

Helping Communities build Economic Stability through Livelihood Opportunities



- Mobile health units deployed for addressing primary health issues and services against COVID-19
- Promoting direct seeding of rice as an alternative to transplanting paddy using online platform
- Distribution of ration kits to communities
- Supporting government operations in controlling locust attack
- Support to local administration in COVID-19 sanitization drive
- Creating additional livelihood opportunities during lockdown for local communitiesRead more

HEALTH, HYGIENE AND SANITATION

Objectives	Expected Outcome FY'21
<ul style="list-style-type: none"> • Increase access to quality healthcare • Improve Preventive healthcare 	<ul style="list-style-type: none"> • Around 1,10,000 people will be treated by Mobile Health Vans and health camps • 90% decrease in primary healthcare issues within MMU outreach • 90% of people shall be using toilets in our intervention villages

WOMEN EMPOWERMENT

Objectives	Expected Outcome FY'21
<ul style="list-style-type: none"> • Improve Financial and legal literacy • Livelihood Promotion • Develop women entrepreneurs 	<ul style="list-style-type: none"> • > 10,000 women will have undergone financial and legal literacy training • > 3,000 women will have better livelihood opportunities and increased household income • > 2,000 women will be involved in the income generating activities

RURAL INFRASTRUCTURE DEVELOPMENT

Objectives	Expected Outcome FY'21
<ul style="list-style-type: none"> • Strengthening rural infrastructure through need based interventions • Strengthening drainage network to improve sanitation facilities in the villages • Promoting rural sports 	<ul style="list-style-type: none"> • Strengthening rural electrification, roads, drinking water and toilets • Strengthening of drainage network around plant location • Promotion of rural sports

DISASTER RELIEF

Objectives	Expected Outcome FY'21
<ul style="list-style-type: none"> • Support government and the communities at the time of national disaster 	<ul style="list-style-type: none"> • Support government, District administration, municipal corporation, farmers and communities during COVID-19 pandemic

ENVIRONMENTAL SUSTAINABILITY THROUGH SUSTAINABLE AGRICULTURAL PRACTICES

Objectives	Expected Outcome FY'21
<ul style="list-style-type: none"> • Impart Sustainable Agricultural practices • Environmental Sustainability through Conservation of Natural Resources • Environmental and health consciousness through stewardship 	<ul style="list-style-type: none"> • Will benefit over 40,000 new farmers through DSR • 1.8 trillion liters of water will be saved using DSR • Avg. ₹7,500 / Acre will be saved in the cost of paddy cultivation • Promote product stewardship

QUALITY EDUCATION AND SKILL DEVELOPMENT

Objectives	Expected Outcome FY'21
<ul style="list-style-type: none"> • Improve age appropriate learning levels • Improve attendance • Maximize the CSR programme reach • Improve youth's employability through skill development 	<ul style="list-style-type: none"> • 80% Increase in class appropriate learning levels • Ensure > 80% school attendance • > 15,000 students will be covered through the programme • Train > 500 underprivileged youth and help them obtain jobs



Awareness on Coronavirus in Villages & Rural Health Care through 3 Mobile Health Units

PI Foundation in collaboration with GVK-EMRI is implementing Swasthya Seva through 3 Mobile Medical Vans that supports more than one lakh population from remote 64 villages of Jambusar. Our Swasthya Seva ensured access to quality health



care and impacted over One lakh people residing in remote location of Jambusar taluka. This has reduced financial burden on health expenditure for the poor families.

PI Foundation is utilising these Mobile Medical Units 24x7 in 64 villages of Jambusar, Gujarat for spreading awareness on the necessity of social distancing, hand-sanitization through instruction leaflets. The services are extended for conducting thermal screening, distributing masks and other necessities to villagers.



Highlights of the ongoing activities for the month:

- Screening of 350 labours twice a week around Jambusar plant
- Distribution of sanitizers to 5,000 households in the neighboring communities around PI's operations in Jambusar and Panoli
- Distribution of over 2,000 ration kits to neediest households around PI's operations in Jambusar and Panoli
- Spraying of 10,000 litres of disinfectant in surrounding villages of Jambusar



Coverage		
Mobile Health Unit in field		3
Villages Covered		64
Population Covered		1,18,851
Operations		
Total Beneficiaries treated (15 April, 2016 - May, 2020)		3,71,817
Total Beneficiaries treated in May, 2020		5543
Total working days in May, 2020		25
MHU wise beneficiary report - Jambusar	Route	Beneficiary count- May, 2020
MHU_PIF_1	Route-1	1827
MHU_PIF_2	Route-2	1690
MHU_PIF_3	Route-3	2026
Performance		
Avg. Beneficiaries / MHU / Day		74
Avg. Villages visited / MHU / Day (No.)		3



Support to Local Administration in COVID-19 Sanitization Drive

The COVID-19 pandemic has thrown unprecedented and unique challenges across the country. Government is doing mass sanitization drives across the country as a preventive measure. PI Industries through PI Foundation joined hands with government to fight COVID-19. Support to the local administration is being incessantly provided, in fast and efficient sanitization of large areas by deploying services of hi-tech Japanese farm spray machines free of cost. The drive is being carried out in nearly 50+ locations so far, spanning across the states of Andhra Pradesh, Telangana, Rajasthan, Gujarat, Haryana, Delhi, Punjab and further working to see how we can support others.

34

Districts covered

60

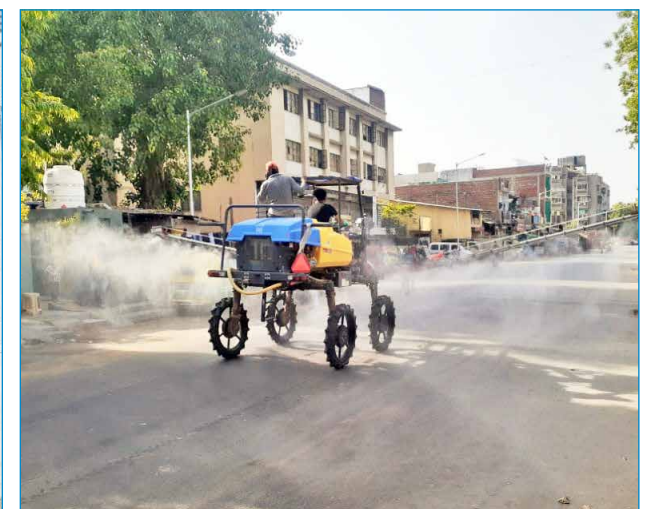
Machines deployed

609

Machine working days

Period

Initiated on 26th March and ongoing





Sustainable Rice Production with the Conservation of Natural Resources through Direct Seeded Rice in Multiple States of India

PI Foundaton has been working closely with farmers in the agriculturally backward region of the country to promote a farming system that is more sustainable—environmentally, economically, and socially. In association with State Agricultural Universities and NGO's in Jammu, Punjab & Haryana, Madhya Pradesh, Bihar, and Karnataka, our field team propagates the benefits of Direct Seeded Rice (DSR) technique throug awareness camps,

farmers meetings, setting up demonstration farms with farmers and trainings. Our demonstration highlights socio-economic and environmental benefits that farmers can reap using DSR technique.

COVID-19 pandemic and consequential lockdown throughout the country have led to labour shortage in the agricultural fields across multiple states in India. Amidst the crisis, agronomists are widely advising the direct seeding of rice as an alternative to paddy transplanting.

During the month, various communication mediums such as webinars, WhatsApp, phone calls were utilised to establish connect with > 11,000 rice growing farmers across different states like Punjab, Haryana, Chhattisgarh, Karnataka, AP, etc. In some of the webinars, experts from Agri-Universities were also invited to address the issues and queries raised by farmers.

Labour short, can direct seeding be alternative to paddy transplanting?

HARISH DAMODARAN & ANJU AGNIHOTRI CHABA
NEW DELHI, JALANDHAR, MAY 13

THE TWO granary states of Punjab and Haryana could face a shortage of an estimated 10 lakh labourers, mainly seasonal migrants from Bihar and Uttar Pradesh, to undertake transplantation of paddy in the upcoming kharif season. With lockdown relaxations not extending to trains to ferry these labourers who usually arrive by early June, farmers are now being encouraged to adopt 'direct seeding of rice' (DSR) in place of conventional transplanting.

How is DSR different from normal transplanting of paddy?

In transplanting, farmers prepare nurseries where the paddy seeds are first sown and raised into young plants. These seedlings are then uprooted and replanted 25-35 days later in the main field. The nursery seed bed is 5-10% of the area to be transplanted.

In DSR, there is no nursery preparation or transplantation. The seeds are instead directly drilled into the field by a tractor-powered machine. The Punjab Agricultural University (PAU) in Ludhiana has developed a 'Lucky Seed Drill' that can both sow seeds and simultaneously spray herbicides to

control weeds. This machine is different from the more popular 'Happy Seeder', used to directly sow wheat on combine-harvested paddy fields containing leftover stubble and loose straw.

But why spray herbicides along with sowing seeds?

Paddy seedlings are transplanted on fields that are "puddled" or tilled in standing water using tractor-drawn disc harrows. For the first three weeks or so after transplanting, the plants have to be irrigated almost daily (if there are no rains) to maintain a water depth of 4-5 cm. Farmers continue irrigating every 2-3 days even for the next 4-5 weeks, when the crop is in the tillering (stem development) stage. The underlying principle here is simple: Paddy growth is compromised by weeds that compete for nutrition, sunlight and water. Water prevents growth of weeds by denying them oxygen in the submerged stage, whereas the soft 'aerenchyma tissues' in paddy plants allow air to penetrate through their roots. Water, thus, acts as a herbicide for paddy. The threat from weeds recedes once tillering is over; so does the need to flood the fields.

In DSR, water is replaced by real chemical herbicides. Farmers have to only level their land and give one pre-sowing irrigation or rain. Once the field has good soil



A farmer on his direct-seeded rice field in Punjab last year. Anju Agnihotri Chaba

What are these herbicides?

There are two kinds. The first is called pre-emergent, i.e. applied before germination. In this case, the pre-emergent herbicide used is Pendimethalin. The Lucky Seed Drill that sows paddy can also spray the chemical, which costs Rs 450-500 at one litre per acre. Alternatively, farmers can use

an ordinary seed drill and apply the herbicide immediately after sowing. The second set of herbicides is post-emergent, sprayed 20-25 days after sowing, depending upon the type of weeds appearing. They include Bispyribac-sodium (Rs 600-700 at 100 ml/acre) and Fenoxaprop-p-ethyl (Rs 700-800 at 400 ml/acre).

What is the main advantage with DSR?

The most obvious one is water savings. According to PAU's director of research Navtej Singh Bains and principal agrono-

mist Makhan Singh Bhullar, the first irrigation (apart from the pre-sowing rain) under DSR is necessary only 21 days after sowing. This is unlike in transplanted paddy, where watering has to be done practically daily to ensure submerged/flooded conditions in the first three weeks. The second savings, relevant in the present context, is that of labour. About three labourers are required to transplant one acre of paddy in a single day. Pritam Singh Hanjra, a farmer from Urfana Khurd village in Haryana's Panipat district, says that the transplanting labour costs last year were around Rs 2,400 per acre, "which may double this time". As against this, the cost of herbicides under DSR will not exceed Rs 2,000 per acre.

Are there drawbacks?

The main issue is availability of the herbicides. Pendimethalin is sold by companies such as BASF (under 'Stomp' brand) and PI Industries ('Bunker'), Bispyribac-sodium and Fenoxaprop-p-ethyl are marketed, among others, by PI Industries and Bayer under 'Nominee Gold' and 'Ricestar' brands, respectively. "If every farmer does DSR, will the demand for these chemicals be met? The seed requirement for DSR is also higher, at 8-10 kg/acre, compared to 4-5 kg in transplanting. Further, laser land levelling, which costs Rs 1,000/acre, is compulsory in DSR.

This is not so in transplanting," Hanjra said.

Surjit Singh, a 60-acre farmer from Gakhlan village in Punjab's Jalandhar district, tried out DSR for the first time on two acres in 2017. This he increased to 6 acres and 10 acres in the next two years. "I am planning to do 15 acres in the coming season. The yields are as good as from normal transplanting, but you need to sow by the first fortnight of June. The plants have to come out properly before the monsoon rains arrive. There is no such problem in transplanting, where the saplings have already been raised in the nursery," explained Singh, whose spring maize crop on the balance 45 acres will be harvested only towards June-end.

How much area is likely to come under direct seeding of rice?

The adoption of any new technology, be it Happy Seeder or Lucky Seed Drill, is ultimately dependent upon farmers feeling the need. The maximum area covered by DSR in Punjab was roughly 1.60 lakh hectares (lh) in 2015 – which dropped to 19,600 hectares, 1,100 hectares, 5,000 hectares and 23,300 hectares in the subsequent years. Sutanwar Kumar Aini, director of Punjab's Agriculture Department, expects it to rise to 2-2.5 lh this time on the back of labour shortages. Even that would be hardly a tenth of the state's total 29-30 lh paddy area.

CSR NEWSLETTER

CORPORATE SOCIAL RESPONSIBILITY

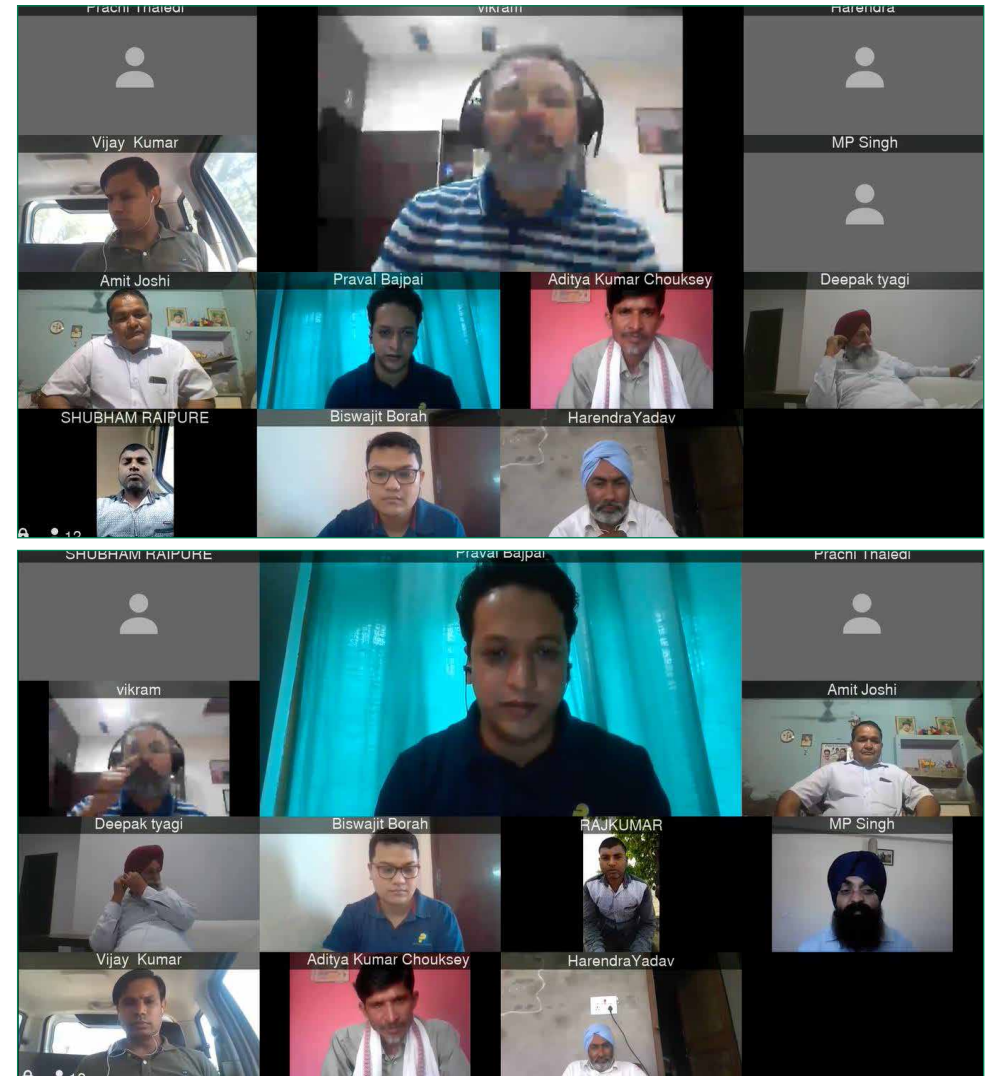
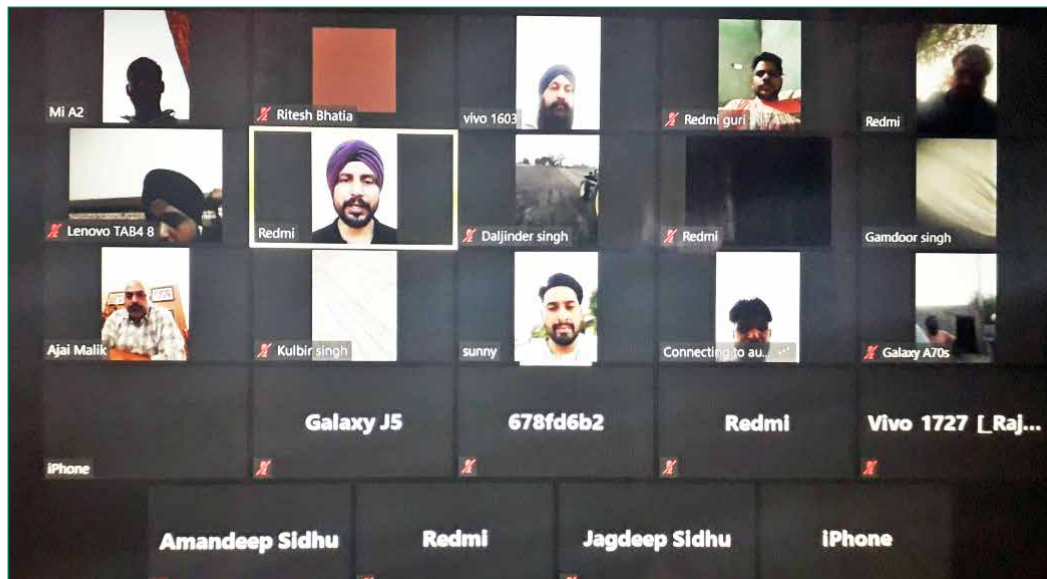


CSR FY'21 | HEALTH, HYGIENE AND SANITATION | ENVIRONMENTAL SUSTAINABILITY | WOMEN EMPOWERMENT

MAY 2020

Various points discussed in these online sessions included:

- Technicalities in early stage practices in direct seeding of rice
- Sharing advantages associated with DSR including water management, labour management, energy and cost savings.
- Favorable soil types for practicing DSR along with proper irrigation timing, weed and nutrient management
- Linking farmers in Punjab with machine owners for timely sowing through rental machines.





Income Generation Programme through Sustainable Agriculture at Rayagada, Odisha

As part of our project, we strategize to enhance agriculture based income by 50% from existing income of 1,000 farmers through ensuring qualitative produce. The intervention puts emphasis on strengthening one existing Farmer Producer



Organization and promoting another new Farmer Producer Organization covering 1000 families in both Bissamcuttack and Kalyansingpur Block.

During the month of May, 2020, 38 Farmer Interest Group meetings were conducted keeping in view the relaxations on lockdown provided by government on essential activities with proper precautionary measures. Main discussion points were the adoption of sustainable agriculture practices in Rabi vegetable crops, marketing the produce through entrepreneur development programmes of Farmer Producer Organisations and soil sample collection.



- **Agriculture demonstration:** During the month, livelihood planning with FPO members was done for 80 farmers focussing on Kharif interventions in paddy and vegetables.
- **Horticulture demonstration:** During the month, 30 farmers planted drumstick stump in both the blocks.
- **Nursery raising:** One field day on nursery raising was organised, keeping social distancing measures. Sweet potato nursery was raised in Bissamcuttack block





Support in Locust Control Operations by Local Authorities in Nagaur, Rajasthan

The locust invasion from neighbouring Pakistan's Sindh province is threatening to cause major damage to the green fodder and some Rabi crops. Nagaur is battling double whammy due to locust attack in this COVID-19 crisis situation. Govt is trying to contain locust attacks that have been reported in several villages of Nagaur, Jaisalmer, Barmer and other parts of western Rajasthan. PI Foundation initiated a project to support the Ministry of Agriculture, Govt of India to contain the locust invasion in one of the worst affected districts of Rajasthan.

Three spraying machines were deployed at the Locust Circle Office (LCO), Nagaur to supplement the government's control operations in controlling the locust invasion. The project is anticipated to support govt's efforts in containing the disaster like conditions of locust invasion and maintain the ecological balance by preserving the agricultural belt in the region.





ASMITA Project- Women Empowerment through Improved access to Credit and Livelihood Initiatives in 20 Villages

ASMITA project is being implemented with an aim to form and strengthen Self-help groups of women for creating a sustainable base for micro finance activity in 15 villages of Jambusar and 5 villages in Panoli. ASMITA – a process of leading women towards the life of dignity, and empowerment, has now entered its fifth year in Jambusar block.



Coronavirus pandemic was viewed as a period to test the resilience of leadership and systems created in Jambusar block. Following interventions were done during the month:

- Continuous communication with SHG leaders to understand the emerging needs for savings and credit activity along with managing social distancing in group meetings





- Leaders took up the responsibility of explaining SHG members the importance of precautions against COVID-19 and urged them to start wearing masks
- 25 SHG leaders from Samoj, Uber, Vedach, Nahar and Kareli were trained in tailoring masks. These leaders prepared more than 10,000 masks and supplied them to various companies like Transpack, Transmetal, Torrent, Petronet to improve their earnings / livelihood during lockdown
- SHG leaders were provided information on rights and entitlements provisioned by government during lockdown, especially on food security, widow pension, JanDhan account



- Discussion with bank managers of Bank of Baorda, Gajera, SBI Sarod and Baroda Gujarat Grameen Bank – Nondhana and Kareli were held to sort out challenges faced by women in their Jandhan Accounts
- Out of 116 mandals, savings of 59 mandals were collected in the month of May 2020. Total savings collected were of ₹1.19 lakh
- Additionally, awareness on COVID-19 was extended to 27 SHGs in Panoli



Economic Empowerment of Women Smallholders and Workers through Improved Agriculture and Inclusive Dairy Value Chain Promotion

PI Foundation along with CARE India is implementing CSR project with a focus on agriculture improvement and inclusive dairy value chain promotion in 60 villages of Jambusar taluka. The project has focused on capacity building and improved practices related to agriculture production system and dairy value chain.

- Continuous awareness is being created amongst community to prevent from COVID-19 through disseminating information by change agents.
- Information about various government schemes have been disseminated among 948 SHG members.
- The change agents and cluster coordinators facilitated and supported SHG members to avail benefits of these schemes while following all guidelines of government. As a result, 537 members got ₹500/- in their JanDhan account, 394 members benefited by agriculture schemes, 85 members booked gas cylinder (free of cost) in Ujjwala scheme, 652 members received free ration.



- Our field team also created awareness on Aarogya Setu application, as a result of which 125 people downloaded the app and learnt to use it
- Communities were trained on sustainable agricultural package of practices in Castor, Pigeon pea, etc, through online mode for the next Kharif season preparation
- Information on various agriculture activities has been disseminated among 1000 SHG members through voice messages by Awaaz De application

JUNE
UPDATES
COMING SOON

For any Feedback/suggestions,
write to us:

pifoundation@piind.com

Against coronavirus we have
weapons three

1. Wear
a mask



2. Maintain
social distance



3. Wash hands
frequently

