



PARIVARTAN
SRIJAN
P0340

STRENGTHEN RURAL
LIVELIHOODS OF
ASPIRATIONAL DISTRICT
BARAN THROUGH
ESTABLISHING VALUE CHAIN
AROUND FARM COMMODITY





"Through our partnership with SRIJAN for our CSR initiative in Baran, Rajasthan, we aim to empower local communities and address challenges in garlic cultivation. By implementing interventions, we have seen remarkable outcomes, including improved productivity, mechanisation, and collective marketing efforts. Our collaboration has not only reached thousands of families, but also brought sustainable growth to the region,"

Ms. Nusrat Pathan,
Head of CSR
HDFC Bank





Dear Esteemed Reader,

We are delighted to present to you the culmination of a remarkable journey, captured within the pages of our coffee table book, chronicling the transformative partnership between HDFC Bank and SRIJAN in the aspirational district of Baran, Rajasthan. Entitled "Strengthening Rural Livelihoods: A Tale of Transformation in Baran," this book is a testament to the power of collaboration, innovation, and determination in fostering sustainable development.

Within these pages, you will find the story of this Project, which commenced on the 1st of January 2021 and concluded on the 31st of December 2023. This initiative, nestled within HDFC Bank's flagship program 'Parivartan', aimed to address the challenges farmers face in Baran, particularly those associated with garlic cultivation—a labor-intensive yet uncertain endeavor. The project sought to empower farmers, enhance productivity, and mitigate risks through a strategic blend of interventions in backward and forward linkages. Every facet of the value chain was meticulously addressed from varietal changes and mechanization to institution-building and market access.

The results speak volumes: over 3,500 families directly impacted, significant improvements in crop productivity, establishment of essential infrastructure, formation of a thriving farmer producer company, and adopting sustainable practices such as solar energy and water harvesting.

As you leaf through these pages, may you be inspired by the resilience of rural communities, the spirit of enterprise, and the promise of a brighter future. This book celebrates their journey towards prosperity, made possible through your unwavering support and commitment.

We extend our heartfelt gratitude to HDFC Bank for their unwavering support and commitment .

Thanks are due to the SRIJAN ground team, whose tireless efforts and commitment made this journey possible. We are also deeply indebted to communities and community leaders for their unwavering support, resilience, and partnership.

Thank you for joining us on this extraordinary voyage of change.

Prasanna Khemariya
CEO, SRIJAN

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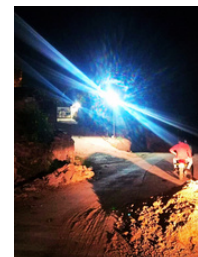


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PREFACE

Garlic is one of the major cash crops for farmers in the Baran district of Rajasthan, known as the largest producer of Garlic in Rajasthan. However, the productivity varied between 15.38 quintals and 28.33 quintals per acre based on an analysis of productivity between 2013-14 and 2017-18 of the districts.

The major challenges faced by farmers in garlic cultivation are as follows:

- It is a labour-intensive crop with 100-105 men days required for an acre of cultivation.
- It is also a water-guzzling crop regarding the number of irrigations required compared to major Rabi cereal crops.
- The coefficient of variation in garlic prices is significantly high, i.e., equivalent to 0.59 in Baran agriculture Mandi, and there is a lack of infrastructure related to the primary processing of the produce at the community level.

SRIJAN designed a project with the support of HDFC Bank's flagship initiative, 'Parivartan,' Titled ***"Strengthen Rural Livelihoods of Aspirational District Baran through Establishing Value Chain Around Farm Commodity."***

SRIJAN worked in a cluster of 30 villages of Mangrol block in Baran district since January 2021. This coffee table book captures seven case studies as best practices under the project.

A photograph of two women working in a field of young garlic plants. The woman on the left is wearing a red and white striped headscarf and a yellow and white striped sweater. The woman on the right is wearing a black and white striped headscarf and a black jacket. They are both using hand tools to work the soil around the plants. The background shows a line of trees under a clear sky.

TRANSFORMING GARLIC CULTIVATION

A Case Study on Sustainable Practices and Increased Yield in Baran District



Mamta Bai Meena

MAHALPUR VILLAGE OF MANGROL



Mamta Bai Meena is a woman farmer in the Mahalpur village of Mangrol block in the Baran district of Rajasthan. She lives in a joint family with her husband, one son, one daughter, and her in-laws. She registered with the Village Development Committee (VDC) formed under the project. Despite Baran being known as the largest producer in Rajasthan, the SRIJAN team discovered a prevailing issue related to the deterioration of productivity of the local variety 'Mahadev' during Rapid Rural Appraisal (RRA), which the member of VDCs also endorsed. ' Farmers had been using this variety for an extended period, which led to a decreased productivity of 19 quintals per acre, which is lower than the district average productivity of 22 quintals per acre. Also, the market value of the produce is lower due to less whiteness, smaller bulb size, and are susceptible to diseases.




**FARMERS STUDIED “RIYAWAN”
AND “YAMUNA SAFED” VARIETIES DURING THEIR
VISITS AND LEARNED NEW FARMING TECHNIQUES**

CASE STUDY 01





Responding to farmers' demands, SRIJAN, in collaboration with local farmers, initiated a quest for better garlic seeds. SRIJAN believes that variety should be selected based on a participatory approach; therefore, four VDCs and SRIJAN representatives as a procurement committee have explored the various markets. They visited Madhya Pradesh's Mandis, including Neemuch, Mandsaur, Daloda, and Kala Peepal, to explore the market of superior garlic seed, as Madhya Pradesh is the highest garlic producer state in India with higher productivity. Farmers studied "Riyawan" and "Yamuna Safed" varieties during their visits and learned new farming techniques. They scrutinized soil conditions to ensure compatibility with their land. The collaborative effort resulted in identifying and procuring high-quality garlic seeds from these Mandis.



HER PRODUCTION INCREASED FROM 7.5 QUINTALS PER BIGHA (1 BIGHA EQUALS 0.4 ACRE) TO 10.5 QUINTALS PER BIGHA. SHE ALSO SOLD THE GARLIC AT A REASONABLE PRICE OF 110 PER KG LAST SEASON, I.E., INCREASED GROSS INCOME OF 33,000 INR THROUGH THE INTERVENTION.

Mamta Bai opted for Riyawan Variety to pilot during October 2022 on one Bigha (Bigha is a local unit equal to 0.4 acres) of land. She has sown 120 kg of garlic seed on one Bigha of land. She also used the service of a custom hiring centre established in her village. She used a bulb-breaking machine to break garlic bulbs into cloves for sowing on her agricultural land. The cost of using a machine was 100 INR per quintal and one labour for cleaning of seed while three men-days were required for cleaning and bulb breaking. Thus, the cost was reduced to 47% through less use of labour in the process. Also, the SRIJAN team worked on promoting organic inputs in the demonstration units by using Sagarika (an organic growth promoter branded by IFFCO). It has also reduced the use of Synthetic fertilizers in the demonstration unit by up to 40%.

All these practices led to positive results in the end. Mamta Bai received increased production by 3 Quintals in her demonstration unit of One Bigha. The production increased from 7.5 quintals per Bigha (1 Bigha equals 0.4 acre) to 10.5 quintals per Bigha. She also sold the Garlic at a reasonable price of 110 per kg last season, i.e., increased gross income of 33,000 INR through the intervention. She also selected and conserved the seed for the upcoming season (October 2023) of “Riyawan” Variety as Farmer Saved Seed (FSS) and scaled it up to the area more than 2.5 times using FSS. ***This shift promotes self-sufficiency and aligns with sustainable farming practices, breaking the cycle of dependency on external seed sources/markets.*** During a project duration of three years, SRIJAN has benefitted such interventions to 2374 unique rural families with 2503 demonstrations.

PROMOTING MACHANIZATION IN GARLIC PRODUCTION

A case study on Village Level Custom Hiring Centre





Farm mechanization is one of the critical initiatives to minimize the cost of cultivation through optimum use of manual labour during various crop production activities. SRIJAN believes in promoting collectives to ensure better efficiency with promoted resources. Therefore, the Village Development Committee established and managed a village-level custom hiring centre. Based on an earlier assessment of the scope of mechanization in Garlic crops, it became clear that the average cost of cultivation per acre is 62,383 INR, i.e., 23.6 INR per Kg. Of these, 37% is the labour cost for seed preparation, weeding, post-harvesting processes, and packaging. And thus, it requires 100-105 men days as labour per acre. Therefore, the SRIJAN team designed village-level custom hiring centres to reduce the cost of cultivation, particularly during sowing, bulb breaking, and post-harvesting processes, through renting machines owned by Village Development Committees at lower prices.

SRIJAN formed a Village Development Committee in Baldeopura village on April 15, 2021 with 17 initial members, which reached 67 members out of 166 Households as of date. With support from HDFC Bank's 'Parivartan' initiatives under the project, the SRIJAN team has provided three types of machines for the establishment of a Custom Hiring Centre in the village, including a Garlic Planter, a Garlic Bulb Breaking Machine, and a Garlic Grading Machine. The Garlic Bulb Breaking Machine had a breaking capacity of 400 Kg Per hour, with a 2 HP (Horsepower) Single Phase Motor, a Garlic planter designed especially for Garlic multi-grain seeding option, and a portable garlic grading machine that could be tractor mounted with 2 motors of 1 HP single phase & 1000 Kg per hour capacity. A five-member executive committee has been formed to maintain the custom hiring centre and efficient operations. Thus, they rented out these machines for the last three seasons since they were handed over to VDC on November 01, 2021.

VDC & NON-VDC MEMBERS HAVE BENEFITED FROM HIRING THESE MACHINES

**RENTING THE MACHINES HAVE EARNED THE CHC
MORE THAN 64,000 + INR TILL LAST YEAR**



This CHC has rented these machines to VDC and non-VDC members, and in the last three seasons, these machines have been rented out 204 times, i.e., used by more than 68 farmers. By renting these machines, till last year, they have earned 64,305 INR; this season, they expect to earn 20,000 INR more as farmers pay after harvesting their crops. Thus, CHC has earned close to 84,305 INR since receiving these machines at the centre. They have also decided to lower rental rates for the machines for the welfare of the farmers, like 100 INR per Bigha for the Bulb Breaking machine and Seed Drill machine and 15 INR per quintal for the garlic grading machine. This is nearly half concerning local market rates.



FARMERS NOW ASPIRE TO PURCHASE MORE MACHINES THROUGH EARNED REVENUES AS THEY FIND IT SUITABLE TO DECREASE THE COST OF LABOUR IN GARLIC CULTIVATION



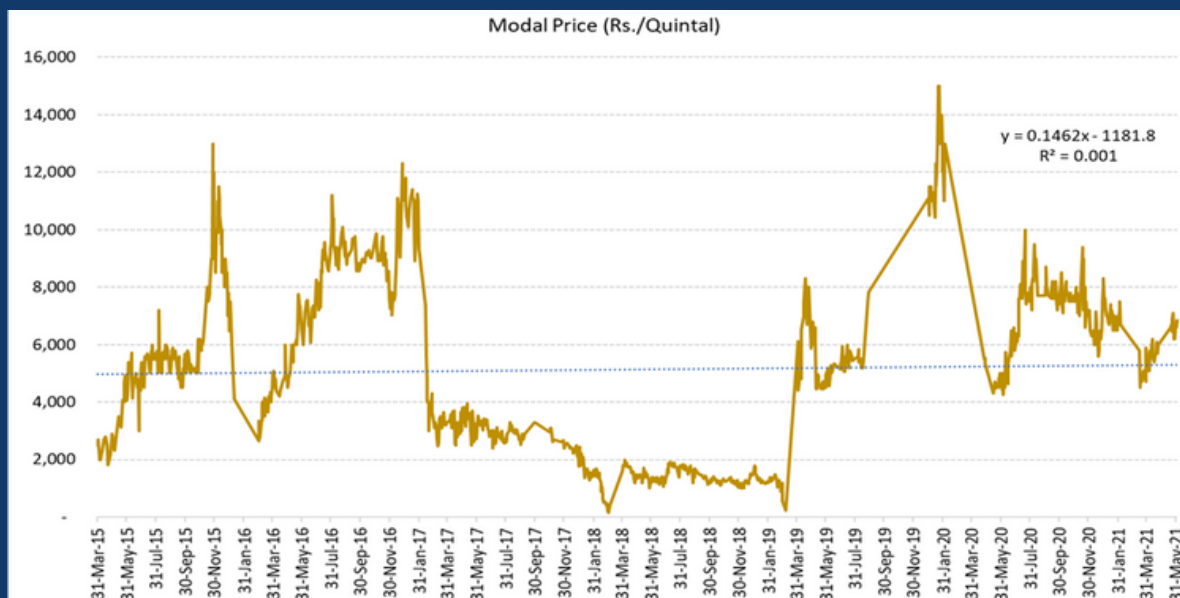
Now, the CHC unit in Baldeo Pura is looking for more machines through their earnings. They have purchased one soybean spiral grading machine worth 6,200 INR as they will use it for grading their soybean crop on a rental basis. They have also made an expenditure of 7,700 INR towards the maintenance of these machines. They also aspire to purchase new bulb-breaking machines once they earn more than one lakh rupees through rental services based on the farmers' demand for that particular machine. ***Thus, this idea worked for the farmers in the village, and they found it suitable to decrease the cost of labour in Garlic cultivation. It also acts as an inspiration for other CHCs to earn more through renting services to the farmers.*** Under the project cycle, the SRIJAN team has established 16 Custom Hiring Centres (CHCs) in 16 villages.

ESTABLISHING MARKET LINKAGES THROUGH A FARMER PRODUCER COMPANY

A Case Study on Farmer Producer
Organisations



HIGH VARIATION IN MANDI PRICES MAKES GARLIC, A RISKY CROP TO GROW.



Building on problems identified during the earlier RRA, it was evident that the visual fluctuation in garlic price is supported by a high coefficient of variation (standard deviation/ mean), which is 0.59, signifying a high variation in prices, making Garlic a risky crop to grow due to its uncertainties in prices.

**THE SUMMARY STATISTICS
OF THE MODAL PRICE
PRESENTED IN THE GRAPH
PRESENTED HERE:**

**Summary Statistics of Garlic Modal Price at
Baran APMC from Mar '15 – May '21 (all prices
in Rs per quintal)**

COUNT	1,152
MINIMUM	150
MAXIMUM	15,000
RANGE	14,850
MEAN	5,127
MEDIAN	5,000
MODE	5,000
STANDARD DEVIATION	3,022
COEFF. OF VARIATION	0.59
COEFF. OF CORRELATION	0.03

FORMATION OF A FARMER PRODUCER COMPANY

ON FEBRUARY 22, 2022, BOARD OF DIRECTORS AND PRODUCERS COMPLETED THE REGISTRATION PROCESS AND ESTABLISHED "SAHANSHAKTI FARMER PRODUCER COMPANY LTD."

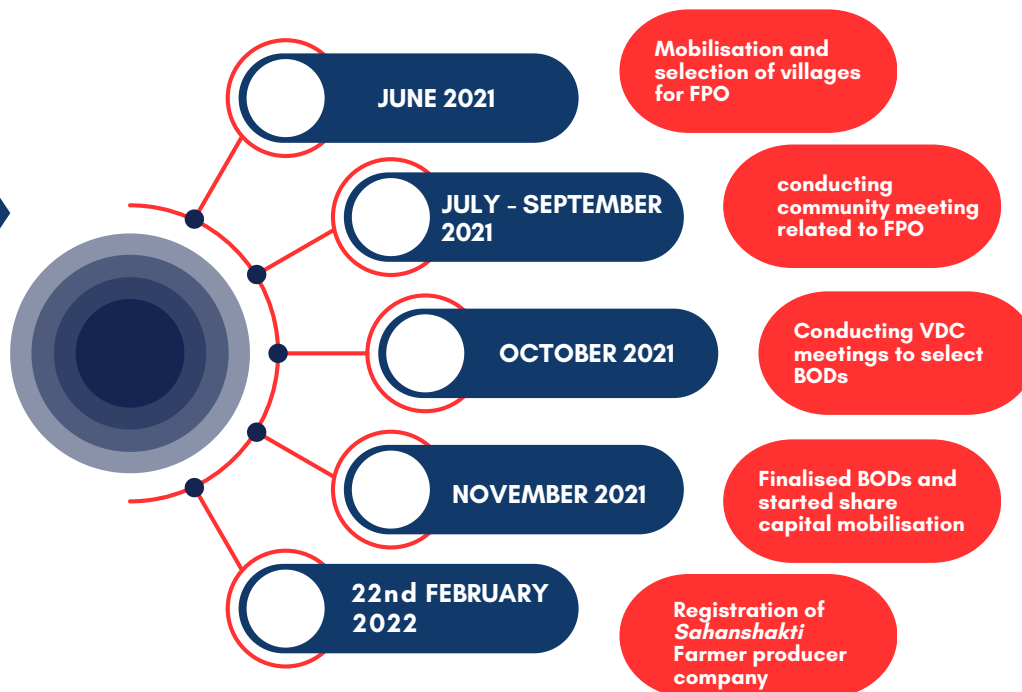


The majority of farmers in the region focus more on production than on the market. Due to a lack of market knowledge and collectiveness, farmers are now disadvantaged as they are not involved in the complete agriculture value chain, which allows intermediaries to keep a higher percentage of profits. Therefore, the SRIJAN team proposed the formation of a farmer-producer company by federating the members of VDC to negotiate for better price realization through access market and value addition.

The SRIJAN team conducted village-level meetings to engage in discussions with producers. After these meetings, three members from each village development committee (VDC) voluntarily participated. Thus, the community selected 17 Board of Directors (BoDs) to form the FPC. On February 22, 2022, BoDs and producers completed the registration process and established "Sahanshakti Farmer Producer Company Ltd." with an initial 600 producers as shareholders.



TIMELINE OF **SAHANSHAKTI** FARMER PRODUCER COMPANY LTD



Later, the SRIJAN team focused on building the capacity of the Board of Directors (BoDs) through multiple trainings and external exposures. The training & exposures were focused on the importance of the FPC, legal compliance as per the Act, roles & responsibilities of the BoDs and shareholders, etc. Also, they have real-time experience running FPC successfully. SRIJAN team also facilitated monthly board meetings by setting agendas and explaining the Company's operations so they could be aware of the processes involved. At these meetings, the BoDs discussed topics related to the Company's plan, setting up the FPC office, managing assets, distributing shareholding certificates, procurements, maintaining records, legal paperwork, general meetings with the shareholders, etc. They also encouraged other VDC members to become shareholders of the Company. Thus, the shareholding increased from 600 members initially to 1705 members by December 2023 with a total share capital of 17.05 Lakhs as each shareholder invested 1000 INR for their shareholding.

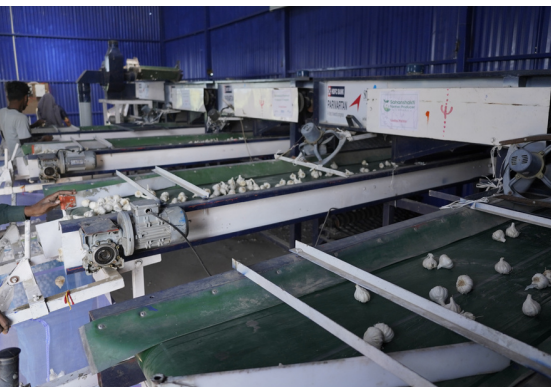
BUSINESS BY THE FPC



The Sahanshakti Farmer Producer Co. Ltd. has started its operations in 2022. In the first year of 2022, the FPC procured 5.647 tons of Garlic, but the average price at Mandi was nearly 1200 INR per quintal. FPC made all procurements at daily Mandi rates at the farmers' doorstep, and the market price fell again, leading to an initial loss to FPC. Total revenue was only 58,839 INR, with a loss of 7,643 INR. This was an initial setback with the FPC and the shareholders. But in 2023, the FPC worked with more targets, with a total procurement of 16.474 tons and total revenue generated of 17,99,225 INR through sales of 13.789 tons as of December 31, 2023. This year, the average price fetched by the farmers is 11,376 INR per quintal, around ten times more than the earlier price.



The FPC did primary grading of the procured Garlic in Grade A (>45 mm size), Grade B (35 mm to 45 mm size), Grade C (25 mm to 35 mm size), and Grade D (15 mm to 25 mm size) and sold it to the market with an average price of 13,048 INR per quintal i.e., with 14.69% more price concerning procurement price as profit to the FPC. This worked as awareness among the BoDs about business operations and the benefits of collective marketing with primary value addition. The FPC is now taking shape in their business operations as they have also set up a central processing unit with a processing & storage facility. They have also diversified their business portfolio by procuring other crops like Soybeans. To date, FPC has also piloted procurement of 7.45 tons of soybeans.





Mr. Bajrang Lal Mehra, a resident of Bohat village in Mangrol block, shared one good experience. He is a shareholder of the producer company. He sold 10.54 quintals of Garlic through FPC, with a total earnings of 1,56,418 INR at an average price of 14,840 INR per quintal. As the procurement was done at his doorstep, he confirmed that he had saved around 115 INR per quintal, i.e., 1212 INR, as FPC didn't deduct for transportation, labour, and weight of the produce. Also, he can negotiate with the Company for the price of his produce at his doorstep, which was not in an earlier case when selling at Mandi. ***Thus, collective marketing is taking shape in this region through a farmer's Company as they aspire to do more business transactions in the coming year and make this initiative successful for themselves.***



ADOPTING MODERN METHODS FOR VEGETABLE CULTIVATION

A Case Study on Crop
Diversification Activities





Damyanti Bai

RAWAL JAWAL VILLAGE



Having six members, Damyanti Bai and her family live in the village Rawal Jawal and grow Garlic, mustard, and vegetables on their two acres of land. She joined the Village Development Committee (VDC) formed in the village, which has 87 members as of the date under the project. She hoped to learn something new that could make her farming better.





The SRIJAN team focused on open vegetable demonstrations with farmers in this village to introduce modern technologies with sustainable practices. She opted for a 1.5 Bigha demonstration for tomato, bottle gourd, and ridge gourd in her field. She opted to raise vegetable saplings through nursery development and later transplanted them in the field. SRIJAN team trained her in using bamboo for the vertical growth of tomatoes to reduce production losses. This method is called 'Trellis Farming'. Therefore, SRIJAN, with the support of HDFC Bank, supported bamboo for tomatoes and bio-input as growth promoters. Damyanti Bai was excited about this new way because it seemed to make good use of the area and, thus, increase the number of saplings planted. She also applied Sagarika, NPK Consortia, and Trichoderma as bio-input provided under the demonstration to reduce the use of chemicals in the cultivation process.



The results were encouraging for her as she harvested good-quality tomatoes due to vertical growth because earlier, they had rotted or been damaged due to the horizontal growth of plants over the ground. Now, she could sell 80% of what she grew to the market at a better price. She earned 46,574 INR by selling tomatoes, bottle gourd, and ridge gourd in March 2023 against a total expenditure of 11,875 INR, i.e., earned four times the investment made. She produced 1218 Kg. of tomatoes (worth 33,684 INR), 440 Kg. of bottle gourd (worth 8,320 INR), and 165 Kg. of ridge gourd (worth 4,570 INR). ***Simple techniques can bring change in production quality and, thus, increase earning opportunities for farmers like Damyanti Bai.*** She is happy to adopt the Trellis technique and looks forward to scaling this in her agricultural field in the future. More farmers in her neighborhoods are learning this technique to grow these vegetables. The SRIJAN team has demonstrated such practices as crop diversification activity on 123 acres of land with more than 300 farmers in the last two years.

An aerial photograph of a large, irregularly shaped pond with murky, brownish-green water. The pond is surrounded by a mix of green agricultural fields and some brown, possibly fallow or recently harvested, land. A dirt road or path runs along the top and right edges of the pond. On the right side, there is a large, dense cluster of trees. The overall scene depicts a rural water management project.

SECURING WATER FOR ALL

A Case Study of
Pakalkhera
Village

CASE STUDY 05

Pakalkhera Village Development Committee

PAKALKHERA VILLAGE



The Pakalkhera Village Development Committee (VDC) was formed in Pakalkhera village. The VDC identified a pond to renovate, called 'Mata Ji Ki Talai,' as there were no outlets for the pond and seating arrangements for villagers. The pond was silted up due to silt coming from the pond's inlets. This pond was useful for critical irrigation of kharif crops, livestock drinking water, and daily water use for villagers. This pond was also situated near the temple; therefore, this is also a religious place for the community members.



THE INTERVENTION CREATED A WATER STORAGE POTENTIAL OF 28,000 CUBIC METERS

THE POND ALSO PROVIDES WATER FOR LIVESTOCK LIKE CATTLE, BUFFALOES, GOATS, ETC., FROM 200 HOUSEHOLDS IN FOUR NEARBY VILLAGES.



The SRIJAN team acknowledged this demand from the VDC, Pakalkhera, and found this site technically suitable for the intervention. The technical team prepared the estimate and started the work in May 2023. The team has agreed to construct an outlet, bund strengthening, and a ghat for the community members' seating arrangements. VDC members also showed interest in applying silt to their agricultural lands to improve fertility. They lift the silt by their transportation arrangement. This collaboration worked for two months between May 01, 2023, and June 28, 2023, and the pond was renovated completely. Thus, it created a water storage potential of 28,000 cubic meters. Total expenditure from the project was 4.4 Lakhs while the community contributed 4.2 Lakhs through de-siltation and transportation of silt to their farm.



The pond filled to a significant level after the first rainfall, prompting gratitude from VDC members & villagers towards HDFC Bank Parivartan initiatives for sponsoring this crucial work. 17 farmers directly benefitted as their land was under command area, while 56 farmers indirectly benefitted. 1036 trollies of silt were transported to 7.5 acres of land by 17 farmers, and 50 acres of land will have critical irrigation during Kharif if rainfall is not good in the future. The pond also provides water for livestock like cattle, buffaloes, goats, etc., from 200 households in four nearby villages. This is the impact of this water harvesting structure constructed in the village. Similarly, in the last three years, the SRIJAN team has worked on 16 such water harvesting structures, nine of which were newly constructed and seven repaired.

ADOPTING MODERN TECHNOLOGIES FOR AGRICULTURE

A Case Study on
a progressive
farmer couple



Phula Bai Meena is a woman farmer and an independent worker. She lives at Jetal Heri Village in Bhatwara gram panchayat of Mangrol block. Her husband, Omprakash Meena, is also a progressive farmer, and they willingly adopted modern agriculture technologies at their farm in their sixties. She is a member of the Village Development Committee formed under the project. They have a family of six members to feed, with a landholding of 4 Bighas.




PHULA BAI ADOPTED SPRINKLER (MICRO-IRRIGATION) USE IN HER DEMONSTRATION FARM AS SHE RECEIVED IT UNDER THE PROJECT. IT HAS HELPED HER REDUCE THEIR IRRIGATION LABOUR AND SAVE WATER BY AT LEAST 30%.

Initially, SRIJAN intervened with seed change in Garlic through a garlic demonstration on one Bigha of land in September 2021. Phula bai adopted this graded Mahadeva seed and yielded eight quintals in the demonstration area. Later on, the SRIJAN team worked on post-harvest management of garlic crops and, thus, promoted the Solar Dryer House with the farmers in December 2021. Each solar dryer was 14 feet by 21 feet in width & length and 8 feet in height with a 6mm UV Polycarbonate sheet. She said, "It hardly takes 2-3 days to dry their produce instead of 8-10 days through sun-drying. And thus, helped me market my produce when required". Secondly, she also expressed about uniform drying of their produce in minimum time. She currently uses it for her crops, i.e., Soybeans and Garlic. She also adopted sprinkler (micro-irrigation) use in her demonstration farm as she received it under the project. It has helped her reduce their irrigation labour and save water by at least 30%. She also took part in multiple training sessions taken by the SRIJAN team related to sustainable agriculture practices and, thus, started using inputs on her farm.

CONVENTIONALLY, FARMERS IN THE VILLAGE WERE USING "JS 9560" VARIETY OF SOYBEAN OVER EXTENDED PERIOD. THEREFORE, THEY SURVEYED THE MARKET AND AGREED ON PILOTING IMPROVED VARIETIES FROM MADHYA PRADESH MANDIS.



Recently, in June 2023, Omprakash Meena, her husband, voluntarily joined the procurement committee from his village to purchase a good variety of soybean seeds for his community. The SRIJAN team targeted 300 farmers for varietal change for soybeans during this Kharif season. He had earlier experience of varietal change on his farm. Conventionally, in his village, farmers have been using the JS 9560 variety of soybeans for a long time as this is a shorter-duration variety and even suitable for less rainfall. Therefore, the region's productivity has declined to 3.8 quintals per acre, even less than the district average of 4.33 quintals per acre. Thus, five farmers, including Omprakash Meena, went to Neemuch, Mandsaur, Daloda, and Kala Peepal Mandis in Madhya Pradesh to select a good variety of Soybean for his region. These farmers have observed the soybean varieties like RVSM 1135 Soybean, PS 1569 Soybean, Black Bold, and NRC-138 based on productivity, suitability, etc. Thus, farmers agreed on piloting for RVSM 1135 Soybean, PS 1569 Soybean, and Black Bold varieties.



**PHULA BAI CHOSE
THE PS 1569 SOYBEAN
VARIETY FOR
DEMONSTRATION IN
ONE BIGHA OF LAND
THIS KHARIF SEASON
OF 2023.**



Phula Bai chose the PS 1569 Soybean variety for demonstration in one Bigha of land this Kharif season of 2023. She also used bio-inputs like NPK Consortia for seed & soil treatment and Sagarika as growth promoters for reducing synthetic fertilizer use in the demonstration unit. This time, plants were coming full of soybean pods, around 60-70 in a single plant compared to 40-50 pods in JS 9560. And this, she received the production of 3 quintals in her one Bigha of land, i.e., 7.59 quintals per acre, which is almost double the earlier repetitive production year on year. She has saved this seed for her future sowing during Kharif and dried her produce in the solar dryer house. She became an example in her village for adopting modern practices even in her sixties. 1900 farmers were demonstrated for an improved package of Soybean practices under the project in the last two years.




ILLUMINATING LIVES

A Case Study on the Adoption and Impact of Solar Lights in Villages



CASE STUDY 07



IN TOTAL, 342 SOLAR LIGHTS WERE INSTALLED IN TWO PHASES IN 30 VILLAGES, WITH AN AVERAGE OF 11 STREETLIGHTS PER VILLAGE.

The HDFC Bank 'Parivartan' initiative has defined goals, and one of the key goals, as recorded under 'Goal 5' of the Natural Resource Management thematic area, is to 'Reduce Carbon Foot-Printing.' It is targeted to cover 1000 villages to have clean & renewable energy solutions. SRIJAN, under project P0340, worked a bit to achieve this milestone under the 'Parivartan' initiative by promoting solar lights at the village level to have at least ten solar lights installed in each of the project villages.

The implementation involved the installation of solar streetlights at nearby households and community spaces. The distribution of solar lights was performed in VDC meetings after educating villagers about its benefits, maintenance procedures, and transfer of responsibility.

In total, 342 solar lights were installed in two phases in 30 villages, with an average of 11 streetlights per village. These solar lights have a capacity of 18 Watts with 50-60 Watts solar PV mono models to capture energy from sunlight during daylight.

Before the introduction of solar streetlights, villagers experienced frequent power cuts, especially during the rainy season, impacting daily life and hindering the movement of children, women, and elders. Evening activities at the village level were limited, and safety concerns arose due to inadequate lighting. After installation, community areas are becoming lively venues for nighttime events. It also encouraged the community for the use of environmentally friendly lighting solutions. The village's social fabric improved as women felt safer and more people could attend community events.



A WOMAN COMMENTED - “BAHAR NIKALTE HAI AB, RAAT MEIN GALIYON ME LIGHT KE KARAN, PEHLE ANDHERA RAHTA THA TO KAM NIKALTE THE”. A CHILD EXPRESSED - “LIGHT KE KARAN NIKALNE SE DARR KAM LAGTA HAI” WHILE COMMUNITY MEMBERS EXPRESSED - “SAAM ME JANWAR WAPAS AATE HAI TO DARR NAHI LAGTA HAI, LIGHT REHTA HAI AB TO”.

The introduction of solar lights in villages proved to be a beacon of positive change, diminishing the challenges associated with the lack of electricity. Beyond illuminating outside homes, it also lit up educational opportunities, improved safety, and strengthened the village's social fabric. This case study serves as a testament to the transformative power of renewable energy solutions in enhancing the quality of lives of communities in rural areas.



HDFC Bank Ltd.
I Techno Campus,
Corporate Social Responsibility
Building – Beta,
3rd Floor, Kanjur Marg,
Mumbai – 400042



4, Community Shopping Centre,
1st Floor, Anupam Apartments,
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