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Hindalco Industries Limited
One International Center, Tower 4, 21st Floor, Senapati Bapat Marg
Prabhadevi, Mumbai-400013

Date: 6th July 2026

Subject: Final Impact Assessment report of Natural Resource Conservation CSR Programme for Hindalco Industries Limited (HIL) in units: Renukoot, Renusagar, Lohardaga, Samri and Belagavi

Dear Mr Avijit,

This refers to our [engagement letter/engagement contract] dated 2nd December, 2025 with Hindalco Industries Limited("you") ('the Contract').

We appreciate the opportunity to assist Hindalco Industries Limited in providing Impact assessment services to Hindalco Industries Limited for their CSR programmes in units: Renukoot, Renusagar, Lohardaga, Samri and Belagavi

This is our final impact assessment report of the Natural Resource Conservation CSR Programme supported by HIL. The performance of our Services and the report issued to you pursuant to the Services are based on and subject to the terms of the Contract.

This report is solely for your benefit and information and is not to be referred to in communications with or distributed or disclosed for any purpose to any third party without our prior written consent. We have been engaged by you for the Services and to the fullest extent permitted by law, we will not accept responsibility or liability to any other party in respect of our Services or the report.

It has been our privilege to work with you, and we look forward to continuing our relationship with you.

Yours sincerely


Full Signature
Jignesh Thakkar
Partner – ESG, KPMG India
KPMG Assurance and Consulting Services LLP

Impact Assessment Report

Theme: Sustainable Livelihood
Name of Project: Natural
Resource Conservation Program

Hindalco Industries Limited

2026

Notice to readers

- Our report shall be prepared solely for Hindalco Industries Limited. KPMG does not accept or assume any liability, responsibility, or duty of care for any use of or reliance on this report by anyone, other than our Client, to the extent agreed in the Agreement.
- Impact assessment is limited to the projects allocated by Hindalco Industries Limited.
- OECD DAC framework has been used in preparing the report as detailed herein. No professional assurance standards ex. ISAE, SSAE etc. have been applied while preparing this report and accordingly the rigors applicable under such standards are not applicable for the scope covered by our report.
- Procedures, analysis and recommendations, if any, are advisory in nature basis the information collected from various sources both publicly and those provided by the client.
- Our observations represent our understanding and interpretation of the facts based on reporting of beneficiaries and stakeholders.
- Our report, by its very nature, may involve numerous assumptions, inherent risks, and uncertainties, both general and specific. The conclusions drawn shall be based on the information available with us at the time of preparing the report.
- We shall not perform an audit and shall not express an opinion or any other form of assurance. Further, comments in our report are not and shall not be intended, nor should they be interpreted to be legal advice or opinion. Client shall be fully and solely responsible for applying independent judgment, with respect to the findings included in the report, to make appropriate decisions in relation to future course of action, if any. We shall not take responsibility for the consequences resulting from decisions based on information included in the report.
- While information obtained from the public domain or external sources has not been verified for authenticity, accuracy, or completeness, we have obtained information, as far as possible, from sources generally considered to be reliable. However, it must be noted that some of these websites/third party sources may not be updated regularly. We assume no responsibility for the reliability and credibility of such information.
- Our work shall be limited to the specific procedures described in this Engagement Letter and shall be based only on the information and analysis of the data obtained through interviews of beneficiaries supported under the programme, selected as sample respondents and discussions with Hindalco Industries Limited team and stakeholders of the programme. Accordingly, changes in circumstances or information available after the review could affect the findings outlined in our report.
- In no circumstances shall we be liable, for any loss or damage, of whatsoever nature, arising from information material to our work being withheld or concealed from us or misrepresented to us by any person to whom we make information requests.
- In accordance with its policy, KPMG advises that neither it nor any of its partner, director or employee undertakes any responsibility arising in any way whatsoever, to any person other than Client in respect of the matters dealt with in this report, including any errors or omissions therein, arising through negligence or otherwise, howsoever caused.
- In connection with our report or any part thereof, KPMG does not owe duty of care (whether in contract or in tort or under statute or otherwise) to any person or party to whom the report is circulated to and KPMG shall not be liable to any party who uses or relies on this report. KPMG thus disclaims all responsibility or liability for any costs, damages, losses, liabilities, expenses incurred by such third party arising out of or in connection with the report or any part thereof.
- By reading our report, the reader of the report shall be deemed to have accepted the terms mentioned hereinabove.

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Abbreviations

AAY	Antyodaya Anna Yojana
BPL	Below Poverty Line
CSR	Corporate Social Responsibility
DPDP	Digital Personal Data Protection Act
FGD	Focus Group Discussion
IDI	In-Depth Interview
HIL	Hindalco Industries Limited
KII	Key Informant Interview
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
RTE	Right to Education Act
OECD DAC	Organisation for Economic Cooperation and Development - Development Assistance Committee
ToC	Theory of Change
UN-SDG	United Nations-Sustainable Development Goal

About Hindalco Industries Limited

About Hindalco Industries Limited

Hindalco, part of the Aditya Birla Group, ranks among the world’s largest aluminium rolling and recycling companies. It is a global leader in copper and a key player in specialty alumina and hydrates. With a presence in 10 countries and 48 manufacturing facilities, Hindalco is India’s leading copper producer.

Corporate Social Responsibility (CSR) at Hindalco

HIL’s top priority is to empower individuals within our communities and deliver meaningful

value to them. Through their CSR programs, they have positively impacted over 2.5 million lives across India, implementing projects in five key areas: Education, Healthcare, Sustainable Livelihood, Infrastructure Development, and Social Change.



HIL’s CSR Areas

Education

Initiatives work to empower children from economically weaker backgrounds and focus on:

- Pre-school education
- Educational support programme
- Vocational and technical education training
- Adult literacy programme
- School infrastructure development

Healthcare

Improving access to healthcare and building a strong healthcare infrastructure in and around local communities with a focus on:

- Preventive healthcare
- Curative healthcare
- Mother and child-care
- Quality/support programmes
- Healthcare infrastructure

Sustainable Livelihood

Developing interventions that help create sustainable and long-lasting livelihood for the communities with a focus on:

- Vocational trainings
- Trainings on technical skills with a special focus on women and farmers.
- Watershed development & irrigation projects

Infrastructure Development

Facilitating all-round development of communities with a focus on:

- Roads
- Community halls/kitchens
- Sports and recreation centres

Social Change

Countering social evils such as exploitation, inequality and trafficking in remote corners with a focus on:

- Social Welfare, Inclusion & Community Development
- Culture, Heritage & Nation-Building
- Health, Sports, Fitness & Safety

Executive Summary

KPMG has been appointed as an impact evaluation agency by Hindalco Industries Limited to assess the impact of their Natural Resource Conservation Program. In this report, KPMG India is evaluating the progress of the programme across three CSR units, Belagavi, Renukoot, and Renusagar, and understanding its relevance, coherence, effectiveness, efficiency, impact, and sustainability.

The study employed a cross-sectional research design utilising a mixed-method framework. Quantitative and qualitative data was gathered through surveys and focus group discussions (FGD) with 85 community member respondents across three CSR units.



Respondents from 7 villages across 3 CSR units were covered under this study



A total of 85 respondents along with few institutional stakeholders were reached through in-person interactions



3 IDI were conducted with village sarpanches

Below are the key insights from the impact assessment



80%

Reported improved biodiversity from plantation activities



88%

Reported improved water availability for livelihood



79%

Reported agriculture on previously barren land

Executive Summary

OECD DAC Evaluation

The various components/outcomes of the Natural Resource Conservation Program were evaluated using the OECD DAC criteria, which include relevance, effectiveness, efficiency, impact, and sustainability. The findings of the study are categorized as follows:

OECD-DAC evaluation
framework

Relevance

Highly relevant - 92% hold BPL or Antyodaya ration cards; 60% earn below ₹50,000 annually. Interventions directly address critical gaps:

- Water scarcity → 88% report improved water availability
- Land degradation → 79% report cultivation on previously barren land
- Energy access → 71% awareness of solar interventions

The programme is well aligned with national priorities such as Jal Shakti Abhiyan, PM-KUSUM, and SDGs 6, 7, 13, and 15.

Effectiveness

Strong where implemented - plantation interventions show 76–80% positive impact on pollution reduction and biodiversity. Water conservation reaches 88% improved availability among aware respondents. Sharp unit variance: Belagavi achieves 100% across all indicators vs. Renukoot with zero soil/water interventions.

Sustainability

Mixed - solar infrastructure reaches 71% of respondents but only 18% report reduced electricity costs. Plantation and water conservation show higher output-to-outcome conversion. Renukoot's interventions are concentrated in solar only, while Belagavi demonstrates efficient multi-pillar delivery. Uneven resource allocation across units limits overall efficiency.

Impact

Evident but uneven - 79% report agriculture on previously barren land; 80% observe improved biodiversity. Belagavi shows transformative impact (100% across all indicators). Impact is nascent in Renusagar (43–74% across water indicators) and limited in Renukoot where only solar interventions are active.

Efficiency

Moderate - plantation and water harvesting structures provide long-term environmental benefits. However, solar maintenance and community ownership mechanisms are not evident. Stronger convergence with government watershed programs and community-based maintenance models are needed for sustained outcomes.

Coherence

Aligned with India's National Action Plan on Climate Change, Jal Shakti Abhiyan, and SDGs 6, 7, 13, and 15. Belagavi demonstrates strong internal coherence with integrated multi-pillar delivery. However, Renukoot's single-pillar scope (solar only) and Renusagar's partial coverage fragment the ToC pathway.

Does not meet expectation

Partially meets expectations

Meets expectations

The programme evaluation above on OECD-DAC parameters highlights strong relevance and effectiveness in well-resourced units, with scope for improvement in efficiency, sustainability, and cross-unit coherence to achieve equitable environmental and livelihood outcomes across all CSR units.

UN-SDG Alignment

The Natural Resource Conservation Program contributes directly to sustainable environmental management, climate resilience, renewable energy adoption, water security, and restoration of degraded land. Through interventions including solar energy support, plantation and green belt development, soil conservation, and water harvesting structures, the programme strengthens natural ecosystems while improving livelihood opportunities for rural communities. The programme supports sustainable agriculture, enhanced water availability, biodiversity conservation, climate change mitigation, and community resilience. Collaboration with Panchayats, community groups, farmers, and government programmes further strengthens long-term sustainability and local ownership

SDG	Alignment with Programme
SDG 2 – Zero Hunger	Soil conservation, land restoration, and improved irrigation support sustainable agriculture, enhanced crop productivity, and food security.
SDG 6 – Clean Water and Sanitation	Water conservation and harvesting structures improve groundwater recharge, irrigation access, and water availability for livelihoods.
SDG 7 – Affordable and Clean Energy	Solar pumps, streetlights, and household solar systems promote access to renewable energy and reduce dependence on conventional fuels.
SDG 8 – Decent Work and Economic Growth	Improved agricultural productivity, reliable water access, and reduced resource constraints strengthen rural livelihoods and income opportunities.
SDG 13 – Climate Action	Renewable energy adoption, afforestation, water conservation, and climate-resilient natural resource management contribute to climate change mitigation and adaptation.
SDG 15 – Life on Land	Plantation activities, biodiversity enhancement, soil restoration, and ecosystem conservation support sustainable management of terrestrial ecosystems.
SDG 17 – Partnerships for the Goals	Collaboration with Panchayats, community institutions, farmers, government schemes, and local stakeholders supports effective programme implementation and sustainability.

Impact Assessment: Approach & Methodology

Study Objectives:

The purpose of this study is to assess the impact of Hindalco's CSR project, **Natural Resource Conservation Program**, across their 3 units: Renusagar, Renukoot & Belagavi implemented during FY 2022-23.

The primary objectives are:

- i. **Assess environmental outcomes of interventions** : To evaluate changes in water availability, soil quality, green cover, and biodiversity resulting from plantation, soil conservation, and water harvesting activities.
- ii. **Evaluate livelihood impact**: To analyse improvements in agricultural productivity, income stability, and access to irrigation resulting from natural resource interventions.
- iii. **Measure effectiveness of clean energy interventions**: To assess the utilisation, productivity benefits, and cost implications of solar energy systems deployed under the programme.
- iv. **Assess sustainability and community ownership**: To evaluate the extent of community participation, maintenance mechanisms, and long-term viability of assets created under the programme.
- v. **Inform future CSR strategy and sustainability**: To generate insights that guide programme refinement, long-term sustainability, and potential scale-up or replication.
- vi. **Evaluate programme across OECD-DAC parameters**: To assess relevance, effectiveness, efficiency, impact, coherence, and sustainability of the interventions.

Study Approach:

The key steps in the approach are as below:

Consultation and Scoping

- An initial scoping and inception meeting was held with Hindalco team to establish the parameters and objectives of the

engagement.

- A comprehensive project plan was subsequently formulated to guide the overall programme of work.
- Mapping of internal and external stakeholders, was undertaken to identify an appropriate sample for consultation.

A review of secondary data was conducted to contextualise Hindalco's strategic contributions within its wider CSR framework.

Study design:

- A mixed approach, consisting of both quantitative and qualitative methods, was adopted for the assessment to provide a more comprehensive understanding of the project impact across multiple time points.
- A theory of change-based impact framework was developed to articulate the intended outcomes and impact parameters.

Study tools:

Semi-structured survey tools were developed, grounded in the research questions and objectives of the assessment, designed to capture both quantitative and qualitative data were developed. All tools were finalised after consultation with Hindalco team. Tools for the study included:

- One-to-one surveys
- Focus Group Discussion
- Key Informant Interviews

Stakeholder Consultation:

Data was collected during field visits to 3 study locations.

Sampling:

A mix of stratified random and purposive sampling method was employed to ensure a structured, representative sample reflective of the target geography.

Impact Assessment: Approach & Methodology

Sampling:

A mix of stratified random and purposive sampling method was employed to ensure a structured, representative sample reflective of the target geography.

Data Analysis:

The data collected through stakeholder consultations was subjected to both qualitative and quantitative analyses. Triangulation of data was done through:

- Comparing quantitative findings with other data sources such as qualitative interviews or focus group discussions.
- The OECD-DAC evaluation framework has been applied to assess the programme's impact, encompassing dimensions such as design, planning, implementation, monitoring, and evaluation.

Report Preparation

- The results of the study are compiled in a detailed final report, encompassing key findings and actionable recommendations for improving future research and practices.
- The report has been structured in accordance with the OECD-DAC framework to ensure consistency and rigour in evaluation.

Ethical Considerations for Data Privacy

KPMG has followed the guidelines outlined as per the latest Digital Personal Data Protection (DPDP) Act guidelines by implementing robust data governance frameworks, conducting internal compliance reviews and ensuring protection of data.

For the data collection process, KPMG has

adhered to ethical considerations for data privacy:

- a. Informed Consent: All participants were briefed about the purpose of data collection and asked for consent before participating.
- b. Confidentiality: Personal identifiers were removed or anonymized to protect participants identity.
- c. Secure Data Storage: All collected data has been stored in secure, access-controlled environments to prevent unauthorized access.
- d. Limited Access: Only authorized personnel involved in the project have access to the project data.
- e. Use of Data: Data is used solely for research and program evaluation purposes, in line with the consent provided by participants.

Key Assumptions & Limitations of the Study

Assumptions:

1. The analysis is based on the assumption that responses provided by beneficiaries and stakeholders reflect their actual experiences and outcomes.
2. Data collected through surveys and interviews is assumed to be accurate, consistent, and representative of broader programme impact.
3. Findings rely on the premise that programme design and implementation were carried out as intended and that observed changes can be reasonably linked to interventions.
4. External data and secondary sources used in the study are considered reliable, though not independently verified.
5. The theory of change framework assumes a logical linkage between inputs, outputs, outcomes, and long-term impact.
5. External sources and publicly available data were not independently validated, which may affect reliability in certain cases.
6. The study involves assumptions and inherent uncertainties, and results should be interpreted within these constraints.

These considerations should be taken into account when interpreting the findings and applying them for decision-making or future programme design.

Limitations:

1. The assessment is restricted to selected programmes and sample respondents, and may not fully capture the impact across all beneficiaries or locations.
2. Findings are based on self-reported data, which may be subject to recall bias or respondent perception.
3. The study does not constitute an audit or formal assurance exercise, and conclusions are indicative rather than definitive.
4. Outcomes are assessed based on information available at the time of the study, and may change with evolving programme implementation.

About the project: Natural Resource Conservation

Project Rationale:

Rural communities in project locations face persistent environmental and livelihood challenges - degraded soils, depleting groundwater, erratic rainfall, dependence on fossil fuels, and declining agricultural productivity. Smallholder farmers and BPL households bear the brunt of these pressures with limited access to clean energy, sustainable land management, and water-harvesting infrastructure.

Introduction to Hindalco's Natural Resource Conservation Program:

Hindalco's Natural Resource Conservation Program is a multi-pronged CSR intervention promoting environmental restoration and climate resilience across three operational units - Belagavi, Renukoot, and Renusagar. Grounded in its Theory of Change, the program addresses four intervention areas: (i) Solar Energy Support - installation of solar irrigation pumps, streetlights, and household solar systems; (ii) Plantation / Green Belt Development - native species plantation, soil preparation, and survival monitoring; (iii) Soil Conservation - contour trenches, bunds, land levelling, and nutrient replenishment; and (iv) Water Conservation - check dams, percolation tanks, farm ponds, and water body renovation. Through these activities, the program seeks to reduce energy costs, improve crop yields, restore degraded land, enhance water security, and build long-term community resilience.

FY 2022-23

Implementation year under
Impact Assessment study

FY 2025-26

Assessment year

3 CSR units

Study locations:
Renusagar, Renukoot,
& Belagavi

68,870

Project beneficiaries
across study locations

Stakeholders



Farmers

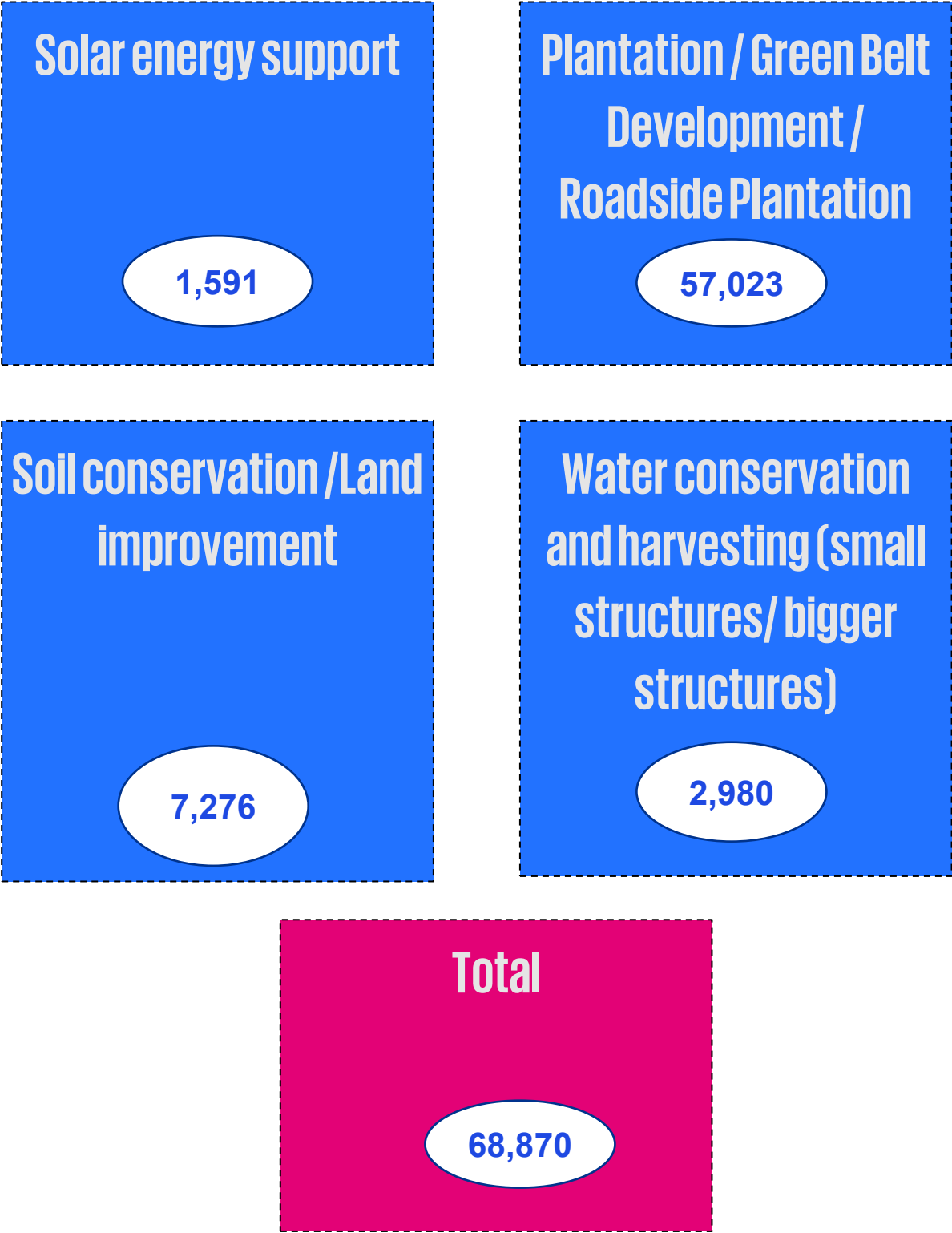


Panchayat
Officials



Community
Members

Program Activities and Outreach (FY 2022–23)



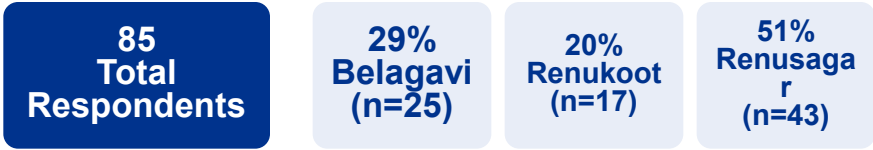
Theory of Change

Table 1: Theory of change of the project

Stakeholders	Strategic planning		The effects		
	Intervention	Activities	Output	Outcomes	Impact
Community members Farmers Panchayat officials	Solar energy support	Installation of solar irrigation pumps / streetlights / household systems	1,591 solar interventions implemented Households/farmers accessing clean energy Reduced diesel consumption for irrigation	Reduced energy costs Reliable access to lighting/irrigation Lower greenhouse gas emissions Increased productive hours (evening activities, reduced outages)	Adoption of renewable energy Reduced carbon footprint Improved livelihood resilience through energy reliability
	Plantation / Green Belt Development / Roadside Plantation	Plantation of native species Soil preparation & pit digging Fencing & maintenance Watering and survival monitoring	57,023 plantation activities (community & roadside plantation) Roadsides and community areas greened Improved micro-climate in plantation zones	Increased green cover and shade Reduced dust pollution and soil erosion Enhanced biodiversity (birds, insects)	Improved environmental quality Carbon sequestration and climate mitigation Temperature regulation and healthier ecosystems
	Soil conservation /Land improvement	Contour trenches, bunds, gully checks Land leveling, mulching Soil nutrient replenishment	7,276 interventions (bundling, trenching, land levelling, soil restoration)	Reduced topsoil loss Improved fertility and land productivity Enhanced crop yield stability	Sustainable agriculture on restored land Higher and more reliable farm incomes Improved resilience to drought
	Water conservation and harvesting (small structures/ bigger structures)	Construction of check dams, percolation tanks, contour bunds Renovation of existing water bodies Creation of farm ponds & recharge pits	2,980 structures (check dams, ponds, percolation tanks, recharge systems)	Improved irrigation water availability Reduced time/cost spent fetching water Increased cropping intensity (from single to double crop)	Sustainable agriculture on restored land Higher and more reliable farm incomes Improved resilience to drought

Study Outreach

Sample Overview



Respondent Type



Gender Distribution



Age Distribution

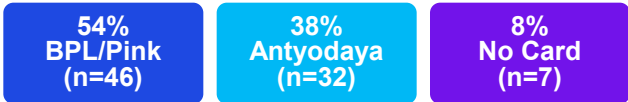


Education Status of Respondents



Socio-Economic Profile

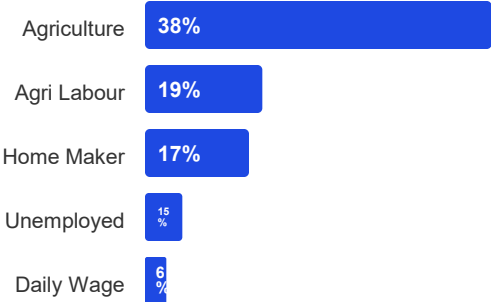
Ration Card Type



Annual Family Income



Occupation



Key Observations



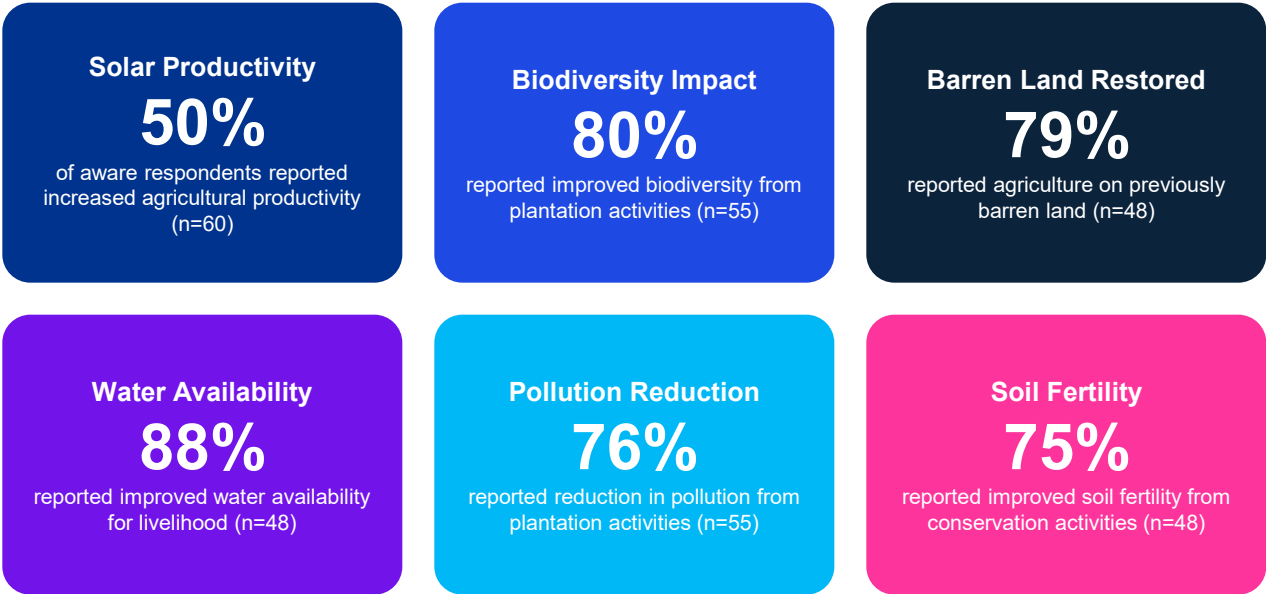
Income Profile



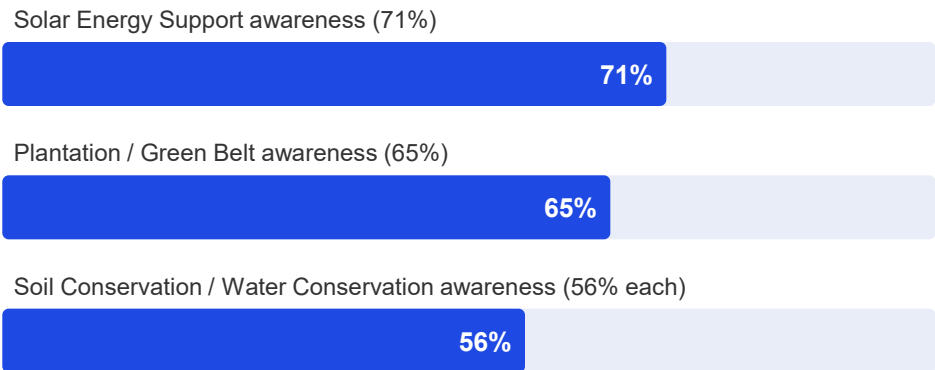
Note: All 85 respondents are community members from three Hindalco CSR units where the Natural Resource Conservation program has been implemented.

Key Outcome Indicators

The following indicators capture the program’s performance across solar energy support, plantation and green belt development, soil conservation, and water conservation as reported by 85 community member respondents across three Hindalco CSR units.



Programme Awareness Across Interventions



Key Insight:
The program demonstrates strong traction on plantation and water conservation, with 80% reporting improved biodiversity and 88% improved water availability. Solar energy has increased productivity for 50% of aware respondents, though only 18% report reduced electricity costs, suggesting the primary benefit is irrigation access rather than cost savings. Belagavi leads as the benchmark unit with 100% positive outcomes across all non-solar interventions. The most significant gap is the absence of soil conservation and water harvesting in Renukoot, and the limited solar impact perception despite high awareness. Cross-unit standardisation of intervention coverage remains the top priority.

Comparative Analysis by CSR Unit

Table 2: Comparative Analysis by Hindalco CSR Unit

Indicator	Belagavi (n=25)	Renukoot (n=17)	Renusagar (n=43)	Overall (n=85)
Solar Energy Awareness	0%	100%	100%	71%
Solar: Increased Productivity	NA	71%	42%	50%
Plantation Awareness	100%	41%	53%	65%
Biodiversity Improved	100%	86%	57%	80%
Soil: Agri on Barren Land	100%	NA	57%	79%
Water Availability	100%	NA	74%	88%
Water: Time Reduced	100%	NA	70%	85%
Water: Income Stability	100%	NA	43%	73%

*NA: These units did not have applicable responses for enrolment awareness campaigns. Green = Strong (80%+), Yellow = Moderate (13%-80%), Red = Weak (<13%). Gray = Not Applicable.

Key Takeaways

- Belagavi** is the clear benchmark: 100% across all plantation, soil conservation, and water conservation indicators, demonstrating the impact of integrated multi-pillar delivery.
- Renukoot** operates on a single pillar (solar energy only) with 71% reporting productivity gains but no soil, water, or plantation interventions, severely limiting its ToC pathway.
- Renusagar** shows partial coverage across all four pillars, but outcomes range widely (42–74%), indicating scope for deepening interventions, particularly in water cost reduction (0%) and income stability (43%).
- Solar energy awareness is high** (71%) but impact conversion remains low - only 18% report reduced electricity costs, suggesting the need for better community training on solar asset utilisation.

Narrative Interpretation: Unit-Level Divergence

Belagavi

Belagavi is the clear benchmark unit, achieving 100% positive outcomes across all plantation (pollution reduction, biodiversity, cooling, production), soil conservation (barren land restoration, fertility improvement), and water conservation indicators (availability, time reduction, cost savings, income stability). All 25 respondents confirmed multi-pillar impact. However, solar energy interventions are absent at this unit, representing an untapped opportunity. The integrated delivery model at Belagavi validates the full Theory of Change pathway.

Renusagar

Renusagar has the broadest intervention scope with all four pillars active, but coverage is partial - only 53% report awareness of plantation, soil, and water interventions. Solar awareness is universal (100%), with streetlights (77%) being the most visible installation. Plantation impact ranges from 52-57%, soil conservation shows 48-57% impact, and water conservation achieves 43-74% across indicators. Notably, zero respondents report reduced water-fetching costs, indicating cost savings have not materialised despite improved water availability (74%). Deepening intervention reach and community engagement is critical.

Renukoot

Renukoot operates exclusively on solar energy, with 100% awareness and 71% reporting increased agricultural productivity from solar irrigation pumps and lights. However, only 18% report reduced electricity costs, suggesting that the primary benefit is irrigation access rather than household energy savings. No plantation, soil conservation, or water harvesting interventions have been implemented, limiting the unit to a single ToC pillar. Plantation awareness stands at 41% (7 of 17), likely from organic or spillover initiatives, but with partial impact (57-86% among those aware).

Cross-Unit Synthesis

The divergence across units reveals a clear pattern: integrated, multi-pillar delivery (Belagavi) produces transformative outcomes, while single-pillar (Renukoot) or partial-coverage models (Renusagar) yield fragmented results. The program's overall effectiveness is anchored by Belagavi's performance, which masks significant gaps elsewhere. Standardising intervention coverage and replicating Belagavi's integrated model across Renukoot and Renusagar is essential for the program to achieve its full Theory of Change potential.

Mapping to Theory of Change

Table 3: Mapping Outcomes to Theory of Change

Outcome (Theory of Change)	Indicator	Finding	Assessment
Reduced energy costs and reliable access to lighting/irrigation	Electricity cost reduction; irrigation access during water shortage	Only 18% report reduced electricity costs despite 71% awareness. 50% report increased productivity. Impact concentrated in Renukoot (71%) and Renusagar (42%)	Partially Meets
Increased green cover, reduced pollution, enhanced biodiversity	Pollution reduction; biodiversity improvement; temperature cooling; fruit/vegetable production	80% report improved biodiversity, 76% pollution reduction, 75% cooler temperatures. Belagavi 100% across all indicators. Renusagar 52-57%	Meets Expectations
Reduced topsoil loss, improved fertility and land productivity	Agriculture on barren land; improved soil fertility; income from improved productivity	79% report agriculture on barren land; 75% improved fertility. Belagavi 100%. Renusagar 48-57%. Not implemented in Renukoot	Meets Expectations
Improved irrigation water availability and reduced time/cost fetching water	Water availability for livelihood; time/cost reduction; income stability	88% improved water availability; 85% reduced time. However, only 52% report cost reduction (0% in Renusagar). Belagavi 100%, Renusagar 43-74%	Partially Meets
Sustainable agriculture on restored land, higher farm incomes	Long-term agricultural sustainability; income resilience; drought resilience	Income stability reported by 73% of water-aware respondents. Belagavi achieves full ToC pathway. Renukoot limited to solar only. No income data captured for soil interventions	Partially Meets
Improved environmental quality, carbon sequestration, climate mitigation	Environmental quality; ecosystem health; temperature regulation	75% report cooler temperatures in plantation zones. Biodiversity improvements noted by 80%. Long-term carbon sequestration outcomes not yet measurable at this stage	Meets Expectations
Equitable programme delivery across all CSR units	Unit-level performance consistency; intervention coverage breadth	Sharp divergence: Belagavi 100% across 3 pillars; Renukoot has only solar; Renusagar partial across 4 pillars. Solar absent in Belagavi. Water/soil absent in Renukoot	Below Expectations
Adoption of renewable energy and reduced carbon footprint	Solar installation uptake; community adoption; fossil fuel displacement	Solar installations include streetlights (33 in Renusagar), irrigation pumps (7 total), and solar lights (26 total). 50% report productivity gains, but household energy cost impact is limited (18%)	Partially Meets

Recommendations

01 Standardise Multi-Pillar Delivery Across All Units

Priority: Renukoot (Single-pillar) & Renusagar (Partial)

Belagavi's integrated model (plantation + soil + water) achieves 100% across all indicators, validating the full ToC pathway. Replicate this approach in Renukoot (currently solar-only) by introducing plantation, soil conservation, and water harvesting. In Renusagar, deepen coverage from 53% to full community reach across all four pillars.

02 Improve Solar Energy Impact Conversion

Priority: Renukoot & Renusagar

Despite 71% solar awareness, only 18% report reduced electricity costs. The primary benefit perceived is irrigation access (23%) and productivity (50%). Conduct community training on optimal solar asset utilisation, household energy management, and diesel cost tracking. Introduce solar-powered drinking water units (currently zero installations) to expand the impact envelope.

03 Address Water Cost Reduction Gap in Renusagar

Priority: Renusagar

While 74% of Renusagar's aware respondents report improved water availability, 0% report reduced water-fetching costs, and only 43% report income stability. Investigate whether cost savings are not occurring or merely not perceived. Consider piped water connections, closer water points, or cost-tracking tools to demonstrate household savings from water conservation structures.

04 Introduce Solar Energy Support in Belagavi

Priority: Belagavi

Belagavi has zero solar energy interventions - the only unit without this pillar. Given Belagavi's strong community engagement and 100% positive response across other interventions, solar installations (irrigation pumps, streetlights) would complement existing water and soil conservation efforts and complete the full ToC pathway at this high-performing unit.

05 Establish Community-Based Maintenance Models

Priority: All 3 Units

The program lacks clearly documented maintenance and community ownership mechanisms for solar installations, plantation assets, and water structures. Form village-level Natural Resource Management committees with defined roles for asset maintenance, survival monitoring of planted saplings, and upkeep of water harvesting structures. Link with government watershed committees and MGNREGA convergence for sustained outcomes.

06 Strengthen Monitoring & Data Collection Systems

Priority: All 3 Units

Current data has significant gaps - no income before/after data for soil interventions, no cost savings tracking for solar, and limited qualitative feedback. Implement structured pre-post impact tracking with baseline income data, energy cost diaries, crop yield records, and water usage logs. This will enable robust outcome measurement and evidence-based programme refinement in future assessment cycles.

Cross-Cutting Recommendations

- Convergence with Government Schemes:** Align interventions with Jal Shakti Abhiyan, PM-KUSUM (solar), MGNREGA watershed works, and state soil health missions to leverage co-funding and ensure institutional sustainability beyond CSR timelines.
- Gender-Sensitive Programming:** 44% of respondents are women. Incorporate gender-specific indicators (e.g., women's time saved on water fetching, women's participation in NRM committees) to track differential impacts and ensure equitable programme benefits.
- Climate Resilience Integration:** Given 65% of respondents are aged 46+ with primary dependence on agriculture, build climate-adaptive practices (drought-resistant crops, micro-irrigation) into the programme design to strengthen long-term livelihood resilience.

Glimpses from the ground



Figure 1: Improved groundwater recharge activity done as part of water conservation and harvesting intervention in Renukoot



Figure 2: Solar light installed as part of Solar energy support intervention in Lohardaga

Thank you

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