

# ADIVASI SAMRIDDHI PARIYOJNA





“HDFC Bank is delighted to partner with SRIJAN to make a meaningful difference in the lives of Pali district residents. Impenetrable geographies like Pali battle with a lack of access to basic resources. With SRIJAN’s support, we have been able to make the women of the district self-reliant. Installation of water harvesting structures, deep freezers and providing clean drinking water facilities are some of the other things that we have done in the area. We hope to continue our efforts in the area to make it a better place for the local residents,” said **Ms. NUSRAT PATHAN, HEAD, CSR & ESG, HDFC Bank.**







Dear Readers,

We are delighted to present our coffee table book, revealing the profound impact of 'Adivasi Samriddhi Pariyojna,' a transformative project accomplished through the unwavering partnership of HDFC Bank and Self-Reliant Initiatives through Joint Action (SRIJAN). Operating under the umbrella of 'Parivartan,' a Holistic Rural Development Program (HRDP), this endeavour has brought about a remarkable change in the lives of the tribal community in Pali district, Rajasthan.

Over the span of three years, the project has touched the lives of 2505 families, empowering them with climate-resilient agriculture practices, sustainable agricultural development, and access to valuable markets for their products. Thanks to the dedicated efforts of the SRIJAN team, tribal families have not only benefited from the business operations of Non-Timber Forest Produces value-added products but have also witnessed a significant 13.63-fold increase in revenue since joining the project. It fills us with immense pride to share that a major portion of this revenue directly benefits the community members, owing to the remarkable leadership and active involvement of our women tribal leaders.

Beyond agriculture, the project has fostered the promotion of water harvesting structures, leading to a staggering increase of 18.562 million liters of water harvesting potential. Moreover, critical irrigation across 55.4 acres of land has been significantly aided by well renovations that enhanced water retention capacity by 2.36 million liters.

To underscore our commitment to sustainability, we have successfully installed solar-powered street lights, lanterns, and deep freezers in Village Level Collection Centers, offering efficient and renewable energy solutions.

Currently, a substantial area of 125 acres enjoys the benefits of micro-irrigation, contributing to heightened water security and enhanced agricultural productivity. Additionally, an extra 12.5 acres of land have embraced solar-based irrigation technology, advancing our journey towards greener practices.

At the heart of this initiative lies our steadfast commitment to empowering women and creating a more inclusive and progressive society. We are immensely grateful to HDFC Bank for their generous support, which has been instrumental in uplifting the tribal community and driving holistic development. Moreover, we pay a special tribute to our resilient women tribal leaders, whose exceptional leadership has been pivotal in making this transformative project a resounding success. Additionally, I extend my heartfelt thanks to Team SRIJAN, whose dedication, hard work, and passion have made this journey of transformation possible.

May this coffee table book serve as an inspiration for all to embrace similar initiatives that foster prosperity, sustainability, and inclusivity.

Sincerely,  
Prasanna Khemariya  
CEO, SRIJAN



# PROJECT SUMMARY

PROJECT CODE: P0319

IMPLEMENTING AGENCY: SELF-RELIANT INITIATIVES THROUGH JOINT ACTION (SRIJAN)

LOCATION: DISTRICT - PALI,  
STATE - RAJASTHAN



HDFC Bank partnered with Self-Reliant Initiatives through Joint Action (SRIJAN) for a project with code P0319. The project is named 'Adivasi Samriddhi Pariyojna' with a defined objective to enhance the prosperity of the tribal community through the Holistic development of agriculture, value chain, and access to the market. This was under their flagship program, 'Parivartan,' and categorized as Holistic Rural Development Program (HRDP). The project has been implemented in 10 identified villages in the Bali block of Pali district in Rajasthan. These villages are tribal- dominated villages with a 98.2% population, specially Bhil & Grasiya communities. It is surrounded by forest, with 25.4% of the total geographical area as a forest area. It is also blessed with Non-timber forest products like custard apples, ber, Palash, etc., managed by the community. However, the collectors of NTFPs, especially women, could not get proper remuneration for their efforts in collecting NTFPs and had a very marginal share in profits through middlemen or other agencies.





The tribal in the region has been practicing subsistence agriculture for decades with small landholding averaging 0.58 hectares (1.2 Acres). Therefore, land shortage & poverty, taken together, led to non-sustainable land management practices and minimized the risk-bearing capacity of farmers. Hilly and undulating steep slope topography stimulates surface run-off and erosion, denuding valuable soil and water resources. The existing water harvesting structure were dysfunctional due to a lack of community ownership and participation in managing the assets and resources. Based on the baseline conducted in the project villages, it was found that 9 out of 10 farming households used to cultivate for self-consumption purposes only. 93% of the sample surveyed families own small ruminants like goats. Still, only 24% of households had their animals vaccinated, and allied agriculture activity accounts for only 13% of income at the household level. Migration was an important source of income for male community members as a large population of the area was involved in the occupation of stone carving and unskilled construction works. From March to June, women travel long distances of 2-3 km on rocky undulated topography to get access to drinking water. Due to the lack of clean drinking water, waterborne diseases like diarrhea, typhoid, etc., are also prevalent in the region. With 76% of households requiring medical help at least monthly, the need for medical assistance arises often. Still, access to health facilities is challenged for 74% of households, given the far-off distance they are located – beyond 5 Km.





All these rationales made SRIJAN design a project to work in a cluster of 10 such villages with the objective as defined above. SRIJAN, with the support of HDFC Bank, worked to support a women-led farmer producer company to strengthen their business operations through the idea of a decentralization businessmodel of NTFP-based value chain. The FPC has been supported with the concept of Village Level Collection Centers (VLCCs) to increase the product portfolios for annual business operations. Apart from this, the project emphasized the change in existing agricultural practices through crop diversification and inclusion of organic inputs, thereby increasing community resilience & income amid climate change. It is also focused on primary animal & human healthcare through health camps, clean drinking water arrangements, and renewable energy-based solutions for lightning & irrigation. And most importantly, the women members' capacity has been constantly increased through multiple engagements, including training, exposure and on-field demonstrations so that a community institution could be formed for their sustainability.





**The critical outcomes** through implementation of the project started from 01st July 2020 till 31st July 2023 in three years, as the SRIJAN team reached out to 2505 unique families directly through climate resilient agriculture practices and 2059 cumulative beneficiaries through business operations of NTFP value-added products. The FPO has done business with a cumulative revenue of 121.33Lakh, of which 84.37 Lakh (70%) went directly to the community members through the purchase of value-added products, labour, and management by women leaders. The revenue increased by 13.63 times with the revenue of the FPO before on-boarding the project. It has also diversified its business from a single product to five other value-added products with other NTFPs like Ber & Palash, and thus, business operations increased from two months to six months. Water harvesting structures are promoted, with total water harvesting potential increased by 18.562 million liters of water. Well renovations are done with an increased water retention capacity of 2.36 million liters. All these structures supported critical irrigation in 55.4 acres of land. Drinking water arrangements (08 units), irrigation technology demonstrations (05 units), street lights (93 units), solar lanterns (145 units), and deep freezers in VLCC (08 units) are demonstrated with community members to illustrate the importance and usability of decentralized renewable energy solutions as all these demonstrations were based on solar energy. 125 acres of land are also covered under micro-irrigation by increasing water productivity, and 12.5 acres of additional land brought under solar-based irrigation technology. 1809 community members and 5154 animals were covered through 16 human health camps & 21 animal health camps. 52 events have been organized for women members for their awareness and building their technical capacities, i.e., for business operations and other thematic interventions.





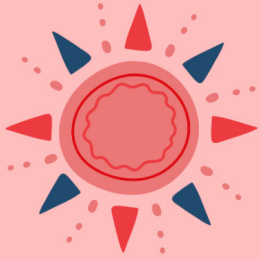
# ADIVASI SAMRIDDHI PARIYOJNA











# A FARMER PRODUCER COMPANY TURNING INTO A SOCIAL ENTERPRISE







Ghummar Mahila Producer Company Limited is a women-led farmer producer company registered under the Companies Act 2013 on 21st May 2015. Its office is in a distant village named Bhimana in the Pali district of the Indian State of Rajasthan. Bhimana and its nearby villages are blessed with non-timber forest produce (NTFPs), managed, and lived by tribal communities. These tribal communities are Grasiya, Meena, Bhil, etc., living in a cluster of villages in the border area of three districts named Sirohi, Pali, and Udaipur. Undulated topographies, narrow roads, agriculture fields, and communities make you feel rural and away from one's busy life in cities. But the journey of tribal women, starting from scratch to a company, is something incredible to know about.





Jitendra Meena, a development professional working with the communities for the past 12 years, works for a non-profit named Self-Reliant Initiatives through Joint Action (SRIJAN). He is responsible for value chain development and management of business operations with GMPCL Women Leaders. SRIJAN, with his project with HDFC Bank under its flagship program 'Parivartan', has turned around the fate of this company in the last three years. In FY 2019-20, the company was dealing with losses in the business of Custard Apple Pulp (NTFP) due to its business operations.



The key challenges were the high cost of production due to the centralized model, increased demand for handmade pulp in the market with high segments, quality of the procurement of raw fruits, and dependency on a single commodity for business revenue. Jitendra came up with the idea of decentralization of the business operations through Village Level Collection Centres (VLCCs) where women can come together with raw fruits, scoop pulp, and directly sell the custard apple pulp to the GMPCL instead of selling raw custard apples with their seeds. It has required facilities for scooping pulp (handmade), sitting arrangements, packaging units, and storage units to maintain the quality of pulp. Earlier, women sell raw custard apples @13 INR per Kg. to the FPC, while now, she sells custard apple pulp at @80 INR per Kg. (Tentatively 4-5 Kgs. of raw fruit turned into 1 Kg. of Custard Apple Pulp) and bring A-grade raw fruit to the centre so that she could scoop more pulp and earn as much as possible in a day through selling pulp to the company.



**THUS, THREE CHALLENGES GOT MITIGATED THROUGH ONE IDEA, I.E., PRODUCTION COST REDUCED AS THERE IS NO FURTHER NEED TO EMPLOY LABOUR SEPARATELY AS IN THE CENTRALISED MODEL, TOTAL VALUE-ADDED PRODUCTS TURNED IN TO HAND MADE PULP AND ALSO THE QUALITY OF THE RAW FRUITS ENSURED BY WOMEN ITSELF AS SHE HAS TO EARN MAXIMUM A DAY.**





GMPCCL LEADERS ACTED AS A BACKBONE FOR IMPLEMENTING THIS IDEA. THEY WORKED AS VLCC IN-CHARGE, MAINTAINED THE HYGIENE & QUALITY OF PRODUCE, AND MANAGED THE CENTRES FOR TWO MONTHS SEASON OF CUSTARD APPLE EACH BUSINESS YEAR.



Apart from implementing the decentralization of business operations, another critical aspect in the last three years was the diversification of the product portfolio. Currently, GMPCL is dealing with other NTFP Produces, including Ber (Indian Jujube) and Palash. The other value-added products developed to sell are Ber Stick, Palash Bio-Degradable Plates, Dehydrated Palash Flower, Dehydrated Ber, and Herbal Gulal.





**COMPARING THE REVENUE OF THE COMPANY IN FY 2019-20 (BEFORE THE START OF THE PROJECT), WHICH WAS 5.29 LAKHS, IT HAS GROWN UP TO 72.12 LAKHS IN FY 22-23 WITH GROSS PROFITS AROUND 8.9 LAKHS. THE TOTAL REVENUE GENERATED IN THE LAST THREE YEARS OF BUSINESS OPERATIONS IS 121.33 LAKHS OUT OF WHICH 84.37 LAKHS WENT DIRECTLY TO THE COMMUNITY MEMBERS THROUGH VALUE ADDED PRODUCTS PROCUREMENT AND LABOUR & MANAGEMENT COSTS OF LEADERS TO THE COMPANY, WHICH IS 70% OF TOTAL REVENUE."**







**JITENDRA AND GMPCL BOARD MEMBERS FEEL PROUD TO BE PART OF THE JOURNEY AND SEE THIS AS AN OPPORTUNITY TO BRING CHANGE IN THE LIVES OF THE TRIBAL COMMUNITY LIVING IN THE AREA. THEY ARE ENTHUSIASTIC ABOUT SCALING THIS BUSINESS IN THE COMING YEARS INDEPENDENTLY NOW AS THEY RECENTLY PURCHASED LAND TO OWN SPACE FOR THEIR SOCIAL ENTERPRISE THROUGH THEIR PROFITS.**

# WOMEN LEADERS – LEADING FROM THE FRONT



MOTHER TERESA SAID, "I ALONE CANNOT CHANGE THE WORLD, BUT I CAN CAST A STONE ACROSS THE WATER TO CREATE MANY RIPPLES." WOMEN LEADERSHIP IN THE GHUMMAR MAHILA PRODUCER CO. LTD. IS CASTING A STONE ACROSS THE WATER THROUGH THEIR LEADERSHIP WHILE IMPLEMENTING THE COMPANY'S DECENTRALIZATION BUSINESS OPERATION MODEL. "WITHOUT THEIR SUPPORT, IT WON'T BE POSSIBLE," – AS QUOTED BY JITENDRA MEENA, A DEVELOPMENT PROFESSIONAL WITH SRIJAN.





Parthi Bai and Champa Bai are among the women leaders working with GMPCL and also part of Choomar Mahila Samiti, a women-led federation promoted by SRIJAN in the Pali district of Rajasthan. They played a crucial role in maintaining village-level collection centres in their villages. Parthi Bai lives in Upla Bhimana village, where this decentralized model was piloted in the hamlet Bhura Tepra. This decentralized centre was established in September 2020 in a rented space where a solar-based deep freezer, scooping & packaging equipment, and other essential assets were installed to run the centre. Parthi Bai, with other leaders of the village, joined for an intensive advertisement of the centre and illustrated the benefits to the other NTFP women collectors in the village.





They went to SHG meetings, organized village-level meetings, and continued to talk with other villagers for the start of the VLCC unit. She played a significant role in maintaining hygiene at the processing space, grading, packaging, taking attendances, keeping records, weighing the produces, storing, transportation to the centralized storage unit and payment to the community members along with other village leaders. In the last three years, they have made 25.884 tonnes of custard apple pulp, paying 19.89 Lakhs to the community members.





While reflecting on working in the centre, she mentioned one issue of external middlemen coming to the village to purchase unripen fruits. The company's leaders came together to stop any external middleman from entering their village for the purchase as it prevents fruit from ripening and getting pulp at the centre. They want the profits to be with the women and the company.



**THUS, THESE LEADERS PLAYED AN IMPORTANT ROLE IN STOPPING ANY EXTERNAL VENDOR FROM ENTERING IN THE VILLAGE; ALTHOUGH THEY FACED SEVERAL CONFLICTS WITH THE VENDORS AND LOCAL ADMINISTRATION, THE COMMUNITY WON UNDER THEIR LEADERSHIP. SHE HAS ALSO EARNED 28,600 INR THROUGH MANAGEMENT AT CENTRE LEVEL AND 23,546 INR WITH THE SUPPORT OF THEIR FAMILY MEMBERS, WHO GOT ENGAGED IN THE EXTRACTION OF PULP AT CENTRE AND SELLING IT TO THE COMPANY IN THE LAST THREE YEARS. SHE HAS ALSO SOLD 7 QUINTALS OF RAW BER AND 5 QUINTALS OF PALASH TO THE COMPANY AND EARNED INCOME.**



WHILE CHAMPA BAI LIVES IN CHINGTA BHATA VILLAGE AND IS ALSO A MEMBER OF FPC'S BOARD OF DIRECTORS. SHE ALSO MANAGES A VLCC CENTRE AT THE VILLAGE, WHICH STARTED NEXT SEASON, I.E., SEPTEMBER 2021 IN THE VILLAGE. IN THE LAST TWO YEARS, THIS VLCC CENTRE HAS PRODUCED 23.297 TONNES OF CUSTARD APPLE PULP WITH PAYMENT OF 17.90 LAKHS TO THE COMMUNITY MEMBERS. SHE HAS EARNED 60,762 INR IN THE LAST TWO YEARS THROUGH MANAGEMENT AND SELLING PULP TO THE COMPANY.







She also manages all works of the centre as Parthi Bai does at Upla Bhimana VLCC centre. But one exciting aspect in this centre is the participation of male members in the centre for scooping of pulp. It is general in this area that women participate more in the collection of raw fruits and extraction of pulp at centre level, but this VLCC has also inclined male members to work to earn money instead of going outside for work like in any construction activity through migration. She says a working member can earn up to double the wage rate in market through this VLCC if he/she works efficiently. She jokingly says, **"now sometimes her husband has to make Roti for her while she is busy working in the centre"**.



# CUSTARD APPLE PLAYED VITAL ROLE TO ENHANCE INCOME



MALI BAI IS AN AGRICULTURE FARMER OF CHINGTA BHATA, BLOCK – BALI, DISTRICT – PALI OF THE INDIAN STATE OF RAJASTHAN. HER FAMILY HAS SEVEN MEMBERS, INCLUDING HER HUSBAND, PITHA RAM. ALL HER FAMILY MEMBERS ARE INVOLVED IN AGRICULTURAL ACTIVITY, AS AGRICULTURE IS THEIR PRIMARY SOURCE OF INCOME. EARLIER, MALI BAI'S ECONOMIC CONDITIONS WERE NOT WELL AS THEY DEPENDED ON AGRICULTURE, BUT AFTER JOINING HER HANDS ON NTFP-BASED VALUE CHAIN, THEIR DEPENDENCY HAS ALSO SLIGHTLY CHANGED. EVEN ONE OF HER CHILDREN USED TO MIGRATE FOR LABOUR WORK RELATED TO STONE CARVING IN THE CITY. SHE HAD A MARGINAL LANDHOLDING OF 0.65 HECTARES WHICH ONLY SUFFICED THEIR NEEDS.

She engaged herself with Village Level Collection Centre (VLCC) opened in the Village Chingta Bhata in September 2021. Her son Rupa Ram used to pluck custard apples from the forest while Mali Bai and her daughter-in-law Seema Bai worked in the VLCC unit to scoop the pulp from the raw fruits. Her younger son Rajkumar also worked as a record keeper in the centre. Their hard work paid off, and in the last two years of operation of the VLCC unit, her family earned 64,227 INR by selling custard apple pulp to GMPCL. In the first year of operation, she sold 202.38 Kg. of pulp and made 14,167 INR, while during the second year, she sold 625.75 Kg worth of 50,060 INR. This was a considerable amount for them to earn in a season of 30 to 45 days.





NOW, HER FAMILY IS MAKING EXPENDITURES ON EDUCATION AS MIGRATION HAS STOPPED. RUPA RAM, HER ELDER SON, WHO EARLIER COULD NOT ENROLL DUE TO LACK OF MONEY, IS PURSUING B.ED. AND WANTS TO BECOME A GOVERNMENT TEACHER. AND SOMEDAY, HE HAS THE ZEAL TO PURSUE HIS PH.D. ALSO. RAJKUMAR, HER YOUNGER SON, ALSO TOOK ADMISSION TO PURSUE HIS GRADUATION.



Since December 2022, Mali Bai is getting her hands-on experience on multilayer vegetable cultivation, also as promoted under the project. Her multilayer unit has bottle gourd, bitter gourd, ginger, coriander, spinach, and cucumber. She has recently started her production for self-consumption within her family and looks forward to having more vegetable production from this unit so that she can sell it as well. She and her family members are truly dedicated into the works, and they have strong belief to increase their income up to one lakh in coming season.



# HARVESTING WATER FOR FOOD SECURITY



Under the project, the SRIJAN team has identified two sites to construct check dams to create water harvesting potentials for the farmers. At one site named 'CWHS nearby Puliya,' there were 13 families who got benefitted through the construction of a masonry check dam. There were 9.6 acres of land under irrigation as it comes under the command area. Earlier, these groups of farmers cultivate maize during Kharif and wheat on 6.4 acres of land and don't have any practices during Zaid. But after the dam's construction, they increased the area under wheat cultivation up to 8 acres of land and 2 acres under Green Gram (moong) cultivation during Zaid.

THANDI BERI IS A VILLAGE IN THE PALI DISTRICT OF RAJASTHAN AND ONE AMONG THE TEN PROJECT VILLAGES IDENTIFIED FOR THE PROJECT 'ADIVASI SAMRIDDHI PARIYOJNA' WITH HDFC BANK. IT HAS 98% POPULATION BELONGING TO SCHEDULED TRIBES, MAJORLY GRASIYA, AND ONLY 27% OF THE AREA AS A NET SOWN AREA OUT OF A TOTAL OF 512 HECTARES OF GEOGRAPHICAL AREA. OF 138 HA. OF NET SOWN AREA, ONLY 36.16 HECTARES OF LAND UNDER IRRIGATION MOSTLY THROUGH WELLS. THE PROJECT VILLAGE HAS UNDULATING TOPOGRAPHY AND HARD STRATA FOR THE RECHARGE TO GROUNDWATER. IT HAS A MAJOR DRAINAGE LINE PASSING FROM THE BOUNDARY OF THE VILLAGE.



While at another site in Shiswada hamlet named 'CWHS nearby Hanuman Mandir', it has also 13 families benefitted through the construction of a second masonry check dam. It has created the potential for 7.46 acres of land in the command area to get irrigated. These check dams have improved their food sufficiency for twelve months through wheat and pulses added into their grain storage. At the same time, these structures helped in recharging wells on the downstream side. The community also contributed 66,250 INR through their labour activities while constructing both check dams. In total, six masonry check dams have been built, five under the project and one with convergence through Gram Panchayat. All these have led to having total water harvesting potential equivalent to 18.562 million Liters of water, benefitting 59 community members through the intervention.





APART FROM THIS, TEN WELL RENOVATIONS ARE DONE IN ALL VILLAGES. WELL DEEPENING OF THE EXISTING WELLS HAS INCREASED THE POTENTIAL OF WATER HARVESTING FROM THESE WELLS. 2.36 MILLION LITERS OF WATER EQUIVALENT VOLUME HAVE BEEN CREATED THROUGH WELL-DEEPENING WORKS AND BENEFITTED 27 COMMUNITY MEMBERS. ONE GOOD CASE IS WITH FAGNU BAI IN THE VILLAGE – UPLA BHIMANA. FOOD SUFFICIENCY IS ONE OF THE CRITICAL CHALLENGES WITHIN HER FAMILY OF 22 MEMBERS, AS THEY HAD LESS PRODUCTION FROM HER LAND DUE TO A LACK OF WATER IN HER WELL. EARLIER, SHE HAD AROUND 20 FEET OF WELL DEPTH, INCREASING TO 60 FEET AFTER DEEPENING.



This has increased volume, equivalent to 128.95 cubic meters. Through this Well renovation, her 1.5 acres of land got irrigated during Rabi, and her production doubled to 15 quintals of wheat last year. She also produced 4.5 quintals of maize last year through her land during Kharif. All these factors led to food sufficiency for her family through the production of Maize & Wheat as consumptive crops on her land. Fagnu Bai also works with GMPCL for custard apple processing management at her village-level centre in Upla Bhimana. She has also earned 31,050 INR in last three seasons through managing VLCC centre at her village.





# DIVERSIFYING INCOME SOURCES THROUGH CROP DIVERSIFICATION AND GOOD AGRICULTURE PRACTICES





GANGA RAM IS AMONG THE NUMBER OF PROGRESSIVE FARMERS IN THE PROJECT VILLAGE THANDI BERI. HE HAS A WIFE NAMED MOVANI BAI AND HAS TWO SONS AND THREE DAUGHTERS IN HIS HOUSE. THE SRIJAN TEAM HAS WORKED ON PROMOTING GOOD AGRICULTURE PRACTICES OF CLIMATE RESILIENT AGRICULTURE ALONG WITH CROP DIVERSIFICATION UNDER THE PROJECT. AMONG THE SEVERAL COMMUNITY MEMBERS ENGAGED, GANGA RAM BECAME A MODEL FARMER IN HIS VILLAGE.







Earlier in his 4.75 acres of land, he cultivated 1.98 acres for cereals & pulses cropping, and the rest, 2.77 acres, used to produce fodder for their livestock (due to sloppy land and distant from his house). In 1.98 acres of land, he used to cultivate only maize, wheat, and gram as consumptive crops. It even uses chemical fertilizers in the process, including Urea and DAP. But after training with the SRIJAN team on the ground, he slowly understood the negative impacts of chemical fertilizers and started using organic inputs on the field. He started using Vermi-Compost, Farm Yard Manures, Jeevamrut, Ghan-Jeevamrut, and other organic extracts and learned manufacturing at the household level during training. He has also diversified his cropping pattern as he shifted from cereal & pulses to cereal & vegetable cultivation.







WHILE IN VEGETABLE CULTIVATION, HE HAS ADOPTED BOTH TYPES, I.E., OPEN AND MULTI LAYER. HE STARTED PRODUCING TOMATO, BRINJAL & ONION THROUGH OPEN VEGETABLE CULTIVATION, EARNING 80,000 TO 1,00,000 INR PER ANNUALLY FROM THE PRACTICES. ALTHOUGH SRIJAN HAS PROMOTED TOMATO CULTIVATION, HE MADE 26,000 INR LAST SEASON BY PRODUCING 6.5 QUINTAL OF TOMATOES FROM 0.2 ACRES OF LAND. WHILE IN A MULTI LAYER VEGETABLE PLOT OF 0.02 ACRE AREA, HE HAS PLANTED GINGER (BELOW THE GROUND), CORIANDER & SPINACH (ABOVE THE GROUND), AND BOTTLE GOURD & BITTER GOURD (AS CREEPER CROPS) IN THREE LAYERS OF VEGETABLE CULTIVATION. HE HAS EARNED 14,985 INR BY SELLING 365 KG. OF VEGETABLE PRODUCED FROM THE UNIT, AND ALSO CONSUME 39 KG OF VEGETABLE AT HIS HOUSEHOLD LEVEL.



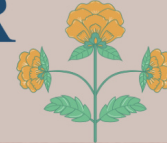
He also uses Sprinkler in his agriculture field and acknowledges that the Sprinkler requires less labour for irrigation and saves water in his well. He also acknowledges vendors' demand for his vegetable in the market due to the taste and longevity of the produce for storage. Recently, he switched to a Solar Irrigation Pump of 5 HP through PM Kusum Yojana, through which he replaced his diesel engine pump. He saves 12,000 INR annually on the cost of diesel for irrigation at his field, including the annual cost of maintenance of diesel pumps. All these changes in his life over the last three years encourage him to make their child educated and emphasize the importance of education.



**IN TOTAL, 3705 DEMONSTRATIONS ARE DONE IN 1465 ACRES OF LAND WITH 2441 UNIQUE FAMILIES FOR AWARENESS OF FARMERS RELATED TO CLIMATE RESILIENT AGRICULTURE PRACTICES. WHILE 60 FARMERS HAVE BEEN SUPPORTED FOR MULTI-LAYER VEGETABLE CULTIVATION AND 80 FARMERS HAVE BEEN SUPPORTED FOR SPRINKLER DEMONSTRATIONS.**



# HARNESSING SOLAR ENERGY: INVESTING FOR THE GREEN FUTURE



RAJASTHAN IS AMONG FIVE MAJOR STATES IN INDIA ACKNOWLEDGED FOR HIGHER POTENTIAL FOR HARNESSING SOLAR ENERGY THROUGH INFRASTRUCTURE DEVELOPMENT. EVEN DECENTRALIZATION OF SOLAR POWER AT FARM & HOUSEHOLD LEVELS WOULD BE ANOTHER SIGNIFICANT PROSPECT IN THE COMING FUTURE. THIS PROJECT HAS EMPHASIZED USING SOLAR ENERGY-BASED TECHNOLOGY AND DEMONSTRATED WITH FARMERS AND RURAL HOUSEHOLDS FOR THE SAME.





One such good example comes from Pakaram. He is a progressive farmer in the village of Koyalvao. He invested 42,000 INR (20% of the total cost) as a community contribution against the total cost of 2.11 Lakh INR for a unit of solar irrigation pump with a capacity of 3 HP in December 2021. He did his cost-benefit calculation before his investment and covered his cost in the first year only. He has seven acres of land with ownership of two brothers (himself and Bhura Ram). While irrigating one single irrigation to his seven acres of land, they consume 60 liters of diesel. Thus, for an average of six irrigations per year, they invest 360 liters of diesel for different crops during the Rabi season.





As per the current diesel rate in his region, he acknowledges annual savings of 34,000 INR, excluding the maintenance cost of the diesel pump, which is extra apart from mentioned savings. He has a Well with a depth of more than 100 feet as the source of irrigation for his crops and drinking water. Now, he can irrigate his field based on his convenience and requirement as the department usually provides three-phase electricity during the night for irrigation to farmers. He partially got himself out of dependency on electricity by installing a solar irrigation pump at his farm, as he also used electric pumps in case required during the lean season. In total, five such units of solar irrigation pumps have been installed for demonstration to the farmers.





While another initiative based on renewable energy has been taken for drinking water arrangements, before the intervention, the community members in the hamlet, Kali Pahadi, village Koyalvao, solely relied on a hand pump for drinking water. Residents had to wait 6-7 days for repairs, or they resorted to collecting water from alternative sources. Queuing for water became a daily routine, with women dedicating significant time to ensuring their families had enough water for domestic use. SRIJAN, with the support of HDFC Bank, installed a solar-based Ground Level Reservoir (GLR) seeking a hand pump source to pump water using solar based motor and also create a storage of 5000 liters of water with a tap to collect water, thus, ensuring access to drinking water for all day.







Even for the maintenance of the unit, a committee named Dharti Mata Peyjal Panghat Yojana Samiti has been formed with the unit users. It has benefited 26 families through the intervention. The impact on women, in particular, has been significant. Women now have more time to invest in themselves and their families. The burden of fetching water has been significantly reduced, allowing them to engage in other productive activities, such as education, skill-building, and income-generating endeavor. In total, eight such units have been installed in eight project villages.





Thirdly, 93 solar street lights have been installed in all ten villages. It has been established in common places and nearby water resources like wells. It has illuminated multiple common locations in all the ten villages and prevented unwanted incidences due to lack of light during the night. One hundred forty-five families are also supported with solar lanterns to allow children to study and women to work during the evening for household chores. Even the decentralised units (set up for NTFP Value chain) are supported with solar based deep freezer for storage of the pulp and prevent from any damage due to any issue of electricity in the villages. All these demonstrations are planned to illustrate communities related to modern technology and increase their dependency on decentralized renewable energy-based solutions.





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,  
Mehrauli Badarpur Road,  
Saidullajab,  
New Delhi – 110068