

# IMPACT REPORT

Parivartan: Integrated Development of selected village clusters of Yamuna Nagar districts in Haryana under CSR of HDFC Bank

PROJECT PERIOD

2019 - 2023

Centre for Advanced Research and Development (CARD)

## Executive Summary

The Yamuna Nagar district in Haryana, also known as the "paper city", is facing challenges in the agriculture, education, health care, and sanitation. The farming is no longer profitable resulting in farmer distress, migration to cities and farmers' suicide.

Poor infrastructure in schools, lack of water and sanitation facilities and traditional way of teaching responsible for high drop-out rates in schools. Moreover, the patriarchal system prevents women and girls from accessing equal opportunities in education, health, and employment.

This scenario reiterated the need for innovative approaches to address these issues in the rural areas of Yamuna Nagar. The Centre for Advanced Research and Development (CARD) and HDFC Bank have partnered to implement a four-year project in 13 selected villages of Chhachhrauli Block of Yamuna Nagar district under the Parivartan- the flagship program of HDFC Bank.

The key objectives of the projects were to promote local livelihoods sustainably, create awareness, and facilitate social development, and support women and child-centred holistic development.

The project focused on improvement of natural resource management, skill development and livelihood enhancement, education, health, sanitation, and financial inclusion.

Under NRM 52 Farmer Interest Groups (FIGs) comprising 1000 farmers were formed, farmers' training and exposure on sustainable agriculture practices, farmer Field Schools were organized. Other activities included Kitchen Garden development, soil testing lab, Watershed Activities for Water & Soil Conservation, Construction of Vermi compost and Azolla cultivation units, drip irrigation, promotion of agroforestry by plantation on farm bunds, renovation of community ponds, solar fencing and solar street lights.

Activities such as Self Help Group promotion, SHG enterprises, Mahila Shakti Mart, livelihood activities such as poultry farming, goat rearing, training of women and girls on Stitching/Dari Weaving, food processing, mushroom farming, formation of FPO and Village Development Committee were implemented for the Skill Training and Livelihood Enhancement of the target community.

In education intervention, infrastructure and WASH facilities at government primary schools were improved. Smart class rooms were developed. Add to this, schools were supported with Teaching Learning Material, BALA Painting, Library, science lab, sitting facilities et cetera. Renovation of Aanganwadis was done in project villages.

General Health camps, veterinary camps, awareness sessions on healthcare were organized. Household toilets were constructed and efforts were done towards solid waste management.

The members of women self –help groups received financial literacy training for day to day operation & management of their groups in an efficient manner.

The program impacted more than 2000 farmers, 468 women, 1500+ children in schools and Aanganwadis and 150 VDC members with indirect benefits to the entire village community.

The HRDP project efforts paved way towards sustainable development of marginalized communities through knowledge building and skilling, promotion and strengthening of community groups and institutions such as FIGs, SHGs, FFSs, FPO and strengthening of VDCs.

Our efforts contributed significantly towards achievement of Sustainable Development Goals for ending poverty, promoting gender equality and protection of environment.

This report is a compendium of HRDP Yamuna Nagar Project's key activities, process and impact in the form of stories of change. It will serve as a learning document for development practitioners, budding NGOs, various stakeholders in government and private space for replicating the best practices.

The stories of change will be a source of inspiration to many who are struggling to live a dignified and decent life.



## District Profile

Yamuna Nagar, popularly known as paper city, is a district in the State of Haryana. It is situated in the south east of the State capital Chandigarh.

Geographically, the district has a total 1756 square kilometre area and ranks 11<sup>th</sup> in the state on the basis of its size. It is bordered by the state of Himanchal Pradesh in the north and by Uttar Pradesh state in the east. River Yamuna forms the eastern boundary of the district with the states of Uttar Pradesh and Uttarakhand. The district is mainly drained by the rivers Yamuna, Markanda and its tributaries.

The district is divided into 3 sub districts, 4 Tahsils, 3 Sub Tahsils, 7 Rural Blocks comprising 471 Gram Panchayats and 655 revenue villages. Yamunanagar District population in 2022 is 1,304,420 (estimates as per aadhar uidai.gov.in Dec 2020 data). As per 2011 census of India, Yamunanagar District has a population of 1,214,205 in 2011 out of which 646,718 are male and 567,487 are female. As per 2011 census, 61.06 % population of Yamunanagar districts lives in rural areas.

## Context

Agriculture, which holds the credit to take mankind to the path of settled civilization or we can say the modern world, has lost charm today. Our farmers are in distress resulting in increase in farmers' suicide. Farming has become a loss making occupation. It neither provides income nor respect to farmers. Youth in villages is not interested in doing farming. They are migrating to cities in search of decent livelihood and in cities they are further get trapped in a vicious cycle of poverty.

Climate Change has further aggravated the problems of farmers and posed grave challenges for survival.

The patriarchal system where son is sitting in the catbird seat in the family prevents women and girls to get equal opportunities for education, health, employment and so on and so forth.

Nearly half of the government schools in the country do not have electricity or playgrounds. Most of them do not have proper basic facilities like classrooms, blackboards, drinking water, toilets, and sanitation facilities. Due to lack of conducive school environment the students do not want to attend classes, which is why the dropout rate is also high.

Rural Health care is one of the biggest challenges for our government. In rural areas the condition of medical facilities is terrible. Considering the picture of grim facts there is a dire need of new practices and procedures to ensure that quality and timely healthcare reaches the deprived corners of the Indian villages. The key challenges in the healthcare sector are low quality of care, poor accountability, lack of awareness, and limited access to facilities.

Access to safe water, sanitation and hygiene facilities is major challenge in villages. The poor sanitation affects every aspect of life be it health, nutrition, development, economy, dignity and empowerment.

**In this scenario, Centre For Advanced Research and Development (CARD) in partnership with HDFC Bank under its flagship Program Parivartan, implemented a Project named “Integrated Development of selected village clusters of Yamuna Nagar districts in Haryana under CSR of HDFC Bank” in 13 villages of Chhachhrauli Block of Yamuna Nagar district, Haryana.**

This was a 4 year project having an overall goal of Promoting Local livelihoods of the Agriculture, predominant Farming based Occupations and the Livelihoods of the Landless Households in a sustained manner.

The key objectives of the project include:

- Perform and Promote Research, Evaluation and Development Activities
- Create Awareness, Organize Trainings, Exposure and Extension Activities
- Facilitate Social Development and Gender Equity.
- Disseminate Innovations of Science and Technology
- Organize and Promote Village and Cottage Industries
- Upgrading Skills of Traditional Artisans, Women and Other Marginalized Communities
- Formation and Empowerment of Common Interest Groups and support through Micro finance.
- Support Child Centred Integrated Development.

### **Key Beneficiaries**

**Direct Beneficiaries:** *590 farmers (both male and female), 450 Women and 150 VDC members*

**Indirect Beneficiaries:** **Entire village community.**

### **Outreach (Villages)**

1. Khilanwala
2. Baniawala
3. Meghuwala
4. Haidarpur
5. Chuharpur Kalan
6. Darpur
7. Kot-Mushtarka
8. Mukaribpur
9. Shahzadwala
10. Arjun Majra

11. Taharpur Kalan

12. Manakpur

13. Pirthipur

## **Intervention: Key Activities, Process & Impact**

### **Thematic Areas of Intervention**

1. Natural Resource Management
2. Skill Development & Livelihood Enhancement
3. Education
4. Health and Sanitation
5. Financial Inclusion

### **Natural Resource Management**

Natural Resources means the entire natural environment that is useful to humans. It includes, soil, water, minerals, forests and much more. During last few decades our actions have severely polluted and exploited the natural resources.

There is dire need that we recognize that people and their livelihood are largely rely on the productivity and health of their natural environment.

It is with this realization that everything that we consume is obtained from resources existing on the earth, CARD made efforts to manage natural resources by implementing following activities:

#### **1. Formation & Strengthening of FIGs**

**A total number of 52 Farmer Interest Groups (FIGs) comprising around 1000 farmers,** were formed and trained in day to day operation and management of FIGs in 13 project villages during the project period. Each FIG comprises 15-20 farmers largely belonging to small and marginal farming communities.

Trading, Credit Linkages, Storage / Ware housing, Processing, Input Linkages- Fertilizers, Manure, Irrigation, Equipment's, Pesticides, Water shed, Capacity building, Technical support, Government linkages, Exposure Visits, Short-, Medium-, and long-term credits, Marketing and Exporting are examples of some of the activities that Farmer Interest Groups formed under the project holds in its kitty.

FIGs embraced the small and marginal farmers under their umbrella and act as a platform for sharing knowledge, linkage building with various stakeholders such as government departments, financial institutions, banks etc., development of common infrastructure for farm sector activities and leveraging government schemes for improved livelihood.

### Case Story

Jai Chand is resident of village Arjun Majra. He is an active member of FIG formed in his village by CARD with the project support. The capacity building activities and exposure of Agronomic best practices organized for farmer group members enhanced the understanding and technical knowledge of Jai Chand about farming. This included but not limited to, selection of variety, use of certified seeds, maintaining optimum plant to plant and row to row distance, correct method of sowing, diligent water management practices, nutrition management, timely identification of pests & fungus attacks, proper use of crop protection products, use of recommended dosage of fertiliser, insecticides, fungicides and use of correct spray protocols.

The technical knowledge followed by monthly skill enhancing meetings, on field support and follow up increased the crop production by 20%, improved the soil fertility and quality of produce as well.

## 2. Training & Exposure of Farmers

During the first year of the project (Year 2019-2020) 2 farmers' trainings were organized at Krishi Vigyan Kendra, Damla. Here farmers oriented about harmful impacts of stubble burning and were introduced to safe ways to manage stubble by decomposing it and using it as farm manure.

Farmers were also trained in vermicomposting method for practicing organic farming methods and reducing the use of chemical fertilizers. The participants were also provided information about new technology machines like paddy transplanter, mulcher, happy seeder, et cetera. A visit to demonstration plots, for effective stubble management using alternative means, was conducted.

This was followed by conducting regular training sessions among farmers on sustainable methods of farming, development of kitchen garden, commercial vegetable cultivation, agroforestry, insect pest management, farm operations and post-harvest management etc. in the next 2-3 years of the project implementation.

Exposure visits played a key role in mobilizing farmers to adopt sustainable/organic practices on their farms. Farmers from project villages visited "Gurukul" and "Sikri" farms where farmers got an opportunity to see the practices and processes of zero budget natural farming and organic farming respectively and its positive impact. Further they witnessed the methods

to prepare organic manure, inter cropping, multi cropping and got to know about different varieties of Sugarcane etc.

Through visit to Field Fresh Private Limited Ladhawal, Ludhiana farmers got exposure of contract farming of baby corn, chilli and salad pea. Baby corn is a two months crop and provides high profits in a year to the farmer. The participants were informed about the crop of baby corn, its benefits, process of cultivation etc.

A total number of 1547 farmers from 13 project villages attended exposure visits to several locations to understand and explore about sustainable farming, mushroom cultivation etc.

## **2. Watershed activities; Stone Pitching & Bunding**

There are few villages in project area where seasonal rives flow near the farmlands and cause soil erosion due to hefty water flow during rainy season. Thus damaging the crops.

To prevent soil erosion we introduced Stone Pitching and Bunding on such farmlands. Laying stone bunds in fields is a well-known technique to check runoff and to control erosion.

These stone bunds formed a barrier that slows down water runoff and allowed rainwater to seep into the soil and spread more evenly over the land. This slowing down of water runoff helped with building-up a layer of fine soil and manure particles, rich in nutrients.

From the perspective of climate change adaptation, contour stone bunds will protect the land from high rainfall. During drought, they will improve rainwater harvesting, retention and seeping into the soil, increasing the amount of water available to plants and preventing the crop damage. Thus improved farm income.

Total 193 Acre land improved through stone pitching and bunding activities. Add to this, 14 Acre land became cultivable through watershed activities and farmers witnessed increase in crop production around 40% per acre.

In Prithipur village, Pipelines were installed to manage the overflow of water. Around 25 Acres land benefitted; 5 Acres land directly and 20 acres land indirectly that ultimately contributed towards improved farm income.

| SR. NO. | DESCRIPTION                           | QUANTITY          |
|---------|---------------------------------------|-------------------|
| 1       | Total village covered                 | 6                 |
| 2       | Total Farming Families Benefitted     | 68                |
| 3       | Increased area under crop cultivation | 14 Acre           |
| 4       | Increased crop production             | 40% per Acre      |
| 5       | Increased Farm Income (per Annum)     | Rs. 20,000- 25000 |

### **Case Story**

Samye Singh is a farmer from village Khilonwala, and a member of FIG (farmer interest group) formed under the project. Before intervention his 5-acre farmland was severely affected by the seasonal river during high rainfall. He was supported under the project and 200-meter stone bunding was done on his land. The Stone Pitching & Bunding has prevented his land from soil erosion and entire 5-acre land has brought under cultivation. Add to this, 3 Acre uncultivated land was also fetched under cultivation. This has improved the livelihood of Samye Singh and strengthened his resilience to climate impacts.

### **Impact.....Its echoing**

1.

The impact of watershed activities is echoing through similar efforts by government and local communities,

In Shahzadwala village, 150-200 meters stone bunding was done by government that benefitted around 7 acres land. The beneficiary farmer will witness an increase of Rs. 20,000-25,000 in his Annual income, in the time to come.

2.

In Village Baniawala, farmers have taken self-initiative and they did 100 meter soil binding. This effort benefitted 5 acres land and beneficiary farmers will see an increase in their farm income from Rs. 20,000-25,000 annually.

### **3. Soil Testing**

The high use of chemical inputs in farming has affected the soil health badly. Farmers are unaware of the proper doses of chemical fertilizers, pesticides and other farm inputs. In lust for bigger profits market is selling variety of chemical inputs to farmers. Problems like soil degradation, absence of friendly microorganism in soil are the major soil health problems identified in project villages.

Soil testing has an answer to these prevailing issues of soil health which provides an assessment about the nutrient /fertilizer needs of the specific farm and also about the application rate of fertilizers/pesticides/nutrients to the soil that suits best.

Under project intervention we supported 455 farming households and 455 soil samples of 300 Acre land got tested at Citrus Estate Lab, Abohar.

The soil health report card made farmers aware of the actual need of the fertilizers, pesticides and other nutrients in the soil. With the support of agriculture expert and project team they learnt to use fertilizers and nutrients on their farm sensibly and responsibly.

**This intervention was quite impactful and resulted into a 10% chemical reduction in soil, Labour cost was reduced by 20% and the beneficiary farmers witnessed 10% increase in crop yield due to improved soil health.**

#### 4. Promoting Organic Compost

To shift farmers from high input based chemical farming to organic farming efforts were made to inform farmers about various organic compost and build their capacities in preparing these composts.

Three types of organic compost methods were introduced to farmers. These include:

1. Vermi Compost unit (Size 10x3x3 ft)- 84
2. Vermi Bag (Size 12x4x2)- 146
3. Azolla Pit (Size 10x3x1.5) 65

This intervention benefitted a total number of 279 farmers; 36 farmers per project village. The beneficiary farmers shifted to organic compost from chemical fertilizers. This improved soil health, reduced cost of cultivation by reduction in cost on purchase of chemical fertilizers, improved farm income, contribution towards ecological sustainability remain the key impacts of this activity.

Azolla fixes environment nitrogen in soil and used as green manure and fodder for animals. **The impact of Azolla cultivation is summarized below:**

| Sr. No. | Description       | Quantity of fodder used by per Animals (Before use of Azolla) | Quantity of fodder used by per Animals (After use of Azolla) | Data record/Animals              |
|---------|-------------------|---------------------------------------------------------------|--------------------------------------------------------------|----------------------------------|
| 1       | Fodder            | 50 Kg                                                         | 40 Kg                                                        | Fodder consumption reduced (20%) |
| 2       | Milk Production   |                                                               |                                                              | 10 % Increased                   |
| 3       | Azolla Production | 150-200 gm per day                                            |                                                              |                                  |

## 5. Establishment of Demos on Different Practices

To encourage farmers to shift to sustainable farming practices, Demo plots played a major role in building a clear understanding about the processes and impacts of various practices.

CARD set up a total number of **156 Demo plots of Wheat crop, on sustainable farming practices in 13 project villages. Bio-Fertilizer, Bio-Pesticide, Bio-Fungicide and Wheat (Variety HD-2967)** were provided to farmers. Farmers used recommended doses of fertilizers as advised by Haryana Agriculture University.

The outcomes of this intervention has been encouraging. Here is example of one such farmer who was supported to develop demo plot.

### Impact- Wheat Demo Plot

| Farmer Name   | Village  | Description                | Outcome         |
|---------------|----------|----------------------------|-----------------|
| Malkeet Singh | Manakpur | Wheat Production           | 22 Quintal/Acre |
|               |          | Yield Increase             | 10 %            |
|               |          | Reduction in Chemical Cost | 20 %            |
|               |          |                            |                 |

## 6. Kitchen Garden

Women from Small and marginal farming households and landless households were mobilized to grow vegetables in backyard or front side of the home for improved nutrition and availability of fresh seasonal vegetables throughout the year for family consumption. This intervention supported the nutritional needs of the beneficiary family. Moreover there was saving of around Rs. 18,000 per year that was spent by one family on purchase of vegetables from the market. In addition the sale of surplus vegetables provided additional income.

We promoted 'Paras Bag' model of kitchen garden. In this model there are 7 outer and 7 inner beds. So the production of vegetables suffice the needs of a family of 5 throughout the year. A total number of 282 households supported to develop Kitchen Garden during the project period. They were provided training on insect pest management, irrigation, use of bio inputs, given seed kits, and handholding support by the agri expert and the project Team. Members of 39 WSHGs (formed in the project villages with the project support) were also engaged in this activity. They were provided training and support to develop Kitchen garden in their backyards. A case example is shared herein:

A WSHG member from village Shahzadwala developed Kitchen Garden in her home in the year 2019. There was bumper vegetable production on a plot of 30x30 square feet.

| Vegetable Production-One Crop Season |              |             |      |        |
|--------------------------------------|--------------|-------------|------|--------|
| Sr. No.                              | Description  | Quantity    | Rate | Total  |
| 1.                                   | Pumpkin      | 1.5 Quintal | 10   | 1500   |
| 2.                                   | Bhindi       | 20 Kg       | 20   | 400    |
| 3.                                   | Tinda        | 40 kg       | 25   | 1000   |
| 4.                                   | Cucumber     | 40 kg       | 10   | 400    |
| 5.                                   | Cow-Pea      | 15 kg       | 20   | 300    |
| 6.                                   | Tar          | 10 kg       | 15   | 150    |
| 7.                                   | Total Income |             |      | 3750/- |

## 7. High Cost Commercial Vegetable Cultivation

In project villages, farmers are largely engaged in growing wheat, paddy and sugarcane. This traditional method of sowing provide them only two crops in a year. They lack regular source of income throughout the year. Commercial vegetable cultivation provides regular income flow to farming households throughout the year.

65 farmers were trained on high cost vegetable cultivation to grow vegetables for commercial purpose at Centre of Excellence for vegetable Indo-Israel project Ghrounda (Haryana). Further they were supported with Pesticide, Fertilizer, and Bio-Fungicide for 0.5 acre of land each. Vegetable seeds (Sponge Gourd, Bitter Gourd, Pumpkin and Bottle Gourd, Bhimdi), were purchased by beneficiary himself.

Through this initiative farmers income was improved and there was regular cash flow ensured in the beneficiary families to meet their day to day expenses. The technique farmers learnt at Centre of Excellence helped in saving irrigation water around 20%, electricity saving 10% and there was 15% increase in crop yield was reported by beneficiary farmers.

As peer effect another group of 52 farmers replicated the said intervention by adopting high cost vegetable cultivation.

Two farmers from village Mukaribpur grew Watermelon using modern technology by our support and encouragement.

## 8. Promotion of Agroforestry

With a view to promote plantation to mitigate climate change and to ensure an additional income to small producers, 79800 poplar trees (Variety: - R-109 & R-110) were planted on the bunds of farms. The benefits of this simple activity include protection from strong winds and stray animals and it also ensured prevented soil erosion.

**798 farmers witnessed 15% increase in their income by adoption of this agroforestry**

## 9. Promotion of Drip Irrigation

Drip Irrigation was promoted among farmers to motivate them to use water resources efficiently, reduce water use in irrigation and increasing the irrigated area in project villages.

Most of the farmers in project villages cultivate traditional crops like paddy, wheat and sugarcane and they use ground water for irrigation. Since they are practicing chemical farming, irrigation needs of such crops are much higher posing serious threat to ground water table that's going down terribly.

The project supported to install 5 drip irrigation units per village, totalling to 65 units in 13 project villages.

Use of drip irrigation ensured higher water usage efficiency, uniform water distribution and less evaporation of water.

This encouraged farmers in project villages to start vegetable cultivation using drip irrigation method.

### Case Story

Daljeet Singh a farmer from village Mukaribpur is member of Farmer Interest Group formed in the village. He started growing muskmelon using modern methods, after attending trainings, organized by CARD. He was supported to install drip irrigation system for 0.5 acre farm. He used intercropping and mulching sheets to maintain moisture and reduce weed to grow vegetables such as muskmelon & Papaya.

In the first year of harvesting muskmelon he got production of 71 Quintal per acre. He sold the muskmelons @ Rs. 2200 per quintal and earned Rs. 1, 56, 200. After deducting the input cost of Rs. 62,000 Daljeet made a profit of Rs. 94,200 from one acre land.

"There was 25% more production if compared to traditional crops like wheat, paddy and sugarcane. Moreover water and electricity expenses got reduced to 30-40%, other input costs on fertilizers, pesticides, weedicides, use of farm machinery etc. also reduced to 50% and it also increased the fertilizers efficiency by 80-90%" shared Daljeet joyfully.

## 10. Farmers Field School (FFS)

Farmer Field Schools were promoted in project villages as Centre for training/agriculture resources. 13 FFS were set up; one in each project village.

In these Farmers Field Schools trainings on farm operations right from tilling till harvesting, pest management, nutrient management, post-harvesting management etc. were conducted.

### Case Story

After receiving training on vegetable cultivation in a Farmer Field School, Sukhvindar Singh, a farmer from Prithipur village adopted vegetable cultivation. He cultivated tomato, capsicum, chilli and bottle gourd (between March- August 2022) on one acre land and earned a net income of Rs. 75,000 within 6 months.

## 11. Promotion of Farmer Producer Organization

A Farmer Producer Organizations “**Bhavya Kisan Producer Company Limited**” (BKPCCL) was formed to initiate collectivized business activities by organizing small producers as shareholders. The efforts of collective marketing were done to ensure better income to farmers.

**There are 280 farmers are shareholders of BKPCCL. The total Share Capital of FPO is**

**Rs. 2,80,000**

## 12. FPO Managed Custom Hiring Centre

A Custom Hiring Centre for farm implements was established at BKPCCL. This Centre was equipped with Farm machineries like Rotavator, Super Seeder, Laser Land Leveler, Zero Drill, Hand operated Rotavator and Direct Seeder for Rice with the project support.

This initiative made the small producers much efficient in the farm operations by ensuring availability of farm machinery on rental basis at subsidized rates.

## 12. Renovation of Community ponds

Ponds are lifeline of our villages. They serve as waste water management system and used for water harvesting to solve the pressing ground water crisis. The filtered water is also used for irrigation activities

With the project support, 17 community ponds were renovated in project villages. The renovation work was done with the objective of improving the village drainage facility to ensure the clean and hygienic environment in villages, improve the ground water table and increasing the availability of irrigation water.

#### 14. Solar Fencing

Today stray animals have become the greatest threat for farms. In project villages farmers have been suffering great loss due to damaged crops by the stray animals like monkey, deer, pig, cow and many others. Thus, efforts were made to support farmers in Solar Fencing with a view to protect their crops from stray animals.

The solar fence is like barbed wire fencing with multiple strands of plain wires and metal/cement/ wooden posts to hold the strands in position. The wires carry high voltage current. The Solar Power Fence gives a sharp, short but a non-lethal shock to the intruder and creates psychological fear, against any tampering. The alarm incorporated in the system gets activated and alert the inmates of the protected area.

**The Solar fencing was installed on the 55 acres farms that directly benefitted 55 farmers and provided indirect benefits to 528 farmers. However it grossly protected 1275 acres land and helped farmers to witness increase in production up to 30%. By reducing the risk of damage of crops.**

#### 15. Solar water lifting Pump

In our 6 project villages, small producers were facing acute shortage of water for irrigation. They were taking water on rental basis from tube wells that was increasing their cost of cultivation and sometimes they could not water their crops on time, resulting into low production or damaged crop.

With the project support CARD installed 6 solar water lifting pumps; one in each abovementioned 6 villages. A Solar Lifting pump comprised of a 7.5 HP submersible motor and 330w solar panels.

A group of farmers was trained to operate and manage the pump and maintain it in a sustainable way.

**82 farmers were directly benefitted by this activity. 120 acres of land came under irrigation, cost of electricity reduced, production increased and all this finally contributed towards approximately 30-35% increase in beneficiary farmers' income**

#### 16. Setting Up Soil Testing Lab

A Soil testing lab was set up which is run and managed by Farmer Producer Organization formed under the project. 2000+ farmers were benefitted through this lab.

## Skill Development and Livelihood Enhancement

### 1. Promotion of Self Help Groups

Organizing women under self-help groups have been proved an important tool to achieve financial empowerment of women that ultimately provides women an agency to voice their opinion on matters related to family, community and society.

Under the HRDP project CARD promoted 39 women self-help groups, comprising 481 members from underprivileged communities in 13 project villages. These SHGs have promoted habit of small savings among women and from their savings women availed loans for various household needs such as education of children, construction/repairing of house, treatment of illness and for livelihood activities.

Regular trainings were conducted to strengthen the skills of SHG members in day to day operation and management of their groups.

### 2. Promotion of SHG Enterprises

Members of women self-help groups were provided livelihood trainings on Food Processing, Bangles & sweet Box making, Dari making, stitching, knitting, Make-up Artist, goat rearing, poultry farming, mushroom cultivation et cetera to start their enterprises for improved livelihood.

Initially four Enterprises were setup; one in each project village namely Pirthipur, Shahzadwala, Darpur, and Khilanwala.

The women entrepreneurs further linked to a marketing platform **“Mahila Shakti Mart”** created under the project to support women entrepreneurs in marketing of their products.

### 3. Mahila Shakti Mart

A Marketing outlet **“Mahila Shakti Mart”** was set- up at Bilaspur, the nearby main marketing place for the people of project villages. This mart has shops/counters of various women entrepreneurs dealing in variety of products such as ready to eat food products(snacks), clothing, Beauty Parlour, tailoring shop etc.

Being situated at main marketplace and run and managed by women, the Shakti mart is gaining attention and popularity among localities. There is good footfall of people and it is helping women to earn decently.

**Engaging women in self-help groups, skilling them in income generation activities and further creating marketing opportunities and support for them through “Mahila Shakti Mart” has contributed towards improved livelihood of underprivileged communities in project villages. It further paved way towards empowerment of women and communities, we served.**

#### 4. Livelihood Activities

##### **Poultry Farming**

Women members of SHGs were trained in poultry farming activities. 45 Poultry farming units were set up in 7 project villages. Each beneficiary was supported with 150 chicks of Rhode Island Red breed, feed and 2 times vaccination.

##### **Goat Rearing**

Goat considered as poor man's cow. Goat Rearing was promoted in the project to ensure availability of milk to add nutrition in the diet of beneficiary families and to add income by the sale of surplus milk, Does and Bucks.

39 women were supported with 91 goats.

**Rani Devi**, a landless labour resides in village Khilanwala. She was supported with 2 female goats of beetal breed, costing Rs. 20,000, on December 2019, wherein she contributed Rs. 3,800.

Within a period of 6 months, Rani was the owner of 4 goats by the year 2022 she was able to earn an income of Rs. 25, 000 from the sale surplus milk and sold 2 does and 1 buck.

### **Goat Rearing**

Raj Bala from Darpur village was encouraged by Village Development Committee members to take up goat rearing for improving income and sustainable livelihood.

She was also supported with 2 female goats and today she has herd of 7 goats; 6 Does and 1 Buck with an approximate value of Rs. 1.40 Lakhs.

She is an aspiring woman entrepreneur who is committed to scale up her goat rearing enterprise to newer heights.

### **Stitching Training**

342 WSHG members were underwent 3 Months' stitching training course. This activity enhanced the skills of women in stitching garments like suits, kurti, plaazo, blouse, petticoat etc.

95 women have taken up this activity professionally while others are using their skills at personal and family level.

Renu Devi, member of a WSHG in Prithipur village has been able to earn an income of Rs. 200/ day Or Rs. 6,000 per month by stitching clothes and she is contributing to family income.

### **Food Processing**

CARD organized a Food Processing Trainings for the members of women SHGs in collaboration with Punjab Agriculture University, Regional Research Station Bathinda (Food processing Training-Cum-Business Incubation Centre).

39 SHG members; one member from each SHG participated in training programme and they learnt to prepare food products that included – Bakery items, Snacks like Bhujia, Mathi and confectionery products. Initially raw material and utensil support was provided to trained women to start food production for sale.

Sonia is members of Tamanna Self-help group from Manikpur village. She prepares and sells Mathi, different types of Namkeen and Laddoos. This provides her an income of Rs. 3000-4000 per month.

Her earnings adds 20% income to her household

### **Mushroom Cultivation**

Women SHG members and other farming families were trained and supported in Mushroom cultivation (Button Mushroom) for additional Income Sources. A total number of 65 mushroom cultivation units were set up; 5 units in each project village.

After training each participant was given 100 mushrooms compost bags, pesticides, Fungicide, Bamboo, Moisture meter, weighing machine, packaging material etc. to initiate the activity.

Suman Kumari, member of Ekta Self Help Group is resident of Arjun Majra. She attended training session on Mushroom Cultivation. From 100 mushrooms compost bags she got production of 210 kilogram which she sold @ Rs. 100 per kilogram and she was able to earn Rs. 21000 from this small unit,

In village Haidarpur, Tilakraj, a members of Farmer Interest group, got production of 230 Kg. button mushrooms (from 100 compost bags, he was provided with project support). He earned Rs. 20,700 after selling it @ Rs. 90 per Kilogram.

***Cumulatively, 7900 Kilogram Mushrooms were produced from 6500 mushroom compost bags by beneficiary farmers. Thus generated a revenue of approximately Rs. 7,90,000.***

## 5. Village Development Committees

Thoughtfully, **Village Development Committees** (VDCs) were formed and strengthened in project villages for implementing project activities efficiently and in a transparent manner, monitoring the progress locally and sustaining the project efforts in long run.

There were 13 VDCs formed comprising 160 members from village community; embracing one member from each Ward and ensuring the representation of all castes and religion in each Village Development Committee.

The members underwent an excursion experience to a Model Village *Rallegan Siddhi* in Ahmednagar district of Maharashtra where they practically experience the power of people and community in village development, holistically. This was followed by village level trainings of VDC members for nudging their interest and energies for the overall development of their village.

**In true sense, Village Development Committees formed in the project villages became that fulcrum, around which all project activities and processes revolved to achieve sustainability**

## Healthcare & Hygiene

### 1. Construction of Household Toilets

Open defecation was prominent in our project villages. Efforts were made to promote hygiene and sanitation environment in project villages and to ensure safety and dignity of women and girls by construction of household toilets.

The poorest Households were identified among the SHG members and 120 Household toilets were built in 13 project villages.

### 2. School Sanitation Unit

The infrastructure of Government Primary schools in project villages was poor, particularly they lack safe sanitation facilities. Adding to it, the lack of separate toilet facility for was responsible for greater absenteeism/ drop out of adolescent girls from schools, mainly when their periods begin at puberty.

The project addressed this need by constructing 11 Sanitation Units (having separate toilets for boys and girls) in project villages. This impacted 1453 children.

### 3. Handwashing Unit

To promote safe hygiene behaviour and practices among children handwashing units were constructed in government primary schools in project villages. A total number of 11 Handwashing units were built in project villages with the project support.

#### **4. Hand Wash Training, Health and hygiene kit distribution to Adolescent girls and school children**

Handwashing session were organized among children and adolescent girls to make them aware about the importance of washing hands to prevent diseases and methods of washing hands correctly to maintain proper hygiene.

A Hygiene Ki comprising, Handwashing soap, nail cutter and sanitizer bottle was provided to 2782 children and adolescents in project villages for promoting good health and hygiene.

#### **5. Youth Club**

Youths in project villages lack focus and addiction to drugs is very common. Simultaneously, the interests of youths from Haryana, in sports is universally known and there are many sports person from Haryana who have been acclaimed internationally.

Realizing that sports has ability to channelize the young energy in positive and productive tasks, CARD formed Youth Clubs in project villages to engage youths in self –consciousness and development of community and nation. Sports Kits comprising Cricket, Football, Volley Ball, Badminton, Carrom, Ludo etc. were procured at Youth Clubs to be used by youths.

Cricket and Volley Ball tournaments were organized with the project support and these witnessed good participation of youths from all project villages.

#### **6. Animal Health Camps**

Livestock rearing is a major livelihood activity in project villages. The well-being of the rural communities depends on the wellness of their cattle. Animal Health Camps were organized to make people aware of the health of their livestock, vaccination, deworming, diseases and its effective management. They were also advised about providing nutrient rich fodder for improved health of their livestock by qualified and experienced veterinarians.

#### **6. Waste Management E-Rickshaw**

Waste management is a major challenge in project villages. It poses serious threat to health and well- being of communities and pollutes environment

To address the aforementioned issues, E- Rickshaws were provided to Gram Panchayts in 4 villages namely, Baniawala, Prithipur, Darpur & Mukaribpur by engaging Village Development Committees in these villages. Village Panchaytas appointed a person (largely youth) for door to door collection of garbage and aggregating the waste at a central place after segregation of solid and liquid waste.

Each household was asked to contribute Rs. 20 per month for collection of garbage. The amount collected was utilized for paying remuneration to the collection boy.

**Thus it provided livelihood to a community member while ensuring cleanliness in the village, good health and well-being of the community and awareness about minimization of waste among people**

## Financial Literacy

The members of WSHGs were trained on Bank Account opening processes and procedures, managing finances of their groups, inter-loaning mechanism, calculation of interest, book keeping et cetera for the effective functioning and day to day management of the self-help groups through local leadership development.

The financial capacity building efforts enabled SHG members to manage credit and thrift activities smoothly and efficiently. The total savings of 27 groups is Rs. 9,79,508 and these groups have been doing inter-loaning, regularly.

25 SHGs have been linked to National Rural Livelihood Mission (NRLM) for further support and strengthening and more will join the umbrella (NRLM) soon.

## Promotion of Education

### 1. Smart Class

Undoubtedly, education is a path that leads to prosperity. It is the right of every child, no matter where he/she comes from, to get quality education that provides basic literacy and numeracy skills (as per the grade) and develop life skills needed to live a dignified life ahead.

CARD with the support of HDFC Bank made efforts to ensure quality education to children studying in Government Primary and Senior Secondary Schools in project villages by converting classrooms to Smart Classes in 12 Schools.

The Smart classrooms were developed by providing a Projector, Audio- Video System, White & Green Board, Mike and Bala Work on the walls of classroom. Teachers' skills were also enhanced in using new technology in teaching. This activity has impacted 3466 children by sustaining their interest in learning, better learning outcomes, reduction in absenteeism/drop outs and increased enrolment of children in government schools in project villages.

### 2. Model School

Three Schools namely Government Senior Secondary School Kot-Mushtarka, Government High School, Khilanwala and Government Senior Secondary School Chuaharpur Kalan were developed as Model Schools.

**The Model Schools** embraced the Smart class room (Projector, audio-video system, Green and white board BaLa work, solar system), a Science Lab, Sanitation unit/ Toilet (for Girl and boys separate), Bala work, RO water facility, Improved sitting facility that included Benches & table support and Computer Lab.

**Smart Classes & Model Schools have been emerged as important tools to provide quality education to children in project villages by ensuring Resource and technology rich teaching learning environment and improved sanitation and hygiene facilities**

### 3. Teaching Learning Material

To achieve better learning outcomes among children from underprivileged communities, students of Government Primary & Middle Schools in 13 project villages were provided Teaching Learning Material that holds Books, Copies, stationary items like pen, pencil, sharpener, eraser, scale, educational charts et cetera.

Hygiene Kits were also distributed to students to promote good hygiene behaviour and practices.

### 4. Aanganwadi Improvement

"You cannot make people learn. You can only provide the right conditions for learning to happen"-Vince Gowmon.

Aanganwadis can play a crucial role in providing early childhood healthcare, supplementary nutrition and maternal healthcare. It is unfortunate that an essential facility encounters lack of basic infrastructural facilities and conducive environment for children learning.

In this scenario CARD with the support of HDFC Bank's flagship Program "Parivartan" renovated 19 Aanganwadis project villages. The walls of Anganwadi's were converted into teaching learning material using BALA work to make education full of fun and create interest in learning among toddlers.

In 3 project villages, Anganwadis were in rented premises so instead of BALA work, Anganwadis were supported with sitting facility for children and staff, toys and utensils to sustain the interest of children in learning.

**Aanganwadi Centres Renovation benefitted 700 toddlers and 400 underprivileged households and the impact could be seen as 20% increase in attendance of children**

## Photo Gallery