IMAPCT ASSESSMENT STUDY REPORT OF CSR PROJECT OF



Conducted by: CRUX MANAGEMENT SERVICES P LTD



March 2025

IMAPCT ASSESSMENT STUDY REPORT OF CSR PROJECT OF BHEL

"Impact Assessment of BHEL Corporate Social Responsibility (CSR) Project Titled " MARKET (Motivating AgRarian Communities for Kandhamal)." for the welfare of Tribal community in Odisha"

Executed for 2020 - 2023

An Initiative of BHARAT HEAVY ELECTRICALS LIMITED
HEAVY PLATES AND VESSELS PLANT, VISAKHAPATNAM

CONDUCTED BY

CRUX MANAGEMENT SERVICES P LTD

March 2025

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ACKNOWLEDGEMENTS

At the outset, we would like to thank BHEL for granting us this project.

We express our gratitude to Shri C Gowri Shankar, GM and Shri SC Jha, Chairman (CSR Committee) and his team for the support since beginning till the completion of this study.

We thank them for coordinating the study with our team.

We congratulate the Programme Managers and the Programme Officer for conducting this study efficiently. We thank them for diligently completing the data collection by visiting the field and conducting meetings with all stakeholders of the projects. We would also like to thank the local team members who worked for data collection.

WE sincerely thank the inputs shares by volunteers / staff members and also to all the beneficiaries and community members for lending their valuable time and sharing ideas and inputs in improving the project and its sustainability.

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LIST OF ABBREVIATIONS

CSR Corporate Social Responsibility

BHEL Bharat Heavy Electrical Limited

PSU Public Sector Undertaking

DPE Department of Public Enterprises

NGO Non-Governmental Organization

BPL Below Poverty Line

MoU Memorandum of understanding

PGs Producer Groups

SDG Sustainable Development Goal

EXECUTIVE SUMMARY REPORT

This report evaluates the progress and impact of a project aimed at enhancing agricultural productivity, improving livestock management, and fostering financial inclusion among marginalized groups. The project's primary focus has been to improve access to financial services, agricultural inputs, and infrastructure such as irrigation systems.

Key Findings:

1. Participation of Marginalized Groups:

The project has seen positive involvement from farmers but has struggled to fully engage marginalized groups, particularly women, lower-income farmers, and those from socially disadvantaged communities. Awareness campaigns and targeted outreach are essential to ensuring broader participation.

2. Sustainability of Interventions:

The introduction of irrigation infrastructure has improved productivity, but there is a lack of sufficient training and local ownership to ensure its long-term maintenance. Similarly, farmer organizations and PGs require ongoing capacity building to remain viable post-project.

3. Market Linkages and Income Generation:

Farmers have had limited access to larger markets and value-added agricultural products. Despite the formation of PGs, there is a need to strengthen market linkages, training on agro-processing, and access to profitable markets.

4. Financial Inclusion:

While PGs have improved access to financial services, many farmers still lack access to credit, especially marginalized groups. Financial literacy and access to tailored loan products remain key challenges.

5. Monitoring and Evaluation (M&E):

The M&E system needs improvement to capture granular data, especially on marginalized groups, and ensure timely adjustments to project interventions. Regular feedback mechanisms are required to address the evolving needs of beneficiaries.

ASSESSMENT ON REESI MODEL ((Relevance, Efficiency, Effectiveness, Sustainability, and Impact)

1. Relevance

The relevance of the project is determined by how well it aligns with the needs and priorities of the target population.

- o In Balliguda, K. Nuagaon, and Phulbani, over 60% of participants expressed interest in the formation of Producer Groups (PGs) and Farmer Producer Organizations (FPOs), citing the need for better market access, group-based activities, and collective bargaining power.
- Financial Services and Livestock Support:
- 90% of respondents highlighted the importance of access to financial literacy training and support, particularly in terms of gaining access to loans, subsidies, and markets.
- Additionally, 80% of respondents emphasized the necessity of livestock services (e.g., veterinary services, breed improvement), which are essential for boosting their income.

Thus we can conclude that he project directly addresses the most pressing needs of the community. Its activities align with local livelihood activities (agriculture and livestock), market access needs, and financial services, ensuring its high relevance.

2. Efficiency

- 50% of respondents in K. Nuagaon and Phulbani reported a 50% or more improvement in livestock productivity, as a result of the introduction of veterinary services and improved livestock breeds.
- the improved irrigation infrastructure funded by the project.
- Formation of PGs:
- o In K. Nuagaon, 85% of respondents stated that the formation of PGs allowed for better group farming practices and easier access to financial and market services.
- Financial literacy training provided to over 70% of farmers helped 45% of respondents' access loans or subsidies.

The project efficiently utilized its resources, with significant improvements in productivity and financial inclusion. The use of infrastructure, training, and services has clearly translated into measurable improvements.

3. Effectiveness

o 40% of respondents in K. Nuagaon reported that their income improved by more than 30%, primarily through improved livestock productivity and crop yield.

- The average crop yield in Balliguda increased by 22% after irrigation infrastructure was introduced.
- Over 60% of participants from Phulbani and K. Nuagaon successfully obtained loans or subsidies as a result of financial literacy programs.
- 70% of PG members in all blocks noted improvements in market access due to the formation of FPOs.
- 80% of respondents indicated satisfaction with livestock services provided under the project, while 75% felt their knowledge of sustainable farming practices had increased.

The project effectively achieved its goals, with measurable increases in productivity, access to finance, and improved market linkages. The outcomes are in line with the project's objectives.

4. Sustainability

Assessment:

Sustainability looks at whether the benefits of the project can continue beyond the funding period.

- 85% of FPO members in Balliguda believed that their FPOs would continue
 to function effectively due to the ongoing community-led management and self-sustaining
 practices.
- o 60% of respondents in Phulbani felt that the irrigation infrastructure would need external support for maintenance beyond the project's lifespan. However, 75% of respondents in Balliguda believed that the PGs would be able to manage maintenance collectively through pooled resources.
- 50% of respondents in K. Nuagaon were able to access financial services from local banks and cooperatives after the project ended, suggesting ongoing access to financial systems.

The project has created solid foundations for sustainability through community involvement, but certain aspects like infrastructure maintenance and continued external support for marginalized groups may need further attention to ensure long-term sustainability.

5. Impact

Assessment:

Impact refers to the long-term changes brought about by the project, especially in terms of social and economic improvements.

- 40% of participants in K. Nuagaon and Balliguda reported increased household income, with the average increase being 30% due to better agricultural practices, livestock services, and market linkages.
- Improved Social Capital:
- The formation of PGs and FPOs led to greater community cohesion, with 75% of respondents in Phulbani stating that these organizations provided essential support for both economic and social activities.

The long-term economic stability of households is supported by over 60% of respondents in Balliguda, K. Nuagaon, and Phulbani who reported a positive outlook for their economic future based on the skills and resources gained through the project.

The project has had a significant positive impact on the target population's economic and social well-being, leading to sustained improvements in income, market access, and social capital.

Overall REESI Assessment

- Relevance: High (The project addresses the core livelihood needs of the community, particularly in agriculture and livestock).
- Efficiency: Medium (Resources have been used effectively to bring about meaningful improvements in productivity, financial literacy, and market access).
- Effectiveness: Medium (The project met its objectives, with substantial increases in productivity and access to financial services).
- Uniqueness: Medium (The project met its objectives, and was moderately unique with substantial increases in productivity and access to financial services)
- Sustainability: Moderate to High (Community-based organizations are likely to maintain operations, but infrastructure may require external support for long-term sustainability).
- Impact: Medium (Long-term improvements in household income, social capital, and economic stability).

Project Detail	s -Thema	tic Areas, SI	OH alignm	ent And Imp	act as	sessm	ent on	REESI r	nodel	
	PROJE	CT DETAILS			Param	eters -(Rated o	n High , N	Nedium	Low)
Project	Thematic area as per CSR policy	Location	Thrust areas	SDG alignment	Relevance	Efficiency	Effectiveness	Uniqueness	Impact	sustainability
MARKET (Motivating AgRarianCommunities for Kandhamal)." for the welfare of Tribal community in Odisha	Inclusive India	Kandhamal	Inclusive India	SDG 1: No Poverty,SDG 5: Gender Equality, SDG 8: Decent Work and Economic Growth	High	Mdm	Mdm	Mdm	High	Mdm

Recommendations:

- 1. Increase Inclusivity and Ensure Full Participation of Marginalized Groups:
- Awareness Campaigns: Implement targeted campaigns using local media and community meetings in multiple languages to increase awareness among marginalized groups.
- Social Mobilization: Train community leaders and mobilizes to address social and cultural barriers that prevent marginalized groups from joining PGs.
- Financial Support: Introduce micro-loans and grants designed specifically for marginalized farmers to enable them to participate in PGs and invest in productivityenhancing inputs.
- 2. Strengthen Sustainability of Project Interventions:
- Irrigation Infrastructure Maintenance: Establish community-led irrigation committees and train local farmers in maintaining irrigation systems.
- Farmer Organization Capacity Building: Develop a curriculum for training PG leaders in financial management, organizational development, and leadership skills to ensure sustainability.
- Financial Linkages: Facilitate stronger connections between PGs and financial institutions to improve credit access for smallholder farmers.
- 3. Improve Monitoring and Evaluation (M&E):
- Granular Monitoring System: Introduce an M&E framework that tracks gender,
 socio-economic status, and agricultural performance at an individual level to identify gaps
 and adjust interventions accordingly.
- Feedback Mechanisms: Develop accessible platforms (mobile surveys, community meetings) for beneficiaries to provide regular feedback on project activities, ensuring responsive adjustments.
- 4. Enhance Market Linkages and Income Generation:
- Market Access Training: Conduct training sessions on market trends, pricing, and packaging to help farmer's access higher-value markets.
- Agro-Processing and Value Addition: Establish small agro-processing units and provide training on value-added products like jams, dried fruits, and dairy to increase farmers' income from agricultural products.
- 5. Foster Long-Term Knowledge Transfer:

- Local Expertise Building: Invest in train-the-trainer programs to create local experts in agricultural practices, financial management, and community organizing.
- Research and Development: Partner with agricultural research institutions to explore innovative, climate-resilient farming techniques and share these insights with farmers.
- 6. Effective Communication of Project Impact:
- BHEL's Role: Strengthen awareness of BHEL's involvement and the project's impact through regular community meetings, newsletters, and social media channels to increase transparency and engagement.
- 7. Prepare for Exit Strategy and Post-Project Continuity:
- Exit Strategy: Develop a comprehensive exit strategy that involves local government authorities and farmer organizations taking over key responsibilities such as financial management, infrastructure maintenance, and training.
- 8. BHEL Employees' Participation in the CSR Process

As the employee participation is very low, it is recommended that the same is addressed. By engaging in CSR, employees align with BHEL's core values of integrity, excellence, and commitment. This strengthens employee loyalty and helps amplify the company's values both inside and outside the organization. The participation of BHEL employees in CSR is crucial for the success of the company's social initiatives.

Actionable Next Steps:

- Launch targeted awareness campaigns and recruit local community leaders for outreach.
- 2. Develop **training modules** on irrigation system maintenance and organizational management for PG leaders.
- 3. Strengthen **partnerships with microfinance institutions** and facilitate easier access to credit for marginalized farmers.
- 4. Organize **market access workshops** for PGs and introduce agro-processing units in selected areas.
- 5. **Review and refine** the M&E system to ensure more granular data collection on marginalized groups.

By executing these next steps, the project will lay the foundation for long-term impact, ensuring inclusive participation and sustainable development for all involved.

CHAPTER 1: INTRODUCTION

The Need for CSR and the CSR Scenario in India: Legal Obligations and Landscape

Corporate Social Responsibility (CSR) refers to a company's commitment to contribute to sustainable economic development, while improving the quality of life of the workforce, their families, the local community, and society at large. In India, CSR has become a pivotal part of corporate strategy, not only for the betterment of society but also for fostering goodwill and improving the overall sustainability of business operations.

Need for CSR in India

India, a rapidly developing country, faces significant challenges in terms of poverty, inequality, environmental degradation, and socio-economic disparities. CSR is a crucial tool for addressing these issues, especially in rural areas where the majority of the population still struggles with access to basic necessities like education, healthcare, and sanitation. The need for CSR arises from the following key factors:

Addressing Social Inequality: Despite India's economic growth, vast portions of its population, particularly in rural and underserved urban areas, continue to face poverty, limited access to healthcare, and educational challenges. CSR initiatives can play a significant role in mitigating these issues by focusing on education, healthcare, and skill development, ultimately improving the lives of marginalized sections of society.

Environmental Sustainability: India's rapid industrialization has led to critical environmental issues such as pollution, water scarcity, and deforestation. CSR can be an avenue for businesses to mitigate environmental damage by implementing green practices, supporting clean energy, water conservation, and environmental education, aligning with SDG 13 (Climate Action).

Economic Development: CSR initiatives have a crucial role in promoting sustainable livelihoods and creating job opportunities, especially in rural areas. The implementation of agricultural training programs, entrepreneurship development, and skill-building can significantly boost local economies, providing support for SDG 8 (Decent Work and Economic Growth).

Business Sustainability and Reputation: It is well established globally that CSR enhances a company's reputation, building trust with customers, investors, and local communities. A company that contributes to social well-being through CSR efforts often enjoys better market positioning, stakeholder engagement, and operational longevity.

CSR in India: The Legal Framework and Obligations

DPE guideline and CSR

The Department of Public Enterprises (DPE) under Ministry of Heavy Industries & Public Enterprises has introduced the CSR Guidelines in March, 2010 for the Central Public Sector Enterprises (CPSEs) to commit themselves to the concept and practical implementation of Corporate Social responsibility. The revised guidelines of DPE (effective from 1st April 2013) pertaining to CSR looks deeper into the matter of Sustainability and Corporate Social Responsibility. Under these guidelines, the CSR interventions are required to be thoroughly and scientifically researched and on this basis the intervention programmes have to be formulated and implemented.

India's new Companies Act 2013 (Companies Act) has introduced several new provisions which change the face of Indian corporate business Companies Act 2013 (Companies Act) has introduced several new provisions which change the face of Indian corporate business. One of such new provisions is Corporate Social Responsibility (CSR). The concept of CSR rests on the ideology of give and take. Companies take resources in the form of raw materials, human resources etc from the society. By performing the task of CSR activities, the companies are giving something back to the society.

Ministry of Corporate Affairs has recently notified Section 135 and Schedule VII of the Companies Act as well as the provisions of the Companies (Corporate Social Responsibility Policy) Rules, 2014 (CRS Rules) which has come into effect from 1 April 2014.

India has made significant strides in ensuring that corporations contribute to social and environmental causes. The most notable of these efforts is the Companies Act of 2013, which introduced a mandatory CSR provision, making India the first country globally to do so. This law not only mandates CSR expenditure but also lays down the framework for how businesses must approach social responsibility.

Key Provisions of the CSR Act (Companies Act, 2013)

Mandatory CSR Spending:

Section 135 of the Companies Act, 2013 requires certain companies to spend at least 2% of their average net profit of the last three years on CSR activities.

CSR Committee:

Companies falling under the above-mentioned criteria are required to establish a CSR Committee. The committee should consist of at least three directors, with at least one being an independent director.

This committee is responsible for formulating the CSR policy and overseeing the execution of CSR programs.

CSR Policy:

Companies must have a CSR policy that outlines the activities they plan to focus on and how the funds will be allocated.

The CSR policy must include specific goals related to social and environmental sustainability, and companies are required to ensure that the funds are directed towards activities specified under Schedule VII of the Companies Act. These activities include:

- Eradicating hunger, poverty, and malnutrition.
- Promoting education and employment.
- Environmental sustainability.
- Gender equality and empowering women.
- Protecting national heritage, culture, and art.

Companies must disclose their CSR activities in their Annual Report, detailing the amount spent, the areas of investment, and the outcomes or impact achieved. Focus Areas as Per Schedule VII: The companies are encouraged to focus on the following CSR activities, which have been listed in Schedule VII of the Companies Act, 2013:

- Promoting education, including special education and vocational training.
- Promoting gender equality and empowering women.
- Improving healthcare, including preventive health care and sanitation.
- Environmental sustainability and protection of natural resources.
- Rural development projects, especially in economically backward regions.
- Disaster management and support for relief efforts.

Importance of Implementation and Impact Assessment: The law also stresses the importance of not just spending funds, but ensuring that CSR activities have a measurable impact. Businesses are encouraged to monitor and assess the results of their CSR initiatives to make sure that they are contributing to the intended societal development goals.

The introduction of the CSR provisions under the Companies Act, 2013 has been a pioneering step in promoting corporate accountability and responsibility in India. By mandating that certain companies contribute to social causes, India has positioned itself as a leader in enforcing CSR. The Act has catalyzed a shift in the corporate mindset, encouraging businesses to play an active role in societal development, particularly in areas such as health, education, environmental sustainability, and rural development.

CRUX RESEARCH INITIATIVES

Crux has mandated itself and has a vision to provide services in CSR space and thus to conduct several activities related to capacity building, mindset changing, empowerment of women and children, health awareness and preventive measures. Crux partners with various organizations both public sector and private sector and provides solutions in CSR studies including baseline surveys, for impact assessment, CSR audit and CSR planning.

BHEL and CSR POLICY

BHEL is India's largest engineering and manufacturing enterprise in the energy and infrastructure sectors. Established in 1964, we are a leading power equipment manufacturer globally and one of the earliest and leading contributors towards building an Aatma nirbhar Bharat, serve customers with a comprehensive portfolio of products, systems and services in the areas of power-thermal, hydro, gas, nuclear & solar PV; transmission; transportation; defence& aerospace; oil & gas and new areas like BESS and EV chargers.

Right from developing country's power generation capacity to creating multiple capabilities in country's core industrial & strategic sectors, BHEL is deeply aligned to the vision of a self-reliant India. Consistent expenditure of more than 2.5% of its turnover on R&D and innovation; establishment of world-class manufacturing assets, development and absorption of new technologies; and creating sustainable business solutions and initiatives in skilling youth, promoting health & hygiene, education, cleanliness and environment protection, stand a testimony to our commitment to contribute not just to our business interests, but also to society at large.

BHEL's growth has been synchronous with achieving self-sufficiency in the indigenous manufacturing of heavy electrical equipment. Out of the available 35,000 MW per annum capacity for power plant equipment manufacturing in the country, BHEL's greatest strength is its highly skilled and committed workforce of around 42,200 employees that have been the cornerstone of BHEL's journey ensuring success

BHEL CSR Policy

BHEL, a global engineering enterprise providing solutions for a better tomorrow, is committed towards holistic welfare of the society by undertaking CSR activities within the ambit of Schedule-VII of the Companies Act, 2013, as amended from time to time. However, thrust areas for CSR activities will be:

- Inclusive India: Mitigation of hunger and poverty through livelihood promotion/ augmenting income generation, Imparting vocational Skills;
- Healthy India: Promoting health care including preventive health care and sports;
- Clean India: Sanitation and making available Safe Drinking Water, Cleaning and preserving the Rivers, Clean surroundings; toilets in schools specially for girls;
- Educated India: Promoting education with thrust on informal education to reduce dropouts at primary school level, value education, digital education;

- Responsible India: Women Empowerment, Setting up old age homes, day care centre and such other facilities for senior citizens, Rural Development Projects and Slum Development Projects;
- Green India: Ensuring environmental sustainability with emphasis on projects based on Solar Energy;
- Heritage India: Protection of national heritage, art and culture;

In the above thrust areas priority will be given to under privileged, neglected and weaker sections of the society. The company shall give preference to the local areas for spending at least 75 % of the amount earmarked for CSR activities. The remaining amount may be utilised beyond local areas. However, contribution made to the Central Government Schemes, where defining the area as well as the scope is not possible for the company will be excluded while arriving 75:25 ratio.

It is desirable that CSR initiatives should be taken up in project mode, to the extent possible. However, it shall exclude any contribution made to the Central Government Schemes. Periodic review of this policy shall be done to ensure its continued suitability, adequacy and efficacy.

BHEL CSR POLICY, 2022

Genesis for BHEL CSR Spending: MARKET(MotivatingAgRarian Communities for Kandhamal)at Kandhamal District, Odisha

The BHEL (MARKET) project aim to address key livelihood challenges faced by tribal communities residing in the remote areas of Kandhamal District, Odisha. The project focuses on the economic upliftment of 10,000 small and marginal women farmers through the promotion of sustainable and contextually relevant livelihood models. The initiative targets enhancing agricultural productivity, improving access to markets, and building durable livelihood assets that ensure long-term sustainability.

To foster market-led growth, the project adopted the Agriculture Production Cluster (APC) approach and develops three market-oriented, intensive farming clusters covering the 10,000 targeted families.

Beneficiaries and Demographics

The primary beneficiaries of the project include small and marginal women farmers from Scheduled Tribes (ST), Scheduled Castes (SC), Other Backward Classes (OBC), and minority communities.

The BHEL (MARKET) Project aims to address the livelihood challenges of marginalized tribal communities in Kandhamal District, Odisha, one of the most underdeveloped regions in the state. With its remote location, low agricultural productivity, and high poverty rates, Kandhamal presents unique challenges for its tribal population, particularly small and marginal women farmers. This project focuses on empowering these farmers through sustainable agricultural practices, improving market access, and fostering long-term economic growth.

The project was conceived to tackle the specific challenges faced by tribal women in Kandhamal, including limited resources, poor infrastructure, and limited market access. By directly working with 10,000 women farmers, BHEL aims to promote sustainable livelihoods and significantly improve their economic conditions, helping lift them above the poverty line.

Logic for CSR Spending:

1. Empowerment of Women Farmers:

Focusing on women, who play a critical role in agriculture but face systemic barriers, the project aims to create a multiplier effect on families and communities by enhancing women's economic participation.

2. Improving Agricultural Practices and Market Access:

The Agriculture Production Cluster (APC) approach will establish three market-oriented farming clusters, improving productivity and providing direct access to markets, ensuring sustainable income generation.

3. Creating Durable Livelihood Assets:

By fostering convergence with government departments, the project will create longlasting livelihood assets that support farmers beyond the project's lifecycle.

4. Poverty Alleviation and Income Enhancement:

The project aims to increase the income of 10,000 families to Rs 80,000 or more annually, helping them rise above the poverty line and contribute to the region's broader economic growth.

Strategic Alignment with BHEL's CSR Goals:

This initiative aligns with BHEL's commitment to inclusive growth and socio-economic development in underserved areas, focusing on women's empowerment, market-driven agriculture, and long-term poverty alleviation. The project represents BHEL's investment in the sustainable development of Kandhamal, improving livelihoods and transforming the economic landscape for tribal communities.

The BHEL (MARKET) project, was implemented by Pradhan, has made notable strides in enhancing the livelihoods of small and marginal women farmers in Kandhamal District. By adopting the APC approach, promoting sustainable agricultural practices, and facilitating market linkages, the project has improved the economic conditions of 10,000 families. With a focus on training, collectivization, and financial literacy, the project is helping these communities move towards sustainable economic growth and poverty alleviation.

Project Overview

Project Scope:

MARKET (Motivating AgRarian Communities for Kandhamal)." for the welfare of Tribal community in Odisha

- 1. Location of the project site :Kandhamal District of Odisha
- 2. Approved value of the project :131.90 Lakhs
- 3. Actual expenditure: 122.81 Lakhs
- 4. Planned date of start: 23/10/2020 Actual date of Start: 23/10/2020
- 5. Planned date of completion: 22/10/2023 Actual date of completion: 22/03/2024
- 6. Implementing Agency: PRADAN Professional Assistance for Development Action, New Delhi
- 7. Beneficiaries 10000 small and marginal farmers through adoption of APC approach in Kandhamal District of Odisha".

CHAPTER 2: METHODOLOGY

Research Design

A research design is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems. The plan is the complete scheme or programme of the research. It includes an outline of what the investigator will do from writing the hypotheses and their operational implications to the final analysis of data.

Descriptive study designs can help you show whether your programme is operating as planned, provide you with feedback about the services you offer, determine whether your programme is producing the types of outputs and outcomes you want, and help clarify program processes, goals and objectives. This is an ideal design for an evaluation study where the context is known to the researcher and the research questions need further description to evaluate the programme.

Thus, a Descriptive study design was used with Quantitative method to collect information from the beneficiaries and Qualitative method to gain insights in the workings of the implementing partners and BHEL officials. The quantitative descriptive design is concerned with describing the characteristics of a particular group, with description of certain facts concerning that group.

Quantitative Method was used as is normally done in a Descriptive study design. This helped best to establish the incidence, extent and magnitude of the programme. There was an attempt to seek information about the programme to evaluate its planning, implementation and outcomes. There was no attempt to theorize the data to explain the phenomena. Findings are generalized based on the response of the sample.

Research Questions

The questions are a guiding beacon for a research study and the reason to find answers. These questions further help to define the objectives of the study.

- 1. What were the objectives of the programme?
- 2. Were the objectives in line with the needs assessed in the baseline survey?
- 3. What were the intended outcomes?
- 4. Have the outcomes been met in the implementation?

- 5. What are the benefits to the target population?
- 6. What is the extent of effectiveness of implementation of the programme?

The analysis and design followed the basic essence of impact assessment On the following aspects (REESI)

Relevance

- Did the overall goal match needs of the project area?
- Did the project's baseline data correctly address needs of the area?

Efficiency

- What outputs were achieved and whether they were according to the plan?
- Was the implementation schedule as planned?
- Was the project cost within planned limit?
- Was the fund utilization prudent?

Effectiveness & Uniqueness

- Did the outputs help achieve the goal?
- Did the project have any unique feature?
- Comparing the inputs to the extent of goals achieved, can project implementation be considered to be effective?
- Can the project be replicated?

Impact

- What were the various tangible and intangible?
- Positive and negative impacts (Socio=economic, Environment, Policy, Technology, Awareness)
- On different stakeholders of the project?

Sustainability

- Would the impacts created by the project sustain?
- Considering the present course of project, is the project sustainable?

• If not, what modifications and corrections need to be done with project execution methodology?

Research Objectives

- To assess if project objectives were in line with the desired output
- To evaluate if benefits reached the target population
- To assess the effectiveness of the programme in terms of the changes

Data collection

Data collection is a vital part of research to bring the facts and validate them. For The present study the methods and tools used to collect information from different stakeholders of all the programmes.

Tools of the Study:

- Questionnaire for beneficiaries of each project
- Interview Schedule with BHEL officials
- Interview Schedule with Implementing partners of each project

Objectives	Sources	Tools
To assess if project objectives were in line with the needs of baseline survey	BHELImplementing agency	 Secondary Data like Project Proposal, MoU with partners Interview Schedule withBHEL Interview Schedule with
To evaluate if benefits reached the target population	Beneficiaries Site visit (for infrastructure)	 Questionnaires for beneficiaries
To assess the effectiveness of the programme in terms of the changes	Beneficiaries Implementing agency BHEL	 Questionnaires for beneficiaries Interview Schedule with BHEL Interview Schedule with Implementing agency Observation notes of researcher

Sources of Data

The research team focused and collected only primary data from the field. They had interviews with the beneficiaries and got their views to understand the impact of the programme. To get a more holistic view, they interviewed the implementing agencies to understand the implementation, strengths and challenges. Questionnaires consisting of majorly close-ended questions focused on the information and experiences of the beneficiaries were prepared respectively. Interview schedule for the officials of implementing agencies was prepared which comprised of open ended questions.

Sampling criteria

Sampling is simply stated as selecting a portion of the population, in the research area, which will be a representation of the whole population. The usual goal in sampling is to produce a *representative sample* (i.e., a sample that is similar to the population on all characteristics, except that it includes fewer people because it is a sample rather than the complete population). Simple random sampling was used in order to select the samples. A simple random sample is meant to be an unbiased representation of a group. It is the most basic sampling procedure to draw the sample.

Research Process Adopted and Fieldwork Methodology by the CRUX Team

The research process for the CSR impact assessment was meticulously designed to ensure comprehensive data collection, accurate evaluation, and meaningful insights into the impact of the CSR project on women farmers from Balliguda, K. Nuagaon, and Phulbani. The CRUX team, with their experience in community-driven research, followed a structured and participatory approach to capture inputs effectively from the beneficiaries.

1. Research Design and Approach

The research process was guided by the need to assess the socio-economic impact of the CSR interventions on marginalized women farmers. The CRUX team employed a mixed-methods approach, combining quantitative data from structured questionnaires and qualitative insights from interviews and group discussions.

2. Detailed Questionnaire Design

The questionnaire was designed to capture comprehensive inputs on various facets of the CSR intervention. It was tailored to ensure that key indicators were assessed systematically. The CRUX team worked closely with field experts, agricultural extension officers, and local women leaders to craft a questionnaire that was culturally sensitive, relevant, and aligned with the project's objectives.

Key sections of the questionnaire included:

- Demographics and Basic Information:
- Gender, age group, and household size.
- Farm size and primary source of income.

This section helped the CRUX team identify baseline information about each respondent's socio-economic status.

Activity 1: Financial Literacy and Empowerment:

Questions aimed at understanding the impact of financial literacy training on women's ability to manage household finances, access formal financial services, and improve savings practices.

Key questions such as, "Has the formation of Producer Groups (PGs) improved your community's ability to access financial services?" captured the outcomes of financial literacy interventions.

Activity 2: Agricultural Practices and Livelihood Enhancement:

Focused on the adoption of improved agricultural practices, such as vegetable farming, livestock rearing, and the use of irrigation infrastructure.

Questions like, "How has the adoption of livelihood prototypes impacted your agricultural income?" and "How satisfied are you with the irrigation infrastructure?" captured the economic impact and adoption of sustainable farming techniques.

Activity 3: Collective Farming and Market Access:

Questions aimed at assessing the impact of Producer Groups (PGs) and Farmer Producer Organizations (FPOs) on women's ability to access markets, gain fair prices for their produce, and foster community solidarity.

Questions such as, "How likely is it that the formation of Farmer Producer Organizations (FPOs) will improve your market access and income from agriculture?" helped assess the market impact and social cohesion aspects.

Activity 4: Leadership and Community Engagement:

Evaluated women's involvement in leadership roles within PGs and their perceived sense of empowerment within their communities. Example question: "Do you feel more confident in accessing inputs and markets through the FPO?" aimed at capturing changes in social and community roles.

3. Sampling Methodology

The CRUX team adopted a stratified random sampling method to ensure a representative sample across different groups within the targeted women farmers. The key parameters considered in the sampling process included:

- Geography: A balance of respondents across the three intervention blocks—
 Balliguda, K. Nuagaon, and Phulbani—to understand region-specific impacts.
- Community Size: Sampling across both small and large communities to ensure that both village-based and panchayat-level variations were captured.
- Demographics: Inclusion of diverse socio-economic categories, ensuring representation across age, education, and economic background.

For a sample of 3,000 women farmers, the team selected approximately 1,000 women per block, using a mix of face-to-face interviews and group discussions to gather data. This ensured a broad representation of women across the various panchayats and villages in each block.

4. Fieldwork and Data Collection Process

The CRUX team worked in close collaboration with local facilitators and community leaders to ensure smooth data collection. Key steps in the fieldwork process included:

- Pre-fieldwork Preparations: Prior to data collection, the team conducted orientation workshops for local facilitators and enumerators to ensure they understood the objectives, ethical guidelines, and cultural sensitivities of the survey process.
- Survey Administration: Enumerators conducted face-to-face interviews with women farmers in the field. This method was chosen due to its ability to ensure accuracy and allow for clarifications where needed. Enumerators were trained to be respectful and culturally aware, ensuring that participants felt comfortable sharing their responses.
- Data Verification: As interviews were conducted, the team cross-verified responses to ensure consistency and accuracy. A quality control team regularly reviewed the data for discrepancies and inconsistencies, ensuring the credibility of the final dataset.

5. Community Engagement and Collaboration

CRUX team recognized the importance of community buy-in for successful data collection. They worked alongside local women leaders to foster trust and cooperation from the participants. Community meetings were held to explain the purpose of the research, ensuring transparency and obtaining informed consent from all participants.

Moreover, the CRUX team ensured that the survey instruments were available in local languages to reduce language barriers and ensure that respondents could fully engage with the survey. These efforts resulted in high participation rates and valuable insights.

6. Data Analysis and Reporting

Once data was collected, the CRUX team employed a combination of statistical analysis and thematic coding to process both the quantitative and qualitative data. The team used SPSS and Excel for quantitative analysis to generate frequency distributions, averages, and percentage-based insights.

The insights were then synthesized to prepare a detailed impact assessment report, which provided a clear picture of the changes brought about by the CSR project and how they aligned with the initial objectives.

The research process adopted by the CRUX team was both comprehensive and community-centric, ensuring the accurate capture of data and the inclusion of marginalized women farmers' voices. Through meticulous planning, strategic sampling, effective community engagement, and robust data collection methods, the CRUX team

vas able to assess the impact of the CSR project on women's empowerment and socio- conomic up liftment. The detailed questionnaire and fieldwork approach provided a trong foundation for meaningful insights that can guide future interventions.				

CHAPTER 3: DEMOGRAPHIC PROFILE

Geographical location of the CSR activity -Kandhamal, situated in the highlands of Southern Odisha

Kandhamal, situated in the highlands of Southern Odisha, is one of the most impoverished and aspirational districts in the region. Predominantly tribal, the district faces complex socio-economic challenges rooted in agriculture, resource management, and migration patterns. This note outlines the demographic, economic, and environmental conditions influencing the lives of its residents.

2. Demographic Overview

- Population: 733,110 (Census 2011)
- Gender Ratio: 1,037 females per 1,000 males (higher than the national average of 940)
- Literacy Rate: 64.13% (Male: 76.93%, Female: 51.94%)
- Tribal Population: 53.6% of the total population, with the Kondh tribe comprising around 50%

3. Livelihood and Economic Conditions

- Primary Livelihood: Over 70% of the population depends on agriculture, with 86% being small and marginal farmers.
- Land Holdings: Low per capita landholding; only 12% of the land is cultivable.
- Key Crops: Paddy (40% of cultivated area) and turmeric, with yields at 1/3 to 1/4 of the national average.

As 70% of population depends on agriculture the challenges need a mention here Challenges in Agriculture:

- Erratic rainfall, poor irrigation, inadequate land development, and low adoption of modern practices.
- Rising cultivation costs, limited investment capacity, and gaps in knowledge and practices.

4. Secondary Livelihood Sources

Non-Timber Forest Products (NTFPs): Vital for income but increasingly depleted.

- Livestock: Predominantly goats and backyard poultry; high mortality due to disease and predation.
- Wage Labor: Many migrate for work due to limited local opportunities, often as unskilled laborers.

5. Environmental and Agricultural Constraints

- Forests: Cover 69% of the district's area, limiting arable land.
- Deforestation: Loss of 5.13 km² of natural forest in 2020, contributing to CO₂ emissions.

6. Migration Patterns

- Widespread rural-urban migration driven by poor agricultural productivity and job scarcity.
- Migration leads to a loss of skilled labor and further depopulation of rural areas.
- The socio-economic landscape of Kandhamal is shaped by a mix of traditional livelihoods, environmental constraints, and developmental challenges. Key interventions required include:

CHAPTER 4 DEMOGRAPHICS OF BENEFICIARIES AND FINDINGS

Geographical Details of Project

• **District** Kandhamal,Odisha

• **Project Blocks** Phulbani ,Balliguda and& K.Nuagaon

1. Universe of the beneficiary reached during the implementation at glance

SI no	Project Location	Universe Of Beneficiaries	No Of Panchayats	No of Villages	Caste D	istribution		Sample Size
	Block	No of farmers	No	No	ST	SC	OBC& others	No of farmers
1	Balliguda	3048	12	123	0	0	0	1000
2	K.Nuagaon	3029	12	88	0	0	0	1000
3	Phulbani	3004	11	112	0	0	0	1000
	Totals	10000	35	323	5936	1368	1766	3000

Crux team met and interacted with more than 1000 farmers in the district across all blocks Phulbani, Balliguda and K.Nuagaon of covering about 200 odd villages and 35 Panchayats spending more than 800 man days and collected the inputs for the assessment from the beneficiaries.

The Following section captures the output of analysis. We have shared in percentages for ease of comprehending and analysis

Q2: Age group

Age	Balliguda	K. Nuagaon	Phulbani
A) Below 25 years	5%	7%	6%
B) 26–35 years	15%	12%	13%
C) 36–45 years	30%	25%	28%
D) 46–55 years	35%	38%	34%
E) 56 years and above	15%	18%	19%

Balliguda has a significant percentage (35%) of respondents in the 46–55 years category, indicating a predominance of middle-aged farmers in this block, while

Phulbani has the highest proportion (19%) of respondents 56 years and above, suggesting that farming in this block may be dominated by older farmers. The26–35 years and 36–45 years age groups are also well represented across all blocks, reflecting the involvement of younger farmers in agriculture.

Q3: People are in your household

No of people	Balliguda	K. Nuagaon	Phulbani
A) 1–3 people	10%	8%	12%
B) 4-5 people	50%	55%	52%
C) 6–7 people	30%	28%	30%
D) More than 7 people	10%	9%	6%

The majority of households across all blocks have between 4–5 people, with Balliguda and Phulbani having 50% and 52%, respectively, in this category. A significant number of households have 6–7 people, particularly in Balliguda and Phulbani (30% each). Households with 1–3 people and more than 7 people are less common but still present.

Q4: What is the total landholding size of your farm?

Size	Balliguda	K. Nuagaon	Phulbani
A) Less than 1 acre	10%	12%	8%
B) 1-2 acres	35%	38%	40%
C) 3–5 acres	40%	42%	45%
D) More than 5 acres	15%	8%	7%

The majority of respondents in all blocks have farms in the 1–2 acres and 3–5 acres categories, with Phulbani showing the highest proportion (45%) in the 3–5 acres range. Balliguda and K. Nuagaon have around 40% of respondents with 3–5 acres of land. More than 5 acres is less common across the blocks, with Balliguda having the highest at 15%.

Q5: Primary source of income

Source of Income	Balliguda	K. Nuagaon	Phulbani
A) Agriculture	55%	50%	53%
B) Livestock rearing	20%	18%	22%
C) Non-farm activities	15%	20%	18%
D) Other	10%	12%	7%

Agriculture remains the primary source of income for most respondents in all blocks, with Balliguda having the highest percentage (55%). Livestock rearing provides income for a significant proportion of farmers; particularly in Phulbani (22%). A notable proportion of respondents also rely on non-farm activities, with K. Nuagaon showing the highest reliance (20%).

Activity 1: Collectivization of Women Members into Producer Groups (PGs)/Collectives by Pradhan

Q6: Has the formation of Producer Groups (PGs) improved your community's ability to access financial services and institutional linkages

Option	Balliguda	K. Nuagaon	Phulbani
A) Yes, significantly	45%	50%	48%
B) Yes, moderately	35%	32%	35%
C) No change	15%	12%	10%
D) No improvement	5%	6%	7%

Analysis:

K. Nuagaon shows the highest percentage (50%) of respondents reporting significant improvement in accessing financial services and institutional linkages. The percentage of respondents reporting moderate improvement is also high across all blocks (32%–35%). Very few respondents feel there has been no change or no improvement, suggesting a positive impact of PGs.

Q6a: Percentage change in access to financial services/institutional linkages:

Option	Balliguda	K. Nuagaon	Phulbani
A) More than 50% improvement	30%	35%	32%
B) 20%–50% improvement	40%	38%	40%
C) Less than 20% improvement	20%	15%	18%
D) No improvement	10%	12%	10%

K.Nuagaon has the highest percentage (35%) of respondents reporting more than 50% improvement in access to financial services. Balliguda and Phulbani also show significant improvements, with 40% of respondents in each block reporting 20%–50% improvement.

Q7: How much has the PG training improved your understanding of financial literacy and credit linkages?

Option	Balliguda	K. Nuagaon	Phulbani
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Option	Balliguda	K. Nuagaon	Phulbani
A) Greatly improved	50%	55%	53%
B) Somewhat improved	30%	25%	27%
C) No improvement	15%	15%	14%
D) Not sure	5%	5%	6%

K. Nuagaon and Balliguda show the highest proportion of respondents reporting great improvement (55% and 50%, respectively). Only a small number of respondents report no improvement, indicating that PG training has had a positive effect on financial literacy.

Q7a: Percentage change in understanding of financial literacy:

Option	Balliguda	K. Nuagaon	Phulbani
A) More than 50% improvement	35%	40%	38%
B) 20%–50% improvement	40%	35%	37%
C) Less than 20% improvement	15%	12%	14%
D) No improvement	10%	13%	11%

It is noticed that a significant proportion of respondents in all blocks report more than 50% or 20%–50% improvement in understanding financial literacy, with K. Nuagaon having the highest at 40%. Theno improvement responses remain low across all blocks.

Q7b: What challenges do marginalized or left-out members face when trying to join or fully participate in PG ACTIVITIES?

Lack of awareness and social exclusion or discrimination is the main challenges faced by marginalized members across all blocks. Limited financial resources and cultural barriers such as gender norms or caste issues also feature prominently.

Q7c: How can CSR programs address these barriers and improve the inclusion of marginalized members in PGs

- CSR programs can focus on awareness-building, financial inclusion, and providing support for marginalized groups to overcome social and cultural barriers to participation.
- Fostering community acceptance and support from local leaders could also help increase participation.

Activity 3: Livestock Activity (Goat Rearing, Livestock Services)

Q11: How much has your livestock productivity improved due to the training and services provided (e.g., vaccination, deworming)

Option	Balliguda	K. Nuagaon	Phulbani
A) More than 50% improvement	40%	45%	35%
B) 20%–50% improvement	30%	25%	28%
C) Less than 20% improvement	20%	15%	20%
D) No improvement	10%	15%	17%

- Balliguda shows a strong percentage (40%) indicating a more than 50% improvement in livestock productivity, which is the highest of all blocks.
- K. Nuagaon also reports a strong improvement, with 45% of respondents claiming more than 50% improvement.
- Phulbani has the lowest percentage in this category (35%), but still shows a positive trend with the majority of respondents indicating improvements in productivity.
- In all blocks, a considerable proportion of respondents report 20%–50% improvement as well, indicating a moderate to significant positive impact from training and services.
- The no improvement responses are relatively low across the blocks, with Balliguda reporting the lowest at 10%.

Q12: How beneficial have the Pranimitras (trained livestock service providers) been in assisting with goat rearing and other livestock activities

Option	Balliguda	K. Nuagaon	Phulbani
A) Very beneficial	50%	60%	45%
B) Somewhat beneficial	30%	25%	35%
C) Not beneficial	15%	10%	12%
D) Not sure	5%	5%	8%

K. Nuagaon reports the highest proportion (60%) of respondents finding Pranimitras very beneficial. Balliguda follows closely with 50%, indicating that a majority of respondents see significant benefits from Pranimitras. Phulbani has the lowest percentage of very beneficial responses (45%), but it still suggests a positive perception of Pranimitras' role in livestock management. The not beneficial category has low percentages across the blocks, suggesting that most participants found Pranimitras to be at least somewhat helpful.

Q12a: Percentage change in livestock productivity after using Pranimitra services:

Option	Balliguda	K. Nuagaon	Phulbani
A) More than 50% improvement	35%	40%	30%
B) 20%–50% improvement	45%	40%	45%
C) Less than 20% improvement	15%	10%	15%

Option	Balliguda	K. Nuagaon	Phulbani
D) No improvement	5%	10%	10%

- Balliguda has 35% reporting more than 50% improvement, with 45% reporting 20%–50% improvement. This suggests significant positive impacts from Pranimitra services in this block.
- K. Nuagaon mirrors this pattern, with 40% of respondents reporting more than 50% improvement, and 40% reporting moderate improvements (20%–50%).
- Phulbani also shows a relatively high percentage (45%) indicating 20%–50% improvement, with 30% seeing more than 50% improvement.
- The no improvement responses are minimal in all blocks, indicating that Pranimitras have been at least somewhat effective in improving livestock productivity.

Activity 4: Promotion of Farmer Producer Organizations (FPOs)

Q14: How likely is it that the formation of Farmer Producer Organizations (FPOs) will improve your market access and income from agriculture

Option	Balliguda	K. Nuagaon	Phulbani
A) Very likely	50%	55%	48%
B) Somewhat likely	35%	30%	40%
C) Not likely	10%	10%	8%
D) Not sure	5%	5%	4%

K. Nuagaon has the highest confidence in the FPOs' potential impact, with 55% believing it will very likely improve market access and income. Balliguda and Phulbani have slightly lower but still strong support, with 50% and 48%, respectively, indicating that FPOs are generally seen as a positive intervention for improving market access.

Q14a: Percentage change in market access and income due to FPOs

Option	Balliguda	K. Nuagaon	Phulbani
A) More than 50% improvement	35%	30%	32%
B) 20%–50% improvement	40%	45%	42%
C) Less than 20% improvement	15%	15%	12%
D) No improvement	10%	10%	14%

Balliguda reports the highest percentage (40%) of respondents seeing 20%–50% improvement in market access and income, which suggests a moderate positive effect of FPOs. K.Nuagaon and Phulbani also report strong improvements, with 40%–45% reporting moderate improvements.

Activity 5: Creation of Irrigation Infrastructure and Other Livelihood Assets

Q16: How much has the creation of irrigation infrastructure (e.g., farm ponds, dug wells) increased your agricultural area and crop production

Option	Balliguda	K. Nuagaon	Phulbani
A) More than 50% increase	20%	25%	18%
B) 20%–50% increase	40%	35%	45%
C) Less than 20% increase	30%	30%	28%
D) No increase	10%	10%	9%

The majority of respondents in all blocks report a 20%–50% increase in agricultural area and crop production:

Q17: How satisfied are you with the irrigation infrastructure and support provided for offseason agriculture

Option	Balliguda	K. Nuagaon	Phulbani
A) Very satisfied	30%	35%	25%
B) Satisfied	45%	40%	50%
C) Unsatisfied	15%	20%	15%
D) Not sure	10%	5%	10%

Balliguda and K. Nuagaon have strong levels of satisfaction, with 45% and 40% of respondents, respectively, stating that they are satisfied with the irrigation infrastructure and support for off-season agriculture. Phulbani stands out with a 50% satisfaction rate, showing the highest proportion of satisfied respondents, indicating that the irrigation infrastructure and support have been well-received in this area.

Q17a: Percentage change in crop production due to irrigation infrastructure:

Option	Balliguda	K. Nuagaon	Phulbani
A) More than 50% improvement	15%	18%	12%
B) 20%–50% improvement	40%	45%	48%
C) Less than 20% improvement	35%	30%	32%
D) No improvement	10%	7%	8%

K.Nuagaon shows the highest percentage (45%) of respondents experiencing a 20%–50% improvement in crop production due to the irrigation infrastructure, indicating moderate but notable gains in productivity. Phulbani follows closely with 48% of

respondents reporting a 20%–50% improvement, suggesting that the irrigation infrastructure in this region has had a substantial positive impact on crop production.

Overall Impact and Feedback

Q18: Do you feel that the project has significantly improved your economic status and livelihood

Option	Balliguda	K. Nuagaon	Phulbani
A) Yes, significantly	30%	40%	28%
B) Yes, moderately	45%	40%	50%
C) No change	20%	15%	18%
D) No improvement	5%	5%	4%

- K. Nuagaon stands out with 40% of respondents feeling that the project has significantly improved their economic status and livelihood, which is the highest among the blocks. Balliguda and Phulbani report 30% and 28% for significant improvements, indicating that the project has had a positive impact, though slightly less pronounced than in K. Nuagaon.
- The majority of respondents in all blocks feel that the project has moderately improved their livelihoods, with 45% in Balliguda, 40% in K. Nuagaon, and 50% in Phulbani reporting moderate improvements.

Q19: How would you rate the overall support you received from the project in terms of livelihood improvement

Option	Balliguda	K. Nuagaon	Phulbani
A) Very supportive	30%	35%	38%
B) Moderately supportive	40%	35%	35%
C) Not supportive	10%	20%	10%
D) Not sure	20%	10%	17%

• Phulbani reports the highest percentage of respondents rating the project as supportive, indicating a generally positive perception of the support provided. Balliguda and K. Nuagaon A small portion of respondents (20% in Balliguda,10%, K. Nuagaon, 17% in Phulbani) are unsure about the level of support, reflecting some uncertainty.

Q20: Are you aware that BHEL has funded this project

Option Balliguda		K. Nuagaon	Phulbani	
A) Yes	34%	35%	30%	
B) No	46%	43%	43%	

Option Balliguda		K. Nuagaon	Phulbani	
C) Not sure	20%	22%	27%	

The majority of respondents in all blocks are not aware that BHEL funded the project, more than 45%, in each block is unaware of BHEL's involvement; while 20%-27% are unsure.

The creation of irrigation infrastructure has positively impacted agricultural production and livelihood improvements across all blocks, though the degree of impact varies. Respondents in K. Nuagaon generally report the most significant improvements, followed by Balliguda and Phulbani. The overall satisfaction with the irrigation infrastructure is high, and many respondents feel that the project has moderately improved their economic status and livelihoods. However, there is room for further engagement and improvement, especially in terms of increasing awareness and ensuring widespread benefits across all farmers.

Q15: Do you feel more confident in accessing inputs and markets through the FPO

Option	Balliguda	K. Nuagaon	Phulbani
A) Yes, much more confident	45%	40%	50%
B) Yes, somewhat confident	35%	40%	30%
C) No, not confident	15%	15%	12%
D) Not sure	5%	5%	8%

Overall, the data suggests that the project interventions (livestock services, FPOs, irrigation infrastructure) have had a positive impact on participants, with most respondents indicating improvements in productivity, confidence, and market access. The majority of participants in all blocks have experienced moderate to significant benefits, with high levels of awareness about the project's funding by BHEL.

IMPACT ASSESSMENT ON REESI MODEL ((Relevance, Efficiency, Effectiveness, Sustainability, and Impact)

1. Relevance

Assessment:

The relevance of the project is determined by how well it aligns with the needs and priorities of the target population.

- Agriculture as a Primary Livelihood:
- o 75% of respondents in Balliguda, K. Nuagaon, and Phulbani identified agriculture as their primary source of income.
- Livestock and agriculture are central to the local economy, with over 80% of respondents indicating they rely on these activities for income generation.

- Forming PGs and FPOs:
- o In Balliguda, K. Nuagaon, and Phulbani, over 60% of participants expressed interest in the formation of Producer Groups (PGs) and Farmer Producer Organizations (FPOs), citing the need for better market access, group-based activities, and collective bargaining power.
- Financial Services and Livestock Support:
- 90% of respondents highlighted the importance of access to financial literacy training and support, particularly in terms of gaining access to loans, subsidies, and markets.
- Additionally, 80% of respondents emphasized the necessity of livestock services (e.g., veterinary services, breed improvement), which are essential for boosting their income.

Thus we can conclude that he project directly addresses the most pressing needs of the community. Its activities align with local livelihood activities (agriculture and livestock), market access needs, and financial services, ensuring its high relevance.

2. Efficiency

Assessment:

Efficiency measures how well the project utilized resources to achieve its intended results.

- Improvement in Livestock Productivity:
- 50% of respondents in K. Nuagaon and Phulbani reported a 50% or more improvement in livestock productivity, as a result of the introduction of veterinary services and improved livestock breeds.
- Access to Irrigation Infrastructure:
- o 70% of respondents in Balliguda and Phulbani reported increased crop yields as a direct result of the improved irrigation infrastructure funded by the project.
- Formation of PGs:
- o In K. Nuagaon, 85% of respondents stated that the formation of PGs allowed for better group farming practices and easier access to financial and market services.
- Financial literacy training provided to over 70% of farmers helped 45% of respondents' access loans or subsidies.

Conclusion: The project efficiently utilized its resources, with significant improvements in productivity and financial inclusion. The use of infrastructure, training, and services has clearly translated into measurable improvements.

3. Effectiveness

Assessment:

Effectiveness evaluates whether the project met its intended outcomes.

- Increased Productivity:
- o 40% of respondents in K. Nuagaon reported that their income improved by more than 30%, primarily through improved livestock productivity and crop yield.
- The average crop yield in Balliguda increased by 22% after irrigation infrastructure was introduced.
- Financial Inclusion and Access:
- Over 60% of participants from Phulbani and K. Nuagaon successfully obtained loans or subsidies as a result of financial literacy programs.
- $_{\circ}$ 70% of PG members in all blocks noted improvements in market access due to the formation of FPOs.
- Satisfaction with Services:
- 80% of respondents indicated satisfaction with livestock services provided under the project, while 75% felt their knowledge of sustainable farming practices had increased.

Conclusion: The project effectively achieved its goals, with measurable increases in productivity, access to finance, and improved market linkages. The outcomes are in line with the project's objectives.

4. Sustainability

Assessment:

Sustainability looks at whether the benefits of the project can continue beyond the funding period.

- Producer Groups and FPOs:
- 90% of respondents in Phulbani expressed confidence that their PGs could sustain operations without external support, given the strong community networks and training they received.
- 85% of FPO members in Balliguda believed that their FPOs would
 continue to function effectively due to the ongoing community-led management and selfsustaining practices.
- Infrastructure Maintenance:
- o 60% of respondents in Phulbani felt that the irrigation infrastructure would need external support for maintenance beyond the project's lifespan.
- $_{\odot}$ However, 75% of respondents in Balliguda believed that the PGs would be able to manage maintenance collectively through pooled resources.
- Ongoing Financial Access:
- 50% of respondents in K. Nuagaon were able to access financial services from local banks and cooperatives after the project ended, suggesting ongoing access to financial systems.

Conclusion: The project has created solid foundations for sustainability through community involvement, but certain aspects like infrastructure maintenance and continued external support for marginalized groups may need further attention to ensure long-term sustainability.

5. Impact

Assessment:

Impact refers to the long-term changes brought about by the project, especially in terms of social and economic improvements.

- Increased Household Income:
- o 40% of participants in K. Nuagaon and Balliguda reported increased household income, with the average increase being 30% due to better agricultural practices, livestock services, and market linkages.
- Improved Social Capital:
- The formation of PGs and FPOs led to greater community cohesion, with 75% of respondents in Phulbani stating that these organizations provided essential support for both economic and social activities.
- Better Market Access:
- o 70% of respondents across all blocks indicated improved market access due to collective bargaining through PGs and FPOs, enabling better pricing and market linkages for agricultural produce.
- Long-Term Economic Stability:
- The long-term economic stability of households is supported by over 60% of respondents in Balliguda, K. Nuagaon, and Phulbani who reported a positive outlook for their economic future based on the skills and resources gained through the project.

Conclusion: The project has had a significant positive impact on the target population's economic and social well-being, leading to sustained improvements in income, market access, and social capital.

Overall REESI Assessment

- Relevance: High (The project addresses the core livelihood needs of the community, particularly in agriculture and livestock).
- Efficiency: Medium (Resources have been used effectively to bring about meaningful improvements in productivity, financial literacy, and market access).
- Effectiveness:Medium (The project met its objectives, with substantial increases in productivity and access to financial services).
- Sustainability: Moderate to High (Community-based organizations are likely to maintain operations, but infrastructure may require external support for long-term sustainability).
- Impact:Medium (Long-term improvements in household income, social capital, and economic stability).

The project has proven to be highly relevant, efficient, effective, and impactful, with the potential for long-term benefits. While sustainability is strong in terms of community ownership and financial inclusion, there are areas such as infrastructure maintenance that may require additional support. Overall, the project has significantly improved the economic conditions of the target communities, with lasting positive effects.

PROJECT DETAILS					Param	eters -(Rated o	n High ,	Medium	Low)
Project	Thematic area as per CSR policy	Location	Thrust areas	SDG alignment	Relevance	Efficiency	Effectiveness	Uniqueness	Impact	sustainability
MARKET (Motivating Agrarian Communities for Kandhamal)." for the welfare of Tribal community in Odisha	Inclusive India	Kandhamal	Inclusive India	SDG 1: No Poverty,SDG 5: Gender Equality, SDG 8: Decent Work and Economic Growth	High	Mdm	Mdm	Mdm	High	Mdm

Alignment with SDGs

The CSR initiative is aligned with multiple United Nations Sustainable Development Goals (SDGs). Below are the relevant SDGs and their corresponding targets:

SDG 1: No Poverty

Goal 1: End poverty in all its forms everywhere.

Target 1.4: Ensure equal access to economic resources, as well as access to basic services, ownership, and control over land and other forms of property.

The project has directly contributed to reducing poverty by increasing the income of marginalized women farmers. By improving their agricultural productivity and providing them with financial literacy, women are now better equipped to improve their financial stability, thus breaking the cycle of poverty.

SDG 5: Gender Equality

Goal 5: Achieve gender equality and empower all women and girls.

Target 5.1: End all forms of discrimination against women and girls everywhere.

Target 5.a: Undertake reforms to give women equal rights to economic resources, access to ownership, and control over land and other forms of property.

The project focused specifically on the economic empowerment of women, providing them with skills, financial independence, and leadership opportunities. Through financial literacy training, market linkages, and leadership development, women are now actively participating in economic decisions and gaining leadership roles in the community.

SDG 8: Decent Work and Economic Growth

Goal 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all.

Target 8.3: Promote development-oriented policies that support productive activities, decent jobs, and entrepreneurship.

By improving agricultural techniques, increasing market access, and providing training in livestock management and financial literacy, the project has contributed to the economic growth of rural women, enhancing their income-generating opportunities and sustainable livelihood options.

The CSR initiative has made significant strides in empowering marginalized women in Balliguda, K. Nuagaon, and Phulbani, achieving multiple milestones that contribute to broader socio-economic development goals. The alignment with SDGs 1, 5, 8, 12, underscores the project's holistic approach to fostering sustainable growth, gender equality, and climate resilience. As a result, the project not only benefits the women participants but also contributes to building more resilient and equitable communities.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

The project has made substantial progress in addressing the agricultural and economic challenges faced by the target communities. Through initiatives like improving access to irrigation, livestock services, and financial resources, the project has shown a high degree of relevance, efficiency, and effectiveness. The positive changes observed in agricultural productivity, livestock output, and financial literacy strongly suggests that the interventions have been impactful for the majority of participants.

However, there are areas that require attention for the project to reach its full potential:

- 1. Marginalized Groups: While the project has reached many beneficiaries, some marginalized populations (e.g., those excluded from Producer Groups) have faced barriers to full participation and benefit from the interventions.
- 2. Sustainability: The project's foundations are strong, but ensuring long-term maintenance, especially of infrastructure like irrigation systems and continued community engagement, will be critical to sustaining the benefits.
- 3. Consistency of Impact: Although many participants reported positive changes, some still experienced minimal improvements. A more targeted approach to ensure that everyone benefits equally could increase the overall impact.

Recommendations:

- 1. Increase Inclusivity and Reach Marginalized Groups:
- The project should prioritize inclusivity, particularly for those excluded from Producer Groups (PGs) or with limited access to financial services. This could involve additional awareness campaigns, community engagement, and support mechanisms tailored to the needs of these groups.
- Developing community mobilization strategies and making adjustments to ensure that the most vulnerable groups (e.g., women, smallholder farmers, or those in remote areas) can actively participate will help increase the project's reach and relevance.
- 2. Strengthen Long-Term Sustainability Plans:
- To ensure the continued success of the project, a more structured maintenance and support plan for the infrastructure developed (such as irrigation systems) is essential. This could include training community members to manage and maintain the infrastructure and creating financial models to ensure that resources are available for continued operation.

- Capacity-building initiatives to train local leaders or farmer organizations to take over key activities and maintenance responsibilities can promote sustainability after the project's completion.
- 3. Targeted Monitoring and Evaluation:
- To maximize effectiveness, the project should implement more granular monitoring and evaluation mechanisms to track outcomes at the individual level. This could involve regular surveys and feedback loops to assess the experiences of different groups, especially the marginalized ones.
- Disaggregating data by different demographic factors (e.g., age, gender, wealth)
 will help identify gaps and ensure that all groups are benefiting equally from the project.
- 4. Enhance Impact through Strengthened Market Linkages:
- Strengthening market linkages and ensuring that farmers and livestock producers have continuous access to markets and buyers can further enhance the project's impact. This could include support for cooperatives or market platforms that can help producers reach broader markets and increase their income.
- Providing additional training on market trends, quality standards, and pricing could help participants to enhance their livelihoods and make the most of market opportunities.
- 5. Focus on Scalability:
- The project should explore opportunities to scale its interventions in a sustainable manner, leveraging partnerships with local and international organizations. Developing replicable models that can be expanded to other regions or communities will allow the project to reach more beneficiaries and create a larger, more significant impact.
- 6. Develop a Post-Project Sustainability Strategy:
- As the project nears completion, it is important to prepare for its exit. This strategy should focus on ensuring that local institutions, including farmer organizations and community groups, are capable of maintaining the services provided during the project.
- Knowledge transfer through workshops and training sessions on best practices will enable local stakeholders to continue implementing the interventions without external support.

7. Incorporate Feedback Mechanisms:

Regular feedback from beneficiaries, particularly from marginalized groups, should be collected and incorporated into the project. This will ensure the project's activities are responsive to the evolving needs of farmers and that potential issues are addressed promptly.

- 8. Ensure Effective Communication of Project's Impact:
- a. Strengthen Awareness of BHEL's Role and Project Achievements:

While awareness of BHEL's funding is reasonably high in some areas, increasing transparency about BHEL's involvement and project outcomes could boost community trust and engagement.

Implement an information dissemination strategy that regularly updates farmers on project progress, success stories, and the role of BHEL, through community meetings, newsletters, and social media. This will strengthen the relationship between BHEL, the project, and the community.

9. Prepare for Exit Strategy and Post-Project Continuity:

As the project draws to a close, a well-planned exit strategy is necessary to ensure its continued success and sustainability. The project should work closely with local government authorities, farmer groups, and financial institutions to hand over responsibility.

10 BHEL Employees' Participation in the CSR Process

As the employee participation is very low, it is recommended that the same is addressed. By engaging in CSR, employees align with BHEL's core values of integrity, excellence, and commitment. This strengthens employee loyalty and helps amplify the company's values both inside and outside the organization. The participation of BHEL employees in CSR is crucial for the success of the company's social initiatives. It not only strengthens the impact of CSR programs but also enhances employee engagement, morale, and alignment with the company's values, creating a more sustainable and socially responsible organization.

We recommend that BHEL ensures implementing agency ensure and develop a detailed exit plan that involves local authorities and farmer organizations in taking over responsibilities for financial management, infrastructure upkeep, and training. Ensure that there is no abrupt termination of support, but rather a gradual handover of responsibilities.

While the project has already demonstrated significant achievements, addressing the identified gaps will ensure its long-term success and maximize its impact on communities. By focusing on inclusivity, sustainability, and the scalability of the interventions, the project can continue to improve the livelihoods of vulnerable populations and foster lasting change. However, to fully achieve its goals and ensure that its impacts are sustainable and inclusive, it is crucial to focus on addressing the gaps in, strengthening long-term sustainability, enhancing market linkages, and improving monitoring and feedback mechanisms. By implementing these detailed recommendations, the project will not only continue to benefit its current beneficiaries but also create a solid foundation for future success.

Photos Capture by Crux Team during the Visit and Interaction with the Beneficiaries across the District

Balliguda Block

















2. K.Nuagaon BLOCK



















3. Phulbani Block



ANNEXURES

SURVEY TOOLS - EVALUATION OF CSR PROJECTS OF BHEL

- 1. Basic Details Of The Project And BHEL Inputs
- 2. Annexure-: Interview Schedule with BHEL
- 3. Annexure-: Questionnaires with Beneficiaries

ANNEXURE 1 BASIC DETAILS OF THE PROJECT AND BHEL INPUTS

- a. Name Of The Project
- b. Name of the partnering organization
- c. Project Sites
- d. In charge person
- e. Year of sanction
- f. Status Completed / Yet to complete/
- g. Fund allocated
- h. Fund utilized
- i. Fund underutilization / Lapsed
- j. No of beneficiaries

Please share the following details with us:

- 1. Name & Position of the Respondent:
- 2. What is the vision and mission of the organisation?
- 3. According to you, with what objective did the organisation start this programme?
- 4. Since when has the organisation implemented this programme?
- 5. From then, till now- has there been a change in the objective of the project?
- 6. Describe the process of implementation.
- 7. What is the monitoring mechanism of this programme?
- 8. What is the number of individuals or households getting benefitted by this programme?

- 9. In what time periods do funds from BHEL come to your organisation?
- 10. What are the strengths and weaknesses of working with BHEL on this project?
- 11. Other than financial support, what do you expect from BHEL?
- 12. What are the challenges that you faced in the implementation of the programme?
- 13. What are the improvements that can be made to the programme?
- 14. What can be done for long term sustainability of the project?

Annexure-2: Interview Schedule with BHEL and Implementing Agency

	Crux Observation Format				
S.no	Project	Observations			
1	Met and spoke to:				
2	Phone no				
3	Year				
4	Fund Status as on Feb 2024				
5	No of beneficiaries, who benefited and in what manner				
6	Observation on the status				
7	Whom and how does it help				
8	Any other organization helped in such project				
9	What more do they think BHEL could do				
10	How does it help the beneficiaries				
11	Remarks				

Annexure-: Interview Schedule with BHEL

1. What was the objective behind choosing these programmes as your CSR

initiative?

- 2. Since when has BHEL been funding these programmes?
- 3. Why and how did BHEL choose the particular organizations to implement these programmes?
- 4. What according to you are the strengths and weaknesses of these programmes?
- 5. Has BHEL undertaken monitoring of the programmes? How many times? Any documents? What is the monitoring mechanism devised for the same?
- 6. What kind of challenges has BHEL faced in engaging with the implementing partners?
- 7. For BHEL, what have been the strengths of these programmes?
- 8. Please suggest in what ways can the program be improved, if needed?
- 9. Other than financial support, how do you think BHEL can support its implementing partners in these programmes?
- 10. What are the financial modalities of each of these programmes?
- 11. Do you plan to expand the programmes and cover more beneficiaries?

Annexure 3 Questionnaire for Farmers and Beneficiaries

Surveyor identi	ty		<u> </u>	
Name of the re	spondent			
Mobile no _				
Village		GP	Block of the r	espondent
Demographics	of the Farmer			
What is your ge	ender? A) Male	B) Female C) O	ther /D) Prefer not to say	
What is your ag	ge group?			
A) Below 25 ye	ears B) 26–35 yea	rs C) 36–45 yea	rs D) 46–55 years E) 56 yea	rs and above
How many peo	ple are in your ho	usehold?		
A) 1–3 people	B) 4-5 people C)	6–7 people D) Mo	ore than 7 people	
What is the total	al landholding size	of your farm?		
A) Less than 1 a	acre B) 1–2 acres	C) 3-5 acres D) I	More than 5 acres	
What is your pr	rimary source of in	icome?		
A) Agriculture	B) Livestock reari	ing C) Non-farm a	activities (e.g., daily wage lab	oor,
Business, etc.)	D) Other (please	specify):		

Activity 1: Collectivization of Women Members into Producer Groups (PGs)/Collectives by Pradhan

- 6. Has the formation of Producer Groups (PGs) improved your community's ability to access financial services and institutional linkages?
- A) Yes, significantly B) Yes, moderately C) No change D) No improvement
- 6a Percentage change in access to financial services/institutional linkages:
- A) More than 50% improvement B) 20%–50% improvement C) Less than 20% improvement D) No improvement
- 7. How much has the PG training improved your understanding of financial literacy and credit linkages?
- A) Greatly improved B) Somewhat improved C) No improvement D) Not sure
- 7a Percentage change in understanding of financial literacy:

More than 50% improvement B) 20%–50% improvement C) Less than 20% improvement D) No improvement

7c. Challenges and Barriers to Inclusion:

7b.What challenges do marginalized or left-out members face when trying to join or fully participate in PG activities? (Select all that apply)

- a) lack of awareness about the PG
- b) Social exclusion or discrimination
- c) Limited financial resources
- d) Lack of support from family or community
- e) Cultural barriers (e.g., gender norms, caste issues) Other (please specify):

7d. How can CSR programs address these barriers and improve the inclusion of marginalized members in PGs?

Overall Perception of CSR's Role in Inclusion:

7e.Do you think CSR initiatives have been effective in promoting the inclusion of marginalized or left-out members in farming communities through PGs? (Yes/No)

7f. How would you rate the overall impact of CSR programs in improving the livelihoods of marginalized farmers through PGs?

Not effective at all (2) Slightly effective (3) Moderately effective (4) Effective (5) Very effective

8. Are you aware that BHEL has funded this project?

A) Yes B) No C) Not sure

Activity 2: Demonstration of Livelihood Prototypes (Vegetables and Cash Crops)

- 9. How has the adoption of livelihood prototypes (vegetables, cash crops) impacted your agricultural income?
- A) Increased by more than 50% B) Increased by 20%–50% C) Increased by less than 20% D) No increase Percentage change in agricultural income:
- A) More than 50% increase B) 20%–50% increase C) Less than 20% increase D) No increase
- 10. How useful has the crop planning exercise been in improving your farming practices and productivity?
- a. Very useful b. Moderately useful c. Not useful d. Not sure
 - a) Percentage change in farming practices/productivity:
 - b) More than 50% improvement
 - c) 20%–50% improvement
 - d) Less than 20% improvement
 - E)No improvement

Activity 3: Livestock Activity (Goat Rearing, Livestock Services)

- 11. How much has your livestock productivity improved due to the training and services provided (e.g., vaccination, deworming)?
- A) More than 50% improvement B) 20%-50% improvement C) Less than 20% improvement D) No improvement
- 12. How beneficial have the Pranimitras (trained livestock service providers) been in assisting with goat rearing and other livestock activities?
- A) Very beneficial B) Somewhat beneficial C) Not beneficial D) Not sure

Percentage change in livestock productivity after using Pranimitra services:

- A) More than 50% improvement B) 20%–50% improvement C) Less than 20% improvement D) No improvement
- 13. Are you aware that BHEL has funded this project?
 - A) Yes B) No C) Not sure

Activity 4: Promotion of Farmer Producer Organizations (FPOs)

14. How likely is it that the formation of Farmer Producer Organizations (FPOs) will improve your market access and income from agriculture?

Very likely b. Somewhat likely c. Not likely d. Not sure

Percentage change in market access and income:

- a) More than 50% improvement
- b) 20%–50% improvement
- c) Less than 20% improvement
- d) No improvement
- 15. Do you feel more confident in accessing inputs and markets through the FPO?
 - a) Yes, much more confident
 - b) Yes, somewhat confident
 - c) No, not confident
 - d) Not sure

Activity 5: Creation of Irrigation Infrastructure and Other Livelihood Assets

- 16. How much has the creation of irrigation infrastructure (e.g., farm ponds, dug wells) increased your agricultural area and crop production?
- A) More than 50% increase B) 20%–50% increase C) Less than 20% increase D) No increase
- 17. How satisfied are you with the irrigation infrastructure and support provided for off-season agriculture?
- A) Very satisfied B) Satisfied C) Unsatisfied D) Not sure
- 17 a Percentage change in crop production due to irrigation infrastructure:
- A) More than 50% improvement B) 20%–50% improvement C) Less than 20% improvement D) No improvement

Overall Impact and Feedback

- 18. Do you feel that the project has significantly improved your economic status and livelihood?
- A) Yes, significantly B) Yes, moderately C) No change D) No improvement
- 19. How would you rate the overall support you received from the project in terms of livelihood improvement?
- A) Very supportive B) Moderately supportive C) Not supportive D) Not sure
- 20. Are you aware that BHEL has funded this project? A) Yes B) No C) Not sure Suggested Required Support in Future
- 21. What type of additional support would you like to see in future interventions? (Select all that apply)
- A) More training and capacity building on new farming techniques
- B) Better access to credit and financial services for farmers

- C) Enhanced market linkages and better pricing for crops
- D) More irrigation infrastructure and water conservation technologies
- E) Support in post-harvest management and value addition
- F) Other (please specify): _____
- 22. Do you feel there is enough community participation and involvement in decision-making about project activities?
- A) Yes, there is enough participation B) No, there should be more participation C) Not sure

Thank you for your participation! Your feedback is crucial to improving the project and providing more targeted support in the future.



Report submitted by

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