvested. Besides, they also helped poor families to have roof rain water harvesting structures and RO plant for having safe drinking water. The VDC of Sihot Chhoti identified places for having common water recharge structures at 4 hamlets.

The village social leaders (Dhanna ram, Sultan, Jagdish, from Sihot chhoti, Sultan Singh, Mahaveer Singh from Mandoli, Omprakash, Mool chand, from Sujanpura, Shivnarayan, Premaram from Sewa, Bhagirath, Ganesharam from Fatehpura etc.) played very supportive role during implementation of activities in their respective villages.

### Piprali Cluster

Capacities of VDCs of Malio Ki Dhani, Madhopura, Ramsinghpura, Shyampura villages were developed to evolve village development plans. The 'Vivekanand Yuva Mandal' and 'Pragati Farmers' Club' of Malio Ki dhani village contributed in construction of common recharge unit and well recharge unit at 2 places in the village by convincing the villagers about its importance. They also activated community participation in plantation drive and setting up of village knowledge centre where various skill development trainings, sports events, cultural events, health camps, etc were organized. In Madhopura village, 'Nokhwal Kisan Club' and youth mandal collectively organized consultation meeting with MLA, MP and Zila Pramukh for having better road connectivity, organization of sport tournaments, renovating village school and organization of skill trainings for village youths. They constructed 4 well recharge structures using the expertise of Chandmal, Shravan, Subhas Kumar, etc. The villagers also helped neighbouring villages

for constructing ground water recharge structures. 22 farmers of Ramsinghpura village began to adopt natural farming practices in association with rearing of indigenous cows. They installed 2 well recharge structures and identified site near stream for having water recharge structure. Satyanarayan ji, Pradeep ji and Omprakash ji helped 57 families for installation of household solar lighting systems. They further planned to have solar lighting system for every household of the village. In Shyampura village, 'Navjagriti Farmers' Club' had motivated farmers for adoption of natural farming and levelling of their lands. As a result, 10 hectares of land was levelled and 17 farmers started adopting natural farming practices.

Efforts were also concentrated villages in Reta, Dabpanora, Chainpura, Purohito Ka Bas on strengthening community based organization. Youths of Reta village raised their support for resolving drinking water problem, identification of site for construction of recharge pit in the watershed area and identification of poor families for JKBT support. Most of agriculture

land in Dabpanora village is undulating. As a result of motivational support provided by JKBT to the youths of the village 4 hectares of land was levelled by the farmers at their own expenses. The youths also organized sports and cultural events in the village. Youths of Purohito Ka Bas village raised community participation in village sanitation campaign. The VDC members of Aloda village, Ashok Kumar, Shravan Kumar, Suresh Kumar, etc began to adopt natural farming. VDC members also helped Suresh ji to have recharge pit for bore well. The results were amazing. He could irrigate his farm while there was no water available in the wells of neighbouring farmers.

Farmers from Kaharo Ki Dhani, Rana Ki Dhani and Chainpura villages received benefits of interventions of biogas technology, roof rain water harvesting structures, natural farming and plan support at individual level. This year, efforts were made for formation of CBOs in the villages.





Community discussion on harvesting waste water and rain water held at Village –Mandoli. Developing village plan for water recharging included discussion on site selection, role of different committee members, cost of entire work, mapping, villagers contribution, technical and sustainability aspects etc.

### Laxmangarh Cluster

Village development committees of Bagdi, Bhairapura, Paldi, Chudimiyaan villages motivated villagers to get them involved in village developmental activities. Community of Bagadi village was facing a problem of safe disposal of sewage water. So, they ended up with construction of 2 recharge pits where sewage water as well as rain water has been recharged to the ground. 5 farmers began to adopt natural farming practices while other 5 farmers constructed farm pond under the Government scheme, 'Apna Khet Apna Kaam'. In Bhairapura village, VDC guided farmers to level 8 hectares of undulating agriculture land, plantation of 1,058 plants and construction of soak pits for safe disposal of waste water. 4 families of Balaji Mohaila village were provided solar lighting system and also guided them for other livelihood related activities.

'Dr. Ambedkar Yuva Mandal' of village Paldi got engaged themselves in village sanitation campaign, identifying

children who need support for school books and accessories, raising community support for construction of school gate, setting up village knowledge centre and convergence of pension scheme, PMAY and Shubh Shakti schemes for needy families. They motivated 6 farmers for adoption of natural farming practices and community for construction of recharge pits for 2 open wells. Three years back, 'Chudimiyaan Yuva Mandal' undertook plantation on common land of village. Unfortunately, it caught fire due to unknown reason and they could not save the plantation. It was very disappointing for them. Despite of that this year they again courageously planted 600 plant saplings on the same land.

VDCs of Singodara, Singoddari, Ramchandra Ka Bas and Disnau villages engaged themselves in raising support to neediest families, identification of sites for recharge pits, identification of beneficiaries for biogas construction, Roof Rain Water Harvesting Structures and land levelling initiatives of JKBT. They motivated 10



Installed RO plant for drinking water unit in village Kumas Jatan easy availability of safe and pure drinking water

farmers for adoption of natural farming. The VDC also participated in preparation of report for NABARD.

In Bidodi, Kumas Jatan and Dinwa Jatan villages, capacity building work was continued. RO plants were installed in Kumas Jatan, Bibipur and Shekhwas villages for creating safe drinking water facility for the villagers. Promotion of vegetable cultivation using mini-drip system, Roof Rain Water Harvesting Structures and Natural Farming has been initiated in Bidodi village.

### Dataramgarh Cluster

VDCs of Shesham, Sami, Pratappura, Chidasara and Dudwavillages planned and implemented many activities at community level to inculcate developmental thinking and to bring community together for collective efforts. VDC of Shesham village took initiative in identification of sites for recharge pits, identification of households for roof rain water harvesting structures, identification of beneficiaries for construction of 8 biogas plants, 3

beneficiaries for livelihood based activities, skill based support for 2 families and promotion of zero budget natural farming among 10 farmers. VDC of Sami village came forward for making the village clean, formation of women self help groups and selection of beneficiaries for various interventions of JKBT. VDCs of Pratappura, Chidasara and Dudwa villages showed interest in recharging bore wells, sensitizing community on judicious use of available water, promotion of natural farming, promotion of household solar lighting system and organization of food processing trainings.

### Creating facilities of safe drinking water

Most of village in the Sikar district faces the difficulty in availing safe drinking water. The water available through wells has high levels of TDS, Fluorides and salinity. During regular village level consultation meetings on this issue, villagers were convinced for the construction of Roof Rain Water Harvesting Structures and construction of Recharge Pits, stressed





Water awareness campaign organised to sensitize villagers for saving and efficient use of every drop

that community level RO filters should be installed in the areas where the problem was intense. This was felt as the necessity of poor families who could not afford having household RO units and purchasing of water tankers as a result of which they were suffering from various diseases caused due to consumption of unsafe drinking water.

Looking to the immediate need of the community, JKBT converged the financial help rendered by 'Dalmiya Seva Sansthan', Chidawa, Dept. of Science and Technology, Jaipur, MLA in Dhod block for installation of 5 community RO plants, each in in Kumas Jatan, Bibipur chhota, Shekhiwas, Sujanpura and Mandoli villages. VDC and Gram Panchayat undertook a responsibility of maintenance of RO system. They decided to charge ₹ 2 for 20 ltr. of water. The revenue generated was being used for maintenance of machines. Now, the villagers have access to safe drinking water.

### Convergence of Govt. Schemes

The execution of PRAs and wealth ranking exercise helped the field team in selecting beneficiaries for various entitlement schemes of government. With this, JKBT helped 315 families from 48 villages to avail benefits of 'Pradhan Mantri Aavas Yojana', 'Apna Khet Apna Kaam', support to young girls under 'Shubh Shakti Yojna', 'Pension Yojana', etc.

### Achievement and Impact :

- 1,289 Neediest Families benefitted under various interventions
- 38 Ground water recharge systems established through open wells/bore wells
- 1,920 Capacity Building Programmes organized
- 305 Farmers clubs, Youth Clubs and VDCs formed
- 300 Villages covered/benefitted
- Communities sensitized towards common property resources, execute, monitor and manage their needs





*Bhanwari Devis' family and Hardevaram of village Sujanpura were jointly supported by Youth mandal and JKBT for pottery work*

### Neediest family Support Programme

Wealth ranking and PRA exercise carried in 40 villages led to listing of poor families. After having a dialogue with these families, specific interventions were suggested to them for elevating their livelihood status. Financial support was raised for them depending on their needs. Such 53 families were helped to have small scale enterprises considering their skills. The types of enterprises supported were Flour Mill, Goat Farming, Tailoring Shop, Motor Rewinding Machine, Pottery, Drilling Machine, Musical Instruments like Harmonium and Dholak, Welding Machine, Household Mess, Grocery Shop, Dairy, Photo Copier Machine, Portable Vegetable Trolley for Vegetable Shop, Carpenter accessories etc. Besides, few families were also supported for construction of low cost house and having bicycles for school children. Similarly, elderly people who lacked the access to health facilities were helped in health check up and to purchase of pre-scribed medicines. VDCs of all 40 villages played very important role in reaching out the help to poor families.



*Aasuram of Chidasara started his own enterprise by setting up of welding and drilling machine*





## Promotion of Natural Farming

JKBT created a network of innovative resource farmers who shared their experiences with fellow farmers at various locations in Sikar district and nearby districts to spread the programme to accrue larger benefits. These resource persons have been the role models in the area to emulate the low cost-low external input based natural farming system with diversification of cropping patterns resulting in better productivity and enhanced livelihood.

*Madanlal Bagadiya of village Shyampura cultivated Millet under Natural Farming. He observed that height of the crop was 12 ft. thus increasing the quantity of fodder*

Using cow urine, dung, local plant species and biogas slurry, etc. farmers prepare Jeevamrit, Ghan jeevamrit, and Dashparni ark (liquid extraction of leaves of bitter taste from such 10 different plants as pest control) to improve soil health with natural ingredients to increase crop yields. Cultivation of various crops like Bansi Wheat, Sharbati Wheat, Barley, Mustard, Millet, Moth Bean, Cluster Bean, Gram, Pigeon Pea, Groundnut, Pea, fruits and vegetables have been demonstrated to the farmers.

### Achievement and Impact :

- Organized three days' 'Kisan Mela' for developing direct market linkages for the farmers adopting natural farming; 52 farmers participated in the 'Mela', while 3,200 farmers, consumers, NGOs and Govt. representatives visited the event
- District Collector addressed this 'Mela' and appreciated the initiative
- ZBNF of Sikar farmers shared their experiences of natural farming at various forums like meetings, seminars as well as with officials of Dept. of Agriculture, Rajasthan
- Organized trainings and demonstrations for growing indigenous seeds Gram, Wheat, Barley, Lentil, Fenugreek, Mustard, etc. as inter and mixed crops along with natural farming practices; 380 farmers participated; the attempt helped in increasing crops yields
- Staff participated as resource persons in trainings organized by District Agriculture Department under government scheme of 'Parampragat Krishi Vikas Yojna'
- 150 villages covered under water campaign where the villagers shared their water related issues and proposed solutions
- 20,536 families benefitted under sustainable agriculture practices
- 22,276 acres of land covered under various agricultural interventions
- 287 Villages covered under the programme
- 50% cost of cultivation reduced, good quality of crops produced, received 30% more price for Cereal Crops, Pulses and Vegetables by ZBNF farmers
- 80 Farmers adopted mixed cropping and intercropping patterns





*Demonstration on preparation of Jeevamrit and Dashparni ark and exposure visit to the farm of Prahalad Rai Sharma of village Sujanpura for Youth Mandal and farmers of Mandoli village*

### Promotion of Diversified Cropping Pattern by Natural Farming Practices and Moisture Conservation

Focused efforts on promotion of natural farming practices resulted in its adoption by 4,678 farmers spread in 223 villages. The successful farmers have been sharing their experiences at various platforms available at block, district and state level for bringing more number of farmers into the fold. Zero budget Natural Farming reduces the input cost by 50% and the farmers are getting 30 % premium sale rates for naturally grown produce.

Madanlal Bagadiya living in village Shyampura has been adopted natural farming since last 4 years. Before adoption of ZBNF practices he was cultivating millet over 1.63 acres of land with an expenditure of ₹11,005. His total harvest of Millet used to be 11.50 qt. and 37.49 qt. fodder.

He was cultivating Cluster Beans over rest of 2.04 acres, of land. The production of beans and fodder was used to 22.44 qt. and 24.48 qt. respectively. He used to spend ₹29,050 as total cultivation cost. His net annual earnings were ₹84,070.

In the fourth year of adoption of natural farming practice Millet yield was almost same i.e. 11.41 qt. but fodder production increased up to 84 qt. The area under cultivation was same as earlier. He cultivated Groundnut over rest of 2.04 acres of land. He harvested 51 qt. of Groundnut and 102 qt. of fodder. He incurred cost of ₹13,466 and ₹66,937 toward Groundnut cultivation. His total annual net profit was raised to ₹3,05,679 with adoption of Natural Farming.

Thus his annual expenditure was reduced by 40% and net profit increased by ₹2,21,608.



*Banwarilal Sharma, a resident of village Chidasara, cultivated Banshi variety of wheat under Zero Budget Natural Farming*

### Cultivation of Wheat

Banwarilal Sharma, a resident of village Chidasara, cultivated Banshi variety of Wheat under Zero Budget Natural Farming over 1.63 acre of land. Before intervention, wheat yield was 13.12 qt. per acre and net profit was ₹12,546 at an expenditure of ₹4,182.

Under Natural Farming practices, production of Banshi variety of Wheat was raised to 15.29 qt. per acre. He expended ₹4,373 toward cultivation of Banshi Wheat and his net profit was ₹29,265. Thus, his net profit has increased by ₹16,719.

### Cultivation of Drumsticks

Ramlal Kudi, a resident of village Mkundpura, cultivated Drum Stick over 0.82 acre of land. He sold 4 qt. of shade-dried tender leaves of drum sticks at the rate of ₹10,000 per qt. and 25 qt. of drum sticks at the rate

of ₹1,000 per qt. He had an expenditure of ₹8,300 towards cultivation and earned net profit of ₹56,700.

Before intervention, he was cultivating Wheat and his annual net profit was ₹15,504. But after changing cropping pattern with adoption of Natural Farming his earning were increased by ₹41,196. The harvesting cycle for Drum Sticks was every three months. Thus, he continued to earn profits at regular intervals.





Ranveer Singh of village Kasavali, cultivated traditional crop Kachra, (Cucumis melo, Foot Kakadi in Hindi, Kachra in Marwari), under Natural Farming boosted his confidence

### Revival of Traditional Crop

Revival of traditional crop variety improved the farming income. Increased profit with Kachra crop motivated Ranveer Singh to expand the cultivation area under this crop.

Ranveer Singh, living in the village Kasavali, was growing millets over 0.27 acres, of land. His cost of cultivation was ₹490 and annual net profit was ₹15,110. He was suggested to grow Kachra, a traditional salad crop, to improve the earnings from same acreage.

This year he cultivated Kachra over 0.27 acre of land and adopted natural farming practices. The cost of cultivation was ₹1,980 and he harvested 1,500 kg of vegetable. He sold it at the rate of ₹12 per kg and earned ₹18,000. His net profit was ₹16,020.

During village level meetings, progressive farmers Ishvar Lal and Ramsingh of Durgapura village, Mahesh Kumar of Sob village, Ganesharam of Khurdi village, Satveer ji of Gungara village, Banwari Lal Sharma of Chidasara village, Khushal Singh of Dhod village, Pradeep Ji of Ranoli village, Satyanarayan Ji of Ramsinghpura village, Chetan ram Ji of Bagadi village, Boduram of Chainpura village, Sitaram of Shyampura village and other 1,118 farmers have reported good quality of yields of Bansi wheat, Sharbati wheat, Desi gram, Mustard, Groundnut, Millet, Onion as well as better market prices for these commodities during the year. The practicing farmers have gained good experience and knowledge in cultivation of Cereal and Pulses crop; however, it was felt that they need better inputs for Vegetable crops like Brinjal, Cucumber, Round Melon, Bitter Gourd, etc. and also for fruit plants like Water Melon, Bael, Papaya and Pomegranate for protection from insect attacks even after adoption of ZBNF practices.



Bhagirathmal Kharrate of village Bhadhadar, increased his income with onion seeds conservation and propagation practices

### Seed Conservation and Propagation

Bhagirath mal Kharte lives in a village Bhadhadar and cultivates his farm under natural farming practices. Till last year, he was cultivating Millet and Onion and was selling the harvest. His net earnings were ₹2,10,450 at an expenditure of ₹71,450. He was advised to harvest seeds for sale to further increased his earnings. He was imparted to relevant training in seed conservation. This year, he harvested 1 qt. of seeds of Millet and Onion. He earned a net profit of ₹2,36,500 with its sale in addition to sale of 20 qt. of millets.

JKBT and farmers have had several interactions over crops like Wheat, Barley, Millet, Gram, Moth Bean, Green Gram, Fenugreek, Mustard, Groundnut, etc. as the ground water is declining and farmers felt that they need to select less water intensive crops with better diversification. Bansi Wheat grown under natural

farming has fetched them a market price of ₹2,500 to ₹3,500 per qt. and Desi gram ₹5,500 to ₹6,500 per qt. and they earned an extra benefit of ₹1,000 to ₹2,000 per qt. compared to the similar crops grown under chemical farming.





Farmers of Sikar District visited Kisan Mela organised in collaboration with Agriculture Technology Management Agency (ATMA). ZBNF farmers and JKBT team shared experiences and resource material, live exhibition of Natural Farming methods and quality produce of Wheat, Pulses, Vegetables etc.

### Organization of 'Natural Farming Food Fair' (Prakritik Khadyanna Mela)

Farmers adopting natural farming formed ZBNF committee for developing forward and backward linkages for the produce and setting up of agriculture processing centres. To develop direct market linkages, this committee took an initiative for organization of "Natural Farming Food Fair" at a district place. The committee assisted JKBT team in managing entire event. The farmers were critically selected to ensure that they exhibit naturally grown food only.

NABARD appreciated the initiative and supported it for development of IEC material during the fair. Various institutions i.e. FES, Udaipur; WASKO, Udaipur; Ambuja Cement Foundation, Nagaur and Chidawa; Dalmiya Sewa Sansthan, Chidawa; CUTS, Jaipur; Boruka Charitable Trust; NABARD watershed area farmers from Udaipur; ARAVALI, Jaipur; KALP Jaipur, etc. also participated in the event.

District Collector visited the fair and appreciated the efforts of farmers during personal interactions. Impressed by the impact of the 'Natural Food Fair', District Collector recommended that Agriculture

department should also organize 'Kisan Mela' under ATMA project in collaboration with JKBT. He also invited the lead farmers to share their experiences in the proposed 'Kisan Mela'. Successful farmers like Shri. Ishwar Lal of Durgapura village, Ramchandra of Khokhro Ki Dhani village and Ramlal of Mukundpura village were felicitated during the event.

During organization of 'Kisan Mela' JKBT created awareness among the consumers, who visited the Mela, about natural farming by displaying IEC material and demonstrated natural formulations.





*Naresh Kumar Thakral, District Collector and H.P. Chandel, District Development Manager, NABARD interacting with ZBNF farmer Sanjay Yadav, Durgapura village during exhibition at the Natural Food Fair*



*Tree plantation on common land by Youth Mandal and villagers at village Malio Ki Dhani*

### Cultivation of Vegetables

Sanjay is adopting ZBNF practices since 2014-15. Gradually he began to cultivate vegetables along with Cereal and Pulses. He developed market for naturally grown vegetables like Coriander, Spinach, Green Chili, Carrot, Reddish, Sweet Potato, Green Onion, etc. in Piprali town. He now earns ₹8,000 per month with the sale of vegetables for 8 months of the year.

### Tree plantation

Unpredicted weather changes have led to an alarming situation concerning climate change. In order to combat these changes, development of green cover is very essential. With this concern, 5,34,220 numbers of saplings of fruit plants like Lemon, Mango, Orange, Pomegranate, Bael, Chiku, and Amla were planted over 5,938 acres of land covering 10,237 families residing

273 villages. So as to draw community attention and ensure their active participation, a mass awareness campaign was undertaken by organizing village meetings and rallies and using IEC material. On the other hand, various institutions including schools and NGOs were strategically contacted for their involvement in this initiative. Local Communities and JKBT mutually agreed upon having 70 % and 30 % financial sharing, respectively. Community took a responsibility of taking after care of the plants and maintaining proper plant growth.

### Crop protection and preservation technologies

376 farmers from 76 villages protected their Rabi crops grown over 972 acres, of land from severe cold and bird attack with a help of non-woven sheets. This year

protection with *Moonj* grass has been promoted as a natural way of saving crops from severe winter.

138 families spread in 108 villages have installed Innovative 'Grameen Fridge' (operates without electricity) to preserve perishable agricultural commodities like vegetables and milk. 144 farmers among 62 villages have installed 'Onion Storage Units' to preserve onion for a longer period of time till they get profitable market rates.

### Soil and Water conservation and management

Rural community has been facing a problem of availability of water for drinking as well as for irrigation as the ground water table is declining faster and reached below 350 ft because of its over exploitation. Besides, the quality of water is also deteriorating with

increased amount of fluoride content and high TDS. During the interactions with the villagers of Piprali and Dataramgarh villages, it was noticed that the problem of availability of safe drinking water has been intensified during past few years. They purchase water tankers for the hamlet areas of the villages. The purchase of 20 lit. water can and 5,000 lit. tanker costs ₹20 and ₹500 to ₹700, respectively. The poor people suffer the most as they could hardly afford the purchase of water.

Besides creating awareness about the development of water resources, JKBT has helped the community to install 817 Roof Rain Water Harvesting Structures, 5 RO plants at community level and construction of 38 water recharge structures at common places as well as at individual level.





*Chetan Ram of village Bagri, increased his income with vegetable cultivation using mini drip with overhead water tank irrigation system*

### Promoting vegetable cultivation through mini-drip-irrigation system

Chetan Ram lives in village Bagri. He cultivated Tomato over 0.14 acre of land. He installed mini-drip-system to manage with limited amount of water available for irrigation. He harvested 17qt. Tomato at an input cost of ₹2,040 and he earned a net profit of ₹18,360 at the selling rate ₹1,200 per qt.

Before intervention, he was cultivating Millet. The production was about 1qt. millet and fodder. He was earning about ₹15,985 at an expenditure of ₹600. (Sale price was Millet grains was ₹1,100 per qt. and earning from fodder was ₹1,875). Thus, an appropriate intervention increased the farming income by ₹15,985.



*Smt. Shyokuri Devi, a resident of village Shesham cultivated chilli through natural farming practices*

### Cultivation of Chilli using mini-drip-irrigation system

Smt. Shyokuri Devi, a resident of village Shesham shared, "I cultivated chilli under zero budget natural farming over 0.07 acres, I used mini-drip to manage with limited amount of water available with me for irrigation. I harvested 10 qt. chilli and had a net profit of ₹8,500." (Expenditure ₹1,500; Sale price ₹1,000 per qt.)

Before intervention, she was cultivating millet. She used to have 50 kg of millets and fodder of ₹1,835. Her net profit used be ₹2,055 only. (expenditure ₹330; Sale price ₹6,445 per qt.)

Thus, due to change in cropping pattern, adoption of Zero Budget Natural Farming and introduction of mini-drip irrigation system her income improved by ₹6,445.

Tapping the increasing demand for chemical free vegetables JKBT and 215 families began to promote vegetable farming using low cost drip irrigation system over 19 acres, of land in 57 villages. The farmers started growing vegetables like Chillies, Tomato, Potato, Carrot, Radish, Ladyfinger, Brinjal, Spinach, Coriander in their backyards and on farmlands. Creeper vegetables like Bottle Gourd, Ridge Gourd, Bitter Gourd were raised under trellis system and fruit plants like Pomegranate, Lemon, Papaya, Bael and Ber were also planted.

This method of cultivation, locally known as 'Lataan Kheti', became quite popular among the landed and landless families as it satisfied their household requirement of vegetables, saving them about ₹20,000 annually as well as fetching them about ₹25,000 per year with the sale of surplus vegetables.





*Undulating wasteland converted into cultivable land through Land levelling, strengthened the agriculture based livelihoods*

### Land levelling: Converting undulating fallow land into productive land

Undulating and uneven lands is one of the major problem being faced by the farmers in the area. This has lowered their farming income. They are facilitated to level their lands with the help of tractors or any land levelling machines available. As a result, uncultivable land has been brought under cultivation; cultivation of crops like Millet, Barley, Pulses (Gram, Green Gram, Moth Bean), Fenugreek, Groundnut, Wheat and Vegetables on this land has increased income for the farmers.

Land levelling has strengthened the agriculture based livelihoods. A total 1,235 acres, of undulated wasteland owned by 771 families was brought under cultivation in 62 villages under levelling programme.

After undulating land which brought under cultivation, one of the farmers harvested 7qt. of groundnut from 1acre and earned a net profit of ₹16,800. There are many such farmers who had improved their earnings by land levelling, with cultivation of vegetables and by installation of drip irrigation systems.

The levelling of 443 acres, of undulating land for 161 farmers in Shyapura village raised their total farming income to ₹2.31 crore in a year at an investment of ₹99 lakh. This led JKBF to undertake impact assessment study of the programme to be shared at various platforms.

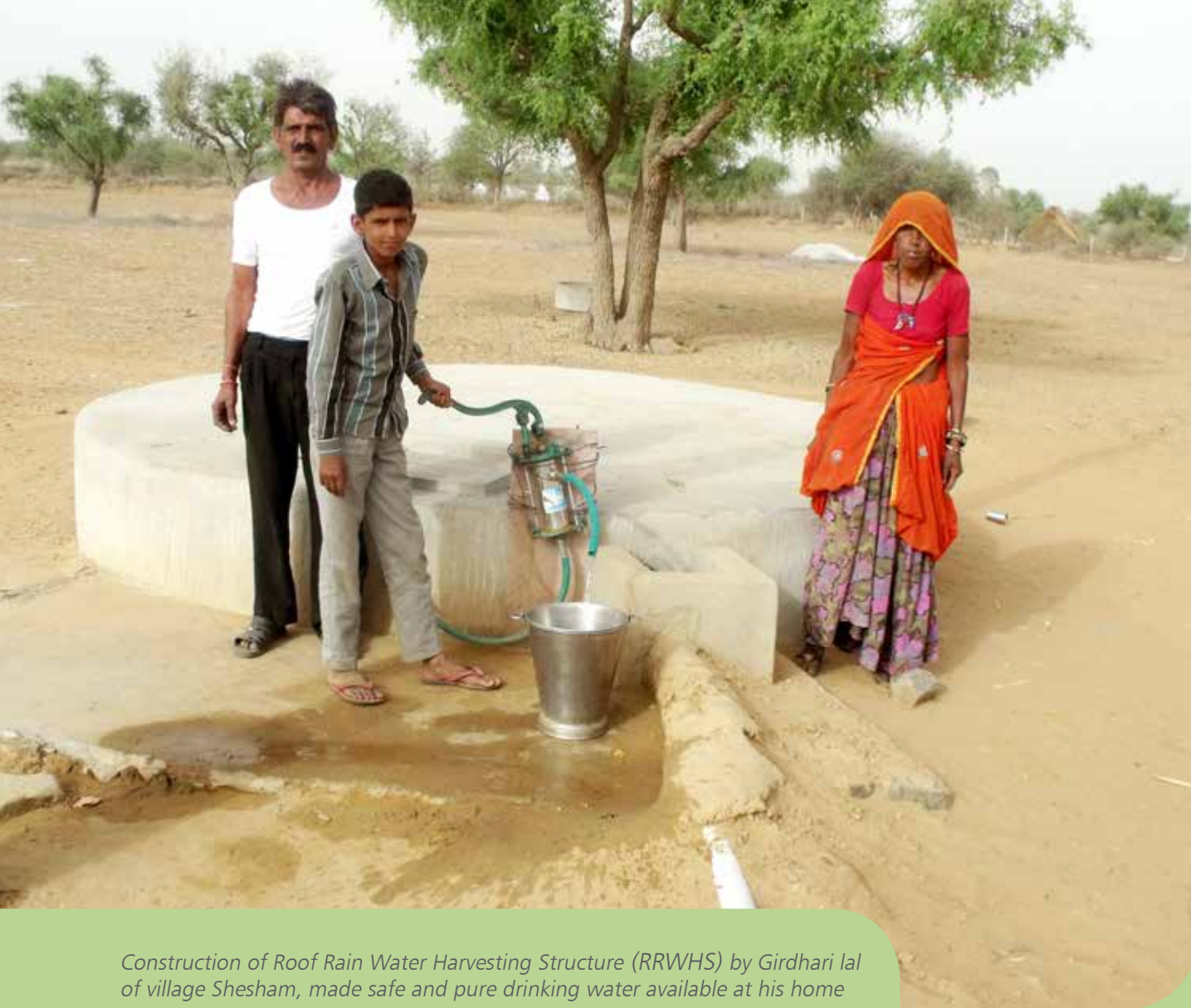
### Efficient use of Micro-irrigation Systems

Sandy soils with less moisture retention capacities demand more water for irrigation and adversely affect agriculture productivity under the constraint of water availability for irrigation. Mulching and use of micro-

irrigation systems are the viable solutions to cope up with this challenge.

Installation of drip and sprinkler irrigation systems along with mulching of soils over 3,621 acres of land have benefited 1,728 families by raising their farming income through vegetable cultivation.





Construction of Roof Rain Water Harvesting Structure (RRWHS) by Girdhari lal of village Shesham, made safe and pure drinking water available at his home

### Roof Rain Water Harvesting Structures (RRWHS)

JKBT has been creating awareness among the rural communities for having roof rain water harvesting structures for availability of safe drinking water. As a result 817 families from 238 villages constructed Roof Rain Water Harvesting Structures as a permanent solution to the problem of availability of safe drinking water at door step. JKBT targeted the neediest families for the intervention.

Shrawan kum, living in village Dudhawa, was fetching the water for drinking purpose from a distance of 300 meters. He was assisted for having Roof Rain Water Harvesting Structure which has overcome his worries and reduced drudgery as the safe drinking water was

now made available at his door step.

Girdhari lal, a resident of village Shesham, was daily fetching drinking water from a water source located at a distance of 500 meters. Construction of 'Roof Rain Water Harvesting' structures made safe drinking water available at his home.

### Farm Ponds, Percolation Tanks and Check Dams

52 different water harvesting structures like farm pond/percolation tank and check dams have been constructed covering 480 acres, of land benefitting 146 families in 6 villages. As a result of these interventions, crop productivity enhanced by 15-20%.



Rain Water Harvesting Structure constructed by Shivkumar, village –Disnau under watershed development project

### Disnau Watershed Development Project

Savarmal showing Rain Water Harvesting Structure constructed under watershed programme. As a result, he could now irrigate an orchard of 84 fruits plants consisting of Pomegranate, Guava, Lemon and other local species as well as the kitchen garden; this has been also a drinking water source for his family.

Water is a day dream for cattle and humans living in the desert. It is very difficult to cultivate fodder for the cattle under the situation of this crisis. Bajari grass is less water intensive fodder variety which can be easily digested by the cattle and can also be used as dry fodder. This local variety was identified in Lamiya village in Dataramgarh block.

Watershed Development project in collaboration with NABARD under the partnership mode with 52% NABARD, 32% JKBT and 16% community contributions was initiated over a total 10,774 hectares of land in Laxmangarh block. 1,249 hectares land is covered under project capacity building phase and activities like strengthening of village watershed committee, training and exposure visits, moisture conservation activities like raising farm bunds, drip irrigation, soil mulching, land terracing, plantation, etc. have been completed in Disnau village.





## Promotion of Dairy Farming through Indigenous Breed of Cows

Training of farmers on indigenous cow based natural farming has created a deep understanding about importance of rearing of indigenous cows. 10 farmers have adopted Natural Farming with rearing of indigenous cows in the Shesham village.

Indigenous cow is an integral part of Zero Budget Natural Farming. Besides trainings on zero budget natural farming, JKBT has also conducted trainings on rearing of indigenous cows as a sustainable livelihood

source. Technical and financial help for following three activities were rendered by JKBT :

- Financial support for purchasing of indigenous breed of cow
- Installation of Improved cattle feeding-cum-drinking water system
- Financial support for purchasing of power operated chaff cutters

*Smt. Santosh Devi of village Fatehpura, is rearing indigenous cow. Besides getting input for Natural Farming, the family consumes 66 Ltr. of milk at home and sale out 129 Ltr. of milk every month. This helps them to monthly income of ₹5,160 at an expenditure of ₹1,290 (20%)*

### Achievement :

- 4,109 Families benefitted
- 30 % Increase in yield under indigenous based natural farming
- 1,080 Families initiated better cattle management practices
- 243 Villages covered

### Promotion of Indigenous Cows

Community is facing many problems in rearing Holstein and Jersey cows. On the other hand, their manure is now useful in Natural Farming. The milk is also not considered totally fit for human consumption. JKBT has been promoting indigenous cows to revert the situation. Farmers have been experiencing that agricultural land has become fertile with the use of dung of indigenous cows for preparation of *Beejamrit*, *Jeevamrit*, *Ghanjeevamrit* and *Dashparni Ark*. Women has a dominating role in dairy farming. Therefore, 3,910 families were supported for purchase of indigenous cows in 226 villages. This has resulted in bringing 4,598 acres, of land under Natural Farming.

Farmers developed understanding about nutritive value of cow milk which is pure and supposed to be capable of healing various diseases. Families are coming forward for rearing of indigenous cows. In Piprali cluster, 38 farmers from Ramsinghpura and Shishyu villages have adopted indigenous cows and began to adopt natural farming.





Satyanarayan Guruji of village Shishyu Ramsinghpura became source of inspiration for the fellow farmers.

Guru Satyanarayan, living in the village Shishyu Ramsinghpura became an inspiring example to other farmers. He demonstrated establishment of nursery of traditional trees, vegetables, pulses, medicinal plants, etc with adoption of practices of indigenous cow based natural farming.

He shared, "I collect waste plastic bottles thrown here and there by travellers. I use them to supply Jeevamrit and Dashapari ark to my farmer friends. It gives me immense satisfaction when they discuss about the quality and taste of the vegetable crops cultivated with the application of Jeevamrit."

He collects the seeds of traditional varieties wherever he goes. He raises their seedlings in his nursery and supplies them to his farmer friends, free of cost. He raises and plants many trees in the vicinity of the village area as of his life mission. He takes every care for maintaining their good growth till March 2018, there are 54 well grown trees in the village which has now become his identity.

Bajrang Lal Jangid of village Chidasara has been adopting indigenous cow based natural farming over whole land owned by him since last year. He underwent training at Jamkandorna, Rajkot, Gujarat. He cultivates cereal, pulses, vegetables (Millet, Gram, Mustard) etc.

### Improved Cattle Feeding-Cum-Drinking Water System

Cattle feeding-cum drinking water system (CFD) has been helpful in maintaining good health of cattle by supplying fodder and water at prescribed interval of time and became popular among the community. As satisfied from its benefits, the farmers renamed it as 'Automatic Pashu Than'. The system is maintaining cattle health, avoiding fodder waste, reducing drudgery and increasing milk production.

291 families were using CFDs in 168 villages; 8 farmers in Sikar and other locations have made self-investment for installation of CFD units.



Pankaj Kumar helping her mother Smt. Geeta Devi in village Fatehpura says, "I enjoys the work as it became quite easier with the use of Chaff Cutter"

### Promotion of Chaff Cutter

Women share major responsibility in cattle management. However, their drudgery has been reduced with support of chaff cutter. The chaffed fodder biomass is easy for digestion for cattle. Moreover, the requirement of

storage space for fodder reduces with chaffed biomass.

506 need based families in 197 villages were benefitted through installation of Chaff cutter unit.





## Women Empowerment through Self Help Groups, Rural Enterprises and Skill Development

### Promotion of Self Help Groups and need based Rural Enterprises

JKBT has formed 912 SHGs that have created a platform for awareness, strengthening and collective action among women and also to uplift them through socio-economic empowerment. JKBT is constantly working for developing their self confidence and ability through continuous training and exposure visits.

*Food processing training was organized for the members of SHGs at village Pratappura*

JKBT felt that SHGs programme needs to look back into its strengths and weakness to develop strategic plans for further extension leading to socio-economic development of women members.

Women members understood the importance of helping each other for their personal needs. Women of Lamiya and Bosana villages demonstrated that the reduction in expenditure on family ceremonies can

help to come out of debt trap. Similarly, in village Lamiya, women come together to reduce agriculture expenses by working on each other's farm in rotation, thus, reducing the requirement of farm labours. They also worked collectively for grading and packaging of onions.

### Achievement and impact :

- 912 Self Help Groups formed
- 12,798 Members covered under SHGs
- ₹5.91 Crore of saving
- ₹88 Lakh Internal lending and through bank linkages
- 2,780 Rural enterprises established
- 123 Different types of need based rural enterprises initiated
- ₹6,500 Average monthly income accrued through Rural Enterprises
- 72 Women emerged as rural entrepreneurs
- Enhanced skills, knowledge and level of confidence
- 1,954 Youths trained through 134 Skill Development training
- 266 Villages covered





*Geeta Devi of village Palasiya, was in financial distress. She established her own Grocery shop which has been generating earnings of ₹6,500 per month and able to fulfil her financial requirement*

### Collective Efforts of Women Members of SHGs

Women members of SHGs have started rural enterprises in the year 2010-11. Since then, 123 different types of need based income generating activities/rural enterprises were taken up by 2780 SHG members which include *Manihari*, *Shringar* Shops, Readymade Garments Sale, Pottery Making, Basket Making, *Bindiya* Making, Fancy Items, Grocery Shop, Embroidery, *Bandhej*, Pickle Making, Leather Work, 'Wooden Toys' making, etc. Many of them have become successful rural entrepreneurs.

89 women members from Raiwasa, Harsh, Singarawat, Losal, Kheensar villages have become confident and, as resource entrepreneurs, they have been inspiring other women. These businesses generated earnings of ₹6,500 to ₹10,000 per month for each of them.

### Setting up of Processing Unit

SHG members of Saraswati SHG of village Pewa and Nirmal Darbar SHG of village Kasli have established food processing units at village level and began making various traditional items in demand like *Tilpatti*, *Moongfali Patti* Sweet, Pickles, Flour Packaging, Noodles and *Namkeen*. They are expanding their business in the neighbouring villages. They provide services to the local shop keepers, direct customers and for the organization of family events.



*Income generation activity of photo copy machine initiated by Rekha Pareek, village Sami*



*Shishir Bajaj, encouraged women members of Self Help Groups and appreciated their efforts for initiation of various income generation activities*

### Skill Development

134 skill trainings on Sewing and tailoring, Computer skills, Cemented mould making, Pickle Papad-Mangodi, Soap Making, Food Processing etc. were conducted benefiting 1,954 youth from 61 villages. The participants in tailoring training were later helped to develop forward linkages for supply of readymade cloths and Rajpooti dresses. The participants in computer training were helped to get employment in coaching institutes, hospitals and government departments as computer operators.

This year, skill training were organized in collaboration with 'Nehru Yuva Kendra' and Punjab National Bank for the Chudimiyar, Disnau, Sihot chhoti, Sewa, Raghunathgarh, Piprali, Sami and Khandi villages.





## Promotion of Non Conventional Energy Sources

JKBT appreciates that Sikar community welcomes the technologies newly introduced after understanding its relevance. Biogas technology was quite new for the area in 2011-12 when it was being introduced. Exposures of the villagers to the biogas plants installed by 11 families, who came forward to accrue the benefits of the technology, resulted in its auto replication. Now, 1473 families are using biogas as cooking fuel. The multiple benefits of the biogas

*Smt. Vinod Devi from village Dudwa cheerfully sharing the benefits of biogas as easy cooking, slurry as manure for crops, time saving and saving expenditure on LPG gas cylinder purchase*

technology have changed many lives in the rural area of Sikar district. The environment-friendly fuel led to reduction in indoor air pollution. Besides, it has been generating good quality compost immensely useful for agriculture. Maharana Pratap University for Agriculture and Technology, Udaipur (MPUAT) has recognized JKBT as biggest biogas promoting organization in Rajasthan State.

Collaboration: Maharana Pratap University for

Agriculture and Technology, Udaipur, Rural Community and JKBT

Contributions in the unit cost of Biogas plant ₹19,500. (JKBT ₹3,500, Govt. ₹9,000, Individual beneficiary ₹7,000).

### Achievement and Impact :

- 1,473 Biogas plants constructed
- 225 Domestic Solar Lights installed
- 279 Villages covered
- 2,436 Tonnes of fuel-wood saved per annum
- ₹4,500 Saved by each family per annum on fuel-wood
- 1 Hours saved daily on fuel collection thereby reduced drudgery
- 2 Hours saved daily in cooking
- ₹15,000 saved as expenses on chemical fertilizers (through use of 10 metric tonnes slurry per plant) in a year
- 573 Biogas owned families saved expenditure on LPG cylinders and, thus, saved ₹20.16 lakh, also stopped use of fuel-wood 360 tonne by these families. (A biogas family saves ₹2,850 in year and used for agriculture and education purpose)
- 60 Youth imparted masonry skill training for construction of biogas plants
- ₹350 Per month per family saved after adoption of Solar Lighting System





"Biogas has changed my life. I cook meals for my family as well as prepare feed for my cattle on biogas." Says Sumitra Devi Pareek, Village Sami.



Antar Kanwar, Village Khandi express her happiness when first time she saw solar light at her home "Really Deepawali has come for me and my family".

### Solar Domestic Lighting System

Many people in the villages of rural areas are without adequate electricity. So, energy provision for all remains a key problem and challenge for thousand of poor people who often have a limited choice that convert energy into useful services. The families in rural villages mostly use kerosene oil which is costly and expensive and is readily available to them.

It is proposed to provide Solar Lights to those households by replacing the kerosene lanterns with solar lighting devices. This will provide better illumination and kerosenes smoke free indoor environment thereby enhance productivity and quality village and, facilitate

education of their children and improve lifestyle. Solar Lanterns are considered to be the most viable option to provide basic electricity need for lighting.

Solar Lighting allows rural families to extend their workday into the evening hours. Fumes from kerosene lamps are a serious health problem in where electric light is unavailable, women and children breathing kerosene fumes inhale are health at risk. By the use of Solar Lanterns these issues are resolved. In India, we get sunlight almost throughout the year and, thus, there is a huge potential for utilization of solar energy for domestic purpose. Hence, 225 resource poor families in 90 villages were supported for having domestic solar lighting system. This has extended late night study

hours for children and working hours for livelihood activities for the adults.

Youths and VDC members played important role in identification of needy families and drawing 30% financial contribution per family (total cost ₹9,700).





# Empowering School Children through Design for Change

Design for change is an opportunity for the children to express their own ideas for a better world and put them into action. It is a unique platform and global movement initiated by Kiran Bir Sethi, Riverside School, Ahmedabad.

DFC also provided an opportunity to students where they dream and solve the problems they bother about by their own initiatives. DFC helps to improve life-skills among students and draw out their hidden potential.

A four step process of Feel, Imagine, Do and Share helps students reach their desired goal. Feel step starts with asking children to slow down and understand the situation before jumping to solve it. In the Imagine step children are asked to brainstorm solutions to improve, enrich, and change the user experience. Do step is about creative agency and the ability to take timely action. The final step is Share-cultivating the abundance mentality.

*Villagers supported children in construction of RRWHS and water recharge pits during execution of their project, Upper Primary School, village Sujanpura*

## Achievement and Impact :

- 12,259 Children become the part of DFC campaign
- 69 schools actively participated
- 12 DFC projects successfully implemented by children
  1. School RRWHS has been renovated and excess water was delivered for recharging the hand pump of the school village Sujanpura
  2. Management system for keeping the school toilets clean was developed village Disnau
  3. Prepared playground for school by levelling of land and removing unwanted thorny plants and bushes village Shyampura
  4. Revived the spirit of social services by reminding scarifies and work done by Great Indian Personalities and freedom Fighters village Paldi
  5. Making the school surroundings clean Sikar town
  6. Management of mid day meal system by children village Sujanpura
  7. Made class room interesting for studies Sikar town
  8. Arranging Ceiling Fans for school class rooms
  9. Construction of soak pit for school waste water village Chidasara
  10. Creating Drinking water facility at school village Sihot Chhoti
  11. Covering the open well and maintaining cleanliness at playground village Harsh
  12. Purchasing Photocopier and computer for village Arjunpura





Sensitizing the villagers for saving every drop of water through construction of RRWHS and water recharge pits by Govt. Upper Primary School, village Sujanpura.



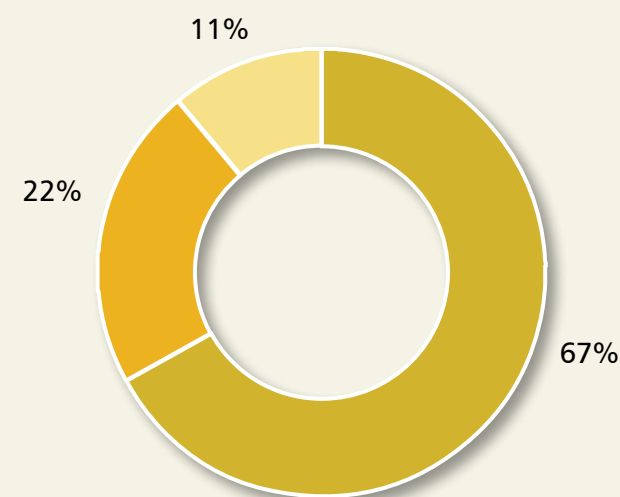
Celebrating Annual Function by DFC Hero at Bajaj Bhawan Sikar. Apoorv Bajaj appreciated efforts made by children.



Children can create wonders when they visualised dreams. Children of Bharati Bal Niketan Senior Secondary School Sikar had cleaned drainage line to remove blockages to stop overflow of sewage water running on road to school.



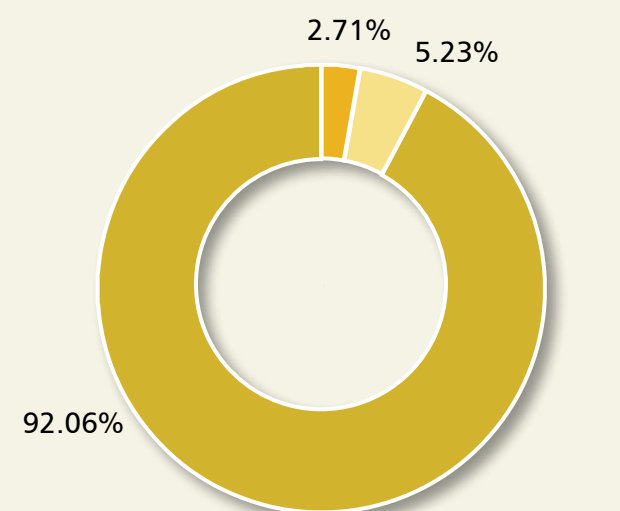
## Financial Progress 2017-18



### Source of Fund

Total fund for 2017-18 ₹ 5.78 Crore

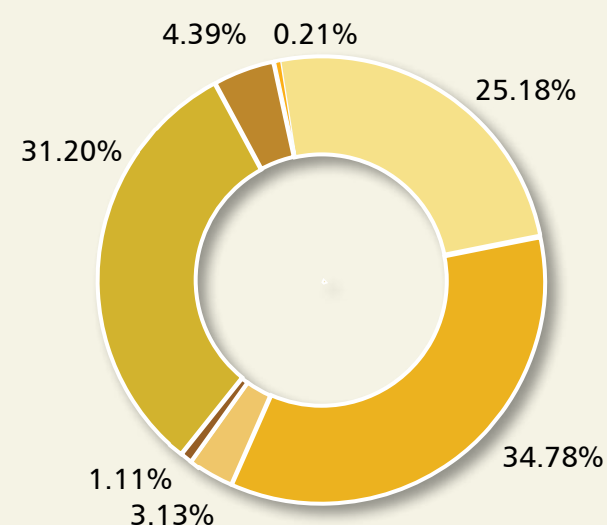
- JKBT contribution ₹ 1.24 crore (22%)
- Community contribution ₹ 0.65 crore (11%)
- Govt. & NABARD contribution ₹ 3.89 crore (67%)



### Found Utilization

Expenditure for 2017-18 ₹ 5.78 Crore

- Programme Expenditure ₹ 5.32 crore (92.06%)
- Training and Capacity Building ₹ 0.16 crore (2.71%)
- Administrative Expenditure ₹ 0.30 crore (5.23%)



### Programme Expenditure

Total ₹ 5.32 Crore

- Community Awareness Building ₹ 1.34 crore
- Organizing Community institutions & Govt. schemes linkages ₹ 1.85 crore
- Livelihood improvement Program ₹ 0.17 crore
- Other support/services ₹ 0.06 crore
- Soil-Water Conservation and Management ₹ 1.66 crore
- Agriculture and Horticulture Development ₹ 0.23 crore
- Animal Husbandry Development ₹ 0.011 crore



### Jamanalal Bajaj Trust accredited by various agencies, departments and communities

- Reorganization to JKBT for leading various programme in Sikar-District Youth Sammelan, Youth Leadership and Community Development Training, Mahatam Gandhi Youth Sanitation Campaign and Shramdan Programme and Yuva Sansad and Yoga Training by Nehru Yuva Kendra: Year 2016
- Pragati Kisan Club, Malio Ki Dhani awarded JKBT for outstanding contribution in vegetable farming through cluster approach using innovative method and new technologies: Year 2014
- Awarded to JKBT for enhancement in agricultural productivity and sustainable agriculture development through crop diversification by NABARD, D. B. Gupta IAS Principal Secretary, Agriculture, Govt. of Rajasthan: Year 2013
- Award to Jagdamba Kisan Clubs for best Kisan club in Rajasthan State by NABARD, Mr. C. S. Rajan, Secretary Rural Development and Panchayati raj, Govt. of Rajasthan: Year 2013
- Agriculture Time, a well-recognized magazine for Agriculture stories honoured JKBT innovative farmers as "Dharti Putra" for initiatives in agriculture innovations and crop diversifications: Year 2013
- Awarded for best work in Sikar District by District Administration in presence of Industrial Minister Sh. Rajendra Pareek, Govt. of Rajasthan: Year 2013



## The Guiding Force Behind JKBT

### Board of Trustees

**Shishir Bajaj**, is a founder member and Chairman of the Trust. After completing his MBA from New York University in 1974. He joined Bajaj Hindustan Sugar Ltd. in August, 1978 and was elevated as executive Director in January 1986. He has shouldered the responsibility as Chairman of Bajaj Hindusthan Sugar Ltd. from 1999 to 2014. He also did his Owner President Management Program from Harvard Business School in 2000. Shishir Bajaj, also served as a whole time director of Bajaj Energy Ltd. from May 2015 to February 2017. He is also a promoter of Bajaj Corp Ltd. which manufactures Bajaj Almond Drops the second largest Hair Oil Brand in India.

### Smt. Minakshi Bajaj

A co-founder member of the Trust, obtained her Bachelor of Arts degree from Calcutta University and is member of Sahachari Foundation, trustee of Jamnalal Bajaj Seva Trust and Seth Lakshman Prasad Urmilla Poddar Girls Education Charitable Trust. Director of A N Bajaj Enterprises Pvt. Ltd.

**Kushagra Nayan Bajaj**, is a Trustee of the trust and has been shouldering responsibility as Chairman and Managing Director of Bajaj Hindusthan Sugar since 2014. He is also Chairman of Bajaj Corp Ltd. and Bajaj Energy Ltd. Kushagra Bajaj holds a Bachelor Degree of Science in industrial managment (finance), Economics and Ethics from the Carnegie Mellon University, Pittsburgh, USA. He earned his Master of Science in Marketing from North Western University, Chicago, USA. He is moving force behind the social responsibility initiatives of the Trust.

**Apoorv Nayan Bajaj**, is a Trustee of the trust and the Executive President of Bajaj Corp Ltd. He has a Bachelor's degree in Commerce from University of Mumbai. He regularly travels to Wardha Programme area to help and guide the programmes of the Trust. Socio-economic and spiritual development of the community is his passion.

**Smt. Vasavadatta Bajaj**, is a Trustee of the trust and she is also Director in Bajaj Corp. Ltd. She has done her B.Com in the year 1997 and additionally she has also done one year Pre-school Teacher's Training in 2001.

**Ramvallabh Agrawal**, is a Trustee and also Secretary, Rajasthan Khadi Gramodyog Sanstha Sangh, Bajaj Nagar Jaipur. He is President of Sikar Jilla Gramodaya Samiti, is an active member of the Trust.

### Dr. Pushpa Porwal

With specialization in child and maternity care, is a Trustee. She has been closely associated with People's Welfare Society since 1972-73. She has been fully devoted to Shekhawati Zanana Hospital, Sikar since 1997.



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