



TATA COMMUNICATIONS



SOCIAL RETURN ON INVESTMENT (SROI) STUDY

EMPOWERED PROJECT

FINDINGS

AND RESULTS

15.03.2024



4th Wheel
Social Impact



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INTRODUCTION



MPowered Project

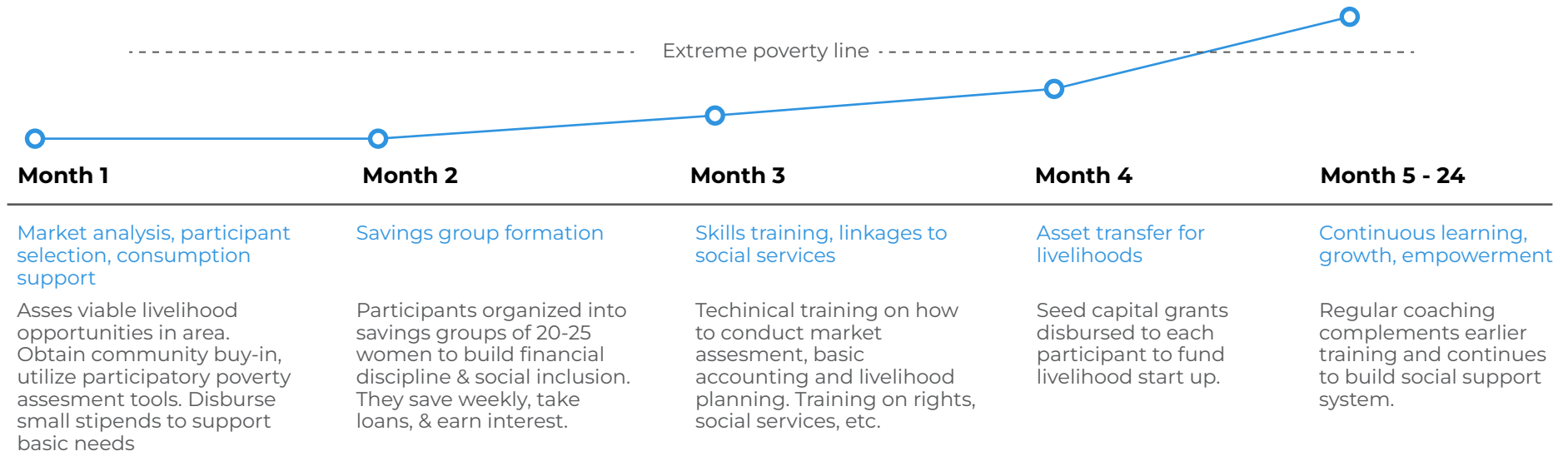
Trickle Up launched the MPowered (Mobile Connections to Promote Economic Development of Women) project with Tata Communications and the state branches of the National Rural Livelihoods Mission in Odisha and Jharkhand in 2016.

The MPowered project aims to empower the poorest and most vulnerable women (the ultra-poor) who live on less than USD 1.25 per day, through interventions that support sustainable livelihood development, and financial, digital and social inclusion.

The project applied Trickle Up's Graduation Approach to building sustainable livelihoods, but with the addition of putting the power of mobile smartphones directly into the hands of women striving daily to overcome conditions of extreme poverty and vulnerability. The sequenced and time-bound Graduation Approach combines careful participant selection, livelihood planning and market research, training and coaching, and savings to build a ladder of support for participants to move out of poverty.

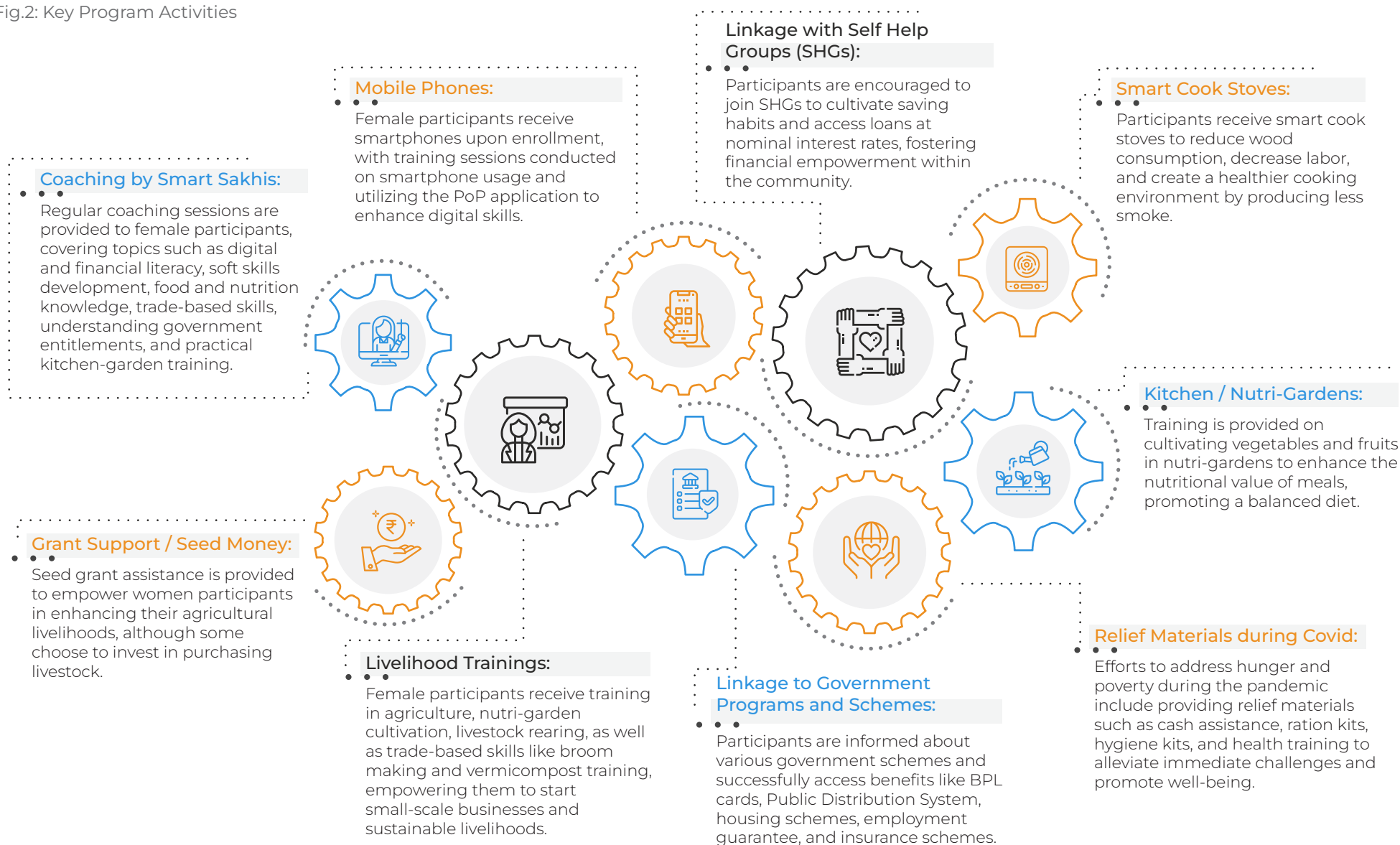
Fig.1: Trickle-Up Graduation Approach

Trickle Up's core competencies are rooted in the Graduation Approach - a rigorously tested approach to economic inclusion that helps households sustainably move out of extremely poverty. Program components work together to increase the economic and social empowerment of participants:



Program activities focus on women's empowerment through training, financial support, and resource provision for improved livelihood and self-reliance. The project has two major components: (1) livelihood component that includes training, seed grant support, facilitation and capacity building and (2) technology component that includes application and usage of smartphones and a Package of Practice (PoP) application for livelihoods and availing services of government and other state programs.

Fig.2: Key Program Activities





The project had reached a total of 2,800 participants from 2016-2023 in Jharkhand and Odisha.

- In the first phase which spanned from 2016 to 2019 the project had reached 1800 project participants/women beneficiaries and a total of 136 Smart Sakhis (in the payroll of Tickle Up). In phase 1 the program reached 1000 PPs from Sundergarh and Balangir districts in Odisha, and 800 PPs from Pakur and West Singhbhum districts in Jharkhand.
- In the second phase spanning 2020 to 2023 an additional 1000 project participants were reached with 500 PPs in both Odisha and Jharkhand.
- In Jharkhand and Odisha, 136 Smart Sakhis serve 2800 participants across five project locations. The Smart Sakhi-to-participant ratio ranges from 1:15 to 1:25, depending on village size and distance. In Odisha's Muribahal, Balishankara, and Sukinda blocks, 32, 25, and 12 Smart Sakhis respectively operate. In Jharkhand's Manoharpur and Maheshpur areas, 48 and 19 Smart Sakhis respectively work.

At the time of the study however the total project participants reached by the program were 2,778 with a drop out of 22 PPs (Annex 1).

A budget of INR 3,68,84,841 was spent on Cohort 1 of the project from 1 October 2016 to 31 March 2018. A budget of INR. 2,53,07,465 was spent on Cohort 2 from October 2020 to March 2023.

Social Return on Investment (SROI) Study

The overarching objective of the study was to identify and quantify the impacts and changes created through the project into tangible numbers, to identify the social value created for each Indian rupee (INR) spent. Key research questions include:

● To what extent does the program improve livelihood patterns and income levels of program participants and contribute to digital, financial, and social inclusion of participants?

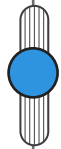
● How effective and efficient are program inputs in contributing to expected outcomes?

● What are the identified gaps in the program's performance, and what recommendations can be made for improvements over the next 5 years?

● What is the impact and functioning of Smart Sakhis, Self-Help Groups (SHGs), community leaders, and community cadre, and how do they contribute toward program sustainability?

● What are the facilitators and deterrents to program outcomes?





The SROI methodology has engaged stakeholders throughout the process to have them articulate the main changes at an outcome level in their lives due to the project and what the relative value of these outcomes is for them. This was an Evaluative SROI conducted retrospectively and based on actual outcomes that had already taken place. The evaluation was guided by the seven principles outlined by the SROI Network.

Fig.3: Principles of SROI

Understanding Project Impact:

To comprehend the impact over a 4-year span, an impact map was crafted, delineating inputs, activities, outputs, and outcome indicators.

Including Material Factors Only:

Relevant indicators and corresponding financial proxies have been identified for the mapped outcomes.

Transparency:

The study's findings will be shared with beneficiaries, the implementation team, employers, and all relevant stakeholders.



Involvement of Stakeholders:

The evaluation has embraced the active participation of all key stakeholders: youth alumni, their families, employers and the implementation team.

Valuing What Matters:

Key inputs, activities, and outputs have been mapped, shedding light on impact outcomes and their respective value as outlined by stakeholders

Avoiding Over-Claiming:

Critical aspects like deadweight, displacement, attribution, and drop-off have been calculated for each key outcome indicator to establish the social value and impact.

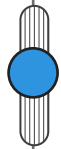
Verification of Results:

The results and values derived have been verified by data analysis and impact assessment experts comprising the evaluation team.

The study was conducted between December 2023 to March 2024. For an overview of methodology and limitations, please refer to Annex 2.



MEASURING SOCIAL RETURN ON INVESTMENT

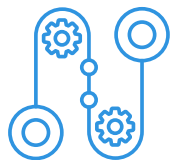


Measuring Social Return on Investment (SROI) is a systematic process involving six crucial steps. It begins with defining the scope, which sets the boundaries, stakeholders, and timeframe for the analysis. Stakeholder involvement follows, where engaging with key stakeholders helps identify relevant outcomes and indicators. The third step entails outcome mapping, where social, environmental, and economic outcomes are clearly defined and assigned values. Impact valuation comes next, where methodologies are applied to assign financial values to these outcomes. In the fifth step, impact aggregation, the various impacts are summarized and aggregated to calculate the SROI ratio. Finally, the findings, recommendations, and the calculated SROI ratio are communicated to stakeholders and decision-makers, facilitating informed choices and resource allocation based on the assessment of social impact and financial return.

Fig.4: Stages of SROI



Establishing Scope and Identifying Stakeholders

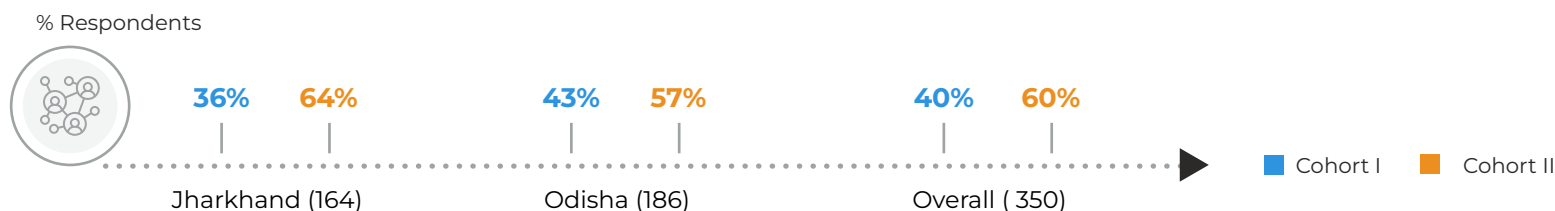


Scope, Timeline and Sampling

The scope of the Social Return on Investment (SROI) study focused on evaluating the impact of the MPowered program, which operated in two states, Jharkhand and Odisha, targeting a total of 2,778 individuals who had participated in the program between 2018 and 2022.

Given the total sample universe of 2,778 individuals from the two states, a 95% confidence level and a 5% margin of error was used to determine an optimal sample size. The sampling process involved allocating 60% of the sample to Cohort II and 40% to Cohort I, proportionally allocating the sample size between the two states, and further dividing the state sample sizes among the respective blocks and gram panchayats. Villages within the blocks were selected to meet the sample size requirement, prioritizing those with the highest number of beneficiaries given time constraints and challenging terrain.

Fig.5: Sampling Based on Two Timelines of Implementation (Cohorts)



Overall, the study reached 350 women participants through surveys, 186 project participants from Odisha and 164 from Jharkhand. Additionally, 10 Focus Group Discussions (FGDs), 15 Smart Sakhi interviews, 4 implementation team interviews, and 4 government official interviews were undertaken. The research study encompassed 4 blocks and 27 villages; 8 villages in Manoharpur and Maheshpur blocks of Jharkhand and 19 villages in Muribahal and Balishankara blocks of Odisha.

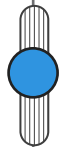
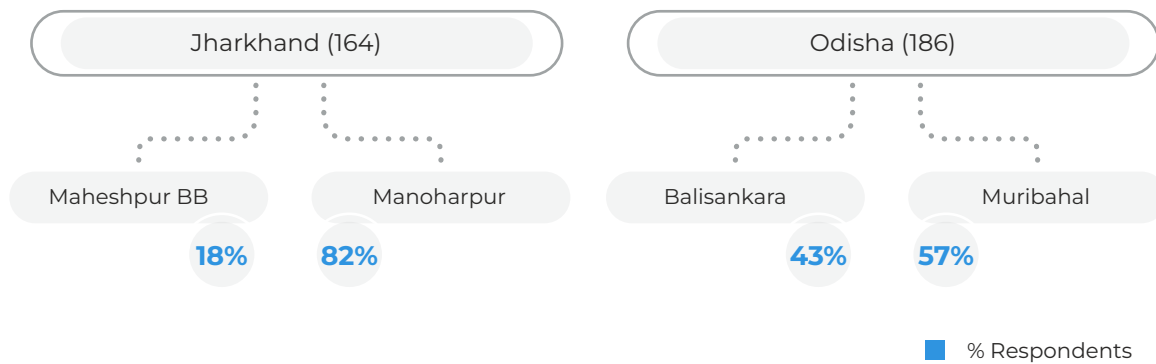
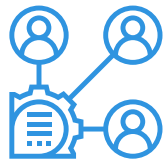


Fig.6: Geographical Representation of the Sample

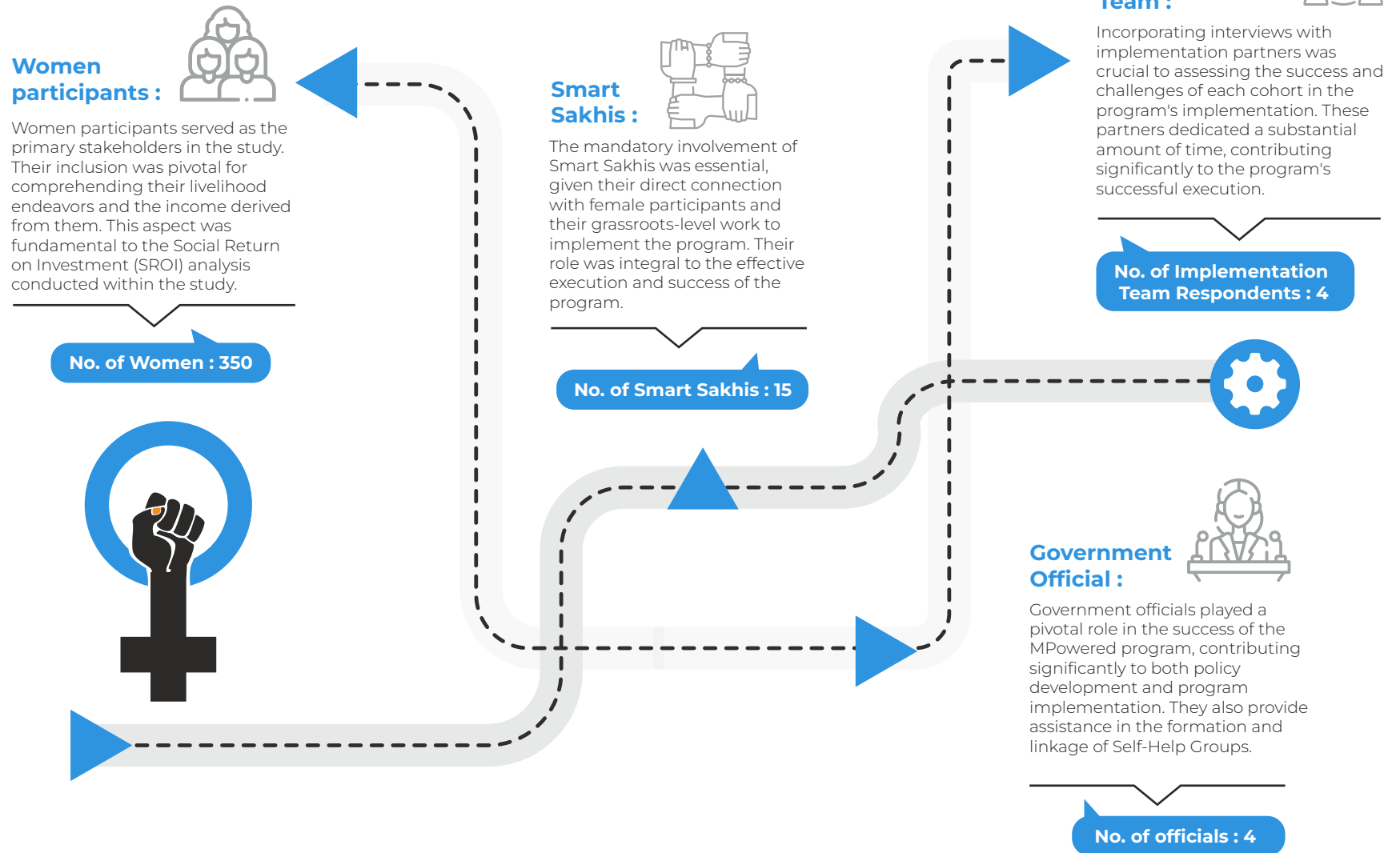




Stakeholder Mapping and Involvement

Four key stakeholders were included in the study: Women Project Participants (PPs), Smart Sakhis (SS), the Implementation Team, and Government Officials, due to their significant influence on or impact by the project.

Fig.7: Stakeholder Mapping, Sample Size



- **Survey and Focus Group Discussion with Project Participants:** PPs are the main beneficiaries of the interventions of the project. These women shared their experiences through surveys and focus group discussions, providing important insights into the impact of the support they've received, such as resources, inputs, grants, and training. For a value game explainer refer to Annex 3.
- **Interviews with Smart Sakhis:** Smart Sakhis play a pivotal role in implementing the MPowered program, as they are appointed from the same villages, fostering strong connections with program participants.
- **Interviews with Government Officials:** Government officials from each state were involved. These officials play crucial roles in establishing and strengthening Self-Help Groups (SHGs), promoting livelihoods such as agriculture and livestock management, conducting capacity-building exercises, and facilitating linkages to government programs.
- **Interviews with Implementation Teams:** The team interviewed implementation teams across all four blocks to understand their roles and contributions to the MPowered program.

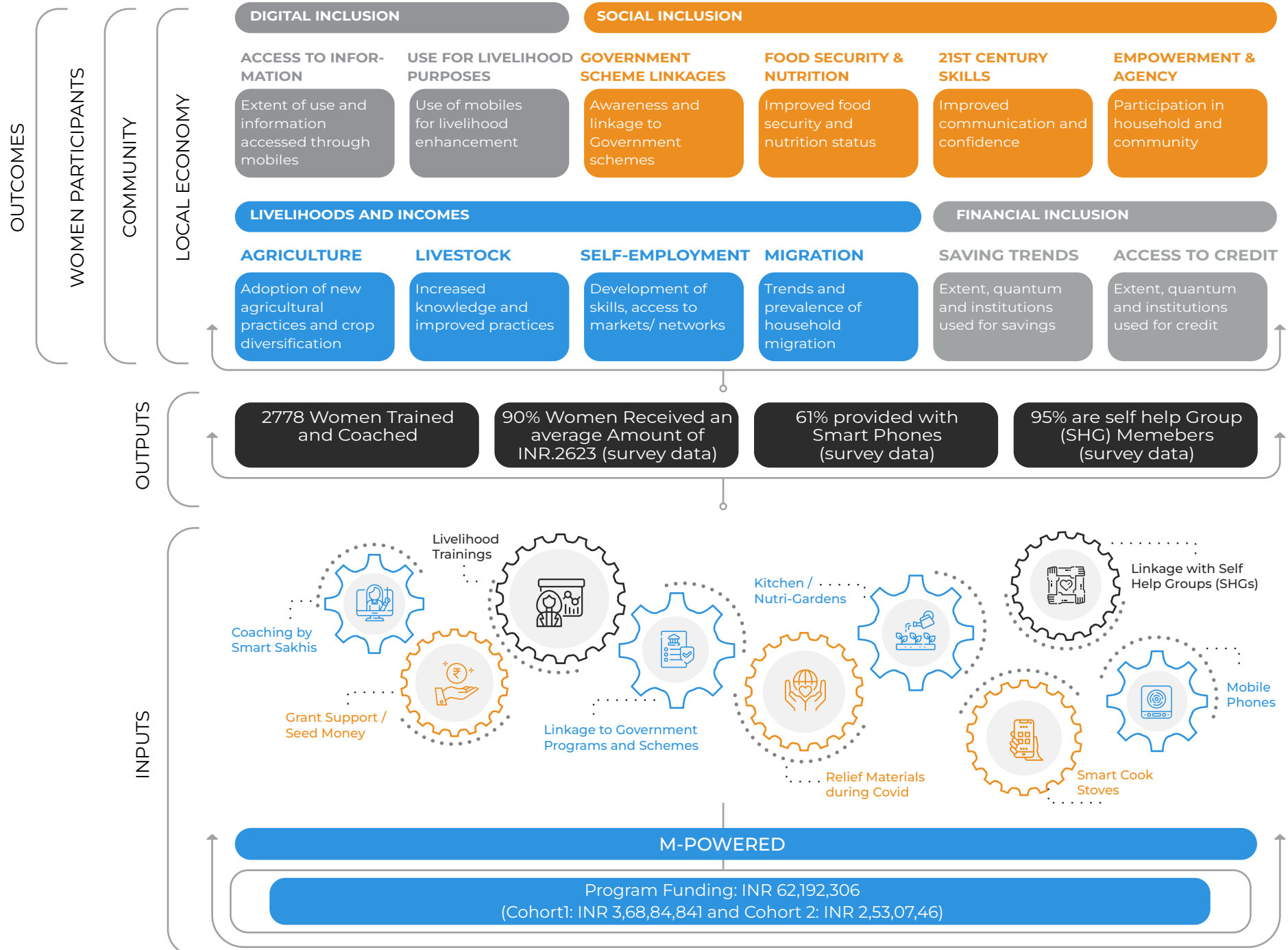
For an overview of the demographic profile of sample respondents, please refer to Annex 4.

Mapping Outcomes

An impact map in the context of a Social Return on Investment (SROI) study is a strategic visual tool that outlines the inputs, activities, outputs, outcomes, and ultimately the impact of a project or program. The impact map served as a crucial tool in the SROI study by visually tracking the journey from livelihood, financial and digital inputs to societal outcomes, demonstrating the tangible benefits of the project on women's empowerment and community development. It quantifies the effectiveness of interventions, aiding in the assessment of the social value generated relative to the investment made.



Fig.8: Impact Map



Evidencing outcomes

The SROI study has evidenced outcomes across four key areas based on stakeholder inputs. These include improvements in livelihoods and incomes, enhanced financial inclusion, increased digital literacy, and greater social inclusion. Stakeholder insights have been instrumental in identifying and quantifying these positive changes, underscoring the program's multifaceted impact.



Livelihoods and Incomes

The program consisted of training and coaching on livelihoods, mobile phones with the Package of Practice (PoP) application, and seed grant support as startup capital for livelihood enhancement.

- 91% of participants have received training and coaching by Smart Sakhis
- 90% have received grant support, with an average amount of INR 2623

Fig.9: Average Seed Grant Amount



INR 2960
Jharkhand (N=147)



INR 2330
Odisha (N=168)

Seed grants have provided participants with opportunities to diversify their economic activities, including the addition of livestock or the start of new businesses. The average seed grant amount is lower in Odisha at INR 2330 compared to INR 2960 in Jharkhand. This disparity can be attributed to a portion of the grants in Odisha being utilized to clear pending contributions for women's memberships in Self-Help Groups (SHGs), thus reviving their active status. Additionally, fund availability was impacted during the COVID-19 pandemic, which contributed to the reduced grant amounts.

- 61% have been provided with mobile phones featuring the PoP app.³

²Seed money for Phase 1 and 2 was INR 2300 and Phase 3 was INR 2900. Sample of women has a mix of the different phases

³Mobile phones have been distributed to 1000 women beneficiaries out of the total 2778

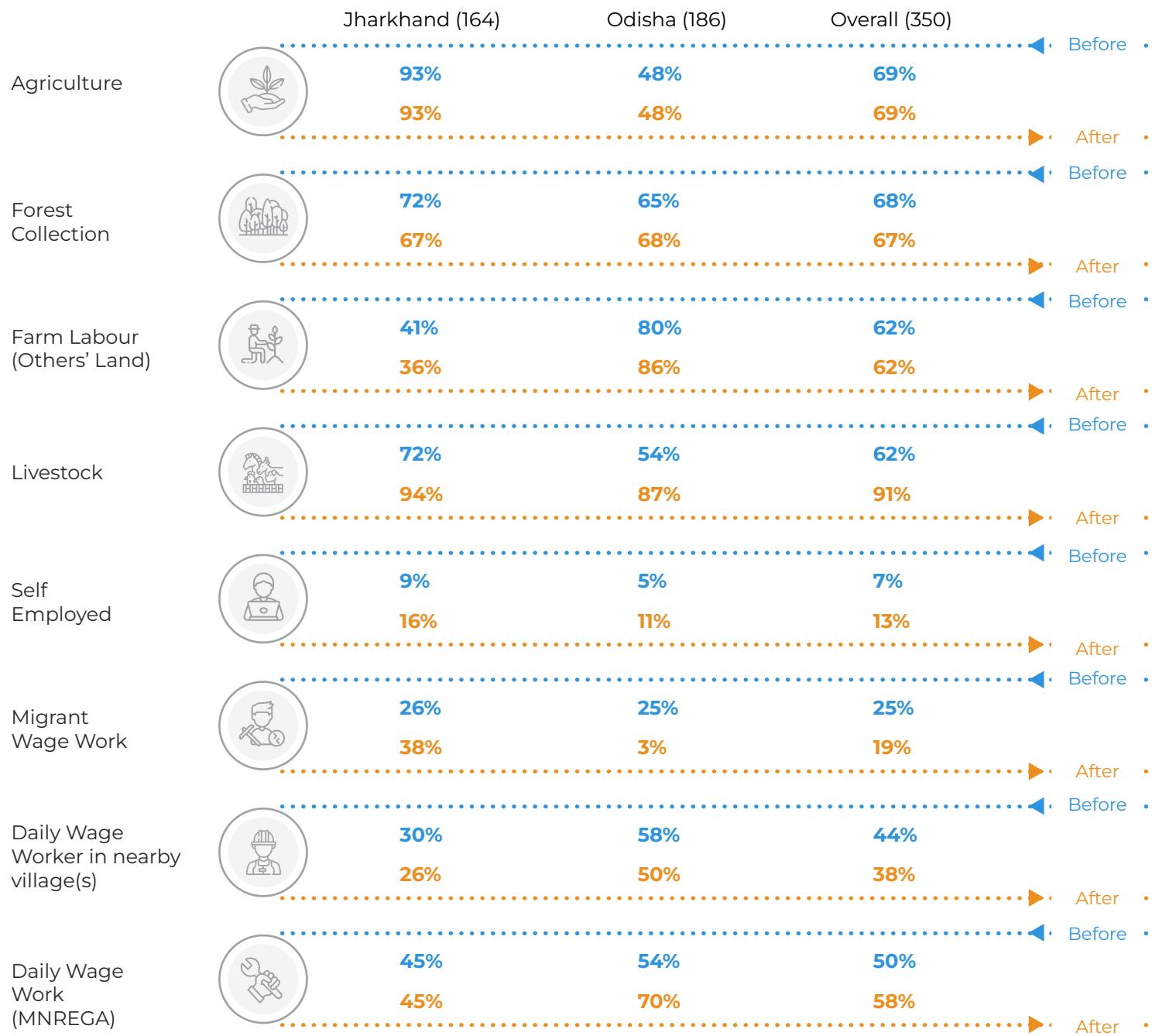
Overall, there has been a shift in the livelihood patterns of women participants.

- In Jharkhand, a significant number of individuals were engaged in agriculture on their own land, which remained consistent post-intervention. Consistent trends were similar for forest collection and farm labor on others' land.
- In Odisha, farm labor on others' land was common which slightly increased post intervention. There was a notable increase in livestock-related activities, suggesting a diversification in income-generating activities.
- Self-employment saw a moderate increase in both regions, indicating a push towards entrepreneurial activities.
- Migrant wage work decreased in Odisha implying that the intervention may have created local opportunities, reducing the need to migrate for work, but increased in Jharkhand pointing to contextual challenges of the region.
- Daily wage work in nearby villages and under the MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) saw increases in Odisha, while in Jharkhand, the participation in MGNREGA work remained consistent.

Overall, these changes suggest a move towards more stable and local forms of employment, with an emphasis on agricultural and livestock work, and a decreased reliance on migrant labor and farm labor on others' land.

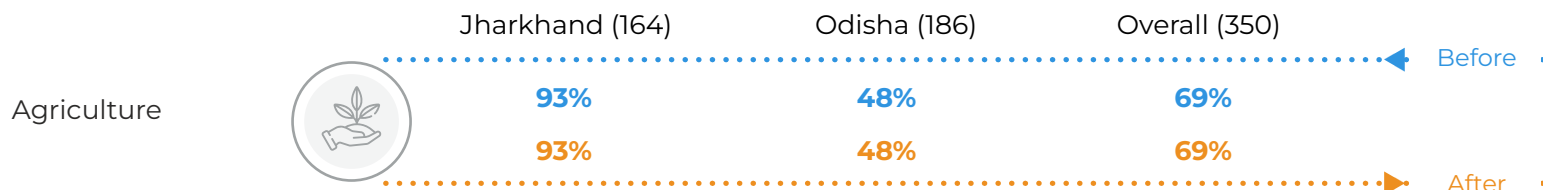


Fig.10: Livelihood Patterns (Pre-Post Intervention)



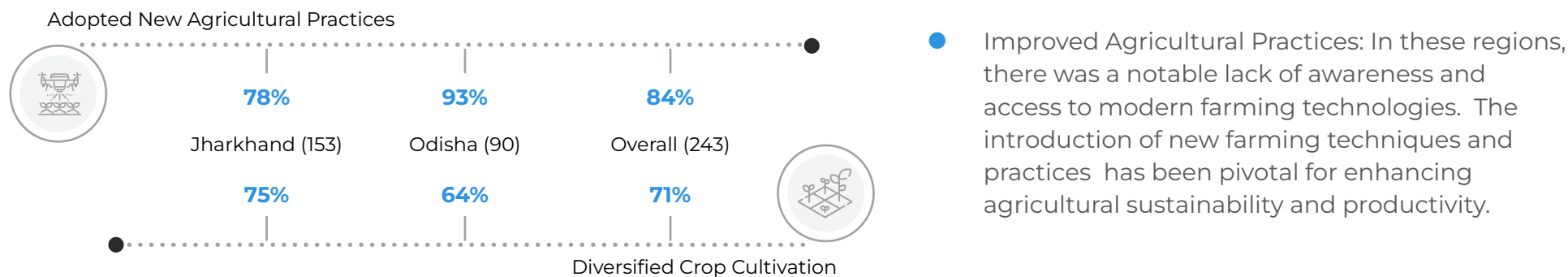
Agriculture

Overall, 69% are engaged with agriculture, more in Jharkhand (93%) than Odisha (48%). Of those involved in agriculture, almost 100% in both states had small parcels of land. There was a notably higher percentage of respondents leasing land in Odisha (26%) compared to Jharkhand (15%).



Farmers in Jharkhand and Odisha are marginal farmers¹, with limited landholdings. The average land on lease is relatively low in both states (0.10 acres in Jharkhand and 0.16 acres in Odisha), indicating that leased landholdings are typically small (Annex 5).

The MPowered program has positively impacted agricultural livelihoods in two ways:









● Improved Agricultural Practices: In these regions, there was a notable lack of awareness and access to modern farming technologies. The introduction of new farming techniques and practices has been pivotal for enhancing agricultural sustainability and productivity.

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¹Typically own less than 1 acre

Table 1: Adoption Rate of Agricultural Practices (Post Intervention)

	Jharkhand (120)	Odisha (84)	Overall (204)
 Vermicomposting	38%	95%	62%
 Better Sowing techniques	43%	36%	40%
 Better Transplanting technique	42%	38%	40%
 Organic Pest Management	26%	48%	35%
 Adopted New Seed variety	29%	27%	29%
 Better Land preparation techniques	22%	22%	22%




These holistic approaches to farming introduced by the program have not only enhanced productivity but have also paved the way for a more eco-friendly and cost-effective agricultural landscape in these regions.

- The widespread adoption of vermicomposting in Odisha is particularly noteworthy, reducing cultivation costs by limiting the need for chemical fertilizers and pesticides and fostering more sustainable farming.
- Better sowing methods like intercropping and line sowing, which have seen a fair uptake, enhance crop yields by making more efficient use of land.
- These practices, coupled with meticulous land preparation and advanced transplanting techniques, have been pivotal in improving crop outputs, according to women participants.
- Organic farming has been embraced through the promotion of natural fertilizers and innovative pesticides like jiva amrut and bija amrut, and mahulastra, which improve soil health and curtail reliance on synthetic inputs.
- The program's emphasis on education around the use of eco-friendly seed varieties is establishing more resilient agricultural systems.
- Strategic planning for farming activities, such as the timing of planting and harvesting to coincide with the most favorable weather conditions and market demands, is optimizing agricultural output.

Crop Diversification:

Before the program, farming mainly involved staples like paddy, wheat, and cotton. With the program, participants diversified crops to include vegetables and fruits alongside staples through intercropping, benefiting both self consumption and income. 77% of women participants now grow vegetables such as tomato, brinjal, chili, potato, radish, spinach, capsicum, pumpkin, peas, lady's finger, onion, cabbage, coriander, bitter gourd, cucumber, sweet corn, and garlic. In Jharkhand, women have added corn, sorghum, niger seeds, pulses, and fruits like banana, berries, papaya, jackfruit, coconut, mango, and guava to their fields.

Table 2: Adoption Rate of Agricultural Practices (Post Intervention)

New Crops	Jharkhand (114)	Odisha (58)	Overall (172)
 Vegetables	69%	59%	77%
 Mustard	30%	2%	25%
 Fruits	5%	0%	4%



Before joining the MPowered program, we only grew paddy and cotton. But now, we're growing pulses and vegetables like tomatoes, brinjals, radishes, and chilies too. The program taught us to plant pulses between cotton rows, so we get two kinds of crops at the same time. We've started using natural stuff like Mahul Astr, Agni Astra, and organic manure on our farms. We also learned how to treat seeds better. Our crop production went up from 5 quintals to 7 quintals"

- Women focus group discussion, Odisha

Case Study: Empowering Transformation in Rural Agriculture

Sunay Lambar is a 47-year-old resident of Jamkundia village in the Manoharpur block of Jharkhand. She joined the MPowered program in 2019 as part of cohort two. The catalyst for her participation was a local NGO that introduced her to the program, sparking a conviction to embark on a transformative journey.

Sunay Lambar, a seasoned farmer with one acre of agricultural land, initially received coaching from Smart Sakhis, a crucial first step in her MPowered journey. As a participant, she also benefited from a seed grant of NR 3000 and was provided with a mobile phone, facilitating communication and access to resources.

With newfound knowledge and resources, she took a bold step by leasing an additional half acre of land, demonstrating her commitment to increasing both yield and income. Through the MPowered program, she

acquired expertise in better seed varieties, enhanced land preparation techniques, improved sowing methods, and advanced transplanting techniques.

Before the program's intervention, she cultivated paddy, corn, and niger. Post-enrollment, her agricultural landscape transformed to include sorghum, corn, and a diverse array of vegetables such as radish, coriander, tomato, and chilli in her kitchen garden.

The MPowered program not only equipped her with agricultural knowledge but also empowered her to open a vegetable shop in the local market. This move not only contributed to her personal growth but also facilitated new connections with vendors, fostering a supportive network within the community.

Sunay Lambar's financial trajectory witnessed a substantial positive shift. Prior to the program, her annual income from agriculture amounted to INR 50,000. Post-enrollment, her annual earnings increased to INR 80,000, indicating the program's efficacy in enhancing livelihoods and economic well-being. By providing her with knowledge, resources, and entrepreneurial opportunities, the program not only diversified her agricultural practices but also significantly elevated her economic standing, exemplifying the program's commitment to holistic rural development.

Forest Collection

67% women in Jharkhand and 68% women in Odisha are engaged with forest collection. Traditionally, residents of these regions have relied on the collection of forest products to complement their daily necessities. Women, in particular, have played a significant role in gathering a wide range of forest resources for personal use, including Mahul, Kendu leaves, bamboo, mushrooms, and an assortment of vegetables and root vegetables.

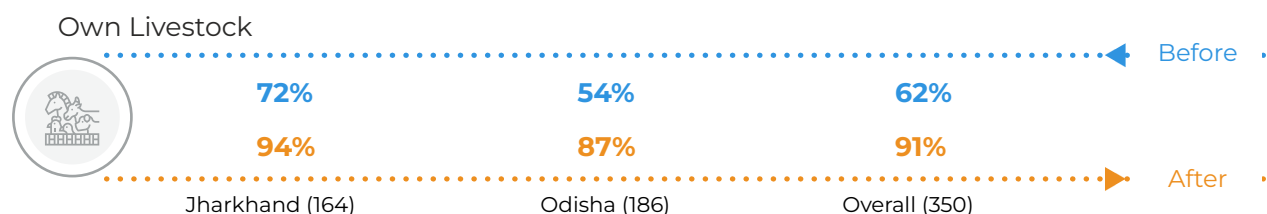
The MPowered program has enhanced the traditional practices of forest collection among women by transforming these activities into opportunities for economic growth. Through providing training on converting raw forest materials into marketable products, the program has broadened their commercial reach, opening up access to a wider array of markets and consumers. Participants of the program, particularly those involved in Self-Help Groups (SHGs) with aligned interests, have been organized into micro-enterprises. These groups receive specialized training focused on the value-added processing of forest products. For instance:

- Bamboo is crafted into brooms,
- Kendu leaves are marketed to the government at fixed rates,
- Sal leaves are utilized to make disposable plates,
- Tola seeds are processed to extract cooking oil.

This strategic initiative to enhance women's abilities in transforming forest collections into marketable products has increased their income and provided a steady livelihood, reducing the need for migration in search of work by creating local economic opportunities.

Livestock




Following the program, there has been an increase in livestock ownership rates across both states. Before the program, 72% of households in Jharkhand and 54% in Odisha owned livestock such as goats, cows, and chicken. Post the program, ownership increased to 94% in Jharkhand and to 87% in Odisha. Women participants have enhanced their income streams by incorporating livestock rearing into their economic activities.



The program has increased the uptake of livestock as a secondary occupation and improved livestock management practices contributing to higher profitability

- **Enhanced Livestock Portfolio:** The program offered seed funding, enabling women to purchase a wider variety of livestock, including pigs, ducks, and oxen, thereby expanding their livestock portfolio.
- **Improved Livestock Healthcare Knowledge:** Prior to the program, high mortality rates were common due to a lack of knowledge and awareness about effective livestock farming practices. Through hands-on training and app-based learning, participants have gained essential skills in livestock healthcare. 78% participants agreed that livestock mortality has reduced due to timely vaccination, proper feeding schedules, and basic healthcare practices.

Table 3: Adoption Rate of Livestock Management Practices (Post Intervention)

New livestock practices	Jharkhand (164)	Odisha (163)	Overall (317)
 Vaccination/Immunization at appropriate times	58%	79%	70%
 Disease Management	48%	42%	46%
 Deworming	15%	27%	21%

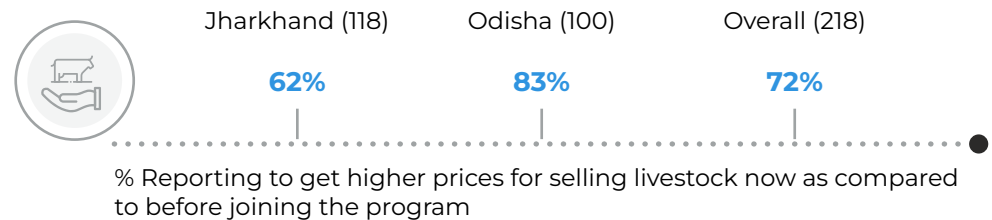
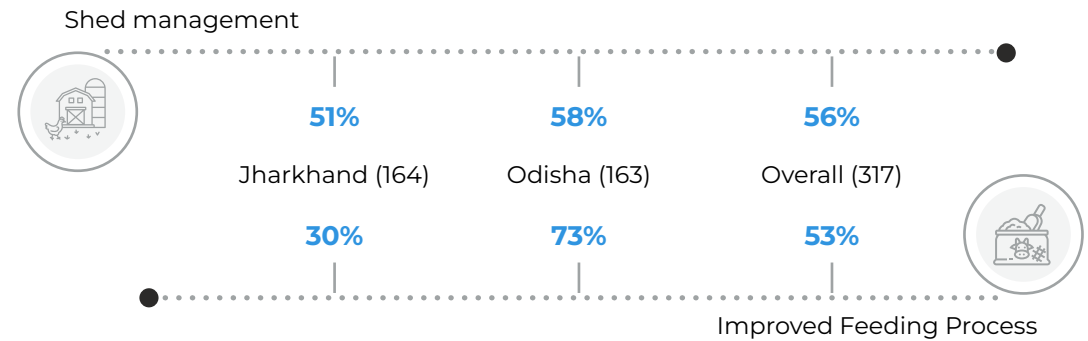
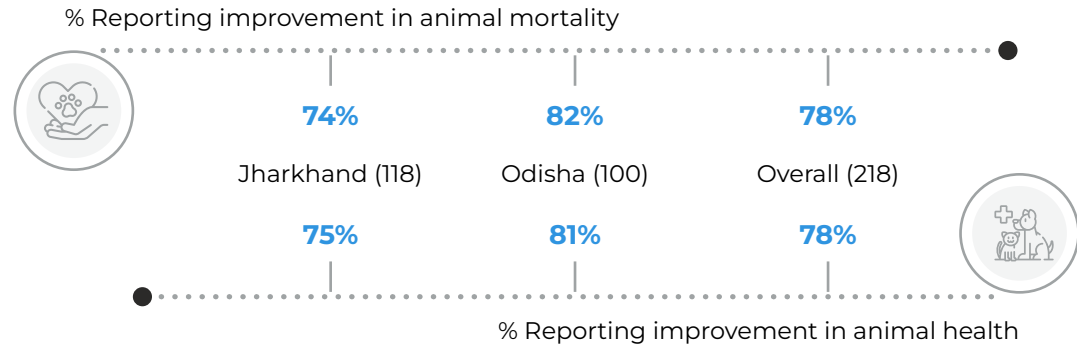


Through the program, we have gained knowledge in livestock health care and vaccination. Previously, due to lack of care, some livestock would perish, but after the program, there has been a noticeable improvement in animal mortality. This is because of the improved livestock management and health practices addressed by the program"

- Women focus group discussion, Jharkhand

- **Enhanced Livestock Management Practices:** Participants have learned the importance of creating adequate shelters and maintaining cleanliness to ensure the well-being of their animals. 78% participants reported improved animal health since the program due to regular veterinary consultations and care.

- **Optimized Livestock Sales Strategy:** Strategic planning in the selling of livestock has enabled participants to maximize their incomes. 72% women participants reported higher prices for selling livestock since the program due to their understanding market dynamics and timing their sales appropriately.





The program has opened up multiple avenues for income for the women involved. We're seeing the most significant results in the area of livestock. With the implementation of proper care and attention to their animals, coupled with strategic selling during peak seasons, women are getting better rates"

- Block Coordinator, Male, 25 years, Dubil, Manoharpur

Case Study: Raibari Angaria's Livestock Success Story

Raibari Angaria, a 39-year-old resident of Lodo Ankua village in Manoharpur, Jharkhand. Raibari's life took a positive turn when she became a participant in the program's Cohort 2. In 2019, she learned about the program through a local NGO's awareness drive. She received a seed grant of INR 3,000, which she wisely invested in purchasing livestock.

Post-program, Raibari found herself caring for goats, chickens, pigs, ducks, and sheep. The program introduced her to modern livestock practices such as shed management, disease management, and deworming, leading to noticeable improvements in the health and mortality rates of her animals. Before joining the program, she sold three goats, a duck, and a hen, earning INR 25,500 annually. However, after participating, she sold three goats and one hen for INR 36,500. This increase in earnings demonstrates the positive impact of the program on livestock management and sales.

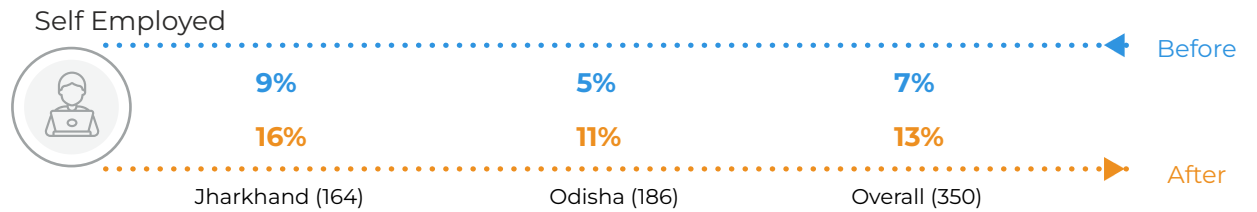
Raibari's experience highlights the importance of selling livestock at the right times, especially during high demand or festival seasons. This strategic approach contributed to a rise in the selling price of her livestock, showcasing the program's role in enhancing participants' understanding of market dynamics.

Raibari Angaria's journey is a testament to how a small investment in livestock, coupled with knowledge gained from the program, can lead to improved practices, better animal health, and increased profits.



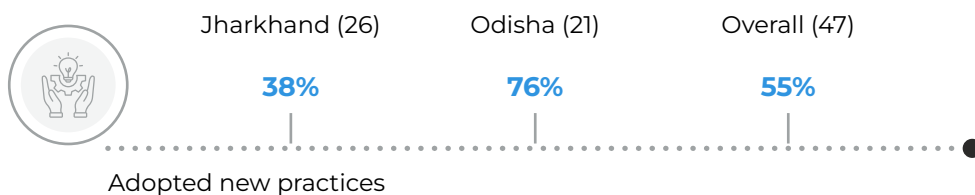
Self-Employment

The data illustrates a rise in self-employment rates among women in both Jharkhand and Odisha subsequent to the program, signaling a tangible empowerment effect. This increase underscores the program's contributions to bolstering entrepreneurial opportunities for women and catalyzing economic autonomy.



The predominant types of micro-enterprises among women in Jharkhand, Odisha, and overall include grocery shops (55%), vegetable vending (15%), and tailoring (13%). Vegetable vending was more prevalent in Jharkhand while tailoring was more prominent in Odisha. Other small businesses owned by women were animal trading, dry fish selling, tuitions, catering, and cyber café operations.

38% of businesses in Jharkhand and 76% in Odisha, who owned businesses, reported adopting new practices since joining the program. Among these, common new practices include establishing connections with new vendors (46% overall), conducting cost-benefit analysis (35%), and expanding customer reach through marketing (23%). Additionally, some businesses in Odisha introduced new products such as paneer, cakes, and snacks and started using digital payments and social media for information.



The program has provided multiple benefits for self-employed women, including:

- **Acquisition of Skills and Opportunities:** Women have ventured into various business endeavors such as tailoring, baking, food preparation, and grocery shops, enabled by the skills and opportunities provided by the program.
- **Enrichment of Products:** Leveraging digital tools such as Youtube, Google and other search engines, women have learned new cooking and stitching patterns, enhancing the quality and appeal of their products (Refer to Digital Inclusion for more information).
- **Diversification of Activities:** Women have diversified their farming and livestock activities, incorporating services like making paneer from cow's milk, thereby expanding their income streams.
- **Exploration of New Markets:** The program has facilitated the exploration of new markets, with women utilizing platforms like WhatsApp and social media for marketing their products, thus increasing their market reach.
- **Establishment of Support Networks:** Women have benefited from a support network established through the program, particularly through the assistance of Smart Sakhis. This support has facilitated the forging of new connections, access to materials for their products, and expansion of their customer base.

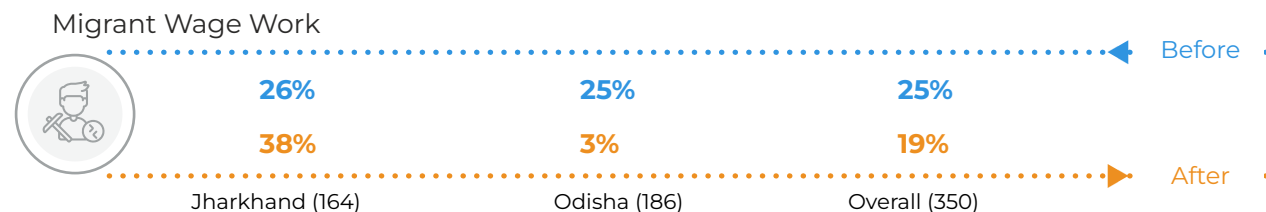


Thanks to the program, we have started a business of making ladoos with puffed rice. We learned to fry rice, make puffed rice, and prepare ladoos mixed with jaggery, which turned out to be quite profitable. The program's support extended to marketing our products through mobile phones, which significantly boosted our sales. The community support, especially from the didis involved in the program, has been incredible, driving customers to our shop for these homemade delicacies"

- Women focus group discussion, Odisha

Migrant Work

Migration is still prevalent among women, more in Jharkhand than Odisha.



- In Odisha, reduced rates of migration are observed among women participants, indicating a shift from external wage labor to local, home-based activities such as small-scale agriculture and livestock farming. Focus group discussions reveal that most women in Odisha are no longer engaged in migrant work, with those who are involved typically doing so for only 4 to 5 days per month.



Earlier, women used to work as wage laborers, but now they are engaging in small-scale agriculture cultivation and livestock farming, which they were not familiar with before. This has increased their income and livelihood options”

- Smart Sakhi, 32 years, Khampur, Odisha



Previously the PPs used to work outside and earn around 2300 rupees. Now they have bought livestock and get an income from that hence they are staying at home. They have also participated in the Sukanya Yojana for the benefit of their children, provided by the government”

- Smart Sakhi, 22 years, Smart Sakhi, 32 years, Balipadar, Odisha

- In Jharkhand, many women still migrate due to limited local job opportunities, exacerbated by water scarcity that restricts agricultural activities to the rainy season. Despite being registered under the MGNREGA scheme facilitated by the MPowered program, women report sparse work opportunities, lasting only 7 to 14 days, with irregular wage payments further discouraging participation. As a result, women continue to engage in out-migration for employment.







There is a crucial need for improved water supply in this village. A deep borewell is essential, as other options like wells and lakes have not been successful here. If someone could provide assistance in this regard, it would significantly benefit the community”

- Cluster Manager (JSLPS), Male, 42 years, Jharkhand

Regarding migration patterns, a significant proportion of respondents reported that at least one person in the family stopped migrating due to the program, with percentages of 75% in Jharkhand and 58% in Odisha, averaging at 63% overall. The average household size in Jharkhand ranges from 5 to 6 members, while in Odisha, it ranges from 4 to 5 members, with more than 80% of respondents reporting 2 to 3 earning members in each family.



Table 4: Extent of Migration

	Jharkhand (164)	Odisha (186)	Overall (350)
 % reporting at least one family member currently migrating out of the village for employment	51%	49%	50%
 % reporting a reduction in the number of members who migrate out of the village for employment because of the program	19%	38%	29%
 % reporting at least one person in the family stopped migrating	75%	58%	63%
 % reporting at least two people in the family stopped migrating	19%	32%	28%

Livelihood Diversification

42% of women participants have broadened their livelihood portfolio by introducing new or diverse income-generating opportunities (41% in Jharkhand, 43% in Odisha). The diversification of employment as a result of the program was calculated by creating a diversification score that reflected the number of different livelihood opportunities taken up by participants before and after program implementation. This score was used to quantify the change in diversification for each state.

- In Jharkhand, the mean diversification score improved by 1.55 points, which corresponded to an average annual income increase of INR 50,505 (n=67) exhibiting positive diversification.
- Odisha saw a similar improvement with a mean diversification score increase of 1.59 points, aligning with an average annual income rise of INR 23,616 (n=80).

Overall, combining the data from both states, the total average increase in the diversification score was 1.57 points. This was associated with a mean annual increase in income of INR 35,872 (n=147) which showed a positive change in their employment diversification. This methodology provides a clear linkage between the increase in diversification of employment and the enhancement of income, highlighting the economic impact of the program.



Before participating in the program, many women were not engaged in any income-generating activities. However, after joining the program, they have diversified into 4-5 different activities and we've seen a remarkable increase in their income”

- Block Coordinator, Age 29, Mahespur

Household Incomes

Overall, pre-post trends indicate positive income growth across all sectors post-program, with the most significant increases in self-employed and forest collection incomes.

- In both states, income from agriculture on owned land has increased post-program, with Jharkhand seeing a substantial rise, while Odisha shows a nominal increase, maintaining a higher baseline.
- Both states experienced growth in income from livestock, with Jharkhand's increase being moderate and Odisha's nearly doubling.
- Income from forest collection rose in both regions, with Jharkhand's income seeing a significant increase, whereas Odisha's more than doubled, albeit from a lower starting point.
- Both states show significant increases in income from self-employment post-program, with Jharkhand more than doubling and Odisha showing a near tripling from a lower base income.
- The aggregate income, which includes income from all the sources, increased in both states. Jharkhand's average almost doubled, whereas Odisha's saw a more moderate increase from a higher initial average income.

Table 5: Changes in Average Annual Incomes (2021-2023)

Average Annual Income (INR)	Jharkhand		Odisha	
	Pre Program	Post Program	Pre Program	Post Program
Agriculture (Own Land)	11,348 (N=49)	16,479 (N=43)	23,256 (N=76)	23,333 (N=79)
Livestock	7,897 (N=61)	9,487 (N=71)	4,963 (N=90)	9,081 (N=147)
Forest Collection	10,859 (N=104)	13,758 (N=94)	4,162 (N=118)	7,517 (N=123)
Self Employed	18,189 (N=14)	34,222 (N=24)	9111 (N=9)	16,381 (N=21)
Aggregate Income	41,168 (N=157)	70,718 (N=158)	30,742 (N=182)	45,451 (N=185)

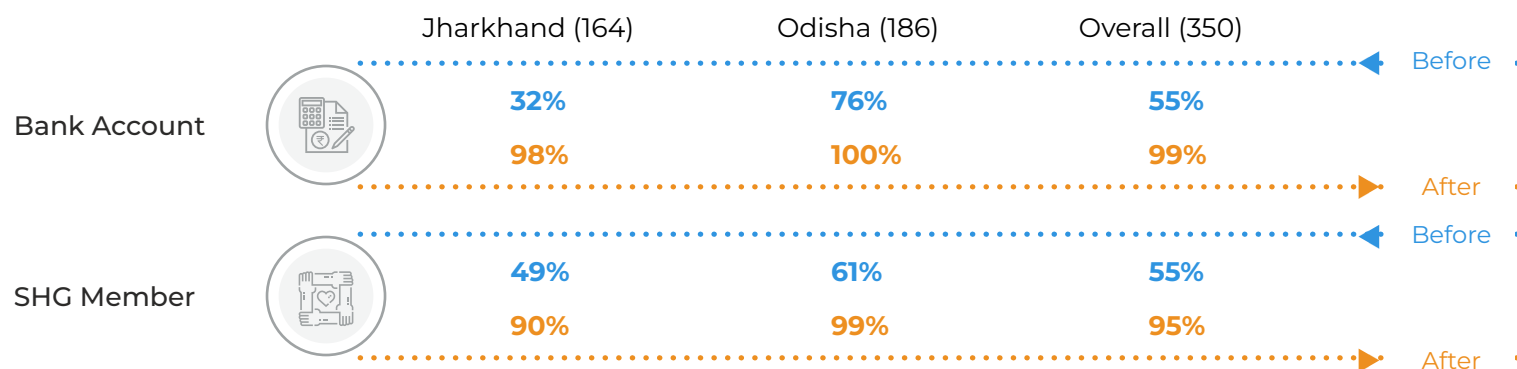
When assessing the impact of the program on income increases, it's important to consider external factors that might contribute to these changes, like broader economic trends, market price fluctuations, environmental conditions like weather patterns, policy shifts at various governmental levels, social dynamics that affect economic participation, technological advancements that enhance productivity, etc.



Financial Inclusion

The MPowered program has facilitated women's access to bank accounts and engagement in Self-Help Groups (SHGs). Among the participants, 59% reported linkage to SHGs, with 69% in Jharkhand and 50% in Odisha. The SHGs provided financial literacy training, enabling savings in post offices and banks. Engagement in SHGs has not only equipped women with essential financial skills but also opened avenues for initiating new businesses and micro-enterprises. This has been facilitated through access to additional credit and loans, further enhancing their economic empowerment and entrepreneurial opportunities.

Fig.11: Ownership of Bank Accounts, Membership at SHGs



- **Financial Inclusion through Bank Accounts:** The introduction of financial literacy and awareness initiatives has encouraged women to open bank accounts, with an increase from 32% to 98% in Jharkhand and from 76% to 100% in Odisha. This transition from storing money at home to utilizing formal banking channels has MPowered women to manage family expenses effectively and save for personal or household needs.
- **Empowerment through Self-Help Groups (SHGs):** The percentage of women engaging in SHGs increased from 49% to 90% in Jharkhand and from 61% to 99% in Odisha. This heightened participation has provided women with access to SHG loans at lower interest rates, facilitating investments in livestock and agriculture. Consequently, women have experienced an increase in income generation, which is utilized to repay loans and sustain agricultural and animal husbandry endeavors. Through SHGs, women have gained a sense of financial independence and resilience.






Before joining the program, our earnings went mainly towards household expenses, and whatever was left often went to alcohol. But since joining the Self-Help Group (SHG) through the program, we've gained so much knowledge. We've learned the value of saving money, not just for the sake of saving, but for crucial future needs. Now, we understand how saving can secure our children's education and provide for us during health emergencies. This program has truly opened our eyes to the importance of financial planning and saving for the future"

- Women focus group discussion, Jharkhand

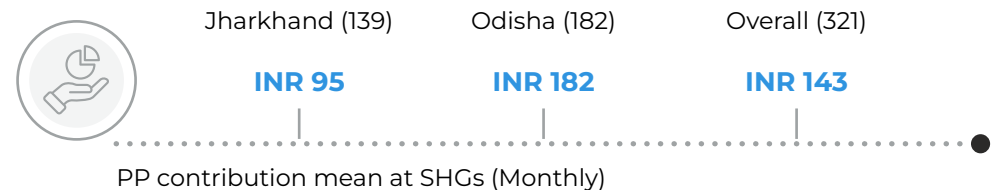
- The program has altered women's financial behavior, shifting from immediate spending to saving for future needs. Currently, 98% of women participants have savings, up from 59% before the program, with average savings reaching INR 8,576 over two years.

Table 6: Extent of Savings

	Jharkhand (164)	Odisha (186)	Overall (350)
 Saved Before the Program	54%	63%	59%
 Saved After the Program	98%	98%	98%
 Average saving per year in the last 2 years (INR)	8832	8350	8576

In Jharkhand, a majority of participants deposit savings at SHGs weekly (80%), reflecting a high level of commitment to regular saving practices. Conversely, in Odisha, the majority (93%) opt for monthly deposits, indicating a preference for less frequent but larger contributions.

Figure 12: Average Contribution Amount at SHG (Monthly)






Previously, women saved money at home, which sometimes led to misuse. Post-program, they have adopted various saving methods, including bank accounts, Self-Help Groups (SHGs), post offices, and schemes like the Sukanya Yojana. This shift in saving practices allows women to allocate income for children's education and health emergencies, enhancing long-term financial security.

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However, overall 65% still save at home, showcasing a persisting practice among the community.

Table 7: Source of Saving

Source of Saving other than SHG	Jharkhand (164)	Odisha (186)	Overall (350)
 Bank	81%	81%	81%
 At Home	52%	76%	65%
 Post office	0%	6%	3%



Before the program, women spent their earnings on household expenses and sometimes on alcohol. Now, with the program's guidance, they prioritize their children's future, save money, and invest their money in businesses, ensuring increased earnings for their livelihoods"

- Smart Sakhi, 22 years, Smart Sakhi, 32 years, Balipadar, Odisha





- The primary loan source in both states was Self Help Groups (SHGs), with 73% in Jharkhand and 97% in Odisha, contributing to an overall average of 92%. While 20% of respondents in Jharkhand took loans in the past two years, a substantially higher percentage of 75% did so in Odisha, resulting in an overall loan uptake of 49%.

Fig. 13: Extent of Loans in the Past 2 Years



Banks were a less prominent source, particularly in Odisha where only 2% of respondents acquired loans from banks compared to 24% in Jharkhand. Micro-finance institutions and money lenders played minor roles in loan provision.






Table 8: Source of Loans

Loan source	Jharkhand (33)	Odisha (139)	Overall (172)
 SHG (Self Help Group)	73%	97%	92%
 Bank	24%	2%	6%
 Micro-Finance	0%	3%	2%
 Money lenders	3%	0%	1%

SHG in both states charges an interest rate of 1% per month, with the benefit of reducing interest rates where subsequent monthly installments are charged interest based on the remaining principal amount. Whereas in Muribahal, Odisha, if the repayment of the loan is timely done then last few months interest rate is not charged. If PPs avail loan from the bank the interest rate is varied from 7 to 12% per annum depending on their credit score.

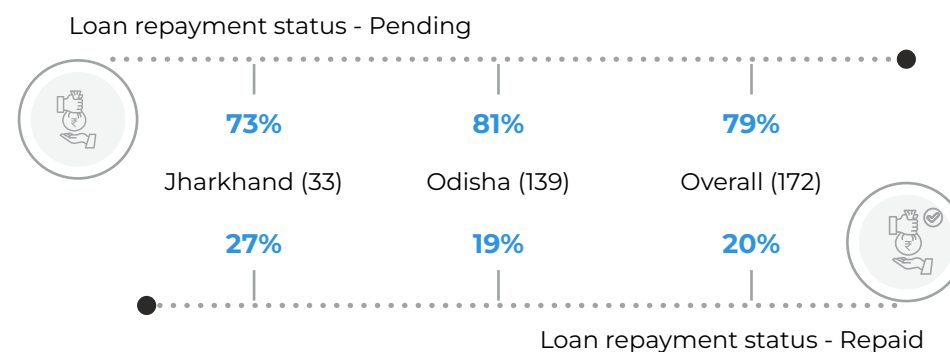
Loan uptake for housing, education, and healthcare emerged as primary reasons, with slight variations between states. This trend underscores women's financial independence and decision-making prowess in pivotal areas that impact both their own lives and those of their children.

Table 9: Purpose of Loans

Loan purpose	Jharkhand (33)	Odisha (139)	Overall (172)
 Housing	24%	19%	20%
 Education	21%	13%	15%
 Health care	15%	18%	17%
 Livelihood activities	55%	51%	52%
 Marriage	0%	6%	5%

Loan repayment rates exhibited regional variations, with a higher percentage in Odisha partially repaying loans, while Jharkhand saw a marginally greater full repayment rate.

Fig, 14: Loan Repayment Status



Case Study: A thriving Journey of a woman associated with MPowered program in Rural Odisha

A resident of Dejhuri village in Muribahal, Odisha, Manju Bhoi, engaged in seasonal agriculture and livestock trading, found a transformative path through the MPowered program in the year 2020, specifically in Cohort 2. Her introduction to the program came through a local NGO, the Nidhi Foundation, during one of their awareness drives.

Manju, managing half an acre of land, embraced the program's intervention by diversifying her cultivation. Previously, her plot saw seasonal crops, but now, vibrant vegetables such as pumpkins, cucumbers, capsicum, cabbage, and tomatoes flourish under her care. In addition to her own land, she actively engaged in farm labor on other fields.

The program's emphasis on community empowerment became evident as Smart Sakhis conducted training sessions. These sessions aimed to strengthen self-help groups (SHGs) by explaining their activities, functions, and overall importance. Manju, guided by a Smart Sakhi, was introduced to the benefits of SHGs and subsequently joined the Maa Binapani Self Help Group in 2020.

Initially, Manju saved money at home, but under the guidance of the Smart Sakhi, she started to contribute INR 100 monthly to the SHG. Maa Binapani SHG, which consists of more than 10 members, accumulated a total savings balance of INR 47,500 by December 2023. Regular monthly meetings facilitated the collection of savings contributions from each member.

In 2023, facing the need for funds for marriage in her family, she availed herself of the SHG's support by securing a loan of INR 20,000 with a minimal interest rate. Partial repayment has already been made, and she aims to complete the repayment in the coming year. The SHGs' savings proved instrumental during this crucial time, and she also understood the importance of self-help group savings.

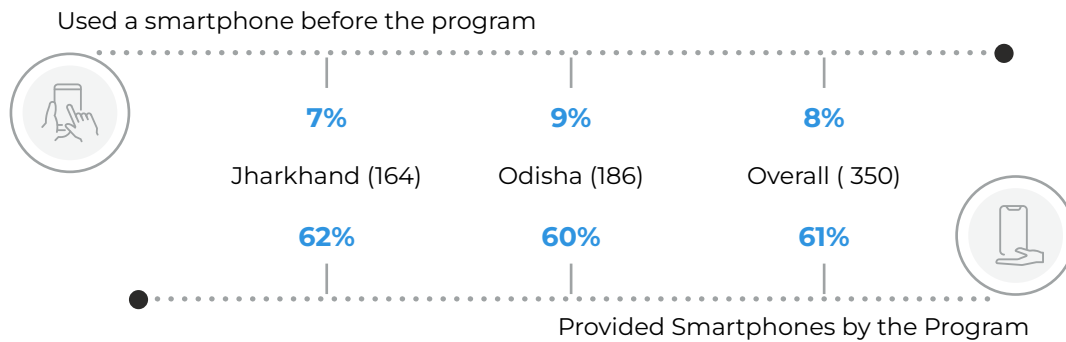
Digital Inclusion

The MPowered program has led to digital inclusion of women. The discussions with women's focus groups clearly highlighted a positive impact of mobile phones on their knowledge and abilities. Initially there was a gap in understanding and utilizing mobile technology among the participants, most of whom had limited formal education. However, the introduction of mobile phones has equipped women to efficiently use mobile phones for engaging with digital apps like WhatsApp, watching instructional videos on YouTube, and making payments through PhonePe.

Key benefits and outcomes include:

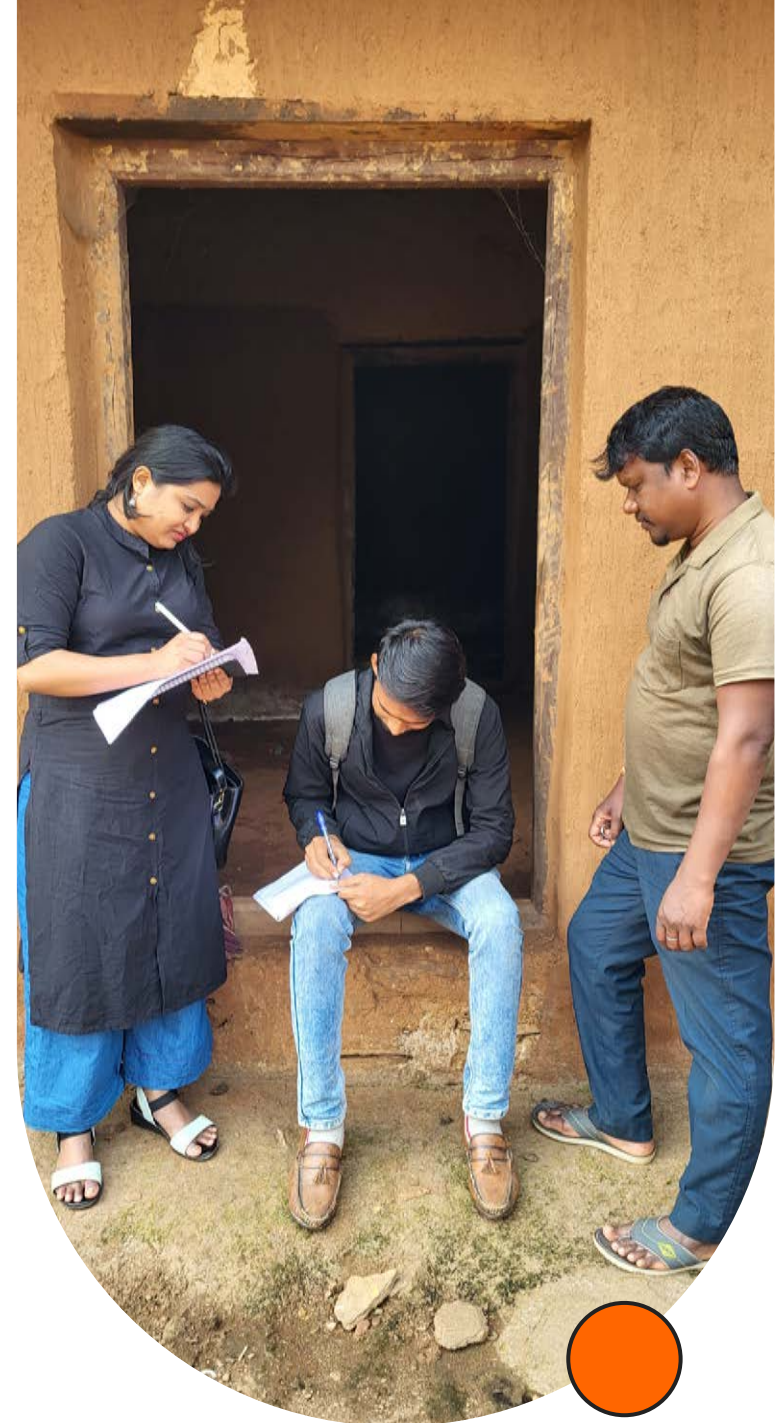
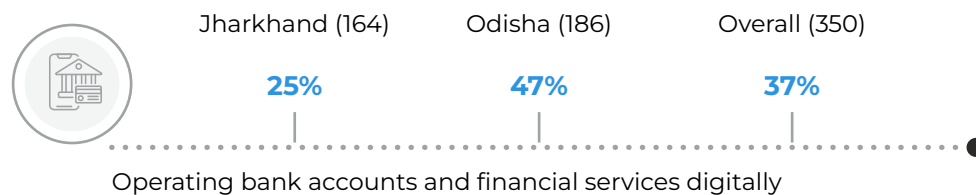
- **Increased Access to Technology:** The program has increased smartphone ownership to 61% overall, enabling women communities to engage with digital platforms and services.

Fig. 15: Access to Smartphones (Pre-Post Intervention)



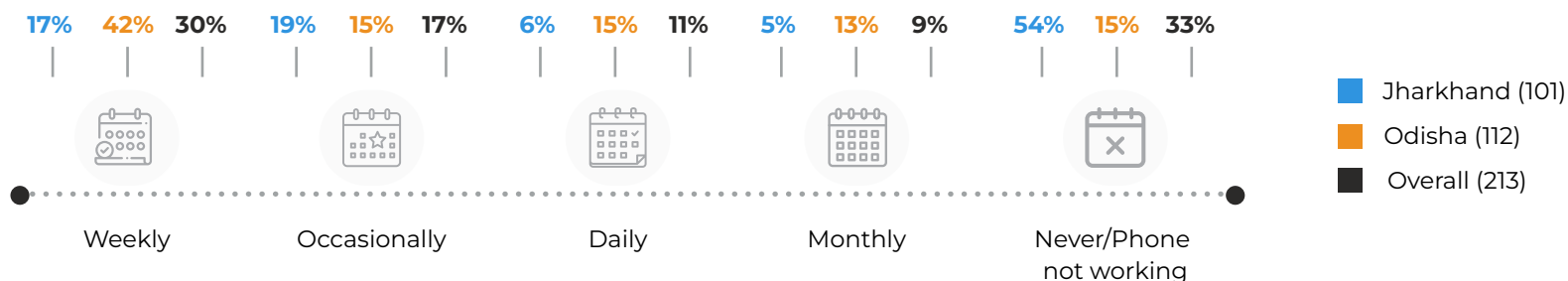
- **Enhanced Financial Inclusion:** There has been an increase in operating bank accounts and financial services digitally, particularly in Odisha, where 47% women reported positively.

Fig. 16: Use of Digital Banking Services



- **Empowerment Through Digital Learning:** The PoP application on smartphones has become a valuable resource for participants, with a significant portion using it weekly for information on agriculture, livestock management, etc.

Fig. 17: Frequency of using the PoP application



YouTube, in particular, has become a valuable tool for the participants, offering a wide array of learning opportunities. From cooking techniques and new sewing patterns to culinary and baking skills, these videos serve as a platform for self-improvement and a stepping stone towards improved employment opportunities. In some instances, small groups of women have had the opportunity to learn directly about livestock health through video calls with Smart Sakhis, using knowledge centers as a resource.



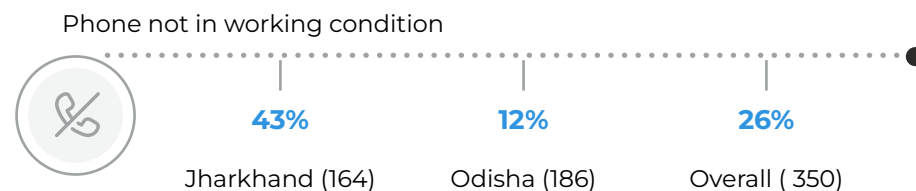
Women are using smartphones to learn about kitchen gardens, improve cultivation, sell the produce, and earn money. They are using YouTube to learn new designs, cooking skills, and how to use PhonePe and GooglePay to make payments”

- Smart Sakhi, 27 years, Rauldega, Odisha

Even though there is positive change, many challenges were noted with the mobile application and the smartphones by different stakeholders.

- **Phone Condition Concerns:** A challenge observed across both Jharkhand and Odisha is the number of phones not in working condition, with 43% and 12% respectively. Problems with broken screens, display issues, and sound faults, along with the cost of keeping the phone charged, make it hard to use phones effectively.

Fig. 18: Phone not in working condition



- **Literacy and Language Barriers:** Reading and writing difficulties greatly limit the ability to use technology and understand app or program content. Even with translations into languages like 'Ho' and 'Santhali', typing remains a challenge. Also, voice commands often don't work well, making access harder.
- **Technology and User Challenges:** Users face problems such as trouble logging in, phones running slow, overheating, and general use difficulties. It's also tough to use basic phone functions and remember login details due to limited reading skills, blocking effective app use.



Women face issues with logging into the PoP application, and experience slow performance due to the initial download of over 200 images from the network."

- Block Coordinator, Male,
29 years, Boldpara



Women with lower education levels or illiteracy encounter challenges in using the PoP application. They do not understand land measurements, typing on the app leads to dependency on husband and children and they also find it challenging to understand English and struggle with adding their names, facing difficulties in user ID and password entries"

- Smart Sakhi, 32 years, Jojogutu

- **Connectivity and Power Supply Issues:** Poor internet service and unpredictable electricity supply hinder consistent technology use, affecting how users engage with their devices.
- **Fear of Financial Control by Husbands:** Despite being aware of financial apps like PhonePe and Google Pay, there is a fear among women that installing these apps could lead to their husbands taking control of their finances, potentially spending the money on alcohol.

The program implemented several strategies to address challenges and barriers in the program and using the PoP app:

- **Home visits and awareness sessions:** A comprehensive approach to mitigate program challenges was implemented including home visits, training sessions, common meetings, awareness campaigns, and support with documentation. The teams took the support of Self-Help Groups (SHG), leveraging their influence to gather women during training and meetings. During these gatherings, the benefits of joining the program were highlighted. Additionally, the Community Resource Person (CRP) was engaged to emphasize the necessity of attending meetings to avail benefits like PDS ration and subsidies, resulting in increased attendance.



- **Training cascades:** Smart Sakhis were trained systematically to guide and address any issues raised by the PPs on PoP usage, using visual aids (such as using green color to explain the PoP button) and guides
- **Language adaptation:** Language barriers were overcome by changing the mobile language to local languages, Ho and Santhali, and encouraging the use of voice search for better comprehension.
- **Ongoing technical assistance:** Continuous technical assistance is provided, including clear instructions on PoP application usage, deleting unnecessary apps, and adjusting language settings. Smart Sakhis support Program Participants (PPs) in tasks like typing and taking photos, ensuring correct username and password entries, and cautioning against repeated use by children.
- **App management:** For effective app management, women were taught to reinstall the app, record usernames and passwords, and uninstall unnecessary apps. Guidance on setting passwords and operating mobile keypads was shared, with an emphasis on noting down passwords on paper for reference.



Despite our training on typing and explaining the phone application, there are still some women who face challenges in using the phone. There is a need for more personalized support to address specific issues related to typing and the overall functionality of the PoP app"

- Smart Sakhi, 27 years, Jamkundia




We personally help participants with typing, guiding them on using the camera, changing language settings, and other app functionalities. This assistance is provided through home visits and one-on-one sessions to address individual challenges and needs"

- Smart Sakhi, 47 years, Khampur

Case Study: Participants Path to Digital Literacy

Tileswari Majhi is a 31-year-old participant hailing from Dangabanji village in Muribahal, Odisha. She became a part of the program in 2020 during Cohort 2, learning about it through word of mouth and Smart Sakhis. Upon enrollment, she received a seed grant of INR 2,300 and a mobile phone. Engaged in seasonal farming and livestock rearing. Primarily through livestock trading, she found her major source of income.





Sharing a mobile phone with two other participants, Tileswari divided usage and recharge costs, typically spending INR 70 on recharges. However, faced with challenges like a phone screen repair expense of INR 150, she adapted to mobile phone usage gradually, having no prior experience before joining the program. Language barriers in the PoP application, especially in writing her name in English, added to her initial struggles.

Smart Sakhis stepped in to provide essential training on mobile phone and PoP application usage, addressing concerns such as forgetting usernames and passwords. Tileswari learned to log in as a guest and noted down essential details for easier access. A positive change came when the PoP application's user interface switched to Odia language, simplifying navigation for Tileswari.

With support from her children, Tileswari also ventured into using YouTube and searching for relevant information on Google. After years of consistent effort, she now comfortably uses a smartphone, checking her bank balance and utilizing the PoP application for agriculture and livestock rearing. Tileswari has become a guiding figure for new participants, assisting them in PoP application usage during the absence of Smart Sakhis.

Tileswari Majhi's journey is an example of the transformative impact of the program, showcasing how determination and perseverance can empower women facing challenges in mobile technology usage, ultimately contributing to their livelihoods.

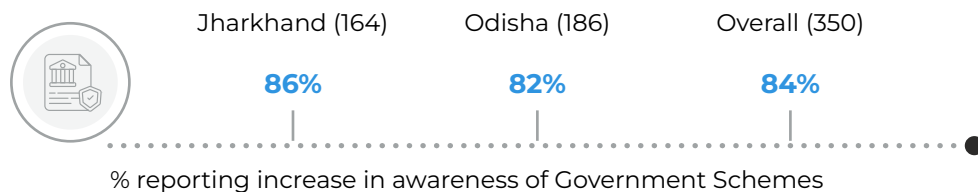
Social Inclusion

The program has advanced social inclusion for women by enhancing awareness and access to government schemes, and adoption of better food and nutrition. Importantly, the program has been instrumental in boosting women's confidence and communication skills. Women, who once hesitated to venture outside their homes, are now engaging actively in making critical decisions for their households and in the community.

- **Government Scheme Linkages**

84% of women participants reported awareness of government schemes and benefits because of the program. Discussions with participants, Smart Sakhis, and implementation teams showed that the program not only raised awareness but also facilitated access to some of these schemes by helping with documentation, filling out forms, and submitting them to government departments.

Fig. 19: Increase in Awareness of Government Schemes



- **Increase in awareness about various government schemes:** Before the program, there was a lack of knowledge about Government schemes. High illiteracy rates contributed to limited awareness of government programs and a lack of knowledge about their rights. Through ongoing awareness campaigns, Gram Sabha meetings, dissemination of information through PoP application and partnerships with Block level government officials the program has improved knowledge and awareness of rights and access to services.



The MPowered program actively engages in MGNREGA initiatives by facilitating Gram Sabha meetings and delivering information about the PM Pashudhan Yojna through the PoP application. The program has helped the Block Program Managers in providing support, overseeing coordination, and scheduling camps to ensure the success of these initiatives”

- Cluster Manager (JSLPS), Male, 42 years. Jharkhand

- **Support to women to navigate the application process and avail benefits:** Participants have been assisted in adding/enrolling new members to BPL cards, getting Aadhar and Ration cards and filling application and online forms for various schemes.

Table 10: Percent of women reporting increased awareness on Government Schemes

Schemes	Jharkhand (141)	Odisha (153)	Overall (294)
Aadhar/Documentation ²	48%	26%	37%
BPL Card ³	52%	20%	36%
MGNREGA ⁴	34%	32%	33%
Indira Awas Yojana (IAY) Scheme ⁵	28%	33%	31%
Rashtriya Swasthya Bima Yojana (RSBY) ⁶	44%	5%	24%
Biju Swasthay kalyan Yojna ⁷	0%	44%	23%
PDS ⁸	7%	32%	20%
Kalia Yojana ⁹	0%	22%	11%
Widow Pension Scheme ¹⁰	7%	9%	8%



Initially, we were unaware of government schemes. After joining the MPowered program, we gained information about various government schemes and learned how to collect documents and apply online at the block office and Panchayat office”

- Women focus group discussion, Odisha

However, the process of accessing government schemes has been hindered by various problems, resulting in delayed progress.

- Essential documents like voter cards, Aadhaar cards, and job cards are generally unavailable to these women.
- Slow processing of benefits by the government dampens overall morale for these women.



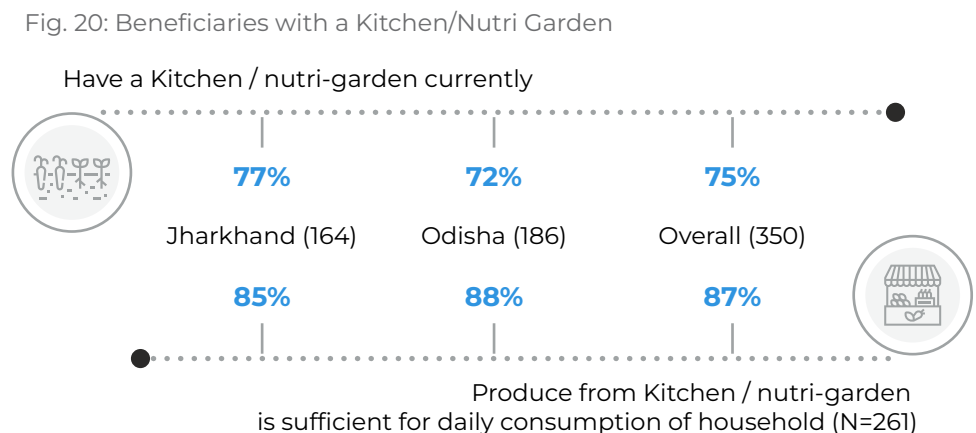
The change hasn't been significant because the government processes are quite slow here, so the benefits that were supposed to be obtained haven't been fully realized. Furthermore some women face challenges due to insufficient documentation delaying their application for government schemes”

- Block Coordinator, Male, 25 years, Dubil, Manoharpur

- **Food Security and Nutrition**

The MPowered program has emerged as a catalyst for positive change in the nutrition status of households in both Odisha and Jharkhand.

- **Implementation of Nutrigardens:** The collaboration between the MPowered program and Jharkhand State Livelihood Promotion Society (JSLPS) and Odisha Livelihood Mission (OLM) in the states of Jharkhand and Odisha, has led to the successful implementation of nutrigardens, with overall 75% participants cultivating various vegetables for self-consumption. This initiative, guided by program training, has not only enhanced participants' access to fresh and nutritious produce but has also instilled a sense of self-sufficiency and food security within households.





The MPowered program and JSLPS both provide support for Nutri-Gardens, leading to improved health for the individuals involved. Before the initiatives, families ate whatever was available, which often lacked nutrition. Participation in the program has changed this. Now, every household has a garden where they grow vegetables for their own use"

- Cluster Manager, JSLPS, Age 42, Jharkhand

- **Improved Nutrition Knowledge and Practices:** Through initiatives such as nutrigarden cultivation and health awareness programs, participants have gained insights into the nutritional value of different foods, resulting in the incorporation of diverse and balanced meals into their diets. Participants gained knowledge about nutrition, leading to the cultivation of nutrigardens using organic manures to enhance the nutritional value of produce. During Mamata Diwas programs, they are made aware about health benefits of consuming vegetables.
- **Diversification of Food Habits:** Participants have expanded their food habits by incorporating a wider variety of nutritious foods such as meat, fish, green leafy vegetables, and other nutritious ingredients. Transitioning from traditional salted rice to a diversified "tiranga bhojan" reflects a positive shift towards a more balanced and nutritious diet, contributing to overall health and well-being.



Before the program, they were unaware of nutritional food, but through Nutri-garden training and understanding Tiranga Bhojan principles, they have gained knowledge on the importance of a nutritious diet. The program introduced them to vermicomposting, enabling the cultivation of diverse vegetables like brinjal, papaya, tomato, and green vegetables in kitchen gardens. This newfound awareness and practical skills have significantly impacted their daily food habits, promoting a healthier and more balanced diet"

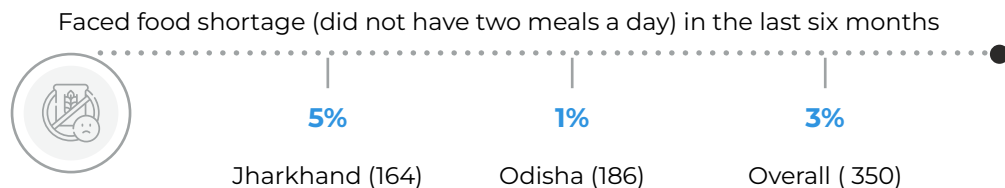
- Smart Sakhi, 33 years, Bara Kindua, Maheshpur, Jharkhand

- **Promotion of Healthy Eating Practices:** Cooking tutorials on platforms like YouTube and health awareness programs have played a crucial role in guiding participants towards maintaining a healthy and balanced diet. By providing practical cooking tips and nutritional guidance, these initiatives have MPowered participants to make informed choices about their dietary habits, promoting long-term health benefits.



- **Improved food security:** The program has significantly improved families' food security. Only 3% reported food shortages in the last six months. Anecdotal evidence reveals that women have moved from diets of mostly rice and water to a variety of vegetables and fruits. This increase in dietary diversity has not only enhanced their nutrition but also ensured a consistent food supply throughout the year, reducing food insecurity during lean seasons.

Fig. 21: Beneficiaries faced food shortages in the last six months



Initially, we were not aware of what nutrition is and used to consume rice and water. After joining the program, we learned about nutrition and understand that maintaining our health is important. Now, we cultivate vegetables and fruits rich in vitamins such as leafy greens, papaya, banana, tomatoes, eggplant, radish etc, in our kitchen gardens and follow a more balanced diet”

- Women Focus Group Discussion, Odisha

Case Study: A Story of Nutritional Transformation

In the village of Lodo Ankua in Manoharpur, Jharkhand, resides Guruwari Angaria, a 37-year-old woman whose life underwent a positive transformation when she enrolled in the MPowered program. Introduced to the initiative in 2020, Guruwari's journey reflects a holistic approach towards improving nutrition and fostering self-sufficiency.

Upon joining the program, Guruwari not only received seed grant support but also a cooking stove. Smart Sakhi provided training on establishing a nutri-garden and the effective use of the cooking stove. Prior to the intervention, Guruwari relied on cultivating paddy and corn, leading to a nutritionally deficient diet comprising salted rice with Taadi or Mahua. At times, she used to purchase vegetables.

With newfound knowledge and skills, Guruwari transitioned to cultivating her vegetables using organic fertilizers. Incorporating organic manure, she successfully grew a variety of nutrient-rich vegetables, including tomatoes, eggplants, radishes, papayas, and bananas. This shift enabled her to adopt a more nutritious and self-sufficient dietary pattern. Guruwari engaged in a barter system, exchanging corn for gangai and using the remaining produce for family consumption. Furthermore, the program intervention taught her the significance of leafy greens and various vegetables in a balanced diet. Consequently, she adopted different cooking methods, transforming her meals from raw to properly cooked, enhancing their nutritional value.

Participating in the program not only empowered Guruwari agriculturally but also improved her nutritional well-being, allowing her to enjoy a more balanced and nourishing diet. The case highlights the positive impact of MPowered and Smart Sakhi on fostering sustainable agriculture and nutritional awareness in the community.

- **21st Century Skills and Community Participation**

Women participants have experienced an increase in their confidence and communication skills, contributing to their active engagement in household and community decision-making processes.

- **21st century skills:** 75% women reported enhanced communication abilities, while 46% have noted an increase in confidence, with women from Odisha showing a greater increase compared to their counterparts in Jharkhand. This rise in confidence has empowered them with greater independence and assertiveness in life decisions, including household management, children's education, and health. Furthermore, some women have ventured into entrepreneurship, negotiating prices in the market and interacting confidently with shopkeepers.



After joining the program, women have experienced an increase in freedom. They now communicate effectively with others. Some who never stepped out of their homes initially are now making decisions for their households, actively participating in village meetings, and even explaining the concept of meetings to their family members"

- Block Coordinator, 39 years,
Boldpada Village, Malisira Village

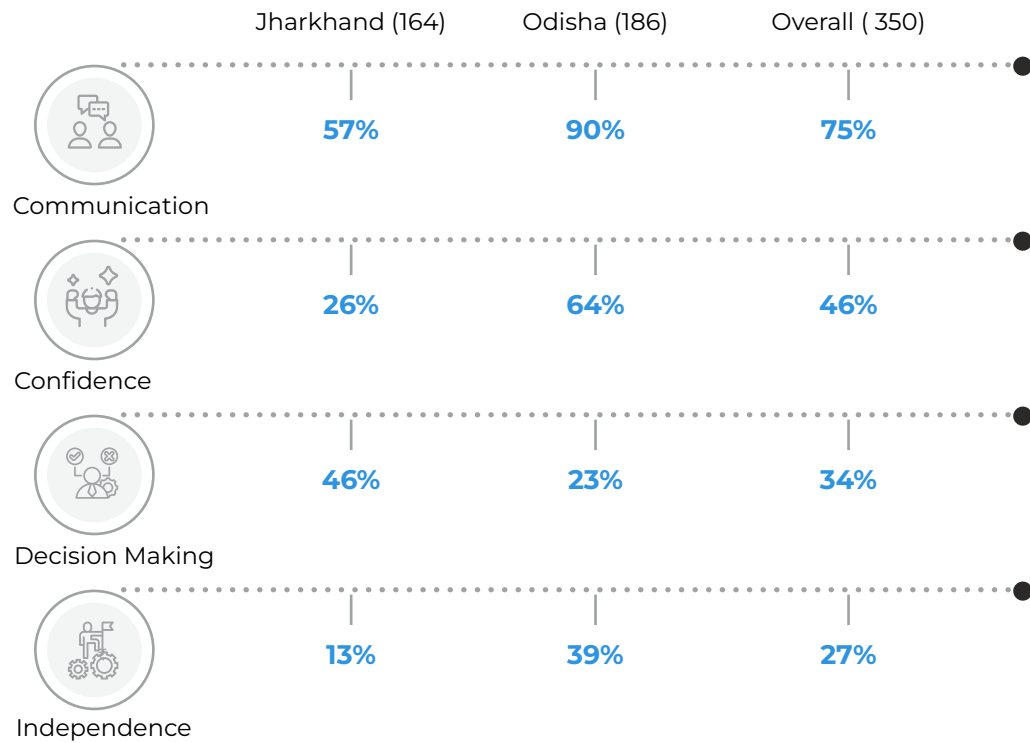


After joining this program, we learned effective communication skills and gained confidence in expressing ourselves. The fear of speaking up and going outside has diminished. We now actively participate in household decision-making and have the courage to work on our own"

- Women focus group discussion, Jharkhand



Fig.22: Percentage of women reporting an increase in 21st Century Skills



Case Study: Impact of Smart Sakhi on MPowered program

A resident of Jojogutu village, Manoharpur, Jharkhand, Ganga Surin, a 32-year-old native of Odisha, has found herself on a transformative path as a Smart Sakhi within the MPowered program since 2020. Having relocated after marriage to Jojogutu, nestled in the West Singhbhum district, Ganga, with her education up to the 10th standard, she initially grappled with communication barriers in the local dialect. However, her determination led her to overcome these hurdles, mastering the local language and fulfilling all criteria to become a Smart Sakhi.

Benefiting from training facilitated by the local NGO Srijan, Ganga received essential tools for her role, including a smartphone and a cooking stove. The training covered diverse topics ranging from agriculture and livestock management to trade skills such as broom making and vermicomposting. Additionally, sessions on food and



nutrition, digital literacy, and the utilization of the PoP application were provided. Notably, an average of 10 Smart Sakhi training sessions are conducted annually. Despite initial challenges in program implementation, including reluctance from the sarpanch to grant Anganwadi access to meetings and hesitance from husbands to allow their wives to participate, Ganga displayed resilience. Undertaking household visits to build rapport and persuade hesitant families, she effectively conveyed the program's significance and benefits.

20 women participants were assigned to Ganga as part of the MPowered program, and she provided the same training to them, fostering empowerment within the community. Monthly PP meetings were conducted, where she addressed challenges in digital literacy by providing hands-on assistance to participants unfamiliar with smartphones. Continuous monitoring and support enabled these women to grasp smartphone usage effectively. Additionally, she imparted knowledge on dietary habits, dressing sense, and communication skills, affecting holistic transformations in the lives of the participants. The pivotal role of Smart Sakhis in implementing the MPowered program is evident, as they serve as the direct link to program beneficiaries, facilitating positive transformations within the community.



By witnessing the active participation of women in the village engaging in various activities, making notable contributions through starting businesses and engaging in livestock activities, other community members express their desire to join the program”

- Smart Sakhi, 29 years, Desil, Odisha



The women who have joined the program spread awareness about it to other women in the village. Due to their efforts, people in the village started kitchen gardens. They also informed others about the benefits of government schemes and provided guidance on starting new ventures”

- Block Coordinator, Male, 39 years,
Boldpada Village, Malisira Village



After learning vermicomposting through the program, these women improved their cultivation, boosting their finances. They've increased income, provided better education for their children, and become inspirations in the community. Now, others are eager to learn about the program for their own livelihoods”

- Block Coordinator, Female, 35 years, Balisankara



- **Community participation:**
88% of women participants now actively engage in SHG meetings, sharing their views and participating in discussions. Their involvement extends to business groups, community meetings like Gram and Palli Sabhas, and educational committees, recognizing the value of their contribution to their livelihoods, community development, and the enhancement of their children's education.

Fig.23: Participated in the community and village level meetings

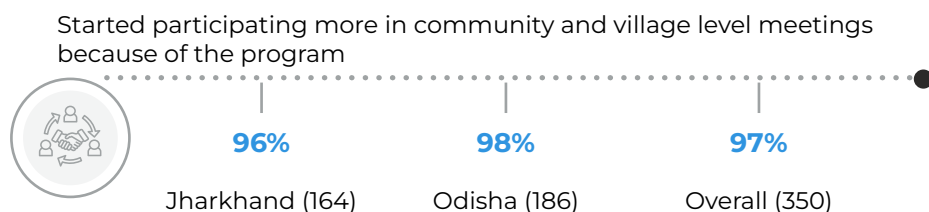


Fig 24: Type of Community Engagement

Meetings attended in last 2 years	Jharkhand (158)	Odisha (183)	Overall (341)
Village level federation meetings (exclusively for SHGs)	77%	97%	88%
Palli Sabha/Gram Sabha meetings	82%	85%	84%
School management committee (SMC) meetings	47%	35%	41%



Through Self-Help Groups (SHGs), women have been encouraged to attend meetings, introduce themselves, and gradually build their self-confidence. As a result, they now actively engage with others, approach government officials, and confidently contribute to decision-making processes in both their homes and communities”

- Smart Sakhi, 22 years, Podmundi, Odisha



The SHG connection of the program has been very valuable for me. SHGs has not only enhanced women's communication skills but has also provided a platform for discussing issues within the group. It has also enabled me to effectively communicate with these groups”

- Community Resource Person, Female, 35 years, Dengpader, Muribahal Block

Comparative Analysis of Cohort 1 and 2

The data provided compares the outcomes experienced by the two cohorts, Cohort 1 (since 2016) and Cohort 2 (since 2021), across various dimensions such as program activities, livelihood changes, agricultural practices, livestock practices, financial improvements, and social changes (Annex 6).

Program Activities

The comparative analysis reveals higher engagement among Cohort 1 participants, attributed partially to their longer association with the program. Cohort 1 demonstrates increased involvement in coaching sessions by Smart Sakhi, various training programs, and adoption of initiatives such as kitchen/nutri-gardens and Smart Cook stoves. Additionally, they exhibit greater participation in relief efforts during the Covid pandemic.

Livelihood Patterns

Overall, while both cohorts experience improvements in livelihood activities post-program, Cohort 1 displays unique characteristics such as higher self-employment rates and reduced reliance on migrant work, possibly influenced by their longer-term program association and accumulated program benefits.

Agricultural Practices

Both cohorts exhibit high rates of adopting new agricultural practices and diversified crop cultivation, indicating a shared willingness to enhance agricultural productivity and resilience. While Cohort 2 demonstrates slightly higher participation rates in specific techniques such as vermicomposting, organic pest management, and better sowing techniques, Cohort 1 shows slightly higher adoption rates in better transplanting techniques and adopting new seed varieties.

Livestock Prices

There is a higher percentage of participants reporting increased livestock prices in Cohort 1 (83%) compared to Cohort 2 (75%) which could be because of the duration of association with the program. Cohort 1 participants have been engaged with the program for a longer period, allowing them more time to implement strategies learned and build relationships with buyers or market channels. This longer association might have enabled Cohort 1 participants to capitalize on market opportunities and implement livestock management practices more effectively, resulting in a higher proportion reporting improved prices for selling livestock.

Migration Patterns

The difference in the prevalence of family members migrating out of the village for employment between Cohort 1 (29%) and Cohort 2 (43%) could also be influenced by the duration of association with the program. Cohort 1 participants, having been associated with the program for a longer time, might have had more opportunities to diversify their income sources and establish alternative livelihoods within the village. This could have contributed to a relatively lower migration rate among Cohort 1 participants compared to Cohort 2, who may still be in the process of transitioning away from traditional livelihoods.

In addition, an analysis of before and after program's implementation, Cohort I exhibited a higher prevalence of farm labor on others' land, livestock ownership, daily wage work, and self-employment compared to Cohort II. Conversely, migrant wage work was most prominent in Cohort II, with significant differences observed ($p < 0.001$). This suggests that the longer the program duration, the greater its impact on improving livelihoods and reducing migration.

Household Incomes

Regarding income improvements, the larger percentage increases observed in Cohort 1 compared to Cohort 2 across various sectors post-program may be partly attributed to the longer duration of association with the program. Cohort 1 participants, having been engaged with the program for a longer period, might have had more time to implement newly acquired skills and knowledge, leading to greater productivity gains and income enhancements. Additionally, the cumulative effect of program interventions over a more extended period may have contributed to more substantial income growth among Cohort 1 participants compared to Cohort 2.

Financial Inclusion

The comparison between Cohort 1 and Cohort 2 participants in savings behavior and loan utilization reveals that Cohort 1, which has been associated with the program for a longer period, exhibits more positive financial outcomes. Despite a lower percentage of savers before the program, Cohort 1 participants demonstrate higher average savings per year and a greater extent of loan utilization in the past two years compared to Cohort 2. Moreover, a higher percentage of Cohort 1 participants save in banks, suggesting a stronger financial infrastructure and potentially greater access to formal financial services. These findings underscore the impact of prolonged program engagement in fostering positive financial behaviors and outcomes among participants, highlighting the importance of sustained program support and continuity in achieving lasting benefits.

Digital Inclusion

The comparison between Cohort 1 and Cohort 2 reveals significant differences in the percentage of participants reporting phones not in working condition. In Cohort 1, 41% of participants reported non-functional phones, whereas in Cohort 2, only 13% reported the same issue.

Nutrition

Cohort 1 demonstrates a higher percentage of participants currently owning a kitchen/nutri-garden at 86%, compared to 67% in Cohort 2. Cohort 1 also reports a higher percentage (89%) where the produce from these gardens is sufficient for daily household consumption, compared to 84% in Cohort 2. This suggests a higher level of self-sufficiency and food security among Cohort 1 participants, possibly due to better gardening practices, resource management, or environmental conditions. The data shows a minimal incidence of food shortage (defined as not having two meals a day) in both cohorts. However, Cohort 1 reports a lower percentage (1%) compared to Cohort 2 (4%). This indicates that while food shortages are relatively rare in both cohorts, Cohort 1 participants experience them less frequently, possibly due to higher food production from kitchen/nutri-gardens or better household food management practices.

21st Century Skills

The comparison between Cohort 1 and Cohort 2 participants indicates that Cohort 1 has generally exhibited more positive outcomes in personal development aspects. Cohort 1 participants reported higher percentages in communication improvement (81% vs. 71%), increased confidence (55% vs. 40%), improved decision-making skills (37% vs. 32%), and enhanced independence (37% vs. 20%) compared to Cohort 2. These differences suggest that Cohort 1 participants may have experienced more significant advancements in their communication abilities, self-assurance, decision-making skills, and autonomy.

Valuation of Outcomes

For outcome valuation, for each indicator the number of women responding positively were considered to gauge how many people that per alumni value applies to. The quantity of change for the impact map is calculated by extrapolating the number of responses from the sample covered to the total population of the beneficiaries. Depending upon the responses received during data collection, proportionate percentage of total beneficiaries are calculated.

Table 5 outlines outcomes, indicators of success, percentages of participants achieving those outcomes, financial proxies to give monetary value to the outcomes, and the total value created by these outcomes.

Table 11: Valuation of Outcomes

Outcome	Indicator	% of women participants	Financial Proxy	Financial Proxy (Mean)	Total Value	Total Value Created
Livelihoods and Incomes	% reporting an increase in agricultural income (2021-2023)	31%	Average increase in annual agricultural income	11,786	10010065	28631571
	% started livestock rearing, post the program	24%	Average annual income from livestock	8,363	5510044	
	% reporting an increase in livestock income (2021-2023)	30%	Average increase in annual income from livestock	7,638	6305013	
	% started a business, post the program	7%	Average annual income from self employment	25,931	4733870	
	% reporting an increase in self employment income (2021-2023)	5%	Average increase in annual income from self employment	14,506	2072579	
	% reporting diversification of employment options	42%	Average increase in annual income owing to diversification	35,390	41292453	41292453
	% reporting knowledge gained in Agriculture Practices	58%	Perceived Value of knowledge gained in Agriculture Practices ²	21,632	35027097	54892632
	% reporting knowledge gained in Livestock Practices	79%	Perceived Value of knowledge gained in Livestock Practices ²	8,163	18012455	
	% reporting knowledge gained in Self - Employment Practices	7%	Perceived Value of knowledge gained in Business Practices ²	8,979	1853080	
Financial Inclusion	% saving at SHGs	92%	Average Annual Savings per woman	1,716	4372064	4372064
Digital Inclusion	% using Pop Application or any other app in SmartPhone	45%	Perceived Value of Digital Tools ⁵	6,122	7629376	7629376
Social Inclusion	% connected with MGNREGA	33%	Average Monetary Benefit from Scheme	20933	19186468	14990023
	% connected with BPL Cards	36%	Average Monetary Benefit from Scheme	6000	6000480	
	% connected with Indira Awas Yojana	31%	Average Monetary Benefit from Scheme	120000	103341600	
	% with kitchen gardens	81%	Perceived Value of Kitchen Garden ²	6673	14990023	74962751
	% reporting increased confidence	46%	Perceived Monetary Value of Improved Confidence ²	40000	51432686	
	% reporting improved communication	74%	Perceived Monetary Value of Improved Communication ²	5591	11584017	
	% reporting improved independence	27%	Perceived Monetary Value of Improved Independence ²	16183	11946048	

⁵The values of intangible outcomes have been obtained from Value Games conducted in Focus Group Discussions. A weighted average method was used to get these proxy values. The number of participants for each FGD served as weights that were assigned to each programme outcome

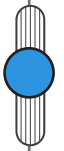
Establishing impact

Social Return on Investment (SROI) analysis involves considering various factors that influence the outcomes achieved, including deadweight, displacement, drop-off, and attribution. These elements play a pivotal role in determining the true social and financial benefits generated by an intervention program.

By systematically considering these factors and applying appropriate discount rates, the SROI analysis provides a more accurate representation of the program's actual social and financial benefits while considering the complex dynamics involved in social interventions. This comprehensive approach ensures that the impact assessment is robust and reflective of real-world scenarios.

- **Deadweight addresses what might have happened even in the absence of the intervention.** In this analysis, a 10% deadweight factor is applied to most indicators, with Financial Inclusion and Government Schemes at 20%. This higher rate reflects existing financial behaviors and government efforts that would likely have produced some benefits independently of the program.
- **Displacement measures whether the program's benefits might simply replace other positive outcomes rather than create additional value.** Most indicators have a 10% displacement factor, while no displacement is considered for Financial Inclusion, Digital Inclusion, Government Schemes, and the Perceived Value of Kitchen Gardens. The shift away from activities like daily wages and migrant work due to the program's focus on agriculture and self-employment are examples of displacement.





- Attribution acknowledges that other factors apart from the intervention contribute to the outcomes. A standard 10% attribution rate is used for all outcomes, except Government Schemes, where it is increased to 30%, recognizing the significant role of government efforts.
- Drop-off considers the expected decline in the program's benefits over time, similar to depreciation. A 10% drop-off rate is applied to most outcomes, highlighting that benefits may diminish without ongoing support. Digital and Financial Inclusion have a higher drop-off rate of 20% due to the evolving nature of technology and the need for updated skills. Government Schemes are expected to have no drop-off, given the consistent efforts by the government.

Table 12: Discounting Factors Applied in SROI Analysis for Outcome Valuation

Outcome	Total Value	Deadweight	Displacement	Attribution	Drop off
Livelihood Incomes	28631571	10%	15%	10%	10%
Livelihood Diversification	41292453	10%	10%	10%	10%
Livelihood Knowledge	54892632	20%	10%	10%	10%
Financial Inclusion	4372064	10%	0%	10%	20%
Digital Inclusion	7629376	10%	0%	10%	20%
Government Schemes	128528548	20%	0%	30%	0%
Health and Nutrition	14990023	10%	0%	10%	10%
21st Century Skills	74962751	10%	10%	10%	10%

These discounting factors help refine the total value calculations, ensuring that the SROI reflects a realistic and tempered assessment of the program's impact. By applying these discounts, the analysis acknowledges the complexity of social change and the multitude of factors influencing the outcomes. This approach provides a more grounded and conservative estimation of the program's benefits, accounting for the natural ebb and flow of its effects over time.



Calculating the SROI

- Investment Inputs

The program incurred costs over two phases totaling INR 62,192,306.

Phase	Year	Budget (INR)
Phase I	2016	3,68,84,841
Phase II	2020	2,53,07,465
Cumulative Total		62,192,306

Additionally, women participants and Smart Sakhis incurred average costs for phone recharges, transport to meetings, and maintenance. The total input cost for these was calculated based on the percentage of women who incurred these costs and the average cost per participant. On average, 63% of women participants incurred costs for phone recharges, 41% for transport to meetings, and 23% for maintenance. This results in an average cost per participant of INR 297,047 for recharges, INR 135,566 for transport, and INR 599,904 for maintenance.

Average Cost incurred by Women Participants

	Total %	Average Cost Per Woman Participant	Total Input Cost
Phone recharge	63%	171	297047
Transport for meetings	41%	119	135566
Maintenance (phone or stove repair)	23%	922	599904

Smart Sakhis in Jharkhand and Odisha also bore costs for phone recharges (average of INR 248), maintenance (average of INR 677), and travel (average of INR 105), providing a nuanced picture of the financial inputs contributing to the SROI analysis. Hence, the total cost that was borne by the 500 Smart Sakhis was INR 5,15,000.

Average costs incurred by Smart Sakhis

	Jharkhand (n=7)	Odisha (n=8)	Total (n=15)	Total Cost (N=500)
Phone Recharge	255	242	INR 248	INR 1,24,000
Phone Maintenance	793	575	INR 677	INR 3,38,500
Travel	57	148	INR 105	INR 52,500

- **Outcome Valuation:** The outcomes generated by the program (e.g., Livelihoods and Income, Diversification, Livelihood Knowledge, etc.) were each given a total value. From these, various discounting factors were applied to account for deadweight, displacement, attribution, and drop-off. These factors are essential to ensure that the SROI reflects the net value created by the program.
- **Calculating Impact:** The cumulative impact for each outcome was calculated by subtracting the discounted amounts (due to deadweight, displacement, etc.) from the total value to arrive at the net present value (NPV) for the impact in 2022-23 and 2023-24.
- **SROI Ratio:** The total NPV of all outcomes was summed to arrive at a cumulative impact of INR 699,610,675. The total input cost, which includes the program budget and the costs borne by the women and Smart Sakhis, totaled INR 63,739,830 + INR 59,849,606 = INR 123,589,436. The SROI ratio is the cumulative impact divided by the total input cost, which equates to approximately 10.54.

This indicates a high level of efficiency in terms of the program's return on investment. It implies that the program's activities have not only recouped the invested funds but have also generated additional social and financial value for the participants and the community.





SROI Calculation

Education	Total Value	Deadweight	Displacement	Attribution	Drop Off	Impact 22-23	Impact 23-24	Cumulative Impact	NPV
Livelihoods and Income	28631571	10%	10%	10%	10%	20872415	39657588	60530003	54562993
Diversification	41292453	10%	10%	10%	10%	30102198	57194177	87296375	78690752
Livelihood Knowledge	54892632	10%	10%	10%	10%	40016729	76031785	116048513	104608522
Financial Inclusion	4372064	20%	0%	10%	20%	3147886	5666195	8814081	7951415
Digital Inclusion	7629376	10%	0%	10%	20%	6179795	11123630	17303425	15609876
Government Schemes	128528548	20%	0%	30%	0%	71975987	143951974	215927961	194499680
Perceived Value Kitchen Garden	14990023	10%	0%	10%	10%	12141919	23069646	35211565	31740430
Confidence/ Communication/ Independence	74962751	10%	10%	10%	10%	54647845	103830906	158478751	142856013
						239084774	460525901	699610675	630519681
							Input Cost	63739830	59849606
								SROI	10.54

For every unit of investment made, the program has generated substantial value in terms of improving livelihoods through income growth and diversification, enhancing knowledge related to livelihood activities, fostering financial and digital inclusion, connecting participants with government schemes, and enhancing health and nutrition through activities like kitchen gardening. Additionally, there has been a positive impact on participants' confidence, communication, and independence, contributing to social empowerment and community engagement.

These results underscore the multifaceted benefits of the program and demonstrate its success in creating sustainable, positive change within the communities it serves.



CONCLUSIONS AND RECOMMENDATIONS

The Social Return on Investment (SROI) ratio shall play a crucial role in identifying and prioritizing key outcomes valued by stakeholders in the MPowered program. By analyzing each of these outcomes, we can uncover actionable recommendations aimed at increasing the number of program participants who experience these outcomes. This, in turn, will contribute to a higher SROI ratio, indicating a more impactful program. These recommendations focus on strengthening the program's capacity to scale, deepen, and extend the duration of outcomes, ultimately enhancing its effectiveness in bringing positive changes to the lives of women and communities.

1. To what extent does the program improve livelihood patterns and income levels of program participants and contribute to digital, financial, and social inclusion of participants?

The program has impacted the lives of women and their communities in terms of these key outcomes:

- **Knowledge and Livelihood Practices:** Women have acquired extensive knowledge in agriculture and agri-based livelihoods, leading to the cultivation of new crops, starting agri allied activities, enhancing business practices and insights into effective livestock management and sales.
- **Crop Diversification:** The program encouraged participants to diversify their farming practices beyond staple crops to include a variety of vegetables and fruits, benefiting both consumption and income.
- **Livestock as an Occupation:** The inclusion of livestock rearing, facilitated by seed grants, has emerged as a vital source of income. This development has led to an increased adoption of livestock rearing as a secondary occupation and the improvement of livestock management practices, contributing to enhanced profitability.
- **Diversification of Livelihoods:** There has been a shift from single agricultural activities to a diversified portfolio of livelihoods such as turning forest collection from a subsistence activity into a source of income through product making and selling.
- **Market Expansion:** The program has enabled women to expand their market presence through effective marketing strategies, leading to increased sales. Women have leveraged digital platforms like WhatsApp and social media to enhance market reach.
- **Increased Savings and Access to Credit:** Initiatives in financial literacy have motivated women to engage more with SHGs and banking services, leading to increased savings and access to credit at lower interest rates. The program has altered women's financial behavior, shifting from immediate spending to saving for future needs such as children's education and health emergencies.
- **Digital Inclusion and Technology:** The introduction of mobile phones and digital apps has equipped women to utilize technology for educational and financial transactions, enhancing efficiency and access to information.



- **Social Entitlements, Nutrition, and Food Security:** The program has improved social inclusion by raising awareness of and access to government schemes. Nutri gardens have promoted dietary diversification, reducing food insecurity and improving nutrition.
- **Community Well-being:** Knowledge dissemination by trained women has created a multiplier effect, benefiting community income and well-being. Women's engagement in various activities and their use of government schemes have served as catalysts for socio-economic development within their communities.

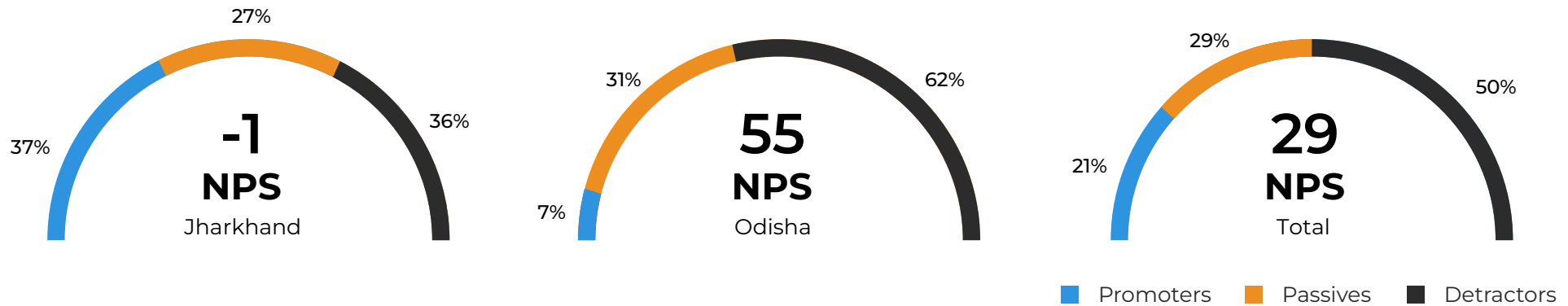
2. How effective and efficient are program inputs in contributing to expected outcomes?

Program inputs are met with positive feedback and requests for enhancement, indicating their effectiveness. Participants value the current training and support but express a desire for more diverse and advanced courses to improve their earning potential. Although the seed grants are appreciated, there's feedback that the amounts could be increased. The use of mobile phones and digital tools is seen as beneficial, yet there's a need for more robust functionality and app offerings. High linkage rates with SHGs are promising, but there's a call for greater credit access and market connections for group enterprises. The program's role in raising awareness of government schemes is acknowledged, with suggestions to further enrich this aspect. Kitchen/Nutri-Gardens have been well-received, with participants interested in ongoing support and nutrition education. These insights reveal a strong foundation with opportunities for programmatic refinements to enhance efficiency and outcomes.

Program Input	Feedback and Suggestions
Coaching by Smart Sakhi & Training for Livelihood	Valued by participants; expansion requested to include beauty parlor management, advanced tailoring, cheese and spice making. Mushroom cultivation is highlighted as a particularly lucrative skill.
Grant Support (Money)	Feedback indicates that seed grant amounts are perceived as inadequate and an increase is suggested.
Mobile Phones	Many devices are not functioning; while Smart Sakhi support is beneficial, there's a need to add more apps to engage women effectively with digital tools.
Linkage with SHG	High positive linkages with women's savings, but there's a need to examine the rate of credit and look into increasing financial contributions for scaling micro-enterprises.
Linkage to Government Programs and Schemes	High attribution of awareness to the program; suggestions include adding more details to the app, assistance with documentation, and sharing success stories.
Kitchen/Nutri-Gardens	Received positively with recommendations for continued tracking and additional nutrition training.



To assess the effectiveness and efficiency of program inputs in contributing to expected outcomes, we calculated the Net Promoter Score (NPS). The Net Promoter Score (NPS)⁶ is a metric used to measure customer satisfaction and loyalty. It categorizes customers into three groups based on their responses to a simple question: "How likely are you to recommend our product/service to a friend or colleague?" Customers who respond with a rating of 9 or 10 are classified as Promoters, those who respond with a rating of 7 or 8 are Passives, and those who respond with a rating of 0 to 6 are Detractors.



Jharkhand has a negative NPS of -1, while Odisha has a significantly positive NPS of 55. The total NPS across both states is 29, indicating an overall positive sentiment towards the product/service being measured. This means that there are more satisfied customers (Promoters) than dissatisfied ones (Detractors) across the surveyed population, with Odisha contributing more significantly to the positive NPS due to its higher percentage of Promoters and lower percentage of Detractors compared to Jharkhand.

3. What is the impact and functioning of Smart Sakhis, Self-Help Groups (SHGs), community leaders, and community cadre, and how do they contribute toward program sustainability?

The impact and functionality of Smart Sakhis, Self-Help Groups (SHGs), community leaders, and community cadre are foundational to the program's long-term sustainability.

- Smart Sakhis are not just participants but are pivotal in cascading knowledge and influencing their peers through role-modeling and support. Their training covers a gamut of essential skills, fostering agricultural improvements and digital proficiency. In terms of direct support, Smart Sakhis receive various forms of assistance, including seed grants, smartphones with applications to aid their tasks, links to SHGs, and resources like Smart Cook stoves and Relief materials during crises like COVID-19. This multifaceted support underscores the program's commitment to equipping Smart Sakhis with the tools they need to succeed and to propagate the program's goals effectively.

⁶The NPS is calculated by subtracting the percentage of Detractors from the percentage of Promoters. A positive NPS indicates that a program has more satisfied customers (Promoters) than dissatisfied customers (Detractors), which is considered a good sign for program growth and success. Conversely, a negative NPS suggests that there are more dissatisfied customers than satisfied ones, indicating potential issues that need to be addressed.

- SHGs have been transformational in formalizing savings and credit systems, previously unseen in the participating villages, and offering women a collective voice and financial empowerment.
- Community leaders and the community cadre play a crucial role in shifting the traditional perception of women's roles in society. By advocating for the program, they underpin its sustainability, ensuring that the gains in income, livelihood diversification, and digital and social inclusion are enduring.

4. What are the facilitators and deterrents to program outcomes?

The program's effectiveness is amplified through targeted livestock management and sales strategies, digital engagement initiatives, and diverse training sessions, supported by Farmer Producer Organizations' guidance. However, it encounters barriers like constrained land for agricultural innovation, market limitations affecting livestock sales, financial hurdles such as low savings and credit access, digital divides due to limited education, and socio-cultural challenges including family opposition and literacy issues. These factors together outline the dynamic interplay between supportive measures and existing challenges, underscoring the necessity for strategic interventions to mitigate barriers and bolster program achievements.

Facilitators for Program Outcomes	Deterrents Against Outcomes
<ul style="list-style-type: none"> ● Targeted Livestock Management and Sales Strategies: The program effectively manages livestock through tailored strategies, optimizing their productivity and sales potential. ● Digital Engagement Initiatives: Utilizing digital tools for engagement enhances communication and access to resources, improving program effectiveness. ● Diverse Training Sessions: Offering a variety of training sessions ensures participants acquire a range of skills and knowledge relevant to their livelihoods. ● Support from Farmer Producer Organizations (FPOs): Guidance from FPOs provides valuable support and expertise, enhancing program outcomes. 	<ul style="list-style-type: none"> ● Constrained Land for Agricultural Innovation: Limited land availability restricts opportunities for agricultural innovation and expansion, hindering participants' ability to diversify their livelihood activities. ● Market Limitations: Constraints in accessing markets affect livestock sales, limiting participants' income potential and economic viability. ● Financial Hurdles: Factors such as low amount of savings and limited access to credit pose significant financial challenges, impeding participants' ability to invest in their businesses and achieve financial stability. ● Digital Divides: Limited education and access to digital resources create disparities in digital literacy and technology adoption among participants, affecting their ability to fully utilize digital tools for their benefit. ● Socio-Cultural Challenges: Family opposition and literacy issues pose socio-cultural barriers, impacting participants' engagement and participation in the program activities.

5. What are the identified gaps in the program's performance, and what recommendations can be made for improvements over the next 5 years?

The MPowered program has made significant strides in empowering women and enhancing community livelihoods through strategic interventions. By continuing to focus on the areas of improvement identified through this study, the program can further increase its SROI, cementing its role as a catalyst for long-term socioeconomic development.

- **Land Ownership and Water Scarcity:** In regions with high land ownership but water scarcity like Jharkhand, focus on investments in natural resource management and watershed development to mitigate water scarcity and enhance agricultural productivity. In areas with low land ownership like Odisha, promote agri-based products such as vermi-composting and diversification into other income-generating activities to maximize returns.
- **Collaboration and Government Support**
 - Establish formal partnerships with relevant government agencies such as horticulturists, agriculturists, veterinarians, and forestry departments to align program objectives with government priorities.
 - Organize regular exposure visits for participants to successful agricultural and livestock interventions to share best practices and facilitate improved livelihood intervention uptake.
- **Financial Support and Grants**
 - Advocate for increased seed grants and funding allocations to empower participants and expand business opportunities.
 - Facilitate access to subsidies and financial assistance programs available for agriculture, livestock, and small business development through collaboration with government agencies and financial institutions.
- **Training and Skill Enhancement**

Develop structured training programs tailored to participants' specific needs, covering agriculture techniques, livestock care, forestry management, entrepreneurship skills, and market linkages.

 - Invite subject matter experts to conduct specialized workshops and hands-on training sessions on topics like Nutri-garden farming, mushroom cultivation, vermicomposting, and small business management.
- **Access to New Markets**
 - Develop strategies to enhance market access for participants through branding initiatives, product differentiation, and partnerships with retailers, wholesalers, and e-commerce platforms, especially for livestock

- and micro-enterprise related activities.
- Explore opportunities to access local and regional markets to widen distribution channels and increase sales.

- **Technology and Digital Tools**

- Enhance the program's mobile application by incorporating user-friendly features and multimedia content such as video tutorials and expert interviews.
- Provide training on digital literacy to ensure effective utilization of digital tools for learning, communication, and business operations.

- **Health and Community Engagement**

- Design and implement health promotion campaigns focusing on hygiene, nutrition, and preventive healthcare.
- Organize community events and workshops to foster community participation and ownership of program activities, maximizing reach and impact.

- **21st Century Skills**

- Provide specialized training sessions focusing on critical thinking, problem-solving, and digital literacy to equip women participants with skills necessary for success in their livelihoods

- **Program Design and Duration**

- Extend the program duration to five years for a more gradual and sustainable approach to skill development and economic empowerment.
- Provide transportation support to overcome barriers to participation and ensure regular attendance at training sessions and market events.
- Allocate additional human resources to support program expansion, monitoring, and evaluation for efficient program delivery.

By undertaking these strategic actions, we anticipate a significant increase in the number of participants reporting positive outcomes, such as improved incomes and livelihoods, financial inclusion, digital access and social inclusion. As a result, the overall value of the program will increase, contributing to a higher Social Return on Investment (SROI) in the future. These actions are designed to empower program participants, enhance their skills and opportunities, and ultimately lead to more impactful and meaningful outcomes, aligning with the program's objectives and mission.

PREVIOUS SROI AND BENCHMARKING

The MPowered project underwent evaluation by KPMG in June 2019, focusing on Cohort I's SROI analysis. KPMG estimated an SROI of 6.7 for that period, meaning for every rupee invested by TU in the project, a return of 6.7 rupees was generated. While several findings align with the current study—such as water scarcity in Jharkhand, particularly in Manoharpur, and challenges with operating and maintaining smartphones—direct comparisons of SROI levels are not feasible. This is due to the present study's inclusion of diverse indicators like perceived value of knowledge, communication, and confidence, which were not considered in the KPMG analysis.

o provide context, we attempted to benchmark this study against another Women's livelihood project evaluated by 4th Wheel Social Impact. Although not an SROI study, some findings overlapped in terms of indicators. The data shows that women in the MPowered project have seen a more significant increase in new agricultural crops compared to the other project. Additionally, there has been a higher uptake of livestock among women in MPowered. However, the MPowered project lags in 21st-century skills such as communication, confidence, and decision-making, highlighting the need for further intervention in these areas.

Some national and international SROI calculations for projects similar to the Mpowered project have also been provided in the table below.

Study/Report	Research Organization	SROI Ratio
Digital, Financial and Entrepreneurship skilling of Rural Women Artisans in Madhya Pradesh (Enabling women artisans through technology)	Social Audit Network, India	INR 1: INR 2.64
SROI Report 2020, Ambuja Cement Foundation	CII-ITC Centre of Excellence for Sustainable Development	INR 1: INR 3.48
Women's Livelihood Bond	IIX Foundation	\$ 1: \$ 2.40
Social Return on Investment of Shae Thot's Livelihoods Work, USAID	Social Value International	\$ 1: \$ 3.30

LIST OF ANNEXURE

Annex 1: Program Reach

State	Cohort	Block	Total Project Participants
Jharkhand	Cohort 1	Manoharpur, West Singhbhum	378
	Cohort 1	Maheshpur, Pakur	400
	Cohort 2	Manoharpur, West Singhbhum	500
Odisha	Cohort 1	Bongomunda, Balangir	500
	Cohort 1	Balisankara block, Sundergarh	500
	Cohort 2	Muribahal block, Balangir	500
Total			2778

Annex 2: Methodology and limitations

Study Design and Methods

In order to understand the outcomes created by the program and to estimate the value of these outcomes, a mixed methods study was undertaken. This approach combined quantitative and qualitative research methods to provide an assessment of the program's impact.

Quantitative Methods

- **Surveys:** In-person surveys were conducted with women participants. These surveys collected data on various aspects, including demographics, current productive engagement status, income levels, and changes in skills and knowledge acquired before and after participating in the program.

Qualitative Methods

- **Semi-Structured Interviews:** One-on-one interviews were conducted with various stakeholders, including family members of program participants, Smart Sakhis, Community Resource Persons and field team members who have engaged with program graduates. These interviews capture insights into their experiences, perceptions, and the impacts of the program.
- **Focus Group Discussions (FGDs):** Focus group discussions were organized with women and other stakeholders. These discussions facilitated dialogues on the impacts of the program. Topics covered included changes in productive engagement



status, perceived benefits of the program, and the influence of program participation on digital, financial and social inclusion.

- **Document Analysis:** An extensive review of program-related documents, reports, and participant testimonials was undertaken. This document analysis extracted data, including success stories, program challenges, and narratives shared by program participants.

By employing this mixed-methods approach, the study generated an understanding of the Mpowered program's impact. The combination of data for analysis and insights from interviews, focus group discussions, and document analysis enriched the assessment, allowing for an appreciation of the changes experienced by women participants and their communities.

Limitations of the study

- The study encountered a limitation in interacting with project participants in Jharkhand's Manoharpur and Maheshpur blocks due to a language barrier. This challenge arose from the predominant use of Santhali and Ho languages in the tribal areas, hindering effective communication with the research team.
- While conducting individual surveys with project participants, they encountered challenges recalling their income from various sources for 2021.
- The research team encountered challenges in explaining the concept of the value game to female participants, particularly in drawing comparisons between program outcomes and product outcomes, which proved to be somewhat challenging.
- In the Muribahal block of Odisha state, many women participants were occupied with their routine household chores during the daytime. In contrast, others were in the jungle grazing goats. This situation contributed to a slower pace in the data collection process.

Annex 2: Methodology and limitations

The value game conducted as part of the SROI (Social Return on Investment) study involved multiple steps.

- Initially, female participants were requested to articulate and share the benefits of the MPowered program. Each participant elaborated on their respective benefits, which were documented on chart paper. Stickers were then created to represent each benefit visually. With assistance from Smart Sakhis, participants engaged in group discussions, collectively prioritizing these benefits based on their perceived importance.
- The next step was the product outcome, in which the participants were asked to pick three gifts they would want. They had to describe these gifts, and the descriptions were put on chart paper with stickers for each gift. The participants then discussed the estimated values of these gifts and arranged them from the highest to the lowest.
- After completing both activities, participants started comparing the listed benefits from the program with the described gifts. For example, they were prompted to consider whether they would choose a physical item like jewelry over a non-material result like improving livestock health.

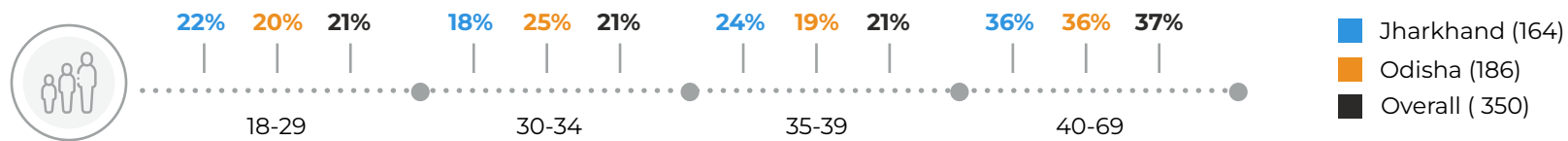


This exercise aimed to match the perceived value of the program's benefits with the value assigned to tangible gifts, offering a framework to understand the importance and impact of the MPowered program in women's lives.

Annex 4: Demographic profile of sample respondents

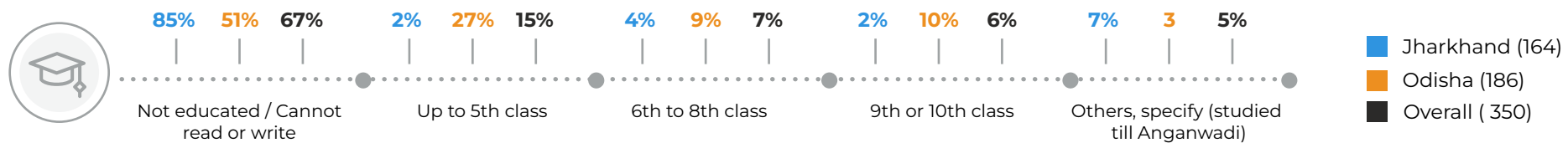
The table summarizes the age distribution of participants in the MPowered program across two regions, Jharkhand and Odisha, as well as the overall participant pool. The data indicates the percentage of participants within specific age categories. In both Jharkhand and Odisha, the majority of participants fall in the 40–69 age range, constituting 36% and 36%, respectively. The 18-29 age group is the second-largest category in Jharkhand (22%) and Odisha (20%). Overall, the distribution across age categories is balanced, with 37% of participants in the 40–69 age range across both regions.

Age across both regions



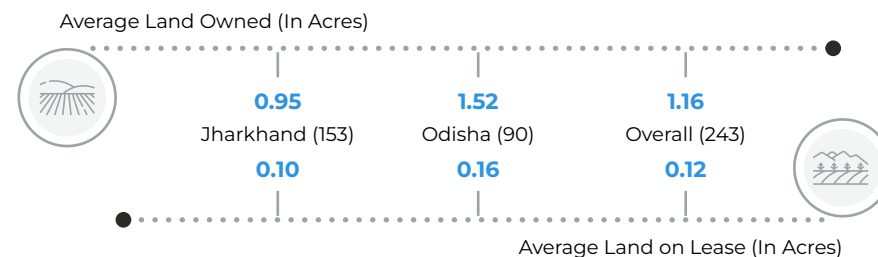
The table compares educational status in Jharkhand and Odisha, as well as overall. It categorizes individuals based on their education levels, from being uneducated to completing different grades of schooling. Jharkhand has a higher percentage of individuals who are not educated or unable to read or write compared to Odisha. Conversely, Odisha shows a higher proportion of individuals who have completed education up to the 5th grade. The data provides insights into the disparities in educational attainment between these states.

Education status



Annex 5: Agriculture landholding

Meetings attended in last 2 years	Jharkhand (153)	Odisha (90)	Overall (243)
Own Land	99%	100%	100%
Lease Land	15%	26%	19%



Annex 6: Cohort Comparative Analysis

Program activity	Cohort 1 (139)	Cohort 2 (211)	Overall (350)
Coaching by Smart Sakhi	96%	88%	91%
Grant Support (Money)	84%	94%	90%
Training for livelihood	59%	47%	52%
Mobile Phones	72%	54%	61%
Linkage with SHG	69%	52%	59%
Linkage to government programs and schemes	83%	75%	78%
Kitchen/Nutri-Gardens	88%	76%	81%
Smart Cook stoves	68%	48%	56%
Relief materials (hygiene, ration, and seed kit) during Covid	99%	85%	90%

Livelihoods	Cohort 1 (n=139)		Cohort 2 (n=211)	
	Before	After	Before	After
Agriculture (Own Land)	56%	57%	77%	77%
Forest Collection	67%	68%	69%	67%
Farm Labour (Others' Land)	76%	70%	53%	57%
Livestock	62%	83%	62%	96%
Self Employed	7%	15%	7%	12%
Migrant Wage Work	12%	13%	34%	23%
Daily Wage Worker in nearby village(s)	52%	45%	39%	35%
Daily Wage Work (MNREGA)	43%	60%	54%	57%

	Cohort 1 (n=79)	Cohort 2 (n=164)
Adopted New Agricultural Practices	85%	84%
Diversified Crop Cultivation	71%	71%

	Cohort 1 (n=67)	Cohort 2 (n=137)
Vermicomposting	31%	39%
Better Sowing techniques	19%	26%
Better Transplanting technique	25%	22%
Organic Pest Management	14%	25%
Adopted New Seed Variety	22%	13%
Better Land Preparation techniques	12%	13%

	Cohort 1 (n=115)	Cohort 2 (n=202)
% Reporting to get higher prices for selling livestock now as compared to before joining the program	83%	75%

	Cohort 1	Cohort 2
% reporting at least one family member currently migrating out of the village for the employment	29% (n=139)	43% (n=211)
% reporting a reduction in the number of members who migrate out of the village for employment because of the program	29% (n=139)	29% (n=211)
% reporting at least one person in the family stopped migrating	70% (n=40)	58% (n=62)
% reporting at least two person in the family stopped migrating	23% (n=40)	32% (n=62)



Average Annual Income (INR)	Cohort 1			Cohort 2		
	Pre Program	Post Program	% increase	Pre Program	Post Program	% increase
Agriculture (Own Land)	7167 (n=40)	13347 (N=43)	86%	14327 (N=80)	25038 (N=79)	75%
Livestock	5647 (N=72)	7015 (N=88)	24%	6605 (N=79)	10702 (N=130)	62%
Forest Collection	4767 (N=87)	7784 (N=93)	63%	8931 (N=135)	12049 (N=124)	34%
Self Employed	12784 (N=10)	29100 (N=20)	128%	18982 (N=11)	24305 (N=24)	28%

	Cohort 1 (n=100)	Cohort 2 (n=113)
Phone not in working condition	41%	13%

	Cohort 1	Cohort 2
Have a Kitchen/nutri-garden currently	86% (n=139)	67% (n=211)
Produce from Kitchen/nutri-garden is sufficient for daily consumption of household	89% (n=120)	84% (n=141)
Faced food shortage (did not have two meals a day) in the last six months	1% (n=139)	4% (n=211)

	Cohort 1 (n=139)	Cohort 2 (n=211)
Saved Before the Program	46%	67%
Average saving per year in the last 2 years (INR)	10988	6987

	Cohort 1 (n=139)	Cohort 2 (n=211)
Communication	81%	71%
Confidence	55%	40%
Decision Making	37%	32%
Independence	37%	20%

Source of Saving other than SHG	Cohort 1 (n=139)	Cohort 2 (n=211)
Bank	85%	78%
At Home	63%	65%
Post Office	6%	1%

	Cohort 1 (n=139)	Cohort 2 (n=211)
Extent of loans in the past 2 years	53%	46%



This research was conducted with the highest standards of independence and objectivity. No member of the research team has any financial interest, advisory role, or affiliation with entities that could influence the outcomes of this study.

This study adheres to ethical guidelines for research involving human subjects. Informed consent was obtained, confidentiality was upheld, and participant welfare was prioritized.

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ABOUT 4TH WHEEL

4th Wheel Social Impact established in 2010, is a research and advisory firm specializing in monitoring and evaluation of social development programs. Our focus is on providing sophisticated insights to enable data-driven decisions in the realm of social development. We offer strategic advisory services to build robust monitoring, evaluation and learning (MEAL) systems for managing social projects. Our approach integrates practical, culturally relevant social impact assessment strategies involving diverse stakeholders.

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