Drip Drop
Enabling Lakhpati Kisan Programme in Jharkhand through ensuring year round Irrigation
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Photo coverage from CInI Project area in Deoghar and Dumka district of Jharkhand

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CInI acknowledges the support from community, Infosys Foundation, TATA Trusts, Implementing Support Organisations like NEEDS, PRAVAH and ASA. This support works as an enabler to Mission 2020 Lakhpati Kisan Project, especially for the farmers of Santhal Pargana region of Jharkhand.
Foreword

About CInI

It had been the endeavour of Collectives for Integrated Livelihood Initiatives – CInI, which is the nodal agency for the Central India Initiative of the Tata Trust, to provide food and livelihood security for tribal communities living in the Central Indian tribal belt. The region cuts across states of Odisha, Jharkhand, Madhya Pradesh, Gujarat and Maharashtra. The key thematic intervention areas of CInI include Food security, Water resource Development, Micro Finance, Community Based Institutions, and Forest Based Livelihoods, which has brought about transformational change in the livelihoods and income levels of the tribal communities. CInI works in partnership with various CSOs, CBOs & Resource Organizations to reach out to over 1,00,000 tribal households across the region.

Lakhpati Kisan Initiative

In 2015, Tata Trusts launched the ‘Mission 2020 – Lakhpati Kisan: Smart Villages’ through CInI. A Lakhpati Kisan is one who earns at least Rs1,20,000 per annum against a basic income of Rs. 30,000 per annum. The programme engages with more than 1,00,000 households in 45 districts across four states – Jharkhand, Odisha, Maharashtra and Gujarat. The objective is to bring about irreversible change in the central Indian tribal belt through economic empowerment and improving the quality of life of tribal communities.

Infosys Foundation Support

It is almost impossible to ensure round the year irrigation in the Santhal Parganas, and hence achieve the objectives of Lakhpati Kisan. Infosys Foundation partnership, as part of the Lakhpati Kisan programme, has therefore been one of the most important partnership for CInI, especially in the Santhal Pargana region of Jharkhand.
The support covers 7000 HHs in Palajori and 6000 HHs in Jama block of Deoghar and Dumka district respectively of Jharkhand.

The activities under the project include:

- Promotion of seepage wells with lifting devices for round the year irrigation
- River/stream based micro lift irrigation with solar systems or diesel pump sets.
- Farm ponds/water bodies in medium and low lands
- Micro drip irrigation and mulching for better water management

All the above irrigation structures are installed and managed by the community institutions like SHGs and Federations.
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Water, which was so near, was inaccessible. The lift irrigation facility brought the water to our farms.
Savitri Chopeyar had small children and elderly in laws to look after, when her husband Ramesh Besra went to Bihar and Bengal for almost 4-5 months every year, to work as a wage labour. There was very little earning from their plot of land where they grew the kharif crop only, because of scarcity of water. River Tepra flowed close by their village Kalipuranga, but there was no means to irrigate the land as it was impossible to lift water from the river. In fact all 95 households migrated for an average of 5-6 months every year in search of employment with which they sustained their family.

CIIN and its local partner organisation PRAVAH facilitated the formation of the SHGs in the village. After discussion with the villagers, a proposal was finalised for installing a lift irrigation system, supported by Infosys Foundation, which can help irrigate the fields at the bank of the river. The condition was that they should contribute 10% of the total cost.

The villagers saw an opportunity and 66 households agreed.

Today, the 66 households grow several crops across the year. The high value chilli crop alone brings Rs. 4000 to Rs. 5000 every month.

Ramesh Besra has not gone to work to other states ever since. Migration has stopped in all 66 households. The LI has ensured enough income for these households to stay with their family.

| Total land irrigated through the project: 25 acres |
| Total investment: Rs. 4,55,940 |
| Contribution from beneficiaries: Rs. 64,290 |
| Total beneficiaries: 66 HH |

### Income Graph of Savitri

- **2018-19**: Rs. 113,763.00 from 0.98 Acre
- **2017-18**: Rs. 95,305.00 from 1.26 Acre
- **2016-17**: Rs. 88,580.00 from 0.95 Acre
I never thought that drip irrigation could bring so much change in my family income.
Sabita Soren spent about 4-5 hours a day in her farm during the monsoon, growing maize. When she heard that drip irrigation and mulching could provide round the year irrigation to her field, with little effort, saving a lot of water, she decided to try her luck. She applied for Infosys support for the same through her SHG.

Since she started growing chilli through drip irrigation provided under Infosys Foundation project, the yield was so high, that she could not find enough time to harvest it. She found a strategy. She employed neighbours to pluck chillies at the rate of Rs.5 per kg. This generated income for her neighbours as well.

Her profit from chilli is about Rs. 90,000 per season. She has sown 2000 seeds of water melon for summer 2020, which is expected to bring Rs. 80,000 to Rs. 90,000.

Sabita is busy rebuilding her one room house, adding four more rooms to it. She has more time at hand and considers herself fortunate to have started drip irrigation with mulching in her farm. She is a proud Lakhpati Kisan today.

Total land holding : 1.5 Acre

Income before intervention : Rs. 17,000 per year

Contribution in drip : Rs. 9000

Infosys grant : Rs. 27,000

Government grant : Rs. 1,20,000

Income Graph of Sabita

1st year

Income from Chilly

Expected income from water melon in 1 acre and bitter gourd in 0.5 acre

2nd year
We were poor...very poor. Water has changed our lives.
As you enter Aamgachhi Kurua, you would see the bountiful seasonal vegetables in the fields, ready to be harvested. “This was impossible even two years back,” says Fulin Kisku. “There was no group, no well, no pond. We could not grow anything, apart from some paddy or maize in the monsoon...”

Fulin Kisku lost her husband early as she did not have enough money for his treatment. Nor could her son continue with his studies. There was little to eat at home, so she worked as a help in other people's houses.

With ClnI and PRAVAH's intervention in her village, she could apply for the drip irrigation with Infosys Foundation support from her SHG.

Initially only 3 didis from the SHG group Tova Baha, including Fulin didi, started drip irrigation in a total of 1 acre 15 decimal land. Excited by the profit they made in the very first year, 3 more didis joined in drip irrigation. They also started collective marketing which saved their time.

They now grow several crops all through the year. As their crops diversified, they made more profit and there was no stopping them from becoming Lakhpati Kisan.

Fulin has bought 4 cows and goats with the profit. She sees a doctor at Dumka town, when she is sick. She is not alone. Others in the group like Manju De spends as much as Rs. 42,000 per year for her two children, on school fees, books and dress. They go to an expensive English medium school. Hiramoni buys new saris whenever she wants and gives her children little pocket money, without having to ask her husband.

**Total land holding : 3 acre**

**Area under drip : 0.45 acre**

**Investment (Well and Drip combined) : Rs. 2,80,000**

**Income 2018-19**

<table>
<thead>
<tr>
<th>Season</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kharif</td>
<td>Rs. 53718</td>
</tr>
<tr>
<td>Rabi</td>
<td>Rs. 39400</td>
</tr>
<tr>
<td>Summe</td>
<td>Rs. 12500</td>
</tr>
</tbody>
</table>

(Annual Total Rs. 1,05,618)
We could not meet even simple day to day requirements earlier.
Lalita Tudu’s family had 20 bighas of land, of which only 5-6 bighas were cultivated during Kharif season. They could not even think of Rabi crop as there was no water.

CInI and its partner NEEDS facilitated the construction of 4 seepage wells and 1 seepage pond, and initiated drip irrigation with mulching, with support from Infosys Foundation, which changed the face of agriculture in the village. Lalita Tudu's family owns one seepage well and one seepage pond. She has also started drip irrigation with mulching which have totally changed her household economy.

At present Lalita Tudu cultivates in around 25 bigha land (5 bigha on lease) throughout the year. Vegetable cultivation is in around 8-10 bigha land of which around 2.5 - 3 bighas are cultivated through drip and mulch, which has proved exceptionally profitable. The pond has fish all through the year. She has constructed a Polyhouse for additional income. Of the total cost of Rs. 3,16,985, her contribution is Rs. 1,50,000, in which Rs. 1,20,000 is a loan from Rang de and Rs. 30,000 was upfront cash contribution.

“We buy nothing from market. We grow rice, dal, mustard, vegetables and get all vegetables from the garden and fish from pond. We get milk from the cows we bought with our profit, and have quite a few goats and chicken, bought a two wheeler and a tractor. We have rebuilt our house and I have also bought some gold jewellery,” smiles Lalita sitting in a courtyard full of drying Arhar and paddy.
Almost 75% of the once vacant plots in our village are now lush green always.
The plots in Masanjore village lay vacant throughout the year, because of lack of water. Bobby Devi grew only maize and mustard. Inspite of joining the *Lakhpati Kisan* project, she was at a loss when *dadas* from CInI and NEEDS asked her and others to grow high value crops. Seasonal crops needed water. How could they possibly arrange that?

Prompted by CInI, and encouraged by other farmers they met during exposure visits, Bobby Devi, along with another farmer, applied for seepage well and drip irrigation under Infosys Foundation project. They harvested a very profitable crop comprising of chilli, tomato, bottle gourd and cauliflower. It involved less labour, less water consumption, and more profit for both of them. The soil retained moisture and became more fertile.

Inspired by them, 20 more *didis* started drip in a total of 10 acres of land. Their contribution was *Shramdaan* for seepage wells, and 10% in cash for drip irrigation. The beneficiaries contribute Rs 50 per hour for running the pump. The Jharkhand Agriculture Minister sanctioned a pump room when he saw their enthusiasm during his visit.

Bobby Devi’s farm and those of others became a model farm for many other villages in the block. She is the proud recipient of *Aparajita* award from Prabhat Khabar.

The women have reconstructed their houses, bought livestock and smart phones for themselves with the profit they make every year. The village has transformed socially and economically with the increase in number of Lakhpati Kisans.

**Total landholding : 2 Acre**

*Estimated income before intervention : Rs. 25,000 per annum*

*Personal Contribution : Rs. 3,000 in well and Rs. 16,000 in drip. Invested Rs. 14,000 for purchasing of mulch sheet for cultivation in drip*

**Income Graph of Bobby Devi**

<table>
<thead>
<tr>
<th>Year</th>
<th>Income (Rs.)</th>
<th>Crop</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019-20</td>
<td>1,30,000</td>
<td>tomato</td>
</tr>
<tr>
<td>2018-19</td>
<td>1,17,000</td>
<td>chilly</td>
</tr>
<tr>
<td>2017-18</td>
<td>1,22,000</td>
<td>creepers</td>
</tr>
</tbody>
</table>
It’s just 2 hours a day, and we have made a roster to share turns in feeding. Its little effort and more profit
Baby Baski started fishery in her pond, but did not make any profit. She took out the fish early and consumed on festivals and other occasions. The other villagers who ventured into the business acquired their fishlings from Bengal, most of which did not survive.

As the water level of the village was promising, the SHG group of which Baby Baski was a member, decided to start a community pond, with support from Infosys Foundation. An exposure visit organised by ClInI and its partner PRAVAH made the SHG more confident in starting the enterprise.

Baby Baski consented to provide her land, and a consent document was drawn which offered 25% of the profit to the landowner and the rest to the other members. The SHG members contributed labour (shram daan) to dig the 10 feet of the pond, which is on a 100’x100’ area. With trainings and hand holding support, the group learnt the tricks of raising fish - preparing the pond, feeding, checking for disease and netting.

In the first year, as there was a delay in acquiring and breeding the spawn, the SHG made little profit (Rs.40,000). But it was enough to raise the morale of the group. This season(2020) they expect considerable profit.

Baby Baski dreams of moving out of her shanty to a city-like house and enrolling her children to English medium schools in near future.
We were uncertain in the beginning. The exposure visit and training made us confident.
Wage labour and efforts at tailoring did not suffice the family of 7, with 5 children. Paddy grown in 4 acres of land, only once a year, was insufficient to sustain all needs.

Komali Besra, and her husband Shiv Charan Soren had heard about the high profit one can make from fish culture. They attempted to grow fish from 1000 fishlings in their pond. However, to their dismay, almost all fish died, as they had no knowledge of fish cultivation.

They decided to do the business in a proper way. Having applied for grant under the Infosys Foundation project, they dug a series of three ponds – for spawn, spawn to fishling and fishling to big fish. The decision was difficult as they had to sacrifice considerable paddy growing land. Moreover, they had doubts about their own skills.

However, the 3 days training and exposure visits provided under the Infosys project gave them full confidence. They learnt about maintaining the ph of pond water, fish food and fish management, netting, identifying and treating illnesses and many other things.

They are looking forward to three times the profit they made from paddy cultivation.

| Total land invested in series of ponds : 50 Decimal |
| Approximate income from the land before intervention : Rs. 42,800 per annum |
| Total investment : Rs.1,39,000 |
| Personal contribution : Rs.13,900 |
We had only maize pulp for meals earlier, now we have fresh vegetables from our farm and fish from our ponds.
The Kartik and Ganesh SHGs of Torojoria sanctioned 2 seepage ponds for 5 didis under the Infosys Foundation project. The ponds were to be constructed on their land.

But, at the last moment, one didi backed out after her husband objected. It was paddy land and the family thought that it was a risk to give away their only source of income. The SHG failed to persuade them.

Nevertheless, the other applicants went ahead. 2 ponds were constructed in their land. The 5 beneficiaries from 2 ponds made considerable profits from fishery. This was an eye opener for the didi, who had backed out, and she re-applied for a seepage well within a year.

This was not the only problem faced. As in many other villages, it was a challenge to convince beneficiaries regarding the contribution required. However, the SHGs mediated the situation well, and the beneficiaries realised that the grant would come only when their contribution was assured.

The households, which only had maize pulp as their meals earlier, now have fresh vegetables from their farm and fish from their ponds.

In a water scarce village, the ponds are oasis of relief for villagers who used to walk 2 kms to the river for ablutions.

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Seepage ponds : 5 beneficiaries</td>
<td></td>
</tr>
<tr>
<td>Total investment : Rs. 2,11,000</td>
<td></td>
</tr>
<tr>
<td>Infosys Grant : Rs. 1,70,000</td>
<td></td>
</tr>
<tr>
<td>Beneficiary contribution : Rs. 30,000</td>
<td></td>
</tr>
<tr>
<td>Drip(3 acres) : 3 beneficiaries</td>
<td></td>
</tr>
<tr>
<td>Govt convergence : Rs. 2,40,000</td>
<td></td>
</tr>
<tr>
<td>Infosys grant for mulching : Rs. 54,000</td>
<td></td>
</tr>
<tr>
<td>Beneficiary contribution : Rs. 24,000</td>
<td></td>
</tr>
</tbody>
</table>
Earlier we could only grow vegetables for consumption. Drip irrigation brought prosperity.
Wellness from well

Sumitra Murmu’s family grew paddy and mustard in 12 bighas of land. There was not enough income through the year. Although they had a bore well, it could not be optimised. So Cini and its local partner, PRAVAH facilitated the process of including her to the SHG and sending her for an exposure visit to Hazaribagh, where she saw drip irrigation or tapak snichai. She applied for drip facility connected to the well, supported by Infosys Foundation and made an income of Rs 2,19,000 in the very first year by growing brinjal, tomato and chilli.

The neighbours are curious about their sudden profit and the technology they apply. But non availability of wells in the village is a hindrance.

Within 2 years Sumitra has bought a Television, refrigerator, dressing table, two phones for her family and has repaired her house. She has admitted her children to private English medium Schools. As a Lakhpati Kisan, she is an inspiration for others in her village and beyond.

Total land holding : 4 acre
Area under drip : 0.5 acre
Investment : Rs. 60,000 for drip only

Income Graph in 2018-19

<table>
<thead>
<tr>
<th>Season</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kharif</td>
<td>Rs. 84800</td>
</tr>
<tr>
<td>Rabi</td>
<td>Rs. 55480</td>
</tr>
<tr>
<td>Summer</td>
<td>Rs.59470</td>
</tr>
<tr>
<td>Annual Total</td>
<td>Rs. 1,99,750</td>
</tr>
</tbody>
</table>
We have all bought two wheelers with our savings. Everyone!!
We are the Change

We did not have any aspirations at all. Access to water brought us hope. We started to aspire to be like city people – confident, well to do and smart. - Rupa Das

Lakhpati kisan is not just about money...it is about finding a voice in my family and in society, getting a chance in decision making and finding aspiration. This would not have been possible if we did not come together and reaped the benefits of the Infosys project. - Rinki Kumari

The Federation looks into the need and level of interest of the farmer who asks for support from Infosys. Then we visit the site. We have learnt about appropriate site selection from the NEEDS engineer who comes along for site visit. We also ensure that there is maximum beneficiary from one well or pond. All the formalities are completed thereafter. First 10 feet is dug by the parties, only then the money comes. We also do vendor selection after comparing 2-3 quotations. We have learnt all these through trainings...and through experience. The training also helped us to negotiate with beneficiaries, to get the measurements of well, pipeline etcetera. We can now run the show on our own. - Binasri Kisku, President, Jagriti Mahila Maha Sangh

Earlier, we sought permission from our husbands and in laws for doing everything. Now, they know that the family income has grown considerably because of us. Now, they are very supportive. We do not ask our husbands for money for treatment of our children or to buy them tiffin. We are respected at home and are consulted for important decision makings. It makes us proud. - Kusum Devi, President, Jagriti Mahila Mahasangh

We have a prestige in society. Earlier we were ignored. Now, even the Mukhiya calls us for important programmes. The bank officials show us respect when we go for loans. - Sunita Devi, Secretary, Shrishti Mahila Mahasangh

No of members in Shrishti Mahila Mahasangh : 3500
No of beneficaries : 3500
No of members in Jagriti Mahila Mahasangh : 3504
No of beneficaries : 3504