

SAMPURNA

Integrating small and margin farmers into Chili and Millet Value chains

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Regd. Office

Madanpur Rampur, Kalahandi, Odisha, Phone: 06676 299909

State Coordination Office

HIG-05, 2nd Floor, Dharma Vihar, Khandagiri, Bhubaneswar – 751030, Odisha. Phone -0674- 2351335

Head Office

Lane No -2, Mahalaxmi Nagar, Bolangir, 76700, Odisha. Phone 06652 -231290

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CHAPTER – I

Introduction

The Mahashakti Foundation, established in October 2004, is a pan-Odisha institution committed to promoting sustainable livelihoods, particularly in impoverished communities. Its mission focuses on developing innovative solutions to improve the quality of life for marginalized groups, including tribal communities, minorities, women, and smallholder farmers. The foundation primarily emphasizes sustainable agriculture practices to uplift those living in some of the state's most underserved regions.

One of its flagship initiatives, SAMPURNA: Integrating Small and Marginal Farmers into the Chili and Millets Value Chain, is implemented in collaboration with HDFC Bank Ltd. across Odisha's Bargarh and Sambalpur districts. Launched in January 2024, this three-year project aims to enhance the livelihoods of 7,240 small and marginal farmers by establishing sustainable Farmer Producer Companies (FPCs). These FPCs offer members affordable and high-quality technical services while facilitating crucial market access.

1.1 Project Objectives:

The Sampurna project is guided by several key objectives:

1. **Organization and Federation:** Mahashakti aims to organize farmers into Producer Groups (PGs) and federate them into block-level FPCs.
2. **Capacity Building:** It focuses on enhancing the knowledge and skills of member farmers, increasing their productivity and income by connecting them with capable service providers for quality technical and business development services.
3. **Value Addition:** Introducing value-added processes for identified commodities to boost market potential.
4. **Marketing Support:** Assisting FPCs in improving the marketing of their produce and establishing effective market linkages.
5. **Government Convergence:** Actively seeking alignment with relevant government programs and schemes, particularly from the Horticulture and Agriculture Departments.
6. **Entrepreneurial Development:** Strengthening the entrepreneurial skills of FPCs through the adoption of innovative business practices.
7. **Self-Reliance:** Developing FPCs into self-reliant, autonomous organizations that can effectively identify and advocate for the needs of their member farmers.

At the program's inception, Mahashakti, in consultation with the Agriculture and Horticulture Departments in the respective districts, identified the chili and millets sectors as having significant potential to enhance the livelihoods of small and marginal farmers through inclusive value chains.

1.2 Strengthening Agriculture-Based Livelihoods:

In partnership with HDFC Bank's Parivartan initiative, Mahashakti Foundation emphasizes the establishment of 'Inclusive Value Chains' in agriculture. A particular focus is placed on empowering women producers within the chili and millets value chains in Sambalpur and Bargarh districts. Mahashakti organizes these women into community-based producers' institutions such as Farmer Producer Groups and Farmer Producer Organizations (FPOs).

Moreover, Mahashakti facilitates connections between these producers and the broader value chain, enabling effective interactions with input suppliers, buyers, technical service providers, and government entities to secure their rightful entitlements.

1.3 Empowering Women Farmers:

Mahashakti's commitment to working exclusively with women farmers is not only an ethical choice but a strategic cornerstone of its approach. By leveraging diverse perspectives in decision-making and fostering a more skilled agricultural workforce, Mahashakti recognizes that women's inclusion acts as a catalyst for increased productivity and resilience in the face of evolving challenges. The empowerment of women in agriculture represents a transformative force capable of reshaping the fabric of agricultural communities.



1.4 Community Resource Persons:

Catalysts for Change Community Resource Persons (CRPs) serve as vital community catalysts, bridging the gap between farmers and key institutions driving agricultural advancement in the SAMPURNA Project. Acting as strategic connectors, CRPs facilitate links between farmers, Producer Groups, Producer Companies, Farm Field Schools, and Custom Hiring Centres, addressing the everyday challenges of sustainable agriculture.

As architects of change, CRPs strategically promote Producer Groups, fostering a sense of community and collaboration. This collective action enhances economic resilience and shared success, positioning CRPs as pivotal agents of transformative change within agricultural sectors.



1.5 Facilitating Producer Group Advancement:

With the involvement of Community Resource Persons, Mahashakti's focus is shifting toward a transformative model that emphasizes the "Facilitation of Producer Groups." By fostering collaboration and shared goals, Mahashakti aims to empower these groups to become self-sufficient and effective in advocating for their needs, ensuring long-term sustainability and growth in their agricultural practices.

Several awareness building meetings were organized in the Bargarh and Sambalpur districts, attracting over [insert number] farmers. These meetings were notable for the active participation of officials from key line departments, including Agriculture, Horticulture, and Krishi Vigyan Kendras.

The primary aim of these sessions was to sensitize farmers about the benefits of becoming shareholders in the Producer Company. Emphasis was placed on ownership and management aspects, particularly how share capital would be utilized to generate business and provide tangible benefits to shareholder farmers. Additionally, officials from the line departments discussed collective input and output marketing strategies facilitated through Farmer Producer Companies (FPCs).

These awareness building meetings played a crucial role in mobilizing farmers and integrating them into the SAMPURNA project, fostering a sense of community and shared purpose.



CHAPTER – II

Institution Building

Institution building is a crucial process for fostering sustainable development within communities. It often begins with the formation of producer groups, where local individuals come together to share resources, knowledge, and skills, enhancing their bargaining power and improving access to markets. This initial step helps establish trust and collaboration among members. As these groups mature and gain experience, they can evolve into producer companies, which are more formalized entities that allow for greater investment, expanded operational capabilities, and enhanced governance structures. This progression not only strengthens the economic resilience of producers but also fosters collective decision-making and empowers members to play a significant role in their own development.

2.1 Formation of Farmers' Producer Groups (PGs)

As part of institutional building process, Farmers' Producer Groups (PGs) consisting of 15-20 farmers at the village level were established. These PGs served as foundational elements for the Farmer Producer Companies (FPCs) that would be registered later. Through a participatory approach, PG members were encouraged to meet regularly, set agendas, and elect their leaders and other office bearers.

To promote financial empowerment, members were encouraged to save, with these savings later converted into equity within the FPC. The PGs concentrated on production-related issues and challenges, facilitating the sharing of experiences and difficulties faced in enhancing their livelihood

opportunities. Additionally, members identified critical services they required to overcome these constraints.



In the first and second years of project implementation, 239 and 95 producer groups were formed, respectively. However, in the third year (up to December 2024), only 81 groups were established across both districts, bringing the total to 415 producer groups under the SAMPURNA project, as detailed in **Table 2.1**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec.
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	2024
	Total No. of PGs formed	Total No. of PGs formed	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Ambabhona	99	5			1	1	105
Bhatli	45	17	10	8	6	24	86
Maneswar	80	0	12	9	9	30	110
Jamankira	15	73	9	11	6	26	114
Total	239	95	31	28	22	81	415

Table 2.1: No. of Producer groups promoted across four blocks in Bargarh and Sambalpur district

Initially, the focus was on forming groups, but the subsequent emphasis shifted towards strengthening these producer groups. This strategic approach ensures that the PGs not only exist but also thrive, enabling them to effectively address the needs and aspirations of their members.



In the first year of the project, 3,900 farmers were organized into 239 producer groups. However, in the second year, only 1,402 farmers were mobilized, including 35 individual farmers in Maneswar. The pace of group formation and farmer mobilization in Maneswar Block was comparatively slower than in other blocks within Bargarh and Sambalpur.



Despite these challenges, by the end of March 2024, a total of 5,302 women farmers had benefited from the project, and by the end of December 2024 — in the third year of the project — the number rose to 6,472 women farmers, as mentioned in **Table 2.2**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	
	Total No. of Farmers	Total No. of Farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Ambabhona	1791	59	0	0	10	10	1860
Bhatli	625	229	148	110	102	360	1214
Maneswar	1244	35	158	136	111	405	1684
Jamankira	240	1079	129	175	91	395	1714
Total	3900	1402	435	421	314	1170	6472

Table 2.2: No. of farmers mobilised across different blocks of Bargarh and Sambalpur districts

Against the target of including 1,938 women farmers, only 1,170 women farmers could be incorporated into the project, with the highest numbers coming from Maneswar (405 women), followed by Jamankira (395 farmers) and Bhatli (360 farmers). Although only 10 farmers were added in Ambabhona in the third year, this block has the largest overall number of farmers at 1,860, followed by Jamankira with 1,714, Maneswar with 1,684, and Bhatli with 1,214.

2.2 Formation of Producer Companies

Three Producer Companies were successfully registered: one in Bargarh district and two in Sambalpur district. The primary aim of these companies is to provide farmer members with comprehensive, end-to-end services. These services include the supply of agricultural inputs, collective procurement, packaging, marketing, technical support, and networking. By strengthening the Producer Companies, Mahashakti aims to ensure their sustainability and long-term benefits for the farmer members.

To facilitate this process, sensitization meetings were conducted in each village, where the need for and importance of the Producer Companies were thoroughly discussed with the Producer Groups (PGs). Additionally, 10 to 12 progressive farmers from each block were identified and appointed as promoters and directors of the Producer Companies, enhancing local leadership and ownership.

2.2.1 Incorporation of Producer Companies

All three Producer Companies were incorporated under the Companies Act; 2013 (18 of 2013) The details of the incorporated companies are as follows:

Sl. No.	Name of the FPC	Date of Incorporation
1	Utkalika Women Agro Producer Company	22 nd July 2022
2	Jamankira Agro Women Producer Company	31 st March 2023
3	Sambalpurian Farmers Producer Company	8 th June 2023

Each of these companies has been assigned a Corporate Identification Number (CIN), as well as PAN and TAN, facilitating their formal operations.

Each Producer Company has established its registered office within its operational block. These offices are equipped with essential resources, including computers, printers, and appropriate furniture and fixtures, enabling efficient administrative functions and operations.

2.2.2 Mobilisation of Share Holders and Share Capital

Mahashakti made a strategic decision to establish a single Producer Company, the Utkalika Women Agro Producer Company, in Bargarh, encompassing both the Ambabhona and Bhatli blocks. This decision was driven by the geographical proximity of these blocks, which aimed to streamline operations and reduce administrative costs.

In its first year of operation, Utkalika successfully mobilized 810 women farmer shareholders, followed by an additional 133 in the second year and 10 in third year, bringing the total to 943 shareholders by the end of December 2024. This represents a conversion rate of approximately 30.68% of women farmers into shareholders across both Ambabhona and Bhatli blocks by that date (**Table 2.3**).

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Total No. of Shareholders	Total No. of Shareholders	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	
Utkalika	810	123			10	10	943
Sambalpurian	0	337				0	337
JAWPCL	0	543				0	543
Total	810	1003	0	0	10	10	1823

Table 2.3: No. of Shareholders mobilised across the three Producer companies



In contrast, the Sambalpurian and JAWPCL Producer Companies were incorporated in the second year of operation. Despite their later start, Sambalpurian was able to convert 337 farmers into shareholders, while JAWPCL achieved a significant conversion of 543 women farmers in the second year. While both the companies could mobilise 405 and 395 women farmers respectively in the third year, they could not mobilise a single shareholder in the third year representing 20% and 31.68% of the total women farmers mobilised in their respective blocks.

Overall, by the end of the third year in December 2024, a total of 1,823 women farmers had become shareholders across all three producer companies, constituting 28.17% of the total mobilized farmers. However, the conversion rate of shareholders in the third year is literally nil for all three companies. Many farmers expressed a desire for immediate returns or benefits from their investments, which highlights the challenges these producer companies face in meeting shareholder expectations and fostering long-term engagement as was reflected in the second year of operation.

In Project Sampurna, a strategic decision was made to establish a share capital of ₹1,000, along with a non-refundable administrative fee of ₹250, which required approval from the respective producer company. Additionally, the Board determined that each promoter and director would be responsible for contributing ₹10,000 in share capital.

For individual farmer shareholders, the structure was simplified to include a contribution of ₹1,000 as share capital and ₹250 as the administrative fee, totalling ₹1,250. Recognizing that some shareholders might face financial constraints, it was also decided that if any shareholder was unable to make this payment in a single instalment, she would be permitted to pay the share capital and administrative fee in two separate instalments. This flexible approach aims to encourage broader participation among farmers while ensuring that the financial contributions support the sustainability of the producer company.

It is important to highlight that within just eight months, Utkalika successfully mobilized ₹909,000 in share capital from both the Ambabhona and Bhatli blocks of Bargarh district. In its second year, this figure increased by ₹142,000, bringing the total share capital mobilized to ₹1,051,000 by the end of March 2024. In third year Utkalika could mobilise just ₹ 10,000 from 10 women shareholder making the total share capital of Utkalika ₹1,061,000.

In contrast, both Sambalpurian and JAWPCL did not mobilize any share capital during their first year of operation. However, following their incorporation, they were able to mobilize ₹427,450 and ₹678,250, respectively in the second year. Again, in the third year, both the producer companies could not be able to mobilise a single rupee of share capital in the project. By the end of the third year i.e. December 2024, the total share capital mobilized across the project reached ₹2,166,700 as presented in Table 2.4.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	
	In Rupees	In Rupees	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Utkalika	909000	142000			10000	10000	1061000
Sambalpurian	0	427450				0	427450
JAWPCL	0	678250				0	678250
Total	909000	1247700	0	0	10000	10000	2166700

Table 2.4: Amount of Share capital mobilised in different Produce companies (in Rupees)

Despite these achievements, mobilizing share capital in the second and third year presented significant challenges for staff and Community Resource Persons (CRPs). Many women farmers were discouraged from contributing due to misinformation from their husbands, who were influenced by news reports of frequent frauds involving chit fund companies that exploited vulnerable rural communities. Additionally, shareholders who had contributed in the initial months were expecting immediate returns, while the company was still in the process of accumulating share capital to launch its business operations and services. This disconnect between expectations and the reality of the company's development posed a considerable hurdle to further mobilization efforts.

2.2.3 Mobilisation of Administrative Fee

In addition to the share capital, a non-refundable administrative fee of ₹250 was collected from each shareholder. This fee was intended to provide a financial cushion during challenging times. However, as share capital mobilization decreased, the collection of the administrative fee also saw a decline. The details regarding the mobilization of the administrative fee can be found in **Table 2.5**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	
	In Rupees	In Rupees	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Utkalika	202500	30500			2500	2500	235500
Sambalpurian		67354				0	67354
JAWPCL		135750				0	135750
Total	202500	233604	0	0	2500	2500	438604

Table 2.5: Amount of Administrative Fee mobilised in different producer companies (in Rupees)

This table outlines the specific amounts collected over the designated periods, reflecting the overall trends in financial contributions and the challenges faced in maintaining consistent support from the shareholders. The reduced mobilization of both share capital and administrative fees underscores the need for renewed efforts in engagement and communication with the women farmers to address their concerns and rebuild their confidence in the initiative.

Each Producer Company has issued valid cash receipts for the collection of share capital and the administrative fee. The collected funds are deposited into the Current Account of the respective Producer Companies, ensuring proper financial management. In principle, share certificates are to be issued to shareholders within two weeks of the share capital collection. However, this process has been slower than anticipated within the project.



2.2.4 Share Certificates

Though by the end of the second year i.e. March 2024, only 933 shareholders, representing 51.46% of the total shareholders had received their share certificates, all the producer companies work hard and distributed share certificates to all the shareholders who had not received earlier. .

2.3 Governance

Initially, five directors were inducted onto the board of each Farmer Producer Company (FPC). However, to address the challenge of inactive board members, Mahashakti inducted the promoters who possess leadership skills, are willing to dedicate time to the company, and have gained acceptance within the community.



The governing board of each producer company comprised members who are credible and respected within the community. These individuals were not only have relevant SHG experience and expertise but also seen as trustworthy by the stakeholders. Additionally, board members dedicated adequate time to their responsibilities, ensuring they were actively involved in the functioning and oversight of their respective company. This engagement fostered strong relationships between the board and the community, enhancing the board's effectiveness.

The Board members clearly understood their specific duties and roles within the organization. This understanding enabled them to provide effective policy direction to the management team. By delineating responsibilities, the board focused on strategic oversight rather than operational details, allowing management to handle day-to-day operations efficiently. This clarity also facilitated better decision-making and alignment with the company's overall mission.

Each producer company had a well-defined vision and set of goals that were understood and embraced by the board, management, and employees alike. This clarity prevented confusion and ensured that all stakeholders were working towards the same objectives. When the vision was internalized across

the organization, it fostered a cohesive work environment and motivates individuals to contribute actively to achieving common goals.

Regular meetings of the governing board in each producer company was held once in a month. Holding meetings at least once a month allowed board members to stay updated on company affairs, discuss challenges, and make timely decisions. These meetings served as a platform for collaborative problem-solving and strategic planning, reinforcing the board's active role in governance.

Accurate minutes of each board meeting was maintained for accountability and transparency. These records provided a reference for decisions made, actions assigned, and discussions held, ensuring that all members were on the same page. Minutes also served as valuable documentation for future meetings and helped track the progress of various initiatives.

In each producer company, all the directors and promoters actively participated in the meeting. Each member contributed her insights, expertise, and perspectives during discussions, fostering a dynamic and collaborative decision-making environment. This engagement not only enhanced the quality of decisions but also encouraged a sense of ownership and responsibility among board members.

The board was responsible for formulating the basic mission of the FPO, along with its strategic direction and major policies. This foundational work ensured that the organization had a clear framework within which it was operates. By establishing guiding principles, the board helped align all activities with the company's mission, facilitating coherence in decision-making and operations.

In each producer company, the Board was involved in the approval of budgets and operational plans ensuring that resources are allocated effectively in line with the Company's goals. This participation helped the board to oversee financial health and operational viability, while also providing management with the support and guidance needed to execute plans successfully.

Accountability was upheld through transparent and regular reporting to members, donors, stakeholders, and government entities. By sharing progress updates, financial statements, and operational insights, the board fostered trust and confidence among stakeholders. This transparency not only strengthened relationships but also encouraged continued support and engagement from all parties involved.

In each producer company, a supportive relationship between the board and the management team, particularly the CEO was maintained for the success of the FPO. The board provided guidance, resources, and encouragement to management, facilitating a collaborative environment where management could effectively implement the organization's strategies. This partnership enhanced operational efficiency and promotes a unified approach to achieving the company's objectives.

To ensure smooth management and effective governance, various committees had been established within each company, including a finance committee, procurement committee, marketing committee, and monitoring and supervision committee. Each committee consisted of three to four directors and promoters, with some members serving on multiple committees. This structure fostered collaboration and allows for diverse perspectives in decision-making.

Before any decision was approved by the managing director, it gained consensus among all committee members. This process applied to all matters, whether related to procurement or financial disbursement. By requiring collective agreement, the committees promoted a culture of collaboration and accountability, ensuring that all directors and promoters were actively engaged in company affairs. This

approach not only enhanced the quality of decision-making but also fostered a sense of ownership among members.

Additionally, the emphasis on consensus-building ensured complete transparency in operations. All committee discussions and decisions were documented, allowing for clear communication within the company and with stakeholders. This transparency built trust among members and reinforced the commitment to ethical governance. Overall, this structured committee framework enhanced operational efficiency, encourages participation, and supports the long-term sustainability of the company.

The core team of the Sampurna project played a vital role in supporting the Board of each producer company by helping to formulate various policies and procedures and develop essential systems as part of a comprehensive capacity-building initiative. This collaboration is crucial for ensuring that producer companies operated efficiently and effectively, adapting to the evolving needs of their communities and markets.

The Sampurna team worked closely with the Board to identify gaps and opportunities within existing frameworks, guiding them in crafting tailored policies that enhanced governance and operational efficiency. This included establishing clear guidelines for financial management, procurement processes, and marketing strategies, which are essential for sustainable growth.

Moreover, the capacity-building efforts extended to developing robust systems for monitoring and evaluation, ensuring that the producer companies could track their progress and measure their impact. By providing training and resources, the Sampurna team empowers the Board and other stakeholders to implement these systems confidently, fostering a culture of accountability and continuous improvement.

Through this collaborative approach, the Sampurna project not only strengthened the governance structure of each producer company but also enhanced the skills and knowledge of its members. Ultimately, this led to more effective decision-making, better resource management, and a greater ability to respond to challenges and opportunities in the agricultural sector.

2.4 Systems and Procedures

All the producer companies promoted in project Sampurna did have Permanent Account Number (PAN) for tax purposes, current account with a banking institution for smooth financial transactions, and Goods and Services Tax (GST) registration to comply with tax regulations, which are critical for legal operations, financial management, and maintaining transparency in all financial dealings.

Utkalika Women Agro Producer company possessed the necessary licenses and permits to operate legally in the agricultural sector. This included acquiring trade licenses, as well as ensuring they have the appropriate certifications for selling seeds, fertilizers, and pesticides. These licenses not only demonstrated compliance with regulatory requirements but also built trust with farmers and customers, allowing the company to operate smoothly within the market. Similarly, jamankira agro Women Producer company also possessed all the required license except a seed license from horticulture department. But Sambalpurian Farmer Producer Company was yet to have the seeds, fertilisers and pesticide license due to certain technical delay in the local horticulture and Agriculture department till the end of the project.



All the producer companies maintained accurate and up-to-date financial records for the effective management of the company's finances. All financial ledgers and records were meticulously updated to reflect current transactions. This practice facilitated transparency, aids in financial reporting, and supported informed decision-making by providing a clear picture of the company's financial health. Standard and consistent accounting policies were maintained in all the producer company for accurate financial reporting. These policies were clearly documented and accessible to all the staff and director of the company, ensuring that all financial transactions were recorded uniformly. Computerized financial system (talley software) had been implemented in all the producer companies to streamline financial operations and enhance accuracy. This system allowed for real-time tracking of transactions, automated reporting, and better data management, making it easier to analyze financial performance and make informed decisions.

Careful planning, monitoring, and management of cash flows were done regularly for the financial stability of the producer company. Effective cash flow management was done by the board of each company to ensure that the company could meet its obligations, invest in growth opportunities, and handle unexpected expenses. Regular cash flow analysis was done to identifying trends and potential issues before they escalate.

The following books and registers were maintained and updated in each producer company.

- a. Shareholder register
- b. Board Meeting / Resolution
- c. Cash book
- d. Sales and Purchase register
- e. Letter received register
- f. Ledger
- g. Stock Register
- h. Board Meeting Notice register
- i. Sundry register
- j. Cheque Issue Register
- k. Letter despatch register

- l. Assets register
- m. Visitors' Book

In each producer company, forecasts, including expense and revenue budgets were prepared allowing the company to anticipate financial needs and allocate resources effectively.

Monthly financial reports were generated through the talley software to understand insight into the company's financial performance in each producer company. These reports included key metrics, such as income, expenses, and profit margins, allowing management and the board to make informed decisions based on up-to-date information.

In each producer company an effective internal control system had been established to prevent and detect fraud and misuse of funds. This system included checks and balances that monitor financial transactions and ensured that resources were used appropriately. Regular audits and reviews were done to reinforce this control framework.

Each Producer company had clear documentation of its products and services such as custom hiring centre, farm field school, group based agri enterprise, along with operational procedures. This documentation ensured that all stakeholders, including employees and customers, understand what was being offered, how it was delivered, and the standards expected.

Each company had clear, well-understood, and consistent human resource policies that outline employee roles, responsibilities, and expectations. The company provided job Descriptions, reviews, performance evaluation, and other HR matters, ensuring that the workforce is aligned with the company's goals and values.

Moreover, each producer company effectively maintained a Management Information System (MIS) to facilitate informed decision-making at the operational level. This system included comprehensive databases for both producer groups and individual farmers. The producer group database was meticulously updated with essential information such as the block, Gram Panchayat (GP), village, date of formation, total number of producers, bank account details, and the contact information for key members like the president and secretary. Similarly, the farmers' database captured a detailed profile of each farmer, encompassing their address, bank account, aadhar number, landholdings, irrigation facilities, cropping patterns, crop planning, input requirements, access to farm mechanization, market connections, any training or exposure they have received and details of share capital and administrative fee paid to the company. This robust data management not only enhanced operational efficiency but also supported targeted interventions and resource allocation, ultimately contributing to the growth and sustainability of the producer companies.

In addition to these efforts, as per the donor's requirements, Project Sampurna also provided a Management Information System (MIS) through its platform, "Dhawani." However, initially there were some challenges with the application software, resulting in irregularities in the farmers' data reported by the project in each block. To address these issues, a dedicated team at the donor level worked actively to streamline the management information system. The goal is to enhance data accuracy and consistency, ensuring that the information collected was reliable and could effectively support the project's objectives. This effort aimed to improve the overall functionality of "Dhawani," thereby facilitated better decision-making and resource allocation for the benefit of the farmers involved.

2.5 Management

In all Producer Companies except Utkalika, the Block Coordinators of Maneswar and Jamankira served as the Chief Executive Officers (CEOs) for Sambalpurian and JAWPCL, respectively, with the approval of their respective Boards. In contrast, Utkalika had appointed a dedicated CEO and Sambalpurian and JAWPCL had appointed additional CEO responsible for overseeing the day-to-day operations of the company, which included managing Accounts, Finance, and Management Information Systems (MIS).

Additionally, each Producer Company received support from five Community Resource Persons (CRPs) who were drawn from the local community. These CRPs played a crucial role in managing field-level activities and facilitating community engagement. Notably, those CRPs who had successfully mobilized at least 200 farmers and either fully or partially raised the required share capital from them were enrolled in the payroll of the Mahashakti Foundation, recognizing their significant contributions to the organization.

Beyond the efforts of the CRPs, each Producer Company was benefitted from the expertise of core project staff, including a Team Leader, Agricultural Expert, Finance Manager, and Marketing Manager. This team provided comprehensive support at every stage of operations, ensured that the companies function efficiently and effectively in serving their community.

The CEOs prioritized operational self-sufficiency and financial independence for the company. This involved developing strategies that reduce reliance on external funding while ensuring that operational activities could be sustained through internal resources. The CEOs closely monitored progress towards these goals, adjusted plans as needed to address challenges and capitalize on opportunities.



Regular review and analysis of monthly financial reports were done in each producer company for informed decision-making. The CEOs examined key financial indicators, such as cash flow, expenses, and revenue trends, to gauge the company's financial health. By making timely decisions based on this information, they addressed potential issues before they escalate and ensure that the company remains on track to achieve its financial objectives.

All the CEOs were adapted at identifying potential problems early, particularly in areas such as producer group formation, bank account opening, staff turnover, supply chain management, and

procurement processes. By monitoring these critical functions, they took swift action to resolve issues, ensuring that operations run smoothly and that farmers received the inputs they needed in a timely manner.

In all the producer companies, participatory management practices were implemented that allow staff to contribute feedback and insights into decision-making processes. This approach not only empowered staff but also fostered a sense of ownership and commitment to the organization's goals. By encouraging open communication and collaboration, the CEOs harnessed the diverse perspectives of the team, leading to more innovative solutions and improved organizational effectiveness.

All the CEOs ensured that management provides transparent and regular reports to the Board, outlining progress towards growth goals and any challenges faced. These reports included realistic plans for expansion, as well as strategies for liaison and networking with external stakeholders. By keeping the Board informed and involved, the CEO fostered trust and collective responsibility in achieving the company's objectives.

CHAPTER - III

Production and Productivity Enhancement

Enhancing production and productivity is crucial for a producer company as it directly impacts profitability, competitiveness, and sustainability. Improved production processes lead to higher output with optimal resource utilization, reducing costs and waste. This efficiency not only allows the company to meet increasing market demands but also enables it to respond swiftly to changes in consumer preferences. Furthermore, productivity enhancements can foster innovation, streamline operations, and improve quality, leading to greater customer satisfaction and loyalty. Ultimately, by focusing on production and productivity, a producer company can strengthen its market position, drive growth, and ensure long-term success in a dynamic business environment.

3.1 Package of Practices (PoP)

The adoption of a package of practices for chili and millets is essential for maximizing yield, improving quality, and ensuring sustainable farming. For chili, these practices encompass proper seed selection, optimal planting times, integrated pest management, and efficient irrigation techniques, all of which contribute to enhanced fruit quality and reduced losses. Similarly, for millets, implementing recommended practices such as soil preparation, crop rotation, and timely harvesting helps in improving resilience to climate variability and pests. By following these comprehensive guidelines, farmers can achieve better resource efficiency, increase profitability, and promote soil health. Additionally, these practices support food security by enhancing the production of nutrient-rich crops like millets, which are crucial for both human health and environmental sustainability. Overall, effective implementation of these practices fosters economic stability for farmers while contributing to broader agricultural resilience.

Bargarh and Sambalpur districts exhibit significant potential to produce both chilies and millets. However, current cultivation practices remain largely traditional, leading to suboptimal utilization of land resources. This results in low production levels, reduced productivity, and limited income for farmers.

Recognizing these challenges, a strategic plan was developed to introduce High Yielding Variety (HYV) seeds and modern scientific cultivation methods to the beneficiaries in these regions. To support

this initiative, comprehensive Packages of Practices (PoPs) for both red chilies and millets (specifically Ragi) were created in-house, with valuable contributions from Syngenta and the Krishi Vigyan Kendra (KVK).



To ensure effective implementation, training sessions were organized for women farmers, along with their husbands, focusing on these newly developed practices. The training aimed not only to educate participants about the benefits of using HYV seeds and modern agricultural techniques but also to empower them with the knowledge necessary to enhance their farming operations. This initiative is expected to lead to increased crop yields, improved productivity, and ultimately, greater income for farming families in Bargarh and Sambalpur.

3.2 Demonstration and Farm Field Schools

In the expansive realm of global agriculture, where challenges reflect the diversity of crops cultivated, a revolutionary transformation is taking place in traditional learning paradigms. The introduction of the Farmer's Field School (FFS) exemplifies this shift, representing a form of experiential education that is reshaping agricultural practices. As Mahashakti Foundation confronted the complex interplay of climate change and resource constraints, the FFS concept emerged not just as an educational model but as a catalyst for fostering sustainable and empowered farming communities.



Implemented across 15 locations within the four operational blocks of Bargarh and Sambalpur districts as presented in **Table 3.1**, Mahashakti uncovered the profound impact of Farmer’s Field Schools, demonstrating why they were at the forefront of innovative agricultural practices in the second year of operation.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec.
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	2024
	No. of FFS	No. of FFS	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Ambabhona	0	3			0	0	3
Bhatli	0	4				0	4
Maneswar	0	4				0	4
Jamankira	0	4				0	4
Total	0	15	0	0	0	0	15

Table 3.1 : Implementation of Farm Field Schools (FFS) in different blocks of Bargarh and Sambalpur

Rooted in participatory learning, hands-on experiences, and community collaboration, the 15 Farm Field Schools established under the Sampurna Project mark a significant departure from conventional teaching methods. This initiative paves the way for a more informed, adaptive, and sustainable approach to farming.

Before initiating the demonstrations, community mobilizers took the important step of facilitating the collection of soil samples for testing. With support from the Krishi Vigyan Kendra (KVK), these soil samples were analysed, and tailored treatments were applied based on the results. KVK scientists provided on-the-spot guidance during this process, ensuring that farmers received expert advice relevant to their specific soil conditions.



For all demonstration plots, certified Almorah variety seeds, as recommended by KVK, were procured from Syngenta Company. These seeds were distributed to farmers through their respective Producers Companies, ensuring that they had access to high-quality inputs necessary for optimal agricultural outcomes.

To further enhance learning and exposure for other farmers, a series of exposure and training programs were organized at various Farm Field Schools. Within the Sampurna Project, a total of 51 exposure trips and one-day training sessions in second year of operation and 60 exposure trips with one day training sessions were organised in third year of operation i.e. upto December 2024, benefiting 3606 farmers. Notably, the highest number of programs and participants were in the Jamankira Block of Sambalpur district in both second and third year of operation, as detailed in **Table 3.2** and **Table 3.3**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec.
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	2024
	No. of visits	No. of Visits	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Ambabhona	0	12	5	5	5	15	27
Bhatli	0	10	6	3	5	14	24
Maneswar	0	9	4	3	6	13	22
Jamankira	0	20	6	5	7	18	38
Total	0	51	21	16	23	60	111

Table 3.2 : No. of Exposure visits organised to the Farm Field Schools in different blocks

This initiative not only provided practical knowledge but also fostered community engagement and collaboration among farmers. Through these efforts, the Farmer's Field Schools (FFS) not only enhance agricultural understanding but also empower local communities to adopt sustainable practices that can withstand evolving challenges.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	
	No. of farmers	No. of farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Ambabhona	0	279	237	245	265	747	1026
Bhatli	0	209	248	115	235	598	807
Maneswar	0	205	135	118	228	481	686
Jamankira	0	523	188	158	218	564	1087
Total	0	1216	808	636	946	2390	3606

Table 3.3 : No. of farmers exposed to various Farm Field Schools and undergone one day training

From the sun-drenched fields showcasing crop diversity to the intricate techniques of integrated pest management, these Farm Field Schools place learning at the heart of agricultural innovation. As Mahashakti deals with the rich soil of practical knowledge and encourages peer-to-peer exchanges, it becomes clear that the FFS is more than just an educational initiative; it is a transformative force. It equips farmers with the skills and insights necessary to steer the complexities of modern agriculture.



By fostering a culture of continuous learning and adaptation, the FFSs encouraged farmers to share experiences and best practices, creating a supportive network. This collaborative environment not only enhanced individual knowledge but also strengthened community resilience, ensuring that farmers were well-prepared to tackle the uncertainties of climate change, market fluctuations, and emerging agricultural technologies. Ultimately, the FFSs served as vital resource, promoting sustainable farming methods that benefitted both the farmers and their ecosystems.

3.3 Green House Revolution

Shade nets, often referred to as shade houses or greenhouses, have become essential components of modern farming strategies. They create a controlled environment that effectively addresses the challenges posed by varying climatic conditions. By regulating temperatures, shielding crops from adverse weather, managing pests, and conserving water, shade nets emerge as versatile tools for farmers dedicated to implementing sustainable and efficient agricultural practices.

For Project Sampurna, the adoption of greenhouses for nursery raising and diverse agricultural activities represents a significant transformation in its second year of operation. Project Sampurna has successfully harnessed the multifaceted advantages and efficiency gains associated with the strategic integration of two greenhouses in Raisabha village of Bhatli Block and Amkuni village of Maneswar Block and three greenhouses viz. Sunarpur village in Maneswar Block and Chinimahul and Salabhadi villages of Jamankira Block in the third year of operation as detailed in **Table 3.4**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	
	No. of Green House	No. of Green House	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Ambabhona	0				1	1	1
Bhatli	0	1				0	1
Maneswar	0	1			1	1	2
Jamankira	0		1			1	1
Total	0	2	1	0	2	3	5

Table 3.4 : No. of Green Houses / High Tech Nursery developed in different blocks of Bargarh and Sambalpur districts

In each greenhouse, nurseries for chili and a variety of other vegetables were established. Overall, the Sampurna Project successfully raised 140,000 seedlings, benefiting 51 farmers in second year of operation and 560,000 seedlings both moringa and chili in third year of operation benefitting 273 farmers in third year of operation, as detailed in **Table 3.5** and **Table 3.6**.

BLOCK	2022 APR to	2023 APR.	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	
	No. of Seedlings	No. of seedlings	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Ambabhona	0	0			100000	100000	100000
Bhatli	0	100000	100000	100000		200000	300000
Maneswar	0	40,000		50000	110000	160000	200000
Jamankira	0		100000			100000	100000
Total	0	140000	200000	150000	210000	560000	700000

Table 3.5: No. Number of seedlings raised in each Green House

The strategic use of greenhouses allowed for optimal growing conditions, resulting in healthier plants that are better equipped to thrive in changing environmental conditions.

By offering a steady supply of quality seedlings, the project empowered farmers to diversify their crop production, ultimately increasing their income potential and contributing to food security within the community. The positive impact of these efforts highlights the importance of sustainable agricultural practices and the role of innovative solutions in modern farming.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	
	No. of Farmers	No. of farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Grand Total
Ambabhona	0	0			50	50	50
Bhatli	0	35	30	40		70	105
Maneswar	0	16		20	32	52	68
Jamankira	0	0	50			50	50
Total	0	51	80	60	82	222	273

Table 3.6: Number of farmers benefitted from the above seedlings

This strategic implementation of greenhouses not only enhances crop quality and yields but also supports project Sampurna's mission to promote sustainable farming. By providing an optimal growing environment, these structures enabled farmers to cultivate a variety of crops year-round, effectively mitigating the risks associated with seasonal fluctuations. Furthermore, the use of greenhouses contributed to resource conservation, as they helped reduce water usage and minimize the reliance on chemical pest control.

Mahashakti Foundation's initiative exemplifies a forward-thinking approach to agriculture, showcasing how innovative practices could lead to increased productivity and environmental sustainability. Through this transformative paradigm, the foundation is paving the way for a more resilient agricultural community, equipped to meet the demands of the future.

3.4 Farm Mechanisation

Due to a lack of training and resources, many poor farmers in the two districts continue to rely on indigenous and traditional farming machinery and equipment. Recognizing this challenge, the project aimed to support each Producer Company with a power tiller, a tool that would not only enhance productivity on their farmland but also ensure higher crop yields. While individual farmers often struggle to invest in such machinery due to high costs, the collective approach proposed by the project made this goal attainable.



To facilitate this initiative, each Producer Company was allocated ₹5 lakhs to purchase their own power tiller. This financial support has been instrumental in enabling poor farmers to access modern agricultural technology, which they otherwise might not have been able to afford. The impact of this initiative has been significant, thanks in large part to the support provided by HDFC Bank Parivartan.

In addition, all three Producer Companies have established Custom Hiring Centres (CHCs). These centres offer agricultural machinery and equipment for rent to their member farmers, effectively addressing the needs of small and marginal women farmers who may lack the resources to purchase expensive machinery in Ambabhona, Maneswar and Jamankira blocks. By providing access to essential equipment on a rental basis, the CHCs planned to empower these farmers, allowing them to increase their productivity without the burden of large investments as highlighted in **Table 3.7**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec. 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of CHC	No. of CHC	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	
Utkalika	0	1				0	1
Sambalpurian	0	1				0	1
JAWPCL	0	1				0	1
Total	0	3	0	0	0	0	3

Table 3.7: No. of Custom Hiring Centre providing agri implement rental services to the farmers

The primary objective of the Custom Hiring Centers (CHCs) is to make modern agricultural machinery and equipment accessible to farmers at an affordable cost. These centers typically offered a wide range of equipment, including tillers, weeders, seeders, sprayers, and other essential farm implements. Women farmer shareholders could rent the machinery they needed for a specified period, generally on an hourly basis or per acre, depending on the type of equipment and the specific agricultural task.



However, challenges related to the geographical location of the villages and transportation logistics have made some farmers hesitant to transport the equipment to their fields. This reluctance is evident in the revenue generated by each CHC, as illustrated in **Table 3.8**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Revenue in Rs.	Revenue in Rs.	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	
Utkalika	0	400	1000	3000	600	4600	5000
Sambalpurian	0	0	600	4500	1900	7000	7000
JAWPCL	0	7345	1000	8700	700	10400	17745
Total	0	7745	2600	16200	3200	22000	29745

Table 3.8: Amount of Revenue generated in each CHC in Rupees

Despite these challenges, the custom hiring centers gained considerable acceptance among women farmers. In response, each Producer Company developed tailored strategies to maximize the benefits for women farmers, ensuring that they could effectively utilize the available resources.

To further support women farmers in becoming comfortable and proficient with modern machinery, several demonstration and training programs were organized at the block level. These sessions offered hands-on experience and valuable insights into the operation and maintenance of the equipment, empowering women to make the most of the resources at their disposal. Details of these programs are outlined in **Table 3.9**.

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Demo cum Training	Mo. Of Demo cum training	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	
Utkalika	0	1				0	1
Sambalpurian	0	0				0	0
JAWPCL	0	2				0	2
Total	0	3	0	0	0	0	3

Table 3.9: No. of demonstrations cum training programs organized on agri equipment

In addition to training programs, informative leaflets were distributed within producer groups and across nearly all operational villages. These materials aimed to raise awareness among women farmers about the advantages of agricultural mechanization and the potential to reduce physical labor. By promoting the benefits of modern farming practices, the initiative sought to encourage more women to adopt these technologies, ultimately improving their productivity and quality of life.

3.5 Crop Planning

Crop planning is crucial for successful any cultivation, particularly for crops like chili and millets. Effective crop planning enabled farmers to time their planting and harvesting to align with market demand, helped them secure better prices for their produce and maximize returns on investment throughout the year. For crops such as chili, which could be highly profitable but sensitive to market fluctuations, and millets, which gained recognition for their nutritional value and resilience, strategic planning was essential.

Community mobilizers were instrumental in assisting farmers in the producer groups with the development of comprehensive crop plans. They worked closely with the farmers in each producer group to gather critical data regarding soil conditions, market trends, and seasonal patterns. This information were meticulously collated.



The insights gained from this analysis was not only inform individual farmers about optimal planting schedules and expected yields but also played a significant role in shaping the business plans / sustainability plan of the Producer Companies. By understanding the best times to plant and harvest, as well as predicting market conditions, these companies could better strategize their operations, ensuring a steady supply of crops that meet market demand.

3.6 Input Demand Estimation

Input demand estimation is a critical activity for each Producer Company, with the exception of the Sambalpurian Farmer Producer Company. Both Utkalika and JAWPCL committed to providing their farmer members with the best possible services aimed at reducing input costs and enhancing their income. These objectives achieved through a collective approach, where farmers worked together to procure inputs and sell their produce. This collaboration not only improved bargaining power for better prices but also ensured the timely delivery of quality produce.

By conducting input demand estimation exercises with each farmer, the Sampurna team could accurately gauge the quantity of inputs required by their members and the optimal timing for procurement. This proactive approach allowed the companies to secure high-quality inputs at lower prices well in advance, ensuring that farmers receive what they need according to their specific requirements.

3.7 Supply of Inputs

To support these efforts, Mahashakti Foundation has established partnerships with key suppliers such as Syngenta for seeds and IFFCO for fertilizers and micronutrients. Arrangements were also being made to provide seeds and other essential inputs for both the Kharif and Rabi seasons.

However, input demand estimation could not be successfully implemented within the Sambalpurian Producer Company. Despite significant efforts from both the project team and the producer company, they faced challenges in obtaining the necessary licenses for seeds, fertilizers, and pesticides even by the end of third year of operation. These technical issues have hindered their ability to effectively estimate and meet input demand. Nevertheless, the commitment to overcoming these hurdles remained strong, and ongoing efforts were e focused on resolving the licensing challenges to benefit the farmer members in the future.



Among the three producer companies, Utkalika stands out as the only one with a license from Horticulture department for seed procurement and selling. In contrast, both Sambalpurian and JAWPCL lacked the necessary seed licenses. To address this, Utkalika provided crucial support to these companies by supplying seeds as recommended by the Krishi Vigyan Kendra (KVK) in Bargarh.

3.7.1 Seeds

During its second year of operation, Utkalika procured Almorah and Krishna seeds valued at Rs. 11.50 lakh for distribution to farmers. Meanwhile, JAWPCL and Sambalpurian procured seeds worth Rs. 6.27 lakh and Rs. 1.75 lakh, respectively, from Utkalika to fulfil their own supply needs for farmers in their networks. In the third year of operation, once again Utkalika procured seed worth Rs.394,000 for own use and supply to JAWPCL. Further both Sambalpurian and JAWPCL procured moringa and papaya seeds from another producer company from Balangir for their selling to the farmers of their locality. In total in the third year exclusively all these three producer companies procured seeds worth Rs.873,000 as presented in **Table 3.10**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Seeds in Rs.	Seeds in Rs.	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Seeds in Rs.
Utkalika	0	1149980		86000	308000	394000	1543980
Sambalpurian	0	175000	82000	82000		164000	339000
JAWPCL	0	627500	82000		315000	397000	1024500
Total	0	1952480	164000	168000	623000	955000	2907480

Table 3.10: Procurement of seeds by Producer companies in Rupees

As a result of these efforts, Utkalika achieved a remarkable turnover of Rs. 15.44 lakh by the end of third year of operation, reflecting its role not only as a supplier for its own operations but also as a vital resource for other producer companies. This collaborative approach not only strengthened Utkalika's market position but also ensured that farmers across the region had access to the necessary seeds, thereby enhancing agricultural productivity and fostering community engagement.



In its second year of operation, Utkalika successfully supported 408 farmers with seed distribution in Ambabhona and Bhatli Blocks. In comparison, Sambalpurian and JAWPCL provided seeds to 110 and 605 farmers. In contrast Utkalika supported 257 farmers in Ambabhona, Sambalpurian supported 230 farmers in Maneswar and JAWPCL supported 435 farmers in Jamankira Block as illustrated in **Table 3.11**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Farmers	No. of Farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	No. of Farmers
Ambabhona	0	359	0	22	235	257	616
Bhatli	0	49	0	0	0	0	49
Maneswar	0	110	0	115	115	230	340
Jamankira	0	605	0	100	335	435	1040
Total	0	1123	0	237	685	922	2045

Table 3.11: No. of Farmers benefitted from Seeds services

While these numbers indicate a positive impact, they could have been even higher. A significant challenge faced by these producer companies was the established relationships farmers had with existing seed stalls, which offered discounted prices and the option to purchase seeds on credit. This dynamic hindered Utkalika, Sambalpurian, and JAWPCL from strategically scaling their seed procurement and sales efforts.

Many farmers opted for competing vendors, often swayed by mere price differences, sometimes as little as Rs. 10. This trend not only impacted the sales figures but also underscored a disconnect between farmers and their producer companies, diminishing the sense of ownership and loyalty among the farmer community. Consequently, the supply of seeds fell short of the estimated demand.

Each of the three producer companies aimed to deliver seeds directly to farmers through their respective enterprise groups and other producer associations, facilitating access at the doorstep. However, there were instances where some seeds went unsold, ultimately leading to spoilage. This was attributed to a lack of urgency among community resource persons and insufficient oversight from block coordinators and the CEO.

3.7.2 Fertilisers

Among the three producer companies, Utkalika was the only one to hold a fertilizer license, enabling it to procure and sell fertilizer legally. In the second year of operation, JAWPCL obtained its license shortly after its incorporation. In contrast, Sambalpurian lacked the necessary fertilizer license till the closure of the project and, as a result, was unable to procure fertilizer from dealers.

During the first year, Utkalika successfully procured 230 bags of fertilizer valued at Rs. 84,640, while the other two producer companies could not make any purchases since they had not yet been incorporated. In the second year, Utkalika significantly increased its procurement, acquiring 2,010 bags of DAP, Urea, and Gromore, worth Rs. 23.43 lakh for distribution to farmers. Meanwhile, JAWPCL also made strides by procuring 500 bags of DAP valued at Rs. 6.67 lakh. In third year of operation, Utkalika procured only 200 bags of fertiliser worth Rs.270,800 due to poor planning and execution. However, JAWPCL in third year of operation procured 915mbagsof fertiliser worth Rs.7,81,225. But unfortunately, Sambalpurian

could not plan and procure fertiliser till the end of the project due to lack of planning and coordination despite it obtained its fertiliser license in the third year of operation. The details have been shown in Table 3.12 and Table 3.13.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Fertilisers in Bags	Fertilisers in Bags	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Fertilisers in Bags
Utkalika	230	2010		200		200	2440
Sambalpurian						0	0
JAWPCL		500		915		915	1415
Total	230	2510	0	1115	0	1115	3855

Table 3.12: Procurement of fertilisers in Bags by different Producer companies

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Valaue in Rs.	Value in Rs.	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Value in Rs.
Utkalika	84,640	2343205		270800		270800	2,698,645
Sambalpurian						0	0
JAWPCL		667000		781225		781225	1,448,225
Total	84,640	3,010,205	0	1,052,025	0	1,052,025	4,146,870

Table 3.13: Value of the Fertilisers Procured by different Producer Companies in Rupees



Similar to the challenges encountered in seed marketing, both producer companies faced significant obstacles in the fertilizer market, largely due to competitive tactics employed by local fertilizer shops. Many farmers were drawn to these vendors, often swayed by minor price differences - sometimes as little as Rs. 10 per bag. This trend not only affected sales figures but also highlighted a disconnect

between farmers and their producer companies, resulting in diminished ownership and loyalty within the farming community. Consequently, the supply of fertilizer fell short of the estimated demand.

However, in second year of operation, Utkalika viewed this challenge as an opportunity. It began selling fertilizer to other producer companies supported by the Mahashakti Foundation under different projects within the same district, a strategy that JAWPCL could not implement. As a result of these proactive efforts, Utkalika achieved a remarkable turnover of Rs. 23.43 lakh in its second year solely from fertilizer marketing. This accomplishment reflects its role not just as a supplier for its own operations, but also as a vital resource for other producer companies. This collaborative approach not only solidified Utkalika's market position but also ensured that farmers across the region had access to essential fertilizer, thereby enhancing agricultural productivity and fostering community engagement. But unfortunately this strategy did not work in the third year of operation due to lack of proper planning and coordination. Till the end of the project there was even stock of fertilizer with Utkalika.

In its first year of operation, Utkalika was able to provide fertilizer services to only 51 farmers. However, in the second year, it successfully expanded this number more than tenfold, reaching 520 farmers across Ambabhona, Bhatli, Bijepur, and Sohela Blocks of Bargarh district. In comparison, JAWPCL managed to supply DAP to 116 farmers. In third year of operation the number of farmers benefitted from Utkalika was as meagre as 25. However, the number of farmers benefitted from JAWPCL increased almost 90% as detailed in **Table 3.14**. While these figures indicate a positive impact, they could have been even higher.

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Farmers availed	No. of Farmers availed	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	No. of farmers availed
Utkalika	51	520		25		25	596
Sambalpurian						0	0
JAWPCL		116		205		205	321
Total	51	636	0	230	0	230	917

Table 3.14: No of farmers availed the fertiliser services in different Producer Companies

One significant challenge faced by both producer companies was the established relationships that farmers had with existing fertilizer shops, which offered discounted prices and the option to purchase fertilizer on credit. This dynamic impeded Utkalika and JAWPCL from strategically scaling their fertilizer procurement and sales efforts, limiting their overall market penetration and growth potential.

The demand for fertilizer in the operational areas of the project is remarkably high across both districts. If all three producer companies focus solely on inputs like seeds and fertilizer marketing within their respective client bases in the producer groups, they can achieve sustainable growth in the near future.

To capitalize on this opportunity, Utkalika and JAWPCL had adopted an important strategy: they have engaged the producer groups in their areas as agents for marketing seeds and fertilizer. In return, these agents receive 50% of the producer company's margin as incentives. Additionally, agricultural enterprise groups have played a crucial role in promoting the sale of inputs within their respective regions. This approach allowed the producer companies to significantly minimize their risks, although there were instances where Community Resource Persons (CRPs) sold seeds and fertilizers to farmers on credit.

Despite facing challenges, all three producer companies have gained valuable insights from their experiences. They are now preparing to implement refined and innovative strategies for the upcoming year, with a renewed focus on improving their operations and better meeting the needs of the farming community. Each company aims to deliver seeds directly to farmers through their respective enterprise groups and other producer associations, thereby facilitating easier access right at the farmers' doorsteps. This proactive approach not only strengthens relationships with the farming community but also enhances the overall efficiency of input distribution, ultimately contributing to greater agricultural productivity in the region. By fostering collaboration and leveraging local networks, the producer companies are well-positioned to adapt to the evolving needs of farmers and achieve long-term success.

3.7.3 Bio fertiliser

Biofertilizers play a crucial role in the cultivation of both chili and ragi by enhancing soil fertility and promoting sustainable agricultural practices. These natural fertilizers, derived from living organisms, improve nutrient availability and soil health, leading to higher crop yields and better-quality produce. By facilitating nitrogen fixation and phosphorus solubilization, biofertilizers enhance nutrient uptake, which is vital for the healthy growth of these crops. Additionally, they foster beneficial microbial activity in the soil, improving its structure and aeration while enriching it over time. The use of biofertilizers reduces reliance on chemical fertilizers, promoting environmentally friendly farming and ensuring long-term sustainability. Moreover, certain biofertilizers can bolster plants' natural defence against diseases and pests, which is particularly advantageous for crops like chili. Finally, biofertilizers are generally more affordable, lowering input costs for farmers and making cultivation economically viable, especially for smallholders. Overall, incorporating biofertilizers into chili and ragi cultivation not only boosts productivity but also supports sustainable farming practices and environmental conservation.



In light of the above considerations, Mahashakti introduced biofertilizers in the farm field schools to enhance chili production and conducted several training programs focused on their application. Among the three producer companies, Utkalika was proactive in preparing biofertilizers, specifically focusing on biofertilizers, e.g., "*Handi Khat*" a liquid microbial inoculant and *Jibanmrut*. Following their training,

Utkalika successfully produced 240 bottles of Handi Khat on a pilot basis and marketed them to both Sambalpurian and JAWPCL in the second year of operation.

In addition to Utkalika's efforts, JAWPCL also embarked on a pilot project, partnering with a biofertilizer company to acquire 200 bottles of biofertilizer, as detailed in **Table 3.15**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Bottles	No. of bottles	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	No. of bottles
Utkalika	0	240			940	940	1180
Sambalpurian	0	120			545	545	665
JAWPCL	0	320			1250	1250	1570
Total	0	680	0	0	2735	2735	3415

Table 3.15: Number of Bio fertiliser Bottles prepared / procured by the Producer companies

Viewing this initiative as a viable business opportunity, JAWPCL organized several field demonstrations in Jamankira to showcase the benefits of biofertilizers to local farmers. These demonstrations aimed to educate farmers about the advantages of using biofertilizers, thus fostering greater acceptance and adoption of these sustainable practices. This collaborative approach not only enhanced the agricultural landscape in the region but also positioned both Utkalika and JAWPCL as innovative leaders in sustainable farming solutions.

Taking the example from Utkalika other two producer companies also prepared bio fertiliser in the third year of operation. In the third year of operation, by the closure of the project, Utkalika could produce 940 litres of bottles followed by 665 bottles by Sambalpurian and 1570 bottles by JAWPCL as presented in **Table 3.15**

While Utkalika invested a total of Rs.9035 to produce 940 bottles of Handi Khat, both Sambalpurian and JAWPCL invested Rs.5065 and Rs.19,700 to produce 545 bottles and 1250 bottles respectively in the third year of operation as detailed in **Table 3.16**.

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Investment in Rs.	Investment in Rs.	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Investment in Rs.
Utkalika	0	2,500			9035	9,035	11,535
Sambalpurian	0	8,500			5065	5,065	13,565
JAWPCL	0	8,500			11200	11,200	19,700
Total	0	19500	0	0	25300	25300	44800

Table 3.16: Amount invested for preparation / Procurement of bio fertilisers (in Rupees)

Despite this production, none of the producer companies viewed the production of biofertilizers as a sustainable business opportunity. They faced significant challenges, particularly in the collection of raw materials such as cow urine, [insert other materials, e.g., Cow urine, "plant leaves and other raw materials.

These hurdles hindered their ability to scale production and establish a more robust supply chain. Additionally, the lack of consistent sourcing for these essential ingredients not only affected their operational capacity but also limited their potential to tap into a growing market for biofertilizers. Without addressing these challenges, the producer companies were unable to capitalize on the initial interest and demand for their products, ultimately missing out on a promising avenue for revenue generation and sustainable agricultural practices.

3.7.4 Escorting Producer Groups to Agri-Entrepreneurship

From the basics of collaborative farming to the growth of entrepreneurial ventures, Mahashakti Foundation reveals the hidden potential within local communities. Their journey begins with seeds planted in rich soil and leads to the success of agricultural businesses, creating real change and empowerment. The foundation has played a key role in guiding producer groups through this transformation, helping traditional farmers become active agri-entrepreneurs.

This shift involves combining knowledge, resources, and teamwork within the community. By fostering collective efforts and promoting sustainable business practices, the foundation demonstrates a comprehensive approach that goes beyond traditional farming methods. Their initiatives highlight the importance of collaboration in achieving lasting success in agriculture.

In the second year of operation, six producer groups were established across four blocks in two districts, each receiving financial support of Rs. 73,000 to facilitate group-based agricultural entrepreneurship. These groups served as key agents for their respective producer company, actively engaging in diverse business activities such as selling seeds, fertilizers, vermicompost, and goat farming. This initiative empowered the groups by providing them with the necessary resources and training to run their businesses effectively, while also enhancing local agricultural productivity and sustainability.

By acting as intermediaries, these producer groups bridged the gap between the producer company and the local farming community, ensuring that farmers have access to quality agricultural inputs and services. Their involvement in the seed and fertilizer business enabled them to offer essential inputs at competitive prices, crucial for improving crop yields and farm profitability. Additionally, by promoting vermicompost, the groups encourage sustainable farming practices that enhanced soil health and reduce reliance on chemical fertilizers.

The goat farming component not only diversified their income streams but also encouraged livestock rearing among local farmers, contributing to food security and livelihoods. Overall, this initiative fostered a sense of community and collaboration, empowering farmers to take charge of their agricultural enterprises while creating a robust support system that benefits the entire region.

3. 8 Production of Chili

In the first year of operation, 1,845 farmers engaged in chili cultivation. Following participation in comprehensive training programs focused on best practices for chili farming, exposure to successful farming regions, and hands-on experiences at Farm Field Schools, the number of farmers motivated to grow chili surged to an impressive 2,500 in the second year and 3106 in the third year of operation, including those from the initial year.

This remarkable increase can be attributed to several factors. Many farmers, drawn by the immediate benefits of cultivation, primarily adopted green chili farming. However, with the project team's effective motivation and persuasion, a significant portion of these farmers i.e. 2,405 out of the 2,500 in the

second year and 2330 out of 3106 in the third year of operation i.e. upto December 2024 decided to cultivate red chili, ensuring two harvests per season. This trend is illustrated in **Table 3.17** and **Table 3.18**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Farmers	No. of Farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	No. of Farmers
Ambabhona	445	680		554	276	830	1955
Bhatli	340	565		339	226	565	1470
Maneswar	475	270		289	142	431	1176
Jamankira	585	985		854	426	1280	2850
Total	1845	2500	0	2036	1070	3106	7451

Table 3.17: Number of farmers grown green chili across four blocks of Bargarh and Sambalpur districts

The growth in chili farming can be further attributed to effective crop planning and the convenient supply of agricultural inputs delivered directly to the farmers' doorsteps at reasonable prices. These initiatives not only enhanced the farmers' productivity but also fostered a sense of community and collaboration among them, paving the way for sustained agricultural development in the region.

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Farmers	No. of Farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	No. of Farmers
Ambabhona	0	680		505	225	730	1410
Bhatli	0	565		280	175	455	1020
Maneswar	0	175		195	80	275	450
Jamankira	0	985		610	260	870	1855
Total	0	2405	0	1590	740	2330	4735

Table 3.18: No. of farmers grown red chili across four blocks of Bargarh and Sambalpur districts

The role of government initiatives in this transformation was commendable, particularly in the blocks of Maneswar and Jamankira in the Sambalpur district. The government not only provided free seeds to farmers but also offered various incentives to promote chili cultivation. These supportive measures significantly increased the number of farmers engaged in chili production, fostering a more robust agricultural community.



In the second year, the increase in the number of farmers was mirrored by a substantial rise in the area dedicated to chili cultivation. In the first year, a total of 1,075 acres were cultivated with chili across all blocks. This figure grew to an impressive 1,285 acres in the second year, reflecting an approximate 20% increase and in 1335 acres in the third year of operation, as detailed in **Table 3.19**.

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Area in Acres	Area in Acres	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Area in Acres
Ambabhona	250	380		245	125	370	1000
Bhatli	180	270		148	85	233	683
Maneswar	285	175		110	52	162	622
Jamankira	360	460		395	175	570	1390
Total	1075	1285	0	898	437	1335	3695

Table 3.19: Area under chili cultivation across four blocks of Bargarh and Sambalpur districts

However, despite these positive trends and the government's promotional efforts, the expansion of cultivated area in all the three blocks such as Ambabhona, Bhatli and Maneswar encountered significant challenges in comparison to second year of operation, primarily due to water scarcity. While Jamankira experienced substantial increases in chili cultivation.

This discrepancy highlights the need for targeted interventions in water management and irrigation infrastructure in all the blocks to fully capitalize on the government's initiatives. Addressing these challenges is essential to ensure that all farmers, regardless of their geographic location, can benefit from the opportunities presented by chili farming and contribute to the overall growth of the agricultural sector in the region. Enhanced collaboration between farmers, local authorities, and agricultural experts could provide innovative solutions to mitigate water scarcity and support sustainable farming practices, ensuring long-term success for all involved.

This situation underscores the urgent need for innovative solutions to address water limitations in the region. The heightened interest in chili farming has opened opportunities for the installation of drip

irrigation systems, a crucial step toward improving water efficiency and supporting sustainable agricultural practices.

By adopting these modern irrigation technologies, farmers can more effectively manage their water resources, ensuring that crops receive the optimal amount of moisture without wastage. This targeted approach not only enhances crop yields but also promotes sustainability by reducing reliance on water resources and minimizing environmental impact.

Moreover, the implementation of drip irrigation can lead to a shift in agricultural practices, encouraging farmers to explore other high-value crops alongside chili. This diversification could enhance their resilience against market fluctuations and environmental challenges, ultimately fostering a more robust agricultural economy in the region.

Furthermore, training programs on the maintenance and operation of drip irrigation systems can empower farmers with the skills they need to maximize the benefits of this technology. Collaborative efforts between government agencies, agricultural experts, and local farmers will be essential in ensuring successful adoption and long-term viability of these systems. By investing in such innovations, the agricultural community can build a sustainable future, paving the way for continued growth and prosperity in the sector.

The distribution of green and red chili production across the four blocks of Bargarh and Sambalpur districts is presented in **Table 3.20** and **Table 3.21**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Quantum in Quintals	Quantum in Quintals	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Quantum in Quintal
Ambabhona	8,000	14,250		9,359	4,775	14,134	36,384
Bhatli	5,940	10,680		5,698	3,273	8,971	25,591
Maneswar	7,672	5,325		3,586	1,695	5,281	18,278
Jamankira	12,600	19,205		16,116	7,140	23,256	55,061
Total	34,212	49,460	0	34,759	16,883	51,642	135,314

Table 3.20: Quantum of green chili produced across four blocks of Bargarh and Sambalpur districts

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Quantum in Quintals	Quantum in Quintals	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Quantum in Quintal
Ambabhona	0	266		172	88	260	526
Bhatli	0	189		104	60	164	353
Maneswar	0	91		77	36	113	204
Jamankira	0	321		276	122	398	719
Total	0	601	0	457	218	675	1276

Table 3.21: Quantum of Red chili produced across four blocks of Bargarh and Sambalpur districts

In the first year of project operation, a total of 34,212 quintals of green chili were produced. However, during the Kharif season of the second year, production surged to 37,515 quintals, followed by

11,949 quintals harvested in the Rabi season. This resulted in a remarkable total of 49,460 quintals of green chili produced by 2,500 farmers in the second year. In third year of operation this further increased to 51642 quintals of green chili produced by 3106 farmers just in one season.

A closer analysis of production figures reveals significant growth. In the first year, with a total production of 34,212 quintals, the average yield per farmer was approximately 18.60 quintals. By the second year, this average increased to 19.78 quintals per farmer, reflecting improved farming practices and increased farmer engagement. In third year of operation, just in one season the per capital production comes to 16.63 quintals, indeed a good production.

Additionally, while farmers were not initially familiar with commercial red chili production in the first year, they managed to produce an additional 867 quintals of red chili in the second year, achieving an average of 0.36 quintals per farmer. In third year of operation just in one season an average of 0.29 quintals per farmer was produced. This introduction to red chili cultivation indicates a growing diversification in their agricultural practices and a willingness to adopt new crops.

Overall, the increase in production figures not only highlights the success of the training and support provided to farmers but also illustrated the potential for further growth as they continued to embrace innovative farming techniques. The expansion into red chili production marked a promising step towards diversifying income sources and enhancing the resilience of farmers in the region. As the agricultural community continues to develop, these trends suggest a positive trajectory for chili cultivation, both in terms of quantity and economic viability.

This marked a historic achievement for the project, particularly in how it transformed the livelihoods of poor farmers. Traditionally, these farmers would sell green chili immediately after harvest to meet their immediate financial needs. However, thanks to the project's intervention, an impressive 96% of the farmers chose to cultivate red chili, even though the overall production volume was lower in the second year and 75% in the third year of operation. This shift indicates a significant behavioural change among farmers across all blocks in both districts, reflecting a newfound willingness to adopt longer-term strategies for economic stability.



Moreover, it is noteworthy that not a single farmer from the first year of operation discontinued chili cultivation in the second year. While the total number of farmers i.e 2,500 farmers growing chili in the second year exceeded initial expectations, the project views this as a tremendous success when it raised to 3106 farmers in the third year of operation. This consistent engagement demonstrated the effectiveness of the training and support provided, as well as the farmers' commitment to improving their livelihoods through sustainable practices.



The project's influence extends beyond just production numbers; it has fostered a mindset shift among farmers, encouraging them to invest in more profitable crops like red chili instead of relying solely on immediate sales of green chili. This behavioral transformation boded well for the future, suggesting that with continued support and education, these farmers could enhance their resilience and economic well-being in the years to come. Overall, this achievement illustrates the potential for positive change within agricultural communities when they are equipped with the right resources and knowledge.

3.8.1 Productivity Enhancement

Table No. 3.22 provides a clear comparison of chili productivity among the first, second and third year of operation. In the first year, productivity levels varied significantly, ranging from 26.92 quintals per acre in

Block	Upto 2023 Mar	Productivity Enhancement	2023 Apr. 2024 Mar	Productivity Enhancement	2023 Apr. 2024 Mar	Productivity Enhancement
	Quintal per Acre	In Percent	Quintal per Acre	In Percent	Quintal per Acre	In Percent
Ambabhona	32		37.5	17.19	38.2	19.38
Bhatli	33		39.6	19.87	38.5	16.67
Maneswar	26.92		30.4	13.03	32.6	21.10
Jamankira	35		41.75	19.29	40.8	16.57
Total	31.83		38.49	20.94	38.7	21.52

Table 3.22: Productivity enhancement of Chili across four Blocks in Bargarh and Sambalpur districts

Maneswar to 35 quintals per acre in Jamankira. This variation underscores the differing agricultural practices and conditions in these blocks.

In the second year, there was a noticeable improvement in productivity across all blocks. The yield in Maneswar increased to 30.4 quintals per acre, while Bhatli Block in Bargarh district achieved an impressive 39.6 quintals per acre. In the third year the overall production increased to 38.7 quintals per acre in comparison to 38.49 quintals per acre in second year.

The productivity of chili per acre has seen notable increases across different regions, ranging from a modest 13.03% in the Maneswar Block of Sambalpur to a significant 19.87% in the Bhatli Block of Bargarh district in second year of operation. Overall, the project Sampurna achieved an impressive average increase in productivity of 20.945% in second year. In third year of operation in just one season i.e. in kharif, the productivity ranged from 16.57% in Jamankira to 21.10% in Maneswar. Overall, project Sampurna achieved an increase in productivity of 21.52%.

3.9 Production of Millets

Historically, farmers in the region had cultivated various types of millets. However, due to water scarcity and the shift toward mono-crop cultivation, particularly rice, millets were largely abandoned. The situation began to change thanks to a series of awareness programs conducted by the Mahashakti Foundation, including food festivals and road shows. These initiatives gradually motivated farmers to return to millets cultivation.



In Project Sampurna, the focus was on the millets value chain within the Ambabhona and Bhatli Blocks of Bargarh district. Thanks to HDFC Bank, Parivartan, numerous awareness programs organized by the Mahashakti Foundation, 809 farmers in these two blocks participated in millets cultivation during the project's first year.

Building on this momentum, farmers underwent comprehensive training programs that emphasized best practices in millets farming. They also had opportunities for exposure visits to successful farming regions and gained practical experience at Farm Field Schools in Ambabhona and Bhatli. As a result, the number of farmers motivated to cultivate millets surged to an impressive 1,073 in the second

year and , including those from the previous year and 1321 in the third year including those from the first and second year as shown in **Table 3.23**.

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Farmers	No. of Farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	No. of Farmers
Ambabhona	395	515		603		603	1513
Bhatli	414	558		718		718	1690
Total	809	1073		1321	0	1321	3203

Table 3.23: No. of Farmers engaged in Millets Farming across two Blocks of Bargarh

The increase in farmers engaging in millets cultivation can be attributed to several factors: the motivation generated by the project, the supportive framework established by the Millets Mission in the region, and the training workshops provided. Additionally, government incentives from the Government of Odisha, along with the convenient supply of agricultural inputs delivered directly to farmers' doorsteps at reasonable prices by Utkalika Women Agro Producer Company, played a pivotal role in this transformation.

The government's initiatives were commendable. Not only did they provide free seeds to farmers, but they also implemented various incentives aimed at promoting millets cultivation through the Millets Mission. These supportive measures significantly boosted the number of farmers involved in millets production, fostering a more resilient and vibrant agricultural community.

In the second year and third year, the rise in the number of farmers was accompanied by a significant expansion in the area dedicated to millets cultivation. During the first year, farmers cultivated a total of 438 acres with millets across the two blocks. However, this area grew substantially to 615 acres in the second year and 797 acres in the third year indicating an approximate 40% increase in the second year and 82% increase in the third year when compared to the first year of operation and 29.6% increase in third year when compared to that in the second year as illustrated in **Table 3.24**.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Area in Acres	Area in Acres	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Area in Acres
Ambabhona	220	315		395		395	930
Bhatli	218	300		402		402	920
Total	438	615	0	797	0	797	1850

Table 3.24: Area under Millet cultivation in two blocks of Bargarh district in Acres

This notable growth in cultivated acreage not only highlighted the farmers' increasing engagement with millets but also reflected the broader impact of the project on agricultural practices in the region. The expanding land under cultivation signifies a growing recognition of millets as a viable and valuable crop, further contributing to the overall development of the local agricultural landscape.

The distribution of millets production across the two blocks of Bargarh is detailed in **Table 3.25**. In the project's first year, farmers produced a total of 1,525 quintals of ragi. This figure experienced

remarkable growth in the second and third year, when 1,073 farmers collectively harvested an impressive 3,217 quintals of ragi in the second year and 1321 farmers 4,588 quintals of ragi in third year of operation.

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Yield in Quintals	Yield in Quintals	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Yield in Quintals
Ambabhona	657	1417		1975		1975	4049
Bhatli	868	1800		2613		2613	5281
Total	1525	3217	0	4588	0	4588	9330

Table 3.25: Millets production in quintal across two blocks of Bargarh district

This significant increase in ragi production underscored the effectiveness of the training and support provided to farmers. It not only reflected their enhanced skills and knowledge but also highlights the growing commitment to cultivating millets as a sustainable agricultural practice. The rise in production is an example to the positive impact of Project Sampurna on the local farming community.

A closer analysis of the production figures reveals remarkable growth in millets cultivation. In the first year, total production reached 1,525 quintals, resulting in an average yield of approximately 1.88 quintals per farmer. By the second year, this average yield rose significantly to around 3 quintals per farmer and 3.47 quintals per farmer in the third year of operation, and reflecting improved farming practices and heightened farmer engagement.

The increase in production figures not only underscored the success of the training and support provided to farmers but also illustrates the potential for further growth as they continued to adopt innovative farming techniques. Expanding into millets production represents a promising step toward diversifying income sources and enhancing the resilience of farmers in the region. As the agricultural community continues to evolve, these trends suggest a positive trajectory for millets cultivation in terms of both quantity and economic viability.

This development marks a historic achievement for the project, particularly in its impact on the livelihoods of impoverished farmers. Traditionally, these farmers relied on paddy to meet their household consumption needs. However, thanks to the project's interventions, an impressive 39.68% of farmers opted to cultivate ragi in the second year and 42.97% in the third year despite the overall production volume being lower. This shift reflects a significant behavioural change among farmers across both districts, demonstrating a newfound willingness to adopt long-term strategies for economic stability.

Moreover, it is noteworthy that not a single farmer who participated in the first-year discontinued millets cultivation in the second year. The total number of farmers growing millets in the second year, which reached 1,073 in second year and 1321 in third year exceeded initial expectations, marking a tremendous success for the project. This consistent engagement highlights the effectiveness of the training and support provided, as well as the farmers' commitment to improving their livelihoods through sustainable practices.

The project's influence extends beyond mere production numbers; it has fostered a mindset shift among farmers, encouraging them to invest in more profitable crops like millets instead of relying solely on paddy. This transformation bodes well for the future, suggesting that with continued support and education, these farmers can enhance their resilience and economic well-being in the years to come.

Overall, this achievement illustrates the potential for positive change within agricultural communities when equipped with the right resources and knowledge.

3.9.1. Productivity Enhancement of Millets

Table No.3.26 offers a comprehensive comparison of ragi productivity between the first and second years of operation. In the initial year, productivity levels varied considerably, with yields ranging from 3 quintals per acre in Ambabhona to 4 quintals per acre in Bhatli. However, the second year saw a marked improvement in productivity across both blocks. In Ambabhona, the yield rose to 4.5 quintals per acre, while Bhatli Block achieved an impressive 6 quintals per acre. Again, in third year of operation the yield ranged from 5 quintals in Ambabhona to 6.5 quintals in Bhatli.

Block	Upto 2023 Mar	Productivity Enhancement	2023 Apr. 2024 Mar	Productivity Enhancement	2023 Apr. 2024 Dec	Productivity Enhancement
	Quintal per Acre	In Percent	Quintal per Acre	In Percent	Quintal per Acre	In Percent
Ambabhona	2.99		4.5	50.68	5	67
Bhatli	3.98		6	50.69	6.5	63
Total	3.5		5.23	50.26	5.7	63

Table3.26: Yield and Productivity enhancement of Millets across two blocks of Bargarh district

Overall, the productivity of ragi per acre experienced a remarkable enhancement of 50.7% in both Ambabhona and Bhatli in second year and 63% in Bhatli and 67% in Ambabhona. This significant growth contributes to an impressive average increase of 50.26% in productivity in the second year and 63% in productivity in third year across Project Sampurna. These gains not only reflected the effectiveness of the training and resources provided to farmers but also underscore the potential for sustained agricultural development in the region.

The productivity enhancement of both chili and millets can be attributed to several key factors, such as enhanced training programs that educate farmers on best practices, improved access to quality seeds, robust government support, and readily available resources. These elements created a conducive environment for chili cultivation, equipping farmers with the knowledge and tools necessary to optimize their yields.

The collaborative efforts of this initiative benefitted not only individual farmers but also enhanced the broader agricultural landscape of the region. By promoting advanced farming techniques and better resource management, the project supported economic growth and strengthens food security, ultimately benefiting the entire community.

This upward trend in productivity reflected both the positive impact of the project and the farmers' commitment to adopting innovative methods and technologies. As yields continue to rise, there is potential for increased income for farmers, further solidifying the agricultural community in Bargarh and Sambalpur districts. These improvements represent a successful shift toward more efficient and effective farming practices, paving the way for long-term growth and sustainability in chili production.

CHAPTER – IV

Market Linkage

Marketing is a critical component of the services offered by a producer company, playing a vital role in the commodity value chain. Project Sampurna focuses on enhancing the marketing capabilities for three key product categories: inputs marketing, output marketing, and processed agricultural products. While inputs marketing has been previously discussed, this section will delve into the progress of output marketing, particularly highlighting the integration of small and marginal farmers into the value chains for chilies and millets.



Since the project's inception, a Marketing Manager has been appointed to implement systematic interventions aimed at strengthening output marketing. Key initiatives include identifying potential buyers and sellers, as well as organizing buyer-seller meets to facilitate direct market access for farmers. Historically, farmers in the operational area have engaged in marketing practices passed down through generations, often relying on local middlemen.

When the producer company approached these farmers with the opportunity to market their crops, many were initially skeptical. They questioned the efficiency and reliability of the company's staff, reflecting a deep-rooted mistrust of new marketing arrangements. Farmers were accustomed to immediate payment for their yields, expecting the producer company to adopt similar practices as the middlemen they had worked with for years. However, the producer company faced a significant challenge: it lacked the capital necessary to procure crops with instant payment, making it difficult to meet the farmers' expectations.

Additionally, when the company attempted to set a procurement margin of 5 to 7 percent, potential buyers were unwilling to purchase at those rates, citing current market prices for chilies and millets. Interestingly, while marketing millets was relatively straightforward due to government support

and the implementation of a minimum support price, marketing green and red chilies proved to be more complex. This discrepancy led many farmers to continue their relationships with traditional middlemen, opting for familiar processes over untested alternatives.

To address these challenges, project Sampurna developed marketing policies for each of the three producer companies for their adherence. The policies talked about how each producer company will adopt a multi-faceted marketing strategy such as

- **Building Trust:** Establishing transparent communication channels to reassure farmers who happen to be the shareholders also about the company's processes and reliability.
- **Flexible Payment Terms:** Exploring innovative financing solutions, such as partnerships with financial institutions, to offer quicker payment options that align more closely with farmers' needs.
- **Market Education:** Providing farmers with information about market trends and the benefits of direct selling, thereby empowering them to make informed decisions.
- **Strengthening Buyer Relationships:** Engaging with buyers to negotiate better terms that allow the company to remain competitive while ensuring farmers receive fair compensation.
- **Leveraging Government Programs:** Collaborating with government initiatives that support millets to create a stable demand for farmers' products.

While each producer company began addressing the aforementioned points, forming partnerships with financial institutions proved to be a challenging prospect. Given the low profit margins typical in agricultural marketing, it became clear that the companies would struggle to repay loans along with the associated interest.

Although other strategies were effectively implemented, the producer companies made a strategic decision to facilitate marketing through the existing local middlemen with whom farmers were already familiar. By doing so, the companies could initially operate without imposing additional margins, thereby easing the transition for farmers and fostering trust over time. This approach aimed to gradually build confidence between the farmers and the producer companies, ultimately leading to a more robust partnership. This phased approach not only aids in maintaining relationships with local middlemen but also sets the foundation for future collaboration, as the producer companies work towards eventually creating more favorable marketing conditions for farmers.

To support this initiative, each producer company established aggregation centers at the village level, which allowed for efficient collection and distribution of produce. These centers serve as vital hubs for coordinating the marketing process and enhancing communication between farmers and the producer companies. The details of these aggregation centers are outlined in **Table 4.1**.

Table 4.1: No. of Aggregation Points opened across four blocks of Bargarh and Sambalpur districts

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Points	No. of Points	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	No. of Points
Ambabhona	3	3			1	1	7
Bhatli	2	4				0	6
Maneswar	3	3				0	6

Jamankira	1	3			1	1	5
Total	9	13	0	0	2	2	24

In the first year of operation, a total of nine aggregation points were established at the panchayat level across four blocks. Building on this initial success, the second year and third year saw the opening of an additional 13 and 2 aggregation points respectively equipped for grading, cleaning, drying, weighing, and packaging. These aggregation points became central hubs where farmers could bring their produce, often alongside their existing middlemen buyers, to facilitate the sale.

This approach yielded several significant benefits:

- **Accessibility for Marginal Farmers:** By utilizing the aggregation points, marginal farmers could sell their produce to middlemen without the need to travel directly to distant markets. This convenience was particularly advantageous for those with limited resources.
- **Transparency in Pricing:** The aggregation centers promoted transparency regarding the rates for produce. Farmers gained better insight into market prices, which helped them make more informed decisions when selling their crops.
- **Reduced Transportation Costs:** Centralizing the marketing process at aggregation points minimized transportation costs for farmers. This reduction not only increased their overall surplus but also enhanced their profit margins.

4.1 Marketing of Chilies

While all producer companies in the respective blocks adopted this model, it's worth noting that many larger farmers preferred to stick to their traditional methods. These farmers typically had established relationships with middlemen, who would come directly to their farms with laborers to collect the produce. This direct approach often offered convenience and immediate payment, making it more appealing despite the lack of transparency and potentially lower prices.

Nonetheless, the producer companies continued to provide marketing services to all farmers, even without a profit margin. This commitment underscored the companies' dedication to supporting the agricultural community and building trust over time. By fostering these relationships, the producer companies aimed to eventually encourage more farmers, regardless of size, to engage with the aggregation system and benefit from the collective advantages it offered.

In the second year of operation, a total of 2,405 farmers participated in the sale of green and 2230 farmers in sale of red chili across four blocks. Similarly, in the third year of operation 3106 farmers participated in the sale of green chili and 2330 farmers participated in the sale of red chili as presented in **Table 4.2** and **Table 4.3**. The distribution of sales varied significantly among these areas.

Table 4.2 : No. of farmers sold green chili through the aggregation points

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of Farmers	No. of farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	No. of Farmers
Ambabhona	0	680		554	276	830	1510
Bhatli	0	565		339	226	565	1130

Maneswar	0	175		289	142	431	606
Jamankira	0	985		854	426	1280	2265
Total	0	2405	0	2036	1070	3106	5511

Table4.3: No. of farmers sold red chili through the aggregation points

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of farmers	No. of Farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Tota;	Nol of Farmers
Ambabhona		680		505	225	730	1410
Bhatli		565		280	175	455	1020
Maneswar				195	80	275	275
Jamankira		985		610	260	870	1855
Total		2230		1590	740	2330	4560

In second year of operation, in Jamankira, the largest number of farmers i.e.985 successfully sold their green chilies. This was followed by Ambabhona, where 680 farmers participated, and Bhatli, with 565 farmers selling their produce. Maneswar had the lowest participation, with only 175 farmers selling green chilies. The trend was almost same in the third year of operation. In third year in Jamankira 2265 farmers sold green chili followed by 1510 farmers in Ambabhona and 1130 farmers in Bhatli. As usual Maneswar had the lowest participation with 606 farmers in third year of operation.

Notably, in terms of red chilies, not a single farmer in Maneswar sold the crop, while farmers in the other blocks were actively engaged in selling red chilies. In the second year of operation, when 985 farmers participated in selling of red chili followed by 680 farmers in Ambabhona and 565 farmers in Bhatli sold red chili. Though the trend was found same in the third year of operation, the statistics differed. In the third year of operation similarly 1885 farmers in Jamankira sold red chili followed by 1410 farmers in Ambabhona and 1020 farmers in Bhatli, only 275 farmers participated in selling of red chili in Maneswar.

This discrepancy highlights potential barriers in Maneswar, such as market access or lower demand, which may need to be addressed to enhance participation in future seasons.

This disparity in sales of green chili among the blocks highlights several important factors. The higher numbers in Jamankira and Ambabhona may be attributed to stronger local demand, better access to the aggregation points, or more established relationships with middlemen. In contrast, the lower participation in Maneswar could indicate challenges such as market access issues, less awareness of the benefits of the aggregation system, or fewer existing connections with buyers.

Understanding these dynamics is crucial for the producer companies as they seek to enhance their outreach and support services. By identifying the barriers faced by farmers in areas like Maneswar, the companies could tailor their marketing strategies and support initiatives to encourage greater participation in the future, ultimately strengthening the overall market for green chilies across all blocks.

In the first year of operation, although there was production of green chilies, none of the producer companies facilitated marketing for the farmers. However, in the second year, there was a notable improvement: the producer companies successfully facilitated the marketing of a total of 14,259 quintals

of green chillies, representing approximately 28.83% of the overall production of 49,460 quintals in the second year of operation, The remaining 71.17% of the total green chili production, amounting to 34,931 quintals, was sold by farmers straightway from their farm gates. Similarly, in the third year of operation the producer companies successfully sold 13049 quintals of green chillies, representing approximately 25.27% of the overall production of 51642 quintals of green chillies as shown in **Table 4.4**. The remaining 74.73%, amounting to 38,593 quintals was sold by farmers straight way from their farm gates.

This reluctance to engage with the producer companies may stem from a lack of confidence in the new marketing system. Many farmers, accustomed to traditional practices and established relationships with local middlemen, may have been hesitant to trust an unfamiliar entity, even after the initial successes of the producer companies.

Table 4.4: Quantum of Green Chili marketed with the facilitation of Producer Companies

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Quantum in Quintal	Quantum in Quintal	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	in Quiantals
Ambabhona	0	4317		2340	1433	3772	8089
Bhatli	0	3068		1425	982	2406	5474
Maneswar	0	1575		717	339	1056	2631.24
Jamankira	0	5299		4029	1785	5814	11113
Total	0	14259	0	8510	4538	13049	27307.74

However, each producer company made significant contributions to this effort. Utkalika led the way by marketing 6178 quintals in third year of operation contrast to 7,385 quintals of green chillies in second year of operation across the Ambabhona and Bhatli blocks. JAWPCL followed closely, facilitating the sale of 5814 quintals in third year in comparison to 5,399 quintals in the second year in the Jamankira block. Lastly, the Sambalpurian Farmer Producer Company contributed by marketing of 1056 quintals in the third year in comparison to 1,575 quintals in second year in the Maneswar block.

The marketing of red chili followed a similar pattern. A total of 402 quintals of red chillies in third year (in comparison to 131 quintals of red chili in second year, accounting for 21.80% of the total production of 601 quintals of red chili,) accounting for 59.56% was facilitated by the producer companies. This situation highlights a significant contrast within the Maneswar Block, where no red chili was produced or marketed. In contrast, Utkalika and JAWPCL collectively sold 131 quintals of red chili across Ambabhona, Bhatli, and Jamankira Blocks as presented in **Table 4.5**.

Table 4.5: Quantum of Red chili marketed with the facilitation of Producer Companies in quintals

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Quantum in Quintal	Quantum in Quintal	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	in Quiantals
Ambabhona	0	34		52	28	80	114
Bhatli	0	32		31	18	49	81
Maneswar	0	0		23	11	34	34

Jamankira	0	55		82	36	118	173
Total	0	121	0	188	93	281	402

Specifically, Utkalika facilitated the marketing of 195 quintals of red chili in both Ambabhona and Bhatli Blocks. Meanwhile, JAWPCL concentrated its efforts in Jamankira Block, successfully marketing 173 quintals and Sambalpurian as low as 34 quintals in Maneswar Block.

As previously noted, the decision-making of farmers is heavily influenced by their daily livelihood needs. As a result, many farmers preferred to sell green chili immediately after harvest, rather than waiting to store, dry, and sell red chili several months later. This immediate sale aligns more closely with their financial requirements, even though it may limit potential revenue from the dried red chili in the longer term.

The distribution of sales across these companies and blocks underscored the increasing effectiveness of the producer companies in connecting farmers to markets. While the companies operated without any profit margin, their efforts were crucial in establishing a more organized marketing system that benefited the farmers.

This growth in facilitated sales not only highlights the producer companies' commitment to supporting farmers but also sets a positive precedent for future operations. These figures indicate a promising trend towards enhanced marketing support, paving the way for increased farmer engagement and potentially higher income from their produce. Moving forward, the producer companies can build on this momentum by continuing to refine their marketing strategies and expand their reach, ultimately aiming to support even greater quantities of green chilies and other agricultural products.

In the third year of operation, the three producer companies in the project facilitated the marketing of green chilies worth Rs 104,975,735 in contrast to ₹5,70,36,000 in second year of operation. Among them, Utkalika made a significant contribution, selling chilies valued at Rs.52,371,875 in contrast to ₹2,95,40,000 in second year of operation across Ambabhona and Bhatli blocks of Bargarh. JAWPCL followed, marketing chilies worth Rs. 42,437,500 in comparison to ₹21,196,000 in Jamankira block. In contrast, the Sambalpurian Farmer Producer Company reported sales of only Rs.10,166,360 in the third year in comparison to ₹63,00,000 in the second year of operation in Maneswar block, all achieved without any profit margin as indicated in **Table 4.6**.

Table 4.6 :Value of green chili marketed by the Producer companies across different blocks in Rupees

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Value in Rs.	Value in Rs.	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Value in Rs.
Ambabhona	0	17268000		8189125	5730000	13919125	31187125
Bhatli	0	12272000		4985750	3927000	8912750	21184750
Maneswar	0	6300000		2510200	1356160	3866360	10166360
Jamankira	0	21196000		14101500	7140000	21241500	42437500
Total	0	57036000	0	29786575	18153160	47939735	104975735

In the third year of operation, all the producer companies successfully facilitated the marketing of red chilies valued at Rs. 6,310,000 in comparison to ₹20,48,500 by two producer companies in second year of operation. Utkalika made a particularly significant contribution, selling chilies worth Rs. 31, 45,500 in comparison to ₹11,87,000 in second year across the Ambabhona and Bhatli blocks in Bargarh. JAWPCL closely followed, marketing chilies valued at Rs. 26,49,000 in comparison to ₹8,61,000 in second year as presented in **Table 4.7**. Maneswar contributed of just Rs.5,15,550 in selling of red chilli in third year in comparison to nil in second year of operation.

Table 4.7: Value of Red chili marketed by the producer companies across different blocks in Rupees

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Value in Rs.	Value in Rs.	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Value in Rs.
Ambabhona	0	687000		780000	434000	1214000	1901000
Bhatli	0	500500		465000	279000	744000	1244500
Maneswar	0			345000	170500	515500	515500
Jamankira	0	861000		1230000	558000	1788000	2649000
Total	0	2048500		2820000	1441500	4261500	6310000

However, the market faced a challenging situation due to a substantial increase in red chili production from neighboring states, particularly Andhra Pradesh. This oversupply caused prices to plummet from ₹22,000-₹23,000 to as low as ₹15,000-₹16,000 per quintal, falling well below the anticipated price of ₹20,000 per quintal. This drastic decline in prices led to widespread discontent among farmers, many of whom struggled to understand the dynamics of market fluctuations. As a result, some farmers felt discouraged about pursuing red chili cultivation in the future.

In response to these challenges, the project team, along with company staff, initiated efforts to address the situation. They focused on providing farmers with better market insights and explored strategies to stabilize prices, ensuring that farmers felt supported and motivated to continue their cultivation of red chilies.

Whatever might be the case, had a profit margin been included in their pricing strategy, the collective earnings for the producer companies in Project Sampurna could have ranged from 5% to 10%, translating to an estimated profit of ₹52 lakh to Rs. 1 crore from marketing of green chili and Rs. 3 to Rs. 6 lakhs from marketing red chilies. Such earnings would be vital for the sustainability and growth of these companies in their initial stages.

Recognizing the importance of building a sustainable model, all three producer companies developed strategies to foster deeper engagement with farmers. This included employing Community Resource Persons (CRPs) and dedicated staff to strengthen relationships and facilitate more effective marketing. By enhancing communication and support, the companies aimed to encourage farmers to sell their chilies through the producer companies rather than relying solely on traditional middlemen.

This strategic approach not only sought to increase the volume of produce marketed through the companies but also aimed to instill confidence among farmers in the value of engaging with the producer companies. Ultimately, by demonstrating the benefits of collective marketing and ensuring a fairer return

for their efforts, the producer companies could work towards establishing a more sustainable and resilient agricultural framework for all involved.

4.2 Marketing of Millets

Regarding the marketing of millets, there were no significant issues in the third year also like the second year of the Sampurna Project's operation. Farmers were able to sell all the millets they produced without encountering any obstacles. This success meant that the Sampurna Project primarily focused on generating awareness at the field level, rather than actively participating in the marketing of millets, particularly Ragi.

The Government of Odisha has been proactive in promoting millet cultivation in the state, establishing the Millet Mission over the past six years. This initiative aims to enhance millet production and consumption across Odisha. In line with these efforts, the Millet Mission was launched in the operational blocks of the Sampurna Project viz. Bhatli and Ambabhona in the year 2022-2023 and 2023-2024 periods, respectively.

With support from the Government of Odisha and HDFC Bank Parivartan, the Mahashakti Foundation has played a pivotal role in advancing millet cultivation in these two blocks through the producer company "Utkalika." This organization has been instrumental in facilitating the growth of millet farming in Bhatli for the past two years and has expanded its efforts into Ambabhona over the last year.

Awareness campaigns through billboards, Millet **Rath Yatra** (Millet car festivals) are organized to reach a wider demographic and unlock the full potential of millets by educating individuals, communities, and policymakers about their nutritional, environmental, and economic advantages, which have been instrumental in driving positive change in both millet cultivation and dietary habits, leading to healthier and more sustainable food systems in these two blocks. Leveraging popular social media platforms to share visually appealing content about millets, setting up stalls at farmers' markets and pop-up shops, exhibitions, local events to showcase millet products, providing samples and engage with potential customers to educate them about millets, organizing millet festivals and community gatherings where people taste various millet dishes, learn about their origins, and connect with local producers are some of the noble initiatives taken by Mahashakti Foundation to show people how to incorporate millets into their daily meals. In addition to this, collaborating with chefs, nutritionists, restaurants and influencers to endorse millets foods. and Organizing cooking workshops. Moreover, working with food manufacturers to develop millet-based products such as millet flour, snacks, *idly*, *dosa* and ready-to-eat meals and ensuring proper labeling to highlight the millet content and its health benefits.

In the context of marketing millets, the Millets Mission has made significant strides by establishing Millet Mandis in both Bhatli and Ambabhona blocks. These Mandis were instrumental in purchasing millets directly from farmers at a minimum support price (MSP). In the 2022-2023 season, the MSP for millet was set at ₹3,578 per quintal, which increased to ₹3,846 in 2023-2024. The Mandis operated from January to March, serving the villages of Kashipali, Udepali, and Dumelpali in Bhatli Block, as well as Baddarlipali, Bugbugi, and Alekhpur in Ambabhona Block.

As a result of this attractive MSP, farmers eagerly sold all the millets they had produced at the Mandis. Prior to the launch of the Millets Mission, farmers had been forced to sell their produce to private players for significantly lower prices, typically ranging from ₹2,000 to ₹2,500 per quintal. The introduction

of the Mandis not only provided farmers with a fairer price but also encouraged them to cultivate more millets.

In the second year of the initiative, a notable demand for millets emerged for processing purposes. Utkalika, the processing entity, faced challenges in sourcing enough millets locally, as the scarcity in the area became evident. Consequently, Utkalika was compelled to purchase millets at ₹45 per kg from local farmers. However, when the demand surged, Utkalika struggled to meet its processing needs, ultimately resorting to procuring 100 quintals of millets from Koraput, highlighting both the growing demand for millets and the challenges faced by local farmers in keeping up with that demand.

This series of developments underscores the transformative impact of the Millets Mission on local agriculture and the millet supply chain, fostering a more sustainable and equitable market for both farmers and processors.

Overall, promoting millets cultivation in Bargarh district can lead to a more resilient, sustainable, and healthy food system, benefiting both the farming community and the broader population. These have been possible due to the promotion efforts undertaken by Mahashakti Foundation accompanied by adequate support, resources, and infrastructure provided by Millets Mission and HDFC bank Parivartan. The collaborative efforts of the Millet Mission, Mahashakti Foundation, and Utkalika have not only fostered awareness about the nutritional and economic benefits of millets but have also empowered local farmers to increase their production. As a result, these initiatives are contributing to a sustainable agricultural landscape and enhancing food security in the region.

CHAPTER – V

Food Processing

The processing of agricultural products is a crucial component of the agricultural commodity value chain, particularly for integrating small and marginal farmers. Under the auspices of the Mahashakti Foundation, Utkalika successfully established processing and packaging units within its office, utilizing available space to accommodate necessary machinery.

Prior to setting up the dedicated processing unit, Utkalika conducted pilot processing of Ragi powder at an external facility. This initial phase involved not only processing but also packaging and branding the product on an experimental basis to gauge market response. Throughout this process, Utkalika's premium products were well received, praised for their quality and attractive packaging.

Encouraged by positive market feedback, Utkalika decided to scale up its operations for large-scale processing. The organization provided training to members of the producer groups, focusing on processing and packaging techniques, while compensating them for their participation. To further enhance customer trust and ensure compliance with food safety standards, Utkalika obtained an FSSAI license, reinforcing its commitment to quality and safety in food production.

The two remaining producer companies in Sambalpur district have faced challenges in establishing processing units due to insufficient space in their offices. As a result, they have opted to outsource the processing of raw chilies to external facilities.

Unfortunately, in the second year of operation, the marketing efforts for the processed food products struggled to gain traction due to a lack of skills among the marketing staff of Project Sampurna and the producer companies. Recognizing this challenge, in the third year of operation, Mahashakti

addressed the issue by recruiting skilled marketing experts from Rural Management Background. But unfortunately those experts from rural management background could not contribute to the marketing aspects of the project, as was expected.

However, after the chilies are processed, the women farmers in these companies took on the crucial task of packaging the products. This approach not only allowed them to market the final product effectively but also empowered the women by involving them directly in the value chain. Despite the limitations of not having on-site processing capabilities, the collaboration between these producer companies and the women farmers demonstrated resilience and adaptability in their operations. By focusing on packaging and marketing, they were able to maintain quality, while also exploring opportunities for future growth and expansion.

The products quickly gained recognition for their superior quality and attractive packaging, earning appreciation from consumers across various regions. The "Sampurna" brand carved a niche in the market, particularly for its millet and spice offerings, reflecting a growing demand for natural and locally sourced products.

However, despite the promising start, the marketing of these processed foods faced challenges during the project period. The producer companies grappled with a lack of expertise in areas such as brand promotion, market linkages, and supply chain management. These limitations slowed the pace of market expansion, preventing the brand from reaching its full potential. Strengthening these capacities could significantly enhance the visibility and market reach of "Sampurna," paving the way for greater economic empowerment of women farmers and long-term sustainability of the enterprise.

It was estimated that both Utkalika and the other two producer companies could achieve sustainable growth with proper marketing of their offerings. Currently, Utkalika is not only focusing on marketing processed millet powder but is also expanding its product line to include turmeric and red chili. By processing, packaging, and marketing these products, Utkalika aims to enhance its presence in the market and increase revenue, ultimately benefiting the farmers and contributing to the local economy. With targeted marketing strategies and expert support, there is significant potential for these initiatives to thrive.

CHAPTER – VI

Partnerships and Convergence

The convergence of producer companies with government schemes and programs plays a pivotal role in enhancing agricultural productivity and sustainability. Under Project Sampurna, significant emphasis was placed on aligning the efforts of producer companies with relevant government initiatives, particularly in the cultivation of chilies and millets. This alignment was crucial for maximizing the benefits that both farmers and the agricultural ecosystem can derive from available resources and expertise.

6.1 Convergence with Govt. Schemes

To facilitate this convergence, officials from various government departments provided comprehensive technical guidance. This support ranged from selecting suitable blocks for cultivation to developing tailored training programs and Packages of Practices aimed at capacity building for farmers. During the demonstration phase of the project, collaboration with government line departments was particularly pronounced. Staff from the Krishi Vigyan Kendra (KVK), the Department of Agriculture, the Department of Horticulture, and the Millets Mission were actively involved at each of the five stages of the project. Their on-the-spot guidance was invaluable in ensuring that farmers receive practical, real-time assistance tailored to their needs.



The number of farmers who were benefited from this convergence is detailed in **Table 6.1**. Till the closure of the project, a total of 1329 farmers reaped the rewards of this collaborative effort. The highest impact has been observed in Maneswar Block, where 753 farmers benefited over the past three years. This was followed by Jamankira Block, which saw 362 farmers benefiting, while Ambabhona and Bhatli Blocks recorded a comparatively lower figure of 161 farmers and 53 farmers respectively.

Table 6.1: No. of farmers benefitted out of Convergence with Govt. Schemes

BLOCK	2022 APR to	2023 APR. to	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	No. of farmers	No. of Farmers	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total;	Nol of Farmers
Ambabhona	0	161				0	161
Bhatli	0	53				0	53
Maneswar	300	197		256		256	753
Jamankira	0	248		66	48	114	362
Total	300	659	0	322	48	370	1329

The benefits these farmers received included essential resources such as free seeds and saplings, as well as vital infrastructure support like drip irrigation systems, mulching materials, and sun-drying machines. These provisions not only enhanced agricultural productivity but also promoted sustainable farming practices. By improving access to these resources, the convergence of producer companies with government programs significantly empowered farmers, enabled them to increase their yields and improve their livelihoods. This collaborative approach demonstrated the effectiveness of leveraging government support to foster agricultural development in the region.

The monetary value of convergence within the Sampurna project is outlined in **Table 6.2**. In the first year of operation, the total value of convergence in monetary terms amounted to Rs. 55,00,000, exclusively benefiting farmers in Maneswar Block.

Table 6.2: Value of Convergence across blocks in Sampurna Project in Rupees

BLOCK	2022 APR	2023 APR.	2024 APR - 2024 DEC				Till Dec 2024
	2023 MAR	2024 DEC.	1st Qtr	2nd Qtr	3rd Qtr	2024	Grand Total
	Value in Rs.	Value in Rs.	Apr. - Jun 2024	Jul - Sep 2024	Oct - Dec 2023	Total	Value in Rs.
Ambabhona	0	1937758				0	19,37,758
Bhatli	0	421685				0	4,21,685
Maneswar	5500000	496000		4346000		43,46,000	1,03,42,000
Jamankira	0	1384000		528000	384000	9,12,000	22,96,000
Total	5500000	1880000	0	4874000	384000	5258000	12638000

In the second year, this value saw a decrease, totalling Rs.42,39,443. Whatever may be the case, in the second year of operation, Utkalika emerged as the leader in this achievement, contributing Rs.23,59,443 in Ambabhona and Bhatli Block, followed by JAWPCL which recorded Rs.13,84,000 in Jamankira Block, and Sambalpurian with Rs.4,96,000 in Maneswar Block.

In third year of operation, till December 2024, again the convergence value increased to Rs.52,58,000. While there was no convergence in Ambabhona and Bhatli, Maneswar did convergence worth Rs.43,46,000 along followed by Jamankirra Rs.9,12,000.

Overall, Project Sampurna has successfully leveraged a total of Rs. 1,26,38,000 benefits for farmers through various government schemes by the end of the project. Notably, Maneswar Block stood out with the highest contribution of Rs.1,03,42,000 marking a significant accomplishment for the project. This

financial support underscored the effectiveness of the convergence approach in enhancing the livelihoods of farmers and promoting sustainable agricultural practices in the region. The growing monetary benefits reflected the project's positive impact and its potential for further development in the future.

This collaboration not only enhanced the technical capabilities of the farmers but also strengthened the overall agricultural value chain, ensuring that the benefits of government schemes effectively reached the intended beneficiaries. By fostering these partnerships, Project Sampurna aimed to create a more resilient and productive agricultural environment, ultimately contributing to the livelihoods of small and marginal farmers in the region.

6.2 Partnership with Human Venture

Mahashakti Foundation has partnered with Human Ventures Private Limited, based in Mumbai. Human Ventures is an Agri-FinTech company that has developed a unique community credit platform to engage with verified marginal farmers in clusters. This platform empowers farmers to adopt income-generating, farm-based activities by providing credit support along with backward and market linkages.



During the third year of operation, in collaboration with Mahashakti Foundation, Human Ventures initiated cluster-based chili cultivation projects involving marginal farmers in Jamankira block of Sambalpur district. The two organizations aim to onboard over 400 marginal farmers to adopt chili cultivation in 2024-2025. The objective of this partnership is to gather credible farmers in groups at each identified location and assist them in adopting chili crops on their farms by providing credit support, input materials, technical guidance, and forward linkage assistance.

Additionally, they have partnered with Syngenta Seeds Limited to supply high-quality seeds suited to the region's agro-climatic conditions. Agronomists from Syngenta will provide technical guidance from sapling preparation through to harvest. Human Ventures has also teamed up with Sujay Irrigation to offer drip irrigation systems to the farmers. For credit support, Human Ventures has collaborated with the State Bank of India to extend loans to these farmers.

On the ground, Mahashakti Foundation identified 120 farmers willing to adopt chili cultivation with drip irrigation. Out of them 76 farmers submitted loan applications to bank. Out of 76 farmers, 40 applications were rejected for farmer's loan default, 27 farmers got the loan and another 9 applications are pending for sanction. By the end of Sampurna project, 27 acres of land equipped with drip irrigation.

CHAPTER - VII

Capacity Building

During the second year of operation, a comprehensive series of training programs were organized to enhance the skills and knowledge of our participants. These programs were designed to address various aspects of agricultural practices, project management, and financial literacy, ensuring that all stakeholders are well-equipped to meet the challenges they face.

The detailed list of these training programs is provided in the following table, which outlines the topics covered, the target audience, and the key objectives of each session. This structured approach not only facilitates effective learning but also helps in tracking progress and outcomes, ensuring that our efforts are aligned with the goals of the project.

Table 7.1 Details of Training Programame organised in Financial Year 2021 – 2022

Sl. No.	Programme	Date	Venue
	Skill Development Training Programme	15-17/03/2022	Hotel V.D.Palace, Bargarh

Table 7.2 Details of Training Programame organised in Financial Year 2022 – 2023

Sl. No.	Programme	Date	Venue
1	Residential Training Programme	27-28/06/2022	Hotel V.D.Palace, Bargarh
		27-28/08/2022	Hotel Saket, Sambalpur
2	Exposure Visit	29-30/06/2022	Chira Sabuja FPO, Bijepur, Bargarh
		25-29/09/2022	IIMR, Hyderabad
		26-29/10/2022	Chili Cluster, Gunthur, Andhra Pradesh

Table 7.3 Details of Training Programame organised in Financial Year 2023 – 2024

Sl. No.	Programme	Date	Venue
1	Financial Literacy Camp	20-21/04/2023	Tapovan Conference Hall, Bargarh
		11/2023	Sambalpurian FPO, Maneswar
		12/09/23	Community Centre, Khandagiri, BBSR
2	Residential Training Programme	4-6/05/2023	DPRC,Balangir
		4-6/06/2023	Gopalpur, Berhampur

3	Capacity Building Programme (Training Programmes for Staff and Director of FPOs)	05/2023	DPRC, Balangir
		08/2023	
		30/10/2023	Sambadik Bhawan, Jamankira
		29/11/2023	Raisobha, Bhatli
4	Staff Training Programme	23-25/08/2023	Hotel Keshmin, Bargarh
		15-17/09/2023	Hotel V.D.Palace, Bargarh
5	Exposure Visits	2-5/03/202	Bhanger FPO and Bangabhumi FPO, WB
		8-9/12/2023	Millet Shakti CHES(ICAR-IIHR) BBSR Krusha Jivika PCL, Fategarh, Nayagarh
		24-25/02/2024	Trilokeswar FPO, Kalampur and Agrahi Chasi FPO, Golamunda, Kalahandi

Table 7.4 Details of Training Programme organised in Financial Year 2024 – 2025

Sl. No.	Programme	Date	Venue
1	Financial and Digital Literacy Camp	06/2024	
		09/ 2024	Hotel Sheela Tower, Sambalpur
		11/2024	Utkalika FPO Premise, Bargarh
2	Residential Skill Building Training	07/2024	Hotel Tribeni, Balangir
		10/2024	
		12/2024	Hotel V.D.Palace, Bargarh
3	Staff Training	07/2024	Hotel, Tribeni, Balangir
		10/2024	

7.1 Staff Training Programme

The Staff Training Program was a regular initiative within Project Sampurna, designed to impart knowledge and skills in project planning and management. Its objectives included fostering a deeper understanding of the project's deliverables, goals, and implementation strategies, as well as promoting collaboration and convergence in programming.



The training covered a range of topics, including monthly project planning providing insights into the project's evolution and practical examples of value addition for chili and millets. It also focused on the formation and strengthening of Community-Based Organizations (CBOs) as part of the institution-building process, the adoption of regenerative and climate-resilient cropping patterns, and aligning the project with sustainable agricultural practices. Participants explored potential avenues for value addition in chili and millet crops, which created tangible benefits for both farmers and consumers.



Additional topics included the chili and millet value chain, various aspects of the business development plan, and the scope for enterprise development in chili farming. The training highlighted the importance and benefits of cluster farming and marketing approaches, low-cost farming methods, and farm mechanization techniques like drip irrigation and mulching. It also emphasized the significance of market-driven produce and market information, grading and sorting, and effective planning and strategy for agricultural input and output marketing.

7.2 Training Programme for Board of Directors and CRPs

Governance in community-based institutions, particularly within Producer Organizations, faces numerous challenges that require attention. To strengthen internal governance and address these issues, significant efforts are underway to enhance the capacity of the Board of Directors (BoD).

A series of training and capacity-building programs have been organized for the BoD, focusing on various aspects of Producer Company operations and management. These programs were conducted in multiple phases, each lasting two to three days. Key themes included vision building, the roles and responsibilities of BoD members, legal and statutory requirements, governance and management practices, liaison and networking, monitoring and supervision, human resource management, financial management, business plan development, collective marketing strategies, the establishment of Farmers Support Service Centres, crop planning, and demand estimation for agricultural inputs, among others.

Resource persons from various agencies, including the Department of Agriculture, Krishi Vigyan Kendra, and Mahashakti Foundation, played a crucial role in delivering this training. Additionally, the Team Leader and Agricultural Expert from the Sampurna Project contributed their expertise to the sessions.

7.3 Training Program on Leadership Development and Communication

Three training programs on Leadership Development and Communication were organized for staff, the Board of Directors, and Community Resource Persons. The objectives of these programs were to develop leadership qualities, equip participants with tools and methods for implementing project activities, enhance presentation and communication skills, and improve organizational skills for program and meeting management.



Key topics covered included public speaking and presentation skills, subject matter expertise, clear and articulate speaking, effective body language, audience engagement techniques, and time management skills.

7.4 Training Programs on Financial and Digital Literacy

Six training programs were conducted in various locations for farmers, staff, the Board of Directors, and Community Resource Persons (CRPs). The objectives of these training sessions included teaching participants how to conduct secure bank transactions, complete various transaction documents, and use loans from financial institutions responsibly. Emphasis was placed on utilizing loans for productive and income-generating purposes while adhering to repayment schedules to establish a healthy credit history. Additionally, the programs provided an overview of government schemes, including the Pradhan Mantri Jeevan Jyoti Bima Yojana, Pradhan Mantri Jan Dhan Yojana, and Pradhan Mantri Fasal Bima Yojana.

7.5 Training Program on Package of Practices (PoP)

In addition to the previously mentioned programs, several non-budgeted one-day training sessions were conducted on the adoption of the package of practices (PoP) for chili and millet cultivation at various project locations. The objectives were to train members on PoP for chili cultivation, enhance knowledge of organic and chemical-free farming practices, familiarize participants with farm machinery—including drip and mulching systems—and improve understanding of Integrated Pest Management (IPM) and Integrated Nutrient Management (INM).

The training covered critical aspects of crop growth and the importance of organic and climate-resilient agriculture. Topics included vermicompost, HandiKhata, Jeevamruth, Bijaamruth, and waste decomposers. Participants learned about various schemes for promoting drip irrigation and mulching, the promotion and use of Farmer Field Schools (FFS) and Custom Hiring Centers (CHC), the significance of

market-driven produce, shed net use, early healthy seedling production, enterprise-mode agricultural development, and various techniques and methods of IPM and INM.

7.6 Exposure Visits for Project Staff, Directors, CRPs and Progressive Farmers

From the beginning till the closure of the project, three exposure visits were conducted for progressive farmers and members of the Board of Directors. These visits included trips to Chira Sabuja FPO to understand best practices on Millet cultivation, IIMR Hyderabad to expose the participants to Millets, processing, packaging, branding etc., Additionally exposure trips for board of directors of the FPOs and farmers were also organised to show them the Gunthur chili cluster and Prava Chili Provate Limited to expose them on storage, processing, packaging etc. in the second financial year of the Project. Once again in the second year staff, directors of the FPOs were sent exposure to Bhangar Vegetables Farmers Producer Company and Bangabhumi Farmers Producer Company, West Bengal; Krushi Jivika Farmers Producer Company, Fategarh, Nayagarh promoted by Sukumar Dash. Participants also visited the Millet Shakti outlet, CHES in Bhubaneswar, and a millet processing unit developed by WASAN in Bhubaneswar, Odisha, on September 8th and 9th, 2023. Additionally, on February 24th and 25th, exposure visits were made to Trilokeswar FPCL in Kalampur and Agrahi Chasi Producer Company Ltd. in Golamunda, Kalahandi, promoted by Mahashakti Foundation under the CSS project. More than 70 progressive farmers, community mobilizers, and directors participated in these educational trips. Millet Shakti at Bhubaneswar.



The primary objective of these visits was to provide farmers with a contextual learning experience focused on enhancing productivity. Participants explored topics such as off-season vegetable cultivation using shade nets and greenhouses, intercropping techniques, vegetable aggregation, grading and sorting processes, and effective input marketing strategies. The visits also facilitated in-depth discussions about the practical challenges faced by farmers in these areas, particularly concerning packaging and marketing, as well as the solutions implemented to overcome these hurdles.

In addition to agricultural practices, participants engaged with the Board of Directors of the host producer companies, gaining valuable insights into effective governance and management systems. They

also learned about the Management Information Systems employed by these organizations, which are crucial for maintaining operational efficiency and accountability.



Enhanced training equipped participants with the latest knowledge and skills, enabled them to navigate complexities such as market fluctuations, regulatory requirements, and emerging agricultural technologies. Exposure visits provided practical insights into successful practices and innovative solutions employed by leading organizations, fostering a culture of continuous learning and adaptation.



By investing in these educational opportunities, Mahashakti could better support the stakeholders in overcoming current obstacles and achieving long-term success in their agricultural endeavours. This commitment ultimately strengthened the entire value chain, enhancing productivity, profitability, and resilience within the sector.

CHAPTER - VIII

Statutory Compliance

Timely statutory compliance in a producer company is essential for ensuring legal integrity and operational efficiency. It involves adhering to various legal requirements, such as filing annual returns, maintaining proper financial records, and conducting mandatory meetings. By meeting these obligations on time, the company can avoid penalties, enhance its reputation, and build trust among its members. Additionally, timely compliance supports transparency and accountability, which are vital for sustainable growth and governance. Establishing effective internal processes and monitoring systems can help ensure that all statutory requirements are consistently met.

8.1 Audit of the Producer Companies

The audit for the financial year 2023-2024 of all producer companies has been completed. This essential process aimed to ensure transparency, accuracy, and compliance with financial regulations, which were critical for maintaining stakeholder trust and operational integrity.

In addition to the audit, several related activities were completed, including the filing of income tax returns and the submission of required documentation to the Registrar of Companies (ROC). These activities were contingent upon the completion of the audit, highlighting the interconnectedness of financial processes and regulatory compliance.

8.2 Income Tax return

Utkalika successfully filed its income tax return for its inaugural financial year, 2023-2024. As all the producer companies move into the next fiscal year, they are currently focused on completing the audit for the 2024-2025 financial year. Once the audit process is finalized across all producer companies, including Utkalika, they will ensure that the necessary income tax return for this period is filed promptly. Timely filing is crucial for maintaining compliance with tax regulations and ensuring the financial health of the company. All the producer companies are committed to adhering to all statutory requirements and will implement the necessary measures to facilitate this process efficiently.

8.3 GST Filing

The Goods and Services Tax (GST) return filing for each producer company is conducted regularly on a quarterly basis. This systematic approach ensures compliance with tax regulations and helps maintain accurate financial records. By adhering to the quarterly filing schedule, Mahashakti effectively tracks and reports the tax obligations, minimizing the risk of penalties or discrepancies.

Each filing involves a comprehensive review of sales, purchases, and applicable tax rates, which not only ensures compliance but also provides valuable insights into the financial performance of the companies. Regular GST filings are essential for maintaining transparency and accountability, fostering trust among stakeholders, and supporting informed decision-making.

As Mahashakti continues to uphold its commitment to good governance and regulatory compliance in each producer company, it recognizes the importance of staying updated with any changes in GST regulations. This proactive approach enables Mahashakti to adapt processes as needed, ensuring

that all the producer companies remain in good standing and can focus on their core mission of supporting farmers and enhancing agricultural productivity.

8.4 PAS3 Compliance

The PAS3 compliance was completed for Utkalika in the first and second year of operation, ensuring compliance with the necessary regulatory requirements. However, while the data for the third year have been provided to the company secretary, the compliance has yet to be finalized. This delay highlights the need for prompt action to ensure that all documentation is accurately processed and submitted in a timely manner.

As for the other two producer companies, their PAS3 compliance are still pending. It is crucial that both JAWPCL and Sambalpurian expedite this process to meet legal obligations and maintain transparency in their operations. Completing the PAS3 compliance for all companies not only ensures compliance but also enhances our organizational credibility and fosters trust among stakeholders.

Moving forward, Mahashakti will prioritize the completion of these submissions, working closely with the company secretary and relevant team members to ensure that all necessary data is compiled accurately and complied without further delay. This commitment to timely reporting will support our overarching goals of good governance and operational integrity.

8.5 Annual General Body Meetings

On September 30, 2023, the second General Body Meeting of Utkalika was held, while the inaugural General Body Meetings for both the Jamankira Agro Women Producer Company and the Sambalpurian Farmers Producer Company took place on July 13, 2023, and September 24, 2023, respectively. These meetings provided vital platforms for engaging stakeholders, discussing progress, and addressing challenges, thereby promoting a sense of community and shared purpose among members. The third annual General Body Meeting of Utkalika, along with the second General Body Meetings of both the Jamankira Agro Women Producer Company and the Sambalpurian Farmers Producer Company, were pending by the closure of the project following the completion of the audit for the fiscal year 2023-2024.

CHAPTER - IX

Project Impact

Impact assessment of any social development initiative, particularly an agri-based livelihoods promotion project like *Project Sampurna*, is inherently complex and multifaceted. The challenges arise from the phased nature of such projects and the time required for sustainable outcomes to take root.

In *Project Sampurna*, the first year was primarily dedicated to community mobilization, trust-building, and organizing women farmers into cohesive groups. This phase laid the groundwork for subsequent interventions. The second year, along with the initial half of the third year, focused on institution-building and capacity development. Key activities during this period included training sessions, introducing improved agricultural practices, strengthening farmer collectives, and facilitating access to inputs and markets.

As the project neared completion, efforts shifted towards ensuring sustainability by planning for gradual withdrawal and embedding self-reliant structures within the community. However, in initiatives like *Sampurna*, tangible impacts on livelihoods — such as increased income, enhanced productivity, or resilience to market and climate shocks — typically require more time to manifest. Farmers often need multiple cropping cycles to fully integrate new techniques and witness cumulative results. Consequently, assessing impact within the project period itself necessitates a focus on immediate outcomes and behavioural changes rather than long-term economic gains.

Moreover, external factors such as market dynamics, climatic conditions, and policy shifts can influence project outcomes, adding further complexity to impact measurement. In light of this, the immediate assessment of *Project Sampurna* centres around identifying early indicators of change: behavioural shifts among women farmers, adoption of new agricultural practices, strengthened community institutions, and other visible improvements in livelihood patterns.

This chapter probes into these emerging signs of progress, offering insights into how *Project Sampurna* has begun transforming agricultural practices and livelihoods. While these are preliminary outcomes, they serve as critical stepping stones towards long-term change and sustainability.

9.1 Collective Action through Producer Companies:

6,472 women farmers against the target of 7040 have united to establish **three women led sustainable community institutions** i.e. producer companies, creating common legal platforms aimed at strengthening their livelihoods and promoting sustainable agricultural practices. These producer companies served as formal institutions that empower women farmers by providing them with collective bargaining power, better access to markets, and the ability to secure financial support. Through these platforms, women farmers collaborated to adopt improved farming techniques, streamline input procurement, and enhance post-harvest management. Additionally, the producer companies opened up new income-generating opportunities by facilitating value addition, marketing, and direct engagement with buyers. This collective effort not only improved economic outcomes but also fosters a sense of agency and leadership among women, enabling them to play a more active role in decision-making processes within their communities.

9.2 Empowering Women Farmers through Producer Groups:

Unlike Self-Help Groups (SHGs), the women farmers in producer groups operate with a clear, focused agenda aimed at addressing the unique challenges they face in agriculture. These challenges ranged from ensuring timely access to quality inputs such as seeds, fertilizers, and pesticides to acquiring knowledge about advanced farming techniques through training and capacity-building initiatives. The producer groups served as dynamic platforms where women collectively learnt and implemented improved packages of practices, enhancing their productivity and crop quality.

A key distinguishing factor is their active role in streamlining the marketing of their produce through the producer company, enabling them to secure better prices and improved market access. By bypassing intermediaries and negotiating directly with buyers, they enhance their bargaining power and maximize their income. What truly sets these women apart is their sense of ownership and autonomy — they are not just participants but decision-makers. Together, they shape strategies and take collective actions that directly impact their agricultural outcomes. This process has fostered a deep sense of empowerment and self-reliance, transforming these women into leaders and change-makers within their communities, driving sustainable growth and resilience in the agricultural sector.

9.3 Strengthened Leadership and Governance:

The emergence of producer groups and producer companies has significantly contributed to the development of leadership skills among their members. This enhancement is evident in the way these leaders now manage and govern their respective groups and companies, ensuring smooth day-to-day operations. They have taken on responsibilities such as decision-making, resource management, conflict resolution, and strategic planning, demonstrating increased confidence and competence. This strengthened leadership has not only improved organizational efficiency but also fostered a sense of ownership and accountability, driving sustainable growth and resilience within the producer groups and companies.

9.4 Increased Confidence and Advocacy:

Previously, members of the producer groups and producer companies were hesitant and reserved when interacting with government officials. However, over time, they have grown more confident and assertive. Today, they actively engage with agriculture and horticulture officials, articulating their needs and advocating for their rights and entitlements. This shift reflects a deeper understanding of government processes and available schemes, empowering them to seek support, access resources, and voice their concerns effectively. Their ability to navigate institutional frameworks marks a significant step toward self-reliance and proactive participation in decision-making processes that impact their livelihoods.

9.5 Collective action for better inputs access

The formation of **producer groups** was a game-changer for women farmers, enabling them to harness the power of **collective action** to overcome long-standing challenges in agricultural input procurement. Previously, these farmers operated in isolation, often struggling with **limited access to quality seeds, fertilizers, and pesticides** due to high costs, unreliable supply chains, and a lack of bargaining power. However, by coming together under the umbrella of producer groups and companies, they have transformed their approach to input management, creating a more efficient, cost-effective, and organized system.

One of the most significant impacts of this collective action was the development of **capacity for collective assessment of input requirements**. Through regular meetings and discussions, these women farmers now systematically estimate their input needs based on the type of crops grown, landholding sizes, and seasonal demand. This ensured a more **accurate projection of overall demand**, preventing situations of over-purchasing or shortages that previously affected their productivity.

Armed with this consolidated demand, the producer groups through the producer companies engaged in **bulk procurement of agricultural inputs** directly from suppliers. This bulk buying not only secured **high-quality inputs at reasonable rates** but also gave these women the ability to negotiate **better prices** — often lower than what individual farmers would pay in the open market. Additionally, the producer companies established **relationships with trusted suppliers**, ensuring the inputs they procure meet quality standards and arrive on time, which is crucial for timely sowing and crop management.

This streamlined process brought about several **key benefits**:

- **Cost Reduction:** Bulk procurement significantly **lowered input costs** for women farmers, reducing their financial burden and enhancing their profit margins.
- **Timely Access:** The organized structure ensured that inputs like seeds, fertilizers, and pesticides reach the farmers **right when they need them**, minimizing delays that could impact crop cycles.
- **Quality Assurance:** Access to **genuine and certified inputs** reduced the risks associated with counterfeit or low-quality products, leading to improved yields and better crop health.
- **Empowerment Through Collective Bargaining:** Working as a group amplified their **bargaining power**, giving them a stronger voice in negotiations and enabling them to make informed decisions.
- **Knowledge Sharing:** Alongside procurement, these groups became platforms for **exchanging best practices** related to input use, ensuring that farmers optimize their resources and apply inputs effectively.

Ultimately, this shift towards **collective procurement and input management** enhanced productivity and profitability while reinforcing a sense of **cooperation and solidarity** among women farmers. By pooling resources and making decisions collectively, they were not just reducing costs — they built a **resilient support system** that empowered each woman farmer, paving the way for **sustainable agricultural growth and economic self-reliance**.

9.6 Escorting Producer Groups into Community Enterprises:

A key aspect of the project was its strategic focus from the outset on transforming producer groups into community enterprise groups. Out of the 415 women-led producer groups promoted across four blocks in Bargarh and Sambalpur districts, 273 groups became actively engaged in business activities in various capacities.

A significant number of these producer groups operated as agents for the producer company, facilitating the marketing and distribution of seeds, fertilizers, and pesticides. In return, they earned a margin, contributing to their financial sustainability. Additionally, Mahashakti Foundation extended support to 415 producer groups by providing seed capital of ₹73,000 each, enabling them to diversify into agri-allied activities such as goat farming, vermicompost, biofertilizer preparation & sales, and seedling sales.

Before the establishment of formal processing units, the producer groups in Ambabhona played a crucial role in the value chain by supplying processed millets, chilies, and turmeric to the producer company for packaging and further marketing. This arrangement not only generated income but also strengthened their capacity to handle value-added processes.

The emergence of these **273 community enterprises** marks a significant achievement of the project, fostering economic empowerment and social inclusion for women farmers. By enabling women to take ownership of agricultural enterprises, the project has laid the groundwork for long-term community-driven development, promoting resilience and self-sufficiency in the local agricultural economy.

9.7 Empowered Ownership:

In a groundbreaking shift, **1823 women** farmers have become **proud shareholders** in producer companies with **share capital of 21.66 lakhs** and **administrative Fee of 4.38 lakhs** — a milestone that once seemed beyond reach. For generations, these women were confined to roles of unpaid labour in agriculture, with little say in decisions related to farming or household finances. However, through this initiative, they moved beyond traditional boundaries, embracing ownership in producer companies and redefining their identities as **active stakeholders** in a thriving business model.

Becoming a shareholder is more than just acquiring a financial stake; it symbolizes a profound **sense of pride, belonging, and empowerment**. For the first time, these women have a formal role in shaping the future of their enterprises. Their voices are now heard in **general body meetings, strategic discussions, and governance processes**, where they actively contribute to decision-making. Whether it's deciding on crop procurement, negotiating better prices, investing in agri-machinery for custom hiring centers, or exploring new markets, these women shareholders are **driving collective success** through their leadership and vision.

This transformation fostered a **deeper sense of responsibility and accountability** among the women. As shareholders, they recognized that the growth and profitability of the producer company directly impact their personal income and community well-being. This realization sparked a new level of motivation to adopt improved agricultural practices, strengthen market linkages, and collectively steered challenges such as price volatility and climate change.

Moreover, the economic benefits of this ownership are tangible. The producer companies have become vehicles for **better price realization**. Women who were once at the mercy of middlemen now benefit from selling their produce at fair prices, accessing cheaper inputs, and leveraging shared resources like machinery and storage facilities.

Beyond the economic impact, this shift has triggered a **social transformation**. Women, once perceived as mere helpers in agriculture, are now recognized as **business owners and decision-makers**. Their newfound confidence has not only strengthened their roles within their families but also inspired other women in the community to step forward and embrace leadership opportunities. This growing network of empowered women is setting a precedent for **long-term economic self-reliance and community-driven growth**.

In essence, this journey from **passive beneficiaries to active stakeholders** marks a remarkable evolution in the lives of these women farmers. They are no longer just cultivating crops — they are cultivating a future of **collective prosperity, resilience, and empowerment**.

9.8 Led the Way through knowledge sharing

In a remarkable shift from traditional norms, **women farmers are now actively participating** in training programs focused on improved agricultural practices — a space that was previously dominated by their male counterparts. These training sessions, conducted by agricultural experts from **Mahashakti** and the **Agriculture Department**, cover a comprehensive range of topics aimed at enhancing their farming knowledge and skills. From **seed selection and crop planning to integrated pest management (IPM), soil health management, and sustainable cultivation techniques**, the women farmers are gaining hands-on expertise that empowers them to take charge of their agricultural activities. It is noteworthy that all **6,472** women farmers mobilized under the Sampurna project have participated in one or more training programs organized by the Mahashakti Foundation. These training sessions have equipped the farmers with essential knowledge and skills, enhancing their capacity in various aspects of agriculture and allied activities, thereby strengthening their role in the project's overall success.

Earlier, women in these communities primarily worked as **supporting hands** to their husbands, engaging in labour-intensive tasks with little or no involvement in decision-making. Farming decisions — from crop selection to input procurement and market negotiations — were traditionally considered men's domain. However, with consistent exposure to training and knowledge-sharing platforms, these women have begun to **assert themselves as key decision-makers** in their households and communities. They now confidently decide on matters such as **when to sow, how to manage pests organically, and how to optimize resources** for better productivity.

What sets this transformation apart is the **leadership roles** women have begun to embrace. Many have taken initiative in adopting and promoting innovative practices, such as using bio-fertilizers, employing water-efficient irrigation methods, and exploring diversified cropping patterns to reduce risks and increase income.

This shift has not only enhanced agricultural productivity but also **reshaped gender roles** within the community. As women stepped into leadership positions, they built **confidence and financial independence**, which strengthened their contribution to household incomes. The economic empowerment of these women has created ripple effects across families, enabling better education for children and improved household welfare. Furthermore, their growing presence in agricultural decision-making has sparked **a cultural shift towards inclusivity and recognition of women's roles** in farming — inspiring other women in the community to step forward and embrace similar opportunities.

Overall, this newfound agency is not just about improving agricultural practices — it's about **transforming lives and breaking barriers**. The women farmers are now symbols of resilience and empowerment, paving the way for future generations to pursue agriculture as a space of equality, opportunity, and growth.

9.9 Empowerment through Exposure Visits

As part of the project's efforts to build farmers' capacities, women farmers were given the opportunity to participate in **exposure visits to different regions of Odisha, Andhra Pradesh, and West Bengal**. These visits served as eye-opening experiences, enabled them to witness firsthand a variety of **innovative and region-specific agricultural practices**. By observing successful farming models and engaging with experienced farmers, they gained valuable insights into improved techniques for **crop management, soil health, pest control, and post-harvest handling**.

During these visits, the women learned about practices such as **soil testing** to determine nutrient requirements, the use of **organic fertilizers and bio-pesticides** for healthier crops, and techniques like **mulching and drip irrigation** to conserve water and enhance soil moisture retention. They also discovered efficient methods for **crop rotation and intercropping** to improve soil fertility and reduce pest infestations, as well as strategies to boost productivity and market their produce effectively.

Inspired by these experiences, the women farmers **began implementing these learnings** in their own fields, adopting better farming practices that have led to noticeable improvements in crop yields and quality. Importantly, these newfound techniques were not only enhanced agricultural productivity but also sparked a **positive shift in household dynamics**. Traditionally, farming decisions and practices were male-dominated, but as the women applied their new knowledge, their husbands began to recognize their expertise and supported them in implementing these methods. This fostered a more **collaborative approach to farming**, where household members worked together, leveraging each other's strengths and insights to improve outcomes.

Moreover, the women have taken on the role of **knowledge catalysts** within their communities, sharing their learnings with other farmers, thus creating a ripple effect of knowledge dissemination and innovation adoption. This transformation not only boosted productivity but also contributed to a shift in societal norms, where **women's contributions to agriculture are increasingly valued and respected**. Their growing confidence and leadership in adopting and advocating for sustainable farming practices represent a significant step toward gender inclusivity and empowerment in agriculture.

9.10 Crop Diversification

In the past, farmers in the region predominantly focused on cultivating paddy, a crop deeply rooted in traditional practices. However, this heavy reliance on paddy cultivation limited their income potential, as market fluctuations and rising input costs often led to unpredictable returns. Additionally, growing paddy required substantial water resources, making it increasingly unsustainable in areas facing irregular rainfall or water scarcity.

With the initiation of the project, farmers were introduced to the **commercial viability of alternative crops** like chilli and millets. Through targeted awareness campaigns, training sessions, and field demonstrations, they gained a deeper understanding of the multiple benefits these crops offered. Chilli, with its high market demand and price stability, emerged as a lucrative cash crop, while millets, known for their resilience to drought and minimal input requirements, presented a sustainable and nutritious option.

The project played a crucial role in motivating farmers by showcasing successful models of diversification. Farmers were guided through the entire process — from seed selection, soil preparation, and pest management to post-harvest techniques and market linkages. As they witnessed improved yields and better profit margins, interest in these crops steadily grew.

As a result of these efforts, **3106 farmers adopted chili cultivation**, tapping into its high-value market, while **1,323 farmers diversified into millet farming**, embracing its low-risk nature and nutritional benefits. This shift not only diversified their agricultural practices but also **opened new avenues for income generation**, reduced dependency on paddy, and enhanced their resilience to market and climatic uncertainties.

Moreover, this transition laid the groundwork for more **sustainable farming practices** by promoting crop rotation, reducing soil depletion, and mitigating the risks associated with mono-cropping.

The farmers' willingness to embrace change is now paving the way for long-term agricultural growth, ensuring better livelihoods and greater financial security for farming communities in the region.

9.11 Productivity Enhancement through Mulching and Drip

The adoption of **mulching** and **drip irrigation** techniques brought about a transformative shift in agricultural practices, significantly enhancing productivity while promoting sustainability. These practices proved to be highly effective in conserving soil moisture, regulating soil temperature, and optimizing water usage — factors that are crucial for improving crop health and yield, particularly in regions prone to erratic rainfall and water scarcity.

Mulching involves covering the soil surface with organic or inorganic materials such as crop residues, straw, or plastic sheets. This protective layer reduces evaporation, maintains soil moisture for longer periods, and suppresses weed growth, thereby reducing competition for nutrients. Additionally, mulching regulates soil temperature, shielding plants from extreme heat during summer and providing insulation during colder months, creating a more stable environment for crop growth.

Drip irrigation, on the other hand, ensures the precise delivery of water directly to the plant roots through a network of tubes and emitters. This targeted approach minimizes water wastage and reduces runoff, ensuring that every drop is utilized effectively. By providing a consistent moisture supply, drip irrigation not only supports healthier plant growth but also reduces the risk of diseases associated with excessive moisture, such as fungal infections.

Farmers witnessed these benefits firsthand, with noticeable improvements in crop yields and a reduction in input costs, particularly in terms of labour and water usage. As a result, there was a gradual yet promising shift towards embracing these climate-resilient practices. Beyond enhancing productivity, these techniques contributed significantly to **sustainable farming** by conserving water resources, improving soil health, and making agriculture more resilient to the impacts of climate change.

A remarkable achievement under the Sampurna project was the introduction of drip irrigation, which **brought 126 acres of previously unirrigated land under cultivation** across various blocks. Notably, in Maneswar block alone, 71 acres were irrigated through convergence efforts, while in Jamankira block, 35 acres were irrigated through a collaborative initiative involving Human Venture, Mahashakti Foundation, and the State Bank of India, Jamankira Branch. Additionally, the project extended irrigation facilities to 8 acres in Bhatli and 4 acres in Ambabhona, showcasing the project's impactful reach and the potential of such partnerships to drive agricultural transformation.

This transition marked a crucial step towards building a more sustainable agricultural ecosystem, where farmers were better equipped to handle climatic uncertainties while ensuring higher productivity and improved livelihoods. The increasing adoption of these practices reflected a growing awareness of the importance of resource efficiency and long-term environmental stewardship in farming communities.

9.12 Adoption of Improved Practices

Through this project, farmers gained in-depth knowledge of the Package of Practices (PoP) for chilli and millet cultivation, equipping them with essential skills to improve their agricultural practices. The training covered every stage of the cultivation process, ensuring a comprehensive understanding of key techniques that contribute to better crop management and higher productivity.

Farmers learned the importance of **soil testing** to assess nutrient levels and select appropriate fertilizers, enabling them to maintain soil health and optimize crop growth. The practice of **nursery raising** helped them ensure healthier seedlings, leading to stronger plants and better yields. Additionally, they adopted advanced **soil and water management** techniques, such as mulching and drip irrigation, to enhance moisture retention and improve water-use efficiency, particularly in drought-prone areas.

The project also emphasized **Integrated Nutrient Management (INM)**, encouraging farmers to balance organic and inorganic fertilizers to maintain long-term soil fertility while boosting crop yields. To tackle pest and disease challenges, farmers were trained in **Integrated Pest Management (IPM)**, which promoted the use of biological controls, crop rotation, and pest-resistant varieties, reducing dependency on chemical pesticides and minimizing environmental impact.

At the harvesting stage, farmers adopted techniques to determine the right time for picking crops, ensuring maximum yield and quality. Post-harvest practices like proper drying, grading, and storage were also introduced to minimize losses and preserve the quality of the produce, enhancing its market value.

By adopting these improved practices, farmers experienced a noticeable increase in **productivity i.e 21.57% in chili and 63% in millets**, with significantly better yields compared to previous years. The project records 1,35,314 quintals of green chilies and 1276 quintals of red chili during the three-year project period. Beyond boosting output, this holistic approach optimized resource use and promoted sustainable farming practices, contributing to long-term agricultural resilience. The improved techniques not only enhanced crop performance but also led to increased incomes, creating a positive ripple effect across farming communities and reinforcing the importance of knowledge-driven agriculture.

9.13 Practical Learning through Farm Field Schools:

The introduction of **15 farm field schools** has played a crucial role in enhancing the skills and knowledge of farmers by providing hands-on, field-based learning experiences. These schools served as open-air classrooms (3606 one day training) where farmers directly observed and practice improved agricultural techniques under real-world conditions. By experimenting with new methods and receiving immediate feedback, they gained practical insights into crop management, soil health, pest control, and efficient resource utilization. Applying these learnings in their own fields led to noticeable improvements in productivity, crop quality, and resilience to environmental challenges. Moreover, the peer-to-peer learning environment fostered a sense of collaboration and continuous knowledge-sharing among farmers, contributing to long-term agricultural development.

9.14 Improved Access to Quality Seedlings:

The establishment of greenhouses in various areas significantly enhanced access to high-quality seedlings for the producer groups and producer companies. These greenhouses provided a controlled environment that ensures optimal growing conditions, resulting in healthier, more robust seedlings. By adopting this method, farmers now plant superior seedlings that have a higher survival rate, improved resistance to pests and diseases, and better yield potential. Additionally, the availability of locally grown quality seedlings (**7 lakh chili and moringa seedlings**) reduced dependency on external sources, lowering costs and ensuring timely access. This initiative not only strengthened the foundation for improved crop productivity but also promoted the adoption of advanced agricultural practices among the farming community.

9.15 Empowerment through Mechanization:

Previously, farming activities in the region were carried out manually, placing a significant physical burden on farmers, especially women. Tasks such as tilling the land, sowing seeds, and spraying pesticides were labour-intensive and time-consuming, making agricultural work extremely strenuous. One of the major challenges was the lack of financial resources to invest in mechanization, preventing farmers from accessing equipment that could ease their workload and improve efficiency.

The establishment of Custom Hiring Centres (CHCs) within each producer company has transformed this scenario. These centres provide women farmers with access to a range of agricultural machinery — such as tractors, power tillers, seed drills, and sprayers — at affordable rental rates. This has not only reduced the cost of farming operations but has also significantly minimized the drudgery faced by women, easing physical strain and saving valuable time. The availability of modern equipment has enhanced productivity, improved timeliness in agricultural activities, and allowed women farmers to focus on other income-generating activities. Moreover, the CHCs have empowered women by making mechanization more accessible, fostering a sense of independence and resilience in their agricultural practices.

9.16 Adoption of Chemical-Free Farming Practices:

The introduction of chemical-free farming practices was a key objective of the project from its inception. However, shifting farmers away from their long-standing reliance on chemical fertilizers and pesticides posed a significant challenge, especially given their focus on maximizing chili yields. Despite numerous training sessions conducted by Mahashakti on the preparation and application of natural inputs like *Handikhath* and *Jeevamrut* etc. along with the initial free distribution of these inputs to farmers and their subsequent sale through producer companies — the adoption rate remained low for chili cultivation.

In contrast, the revival of millet cultivation in the region created a unique opportunity to promote chemical-free practices. Farmers were more receptive to growing millets without chemicals, as the crop itself was being reintroduced with a focus on sustainable practices. As a result, 1,321 farmers adopted chemical-free techniques in millet cultivation across 797 acres of land in Bargarh district. This success highlights the potential for promoting eco-friendly farming through crops that align with traditional practices and local ecological conditions.

9.17 Unlocking Higher Income Potential: Promoting Red Chili Cultivation

Farmers have begun to realize that selling dry red chilli offers significantly higher income compared to selling green chilli, primarily due to the greater market demand and better price stability of the dried variety. The drying process not only enhances the shelf life of the produce but also reduces post-harvest losses, making it a more viable option for long-term storage and transport. Additionally, dry red chilli fetches a premium price in both domestic and international markets, where it is widely used as a spice, in value-added products, and for industrial purposes such as oleoresin extraction.

Although 2330 farmers have adopted this practice so far, there is growing interest in shifting towards red chili cultivation and processing. The potential for increased profitability is encouraging farmers to explore techniques for drying, storing, and marketing their produce more effectively. This shift represents a positive step towards income diversification and value addition at the farm level. As more farmers adopt this practice, they are likely to benefit from collective marketing efforts through producer

groups and access to better market linkages, further enhancing their economic resilience and opening up new opportunities in the value chain.

9.18 Enhancing Economic Resilience: Promoting Millets Cultivation

Through a series of targeted awareness programs, farmers in Bargarh district gained a deeper understanding of the multiple benefits of millet cultivation, both from a nutritional and economic perspective. These initiatives emphasized the high nutritional value of millets, showcasing their role in improving food security and addressing malnutrition.

In addition to the nutritional aspects, the programs highlighted the economic advantages of millet farming. Millets are highly resilient to drought and require minimal inputs, making them particularly well-suited to the region's climatic conditions. Farmers discovered that cultivating millets not only reduces production costs but also offers greater climate resilience, ensuring more stable yields even under adverse weather conditions. Moreover, the rising market demand for millet-based products, driven by increasing health consciousness and government promotion, presented a new income-generating opportunity.

As a result of these awareness efforts, 1321 farmers showed a growing interest in adopting millet cultivation. They now recognize its potential to enhance household nutrition while providing a reliable source of income. This shift is contributing to a more diversified agricultural landscape, strengthening both food security and economic resilience in the district.

9.19 Enhanced Access to Government Schemes:

The project played a pivotal role in enhancing access to various government schemes, unlocking benefits worth ₹1.26 crores — with more than ₹1 crore mobilized in Maneswar Block alone. Through effective convergence, producer groups and producer companies were able to tap into a range of resources and support mechanisms that had previously been beyond their reach. This integration simplified the process of availing government assistance, encompassing financial aid, input subsidies, capacity-building initiatives, and infrastructure development.

A remarkable achievement under this initiative was the plantation of 13,800 mango and litchi trees across 300 acres of previously uncultivated land in Maneswar. This milestone was made possible through strategic convergence with the Horticulture Department of Sambalpur, coupled with the dedicated networking and coordination efforts of the project staff. Additionally, farmers benefited from the free distribution of chili seeds, vegetable seeds, and seedlings, further enhancing agricultural productivity.

A total of 1,329 women farmers successfully leveraged multiple government schemes, significantly boosting their agricultural practices and overall livelihoods. Beyond facilitating access to these resources, the project empowered farmers with the knowledge and confidence to steer bureaucratic processes, bridging the gap between the community and government institutions. This holistic approach not only strengthened local agricultural practices but also laid a foundation for sustained community engagement with government support systems.

9.20 Direct Farm Gate Sales

The facilitation provided by the producer company has transformed the way farmers sold their produce (10.5 crores chili and 61.1 lakh millets), enabling direct farm gate sales and eliminating the need for intermediaries. Previously, farmers had to rely on middlemen or travel long distances to sell their crops at

local markets, incurring high transportation costs and often settling for lower prices due to limited bargaining power.

With the producer company streamlining the process, farmers can now sell their produce directly from their farms. This not only reduced transportation expenses but also saved considerable time and effort, allowing them to focus more on farm activities and other income-generating opportunities. Furthermore, by cutting out intermediaries, farmers are able to secure a better profit margin, as they retain a larger share of the market price.

The direct sales model empowered farmers with greater control over pricing negotiations, ensuring more transparency and fairness in transactions. As a result, the overall income of 4,427 women farmers out of the 6,472 mobilized in the project has improved, and they have gained a deeper understanding of market dynamics. Although precise data on income enhancement is not yet available, insights from 3,106 farmers who cultivated chili and 1,321 farmers who grew millets revealed an estimated income increase of 30% to 50% in chili production and 50% to 80% in millet production. This boost can be attributed not only to productivity enhancement, higher volume of yield and higher market prices but also to the benefits of reduced production costs and savings on transportation expenses during marketing.

A systematic survey conducted in the future could provide a more accurate measure of income enhancement. Nevertheless, this shift has strengthened farmers' confidence, encouraged collective marketing through producer groups, and paved the way for more sustainable agricultural practices by creating a reliable and profitable sales channel right at their doorstep. The gradual rise in income has been a key factor in the year-on-year increase in the number of farmers opting to grow chili and millets, signalling a positive trend toward long-term agricultural transformation.

There are several noteworthy examples of farmers reinvesting their increased income into enhancing their agricultural practices and overall livelihoods. Many have adopted advanced techniques such as mulching and drip irrigation, expanded the area under chili and millet cultivation, and invested in small agricultural implements like sprayers. These strategic investments not only boost productivity but also make farming more efficient and sustainable.

Moreover, the positive ripple effects of this income growth extend beyond the fields. Farmers are gradually improving their quality of life — channeling funds towards their children's education, creating household assets, and strengthening their economic resilience. Over the next one to two years, these reinvestments are expected to yield even greater benefits, with further income enhancement and a more profound impact on farmers' lifestyles, education opportunities for their children, and long-term asset creation.

The direct sales model also empowered farmers with greater control over pricing negotiations, ensuring more transparency and fairness in transactions. As a result, their overall income of 4427 women farmers has improved out of 6472 mobilised in the project, and they've gained a deeper understanding of market dynamics. Though the real data on income enhancement is not available, still 3106 farmers who have grown chilli and 1321 who had grown millets revealed that their income has enhanced roughly by 30% to 50% in chili production and 50% to 80% in millet production including the benefits of reduction in production cost and saving the transportation cost during marketing. A systematic survey on this sometime later may provide the exact degree of income enhancement. This shift strengthened farmers' confidence, encouraged collective marketing through producer groups, and paved the way for more sustainable agricultural practices by creating a reliable and profitable sales channel right at their doorstep.

9.21 Brand Development:

The establishment of a processing unit in Ambabhona marked a significant milestone for Utkalika Producer Company, enabling the processing of ragi, chili, and turmeric. To effectively market these products, Mahashakti developed a dedicated brand called “**Sampurna**”, under which these processed foods were sold.

The products quickly gained recognition for their superior quality and attractive packaging, earning appreciation from consumers across various regions. The "Sampurna" brand carved a niche in the market, particularly for its millet and spice offerings, reflecting a growing demand for natural and locally sourced products.

However, despite the promising start, the marketing of these processed foods faced challenges during the project period. The producer company grappled with a lack of expertise in areas such as brand promotion, market linkages, and supply chain management. These limitations slowed the pace of market expansion, preventing the brand from reaching its full potential. Strengthening these capacities could significantly enhance the visibility and market reach of "Sampurna," paving the way for greater economic empowerment of women farmers and long-term sustainability of the enterprise.

9.23 Creation of Social Capital:

Since the launch of Project Mahashakti, a dedicated cadre of Community Resource Persons (CRPs) has been identified and trained in each block to serve as the vital link between farmers, producer groups, and the producer company. These CRPs have played a pivotal role in facilitating various activities crucial for strengthening the agricultural ecosystem.

Their responsibilities extend across several key areas:

- **Group Formation and Institutional Development:** Acting as catalysts for forming producer groups and mobilizing community participation.
- **Financial Inclusion:** Assisting in opening bank accounts and facilitating financial literacy among farmers.
- **Agricultural Planning and Support:** Conducting input demand estimation, supporting crop planning, and ensuring timely input delivery to farmers and groups.
- **Capacity Building and Extension Services:** Providing on-the-spot guidance to farmers on the adoption of Package of Practices (PoP), promoting Farmers’ Field Schools (FFS), and facilitating access to Custom Hiring Centres (CHCs) and aggregation points.
- **Market Linkages and Value Chain Support:** Aiding in the aggregation and marketing of produce, ensuring better market access and improved returns for farmers.

One of the most significant impacts of the project is the sustainability of this social capital. Even after the project’s formal completion, these CRPs remain embedded in their communities, continuing to offer guidance and support to women farmers. Their ongoing presence ensures that the knowledge, networks, and practices established during the project will persist, contributing to the long-term improvement of farmers’ livelihoods.

9.24. Sampurna: A Learning Centre for NGOs and FPOs

The Sampurna Project, implemented by Mahashakti Foundation with support from HDFC Bank Parivartan, has become more than just a service provider — it has emerged as a learning hub for other NGOs and Farmer Producer Organizations (FPOs) across the state. The Farmer Field Schools (FFSs), Custom Hiring Centres, and Greenhouses established under this initiative have not only benefited local women and farmers but also provided valuable learning opportunities for organizations seeking to enhance agricultural productivity and sustainability.

Exposure visits have been organized for FPOs promoted under NABARD's CBBO project, HDFC Bank's partner organizations, and other NGOs in the state. These visits offer insights into best practices in production enhancement, input and output marketing, and the long-term sustainability of FPOs.

Recognizing the growing interest from various organizations, Mahashakti Foundation has developed the "Exposure Trip" as a structured product, creating a new avenue for revenue generation. This initiative enables FPOs and NGOs to learn directly from the successful models implemented under the Sampurna Project while contributing to the project's financial sustainability.

CHAPTER - X

Conclusion

The consolidation of individual farmers' needs within a Producer Company served as a powerful mechanism to streamline resource utilization and negotiate favorable terms, ensuring that farmers acquire quality inputs at competitive prices. The impact of Producer Groups extended beyond resource management to the marketing sphere, where their collective strength transformed the agricultural landscape. By aggregating produce and strategically marketing crops, these groups achieved a level of influence that far exceeded individual efforts. Through their unified endeavors, they steered market dynamics, established direct connections with buyers, and enhanced the visibility of their collective produce.



Information dissemination played a pivotal role in advancing agricultural progress, and each Producer Group provides a dynamic platform for this exchange. Beyond economic prosperity, these groups worked diligently to establish Farmers' Producer Companies, fostering social cohesion and enhancing individual well-being.

In recognizing the pressing need to bridge existing divides in agricultural development, Mahashakti Foundation made it a moral imperative to integrate small and marginal women farmers into the agricultural landscape. By connecting these farmers to the chili and millets value chains, the Foundation addressed multifaceted challenges while empowering women through increased participation.

This integration process involved providing women farmers with vital resources, knowledge, and market linkages. Through targeted initiatives, Mahashakti Foundation enhanced the productivity and sustainability of chili and millet farming practices, placing a strong emphasis on building the capacity of these farmers. As they became active participants in these value chains, they gained a sense of agency and empowerment, contributing to their economic independence.

To broaden outreach and maximize the potential of millets, Mahashakti Foundation conducted awareness campaigns utilizing billboards to educate a diverse audience about the nutritional, environmental, and economic benefits of millets. These campaigns were instrumental in establishing healthier and more sustainable food systems in Bargarh district, Odisha.

Using popular social media platforms, Mahashakti Foundation shared engaging content about millets and actively participates in farmers' markets, pop-up shops, exhibitions, and local events. By showcasing millet products, distributing samples, and engaging with potential customers, the Foundation promoted awareness and acceptance of millets within the community. Additionally, millet festivals and community gatherings provided opportunities for individuals to taste various millet dishes, learn about their origins, and connected with local producers. Collaborations with chefs, nutritionists, and influencers further amplified the message, while cooking workshops and partnerships with food manufacturers facilitated the development of a diverse range of millet-based products.



These multifaceted initiatives not only rose awareness but also benefitted millet farmers by facilitating the sale of their produce through the Producer Company. Mahashakti Foundation's concerted efforts were pivotal in promoting the integration of millets into daily meals, fostering sustainability, and supporting local economies.

A significant initiative in promoting millet consumption was a strategic partnership with a tiffin center in Bargarh. This collaboration introduced a varied menu featuring millet-based dishes, such as Ragi Idly and Ragi Chakuli, with plans to expand the menu based on customer feedback. The kitchen staff undergone specialized training in preparing these dishes and understanding the health benefits of millets, ensuring quality and taste consistency.



This initiative was warmly embraced by the local community, as evidenced by the growing popularity of millet-based offerings. Mahashakti Foundation intended to replicate and expand similar initiatives in other regions, with events like International Millet Day contributing to increased awareness and acceptance.

Moreover, a partnership with a local bakery to produce Ragi cookies enhanced the appeal of millet-based foods in the region, providing a delicious and accessible way for the community to incorporate nutritious millets into their daily diets.

Mahashakti Foundation's visionary approach aimed to produce a diverse range of millet products that cater to both common and elite consumers, garnering appreciation from stakeholders. The Indian Institute of Millets Research's has committed to assist in establishing an advanced processing unit and collaborating on product diversification, innovative packaging, and branding strategies. This partnership promises to elevate the millet industry in Bargarh, delivering far-reaching benefits for the local economy and the broader community.

In summary, Mahashakti Foundation's holistic strategy not only empowered farmers but also promoted sustainable agricultural practices, enhances nutritional awareness, and strengthens local economies. Through these efforts, the Foundation is paving the way for a brighter, more equitable future in agriculture.

IMPORTANT NEWS PAPER CLIPPINGS

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ବୁଦ୍ଧାସ୍ତରୀୟ କୃଷକ ସଚେତନତା ଶିବିର

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ଯୋଗର ଦିଅଯାଇଛି । ଏହାବାର ଖର୍ଚ୍ଚ ବହୁପ୍ରକାରର କମିବା ସହିତ ଚାଷୀ ଜେମିକାଳ ରହିତ ପରିଚରିବା ଖାଜୁଳିକୁ ଯୋଗାଇବା ସହ ବେଶ୍ ବୁଲ ପଇସା ଉପାର୍ଜି କରିପାରୁଛନ୍ତି । ତେବେ ନିର୍ଦ୍ଦେଶରେ ୧୦ ଜଣ ମହିଳା ଓ ପୁରୁଷ ଚାଷୀ ଏହାକୁ ପରିଚାଳି କରିଛନ୍ତି । ଖୋର୍ଦ୍ଧା ଜିଲ୍ଲାର ଚାକପଦରସ୍ଥିତ ଜଣ୍ଡା ଉପପରି କେନ୍ଦ୍ରରୁ ଟ୍ରେକିଙ୍ଗ ହାଣ୍ଡିଖଟ, ଘନ ଜାବାମୂର, ଘନ ବିଜାମୂର, ନିମାସ୍ତ୍ର ଇତ୍ୟାଦିର ପ୍ରସ୍ତୁତି ପ୍ରଣାଳୀ ବେଶ୍‌କ୍ଷମ ସହିତ ଏହାର ଉପଯୋଗ ଓ ଉତ୍ପାଦନାରେ ବିଶେଷର ଅବଦାନ ହୋଇଛି । ମହାଶ୍ୱେ ପାଟରସ୍ଥିତସର ପରିଚାଳନା ନିର୍ଦ୍ଦେଶକ ଶ୍ରୀମତୀ ବିଶାଳା ଉପାଧ୍ୟାୟ, ନିର୍ଦ୍ଦେଶକ ଅନୁମ୍ଳା ମହାନ୍ତିଙ୍କ ଚତୁର୍ଦ୍ଧାଧ୍ୟାନରେ କାର୍ଯ୍ୟକ୍ରମ ପରିଚାଳିତ ହୋଇଥିଲା । ବିଭିନ୍ନପ୍ରକାର କମ୍ପାନୀ ବୋର୍ଡର ମୁଖ୍ୟ କାର୍ଯ୍ୟ ନିର୍ବାହୀ ମହାବୀର ସାହୁ, ବୋଲାନାଥ ପାଧ୍ୟାନ, ଇକ୍ଷରପତି ସାହୁ, କ୍ଷିତିପତି ପାଧ୍ୟାନ ପ୍ରମୁଖ ସହଯୋଗ କରିଥିଲେ ।

