Resilient Homestead and Livelihood Support to the Vulnerable Coastal People of Bangladesh (RHL)

Environmental and Social Impact Monitoring

Annual Progress Report

Reporting Period: January 2025- December 2025

Palli Karma-Sahayak Foundation (PKSF)

Contents

1. Executive Summary

The Resilient Homestead and Livelihood Support to Vulnerable Coastal People of Bangladesh (RHL) project has demonstrated strong environmental and social safeguard performance throughout its implementation. A structured Environmental and Social Impact Monitoring (ESIM) system, aligned with PKSF's Environmental and Social Standards and GCF safeguard policies, has been actively operational at the field level. From January to December 2025, field officers from the Implementing Entities (IEs) collected 2290 samples using digital data collection tools *(*KoBo Toolbox*)* to assess key environmental and social indicators. This included 1090 samples for climate-resilient homesteads**,** achieving 100% of the annual target**;** 734 samples for goat/sheep rearing; and 416 samples for crab farming, representing 10% of the annual target**.** In addition, the only one crab hatchery and 49 crab nurseries implemented during the year were fully assessed. Monitoring covered pre-implementation, implementation, and post-implementation stages**,** allowing the project to track impacts and compliance over time. Sampling intensity varied by intervention based on risk and scale, with more extensive coverage for homestead development due to its infrastructure and household-level safeguard dimensions.

Overall, environmental and social compliance was satisfactory level. Climate-resilient homesteads performed well in dust control through water spraying and polythene sheets to mitigate dust pollution. Clean transportation methods, including manual and CNG vehicles, were used for material transport. Occupational health and safety (OHS) arrangements were maintained with personal protective equipment (PPE) and first aid provisions at construction sites. Stakeholder engagement and resource efficient practices showed significant improvements, particularly in solar energy use and the adoption of improved cookstoves (ICS) from pre- to post-implementation. Goat/sheep rearing showed positive performance in OHS, hygiene, compost-based waste management, and awareness of sexual exploitation, abuse, and harassment (SEAH). Stakeholder engagement was supported through Climate Change Adaptation Group (CCAG) meetings, while grievances were managed through the project's Grievance Redress Mechanism (GRM). However, some post-implementation risks remain, particularly the potential discharge of manure into nearby water bodies. Crab-based livelihoods, including farming, nursing, and hatcheries, also showed strong safeguard performance, with minimal pollution risk and no notable incidents related to SEAH or child/forced labor. Strengths included high local hiring, strong community engagement, use of existing saline water and land, and a small-scale ETP at the hatchery.

The ESIM report is prepared to ensure that the RHL project complies with the Environmental and Social Safeguard (ESS) policies outlined in the Funded Activity Agreement (FAA) and the Environmental and Social Management Framework (ESMF). Its primary objective is to assess and track the project's environmental and social impacts at all stages of implementation, ensuring that mitigation measures are in place to prevent or minimize adverse effects. The report contributes to the achievement of climate resilience and sustainable livelihoods by monitoring compliance with GCF safeguard standards, enhancing gender responsiveness, and strengthening community engagement. Through continuous monitoring, it generates critical data that informs adaptive management strategies, ensuring that the project aligns with the goals of reducing vulnerability and promoting resilience among coastal communities while fostering the long-term sustainability of project interventions.

2. Introduction

The Resilient Homestead and Livelihood Support to the Vulnerable Coastal People of Bangladesh (RHL) project, funded by the Green Climate Fund (GCF) and implemented by PKSF**,** operates across seven coastal districts: Barguna, Bhola, Patuakhali, Cox's Bazar, Bagerhat, Khulna, and Satkhira. This project targets communities vulnerable to salinity intrusion, waterlogging, and cyclones, with the goal of enhancing climate resilience by improving homesteads and adaptive livelihoods. The key outcomes of the project include reducing losses from extreme weather events, enhancing resilience to sea-level rise and salinity, and building both institutional and community capacity for climate adaptation.

A critical component of the project is the Environmental and Social Impact Monitoring (ESIM)**,** which utilizes the Kobo Toolbox for real-time data collection. The monitoring process covers three stages: pre-implementation, implementation, and post-implementation, spanning from January to December 2025 across all seven districts. Field officers from the Implementing Entities (IEs) conduct daily site visits, gathering 2290 geo-tagged and time-stamped data samples to assess environmental and social impacts and the effectiveness of mitigation measures.

The project demonstrates strong compliance with Environmental and Social Standards (ESS)**,** with significant improvements in OHS and sanitation practices, clean technology adoption, and stakeholder engagement. This report presents the monitoring findings, evaluates the effectiveness of mitigation measures, and assesses adherence to both PKSF's ESS and GCF's safeguard policies**.** The results underscore the project's success in promoting sustainable livelihoods and environmental protection while also identifying areas that require continued follow-up to ensure the long-term sustainability of the interventions.

3. Objectives

The core objectives of this periodic monitoring are to:

1. Track compliance trends with PKSF's ESS across project stages;
2. Identify the potential impacts and residual measures;
3. Assess the effectiveness and sustainability of environmental and social mitigation measures;
4. Generate evidence for adaptive management and decision-making to strengthen environmental and social performance.

4. Methodology

The Environmental and Social Impact Monitoring (ESIM) for the RHL project follows a structured approach, collecting data across three key stages: pre-implementation, implementation, and post-implementation. This allows for the assessment of the impact of the interventions at different stages of the project lifecycle while ensuring environmental and social safeguards are being met. Field officers from 18 Implementing Entities (IEs) collected geo-tagged, time-stamped data periodically using digital tools "Kobo Toolbox". A total of 2290 monitoring samples were collected across seven districts, focusing on key interventions such as climate-resilient homestead development, goat/sheep rearing, and crab livelihoods, including crab farming, nurseries, and

hatcheries. The data was gathered from a representative sample of the activities, with 1090 samples collected for homestead development, covering 100% of the yearly target, 734 samples for goat/sheep rearing and 416 samples for crab farming, representing 10% of the annual target. Fewer samples were taken for goat rearing and crab farming due to their localized impacts. Only one crab hatchery and 49 crab nurseries were implemented during the year, both of which were fully assessed.

The monitoring process combined both qualitative and quantitative approaches to capture a comprehensive view of the project's impact. Data validation was ensured through GPS validation, geo-verification, and logical consistency checks. Structured field observations, beneficiary surveys, and environmental assessments were used to evaluate the eight key Environmental and Social Standards (ESS) indicators associated with the project activity implementation. The data was then analyzed to assess compliance with PKSF's Environmental and Social Standards (ESS). Stage-wise compliance was calculated, and trends were analyzed using percentage responses, with comparative and trend analyses visualized through charts to provide insights into improvements and areas requiring further intervention.

5. Stage-wise compliance:

The stage-wise compliance refers to the monitoring and evaluation of the project's adherence to environmental and social safeguards at three distinct phases: pre-implementation, implementation, and post-implementation. By examining compliance at each of these stages, the project can track the effectiveness of its mitigation measures, identify emerging risks, and make necessary adjustments to maintain strong performance throughout the project lifecycle.

- **Pre-Implementation Stage**:

- At this stage, the focus is on the preparation phase. Data collected during this stage assesses whether all necessary risk screenings and baseline evaluations have been conducted. It also examines whether the environmental and social mitigation measures, such as impact assessments and stakeholder engagement, are in place and functioning effectively.
- Compliance is measured by assessing adherence to the preparation guidelines, including environmental and social risk analysis, and the establishment of mitigation strategies to prevent any adverse impacts from project activities.

- **Implementation Stage**:

- This stage represents the active phase of the project, where interventions are carried out in the field. During this phase, the primary focus is on the actual operationalization of the planned activities and the application of the safeguards in real-time.
- Compliance in this phase is assessed by monitoring the execution of risk mitigation measures, including waste management, pollution control, OHS practices, labor inclusion, and stakeholder engagement. This is the most critical phase for ensuring that all the safeguards are adhered to on the ground.

- **Post-Implementation Stage**:

- After the interventions are completed, the focus shifts to evaluating the sustainability of the activities and practices. This stage monitors how well the environmental and social safeguards are maintained after the intervention has concluded.
- Compliance is measured by assessing whether the project's post-implementation practices, such as long-term waste management, sustainable resource use, and continued stakeholder engagement, are being adhered to. It also includes reviewing whether any residual risks from the activities, such as pollution or social issues, are being effectively managed.

5.1. Compliance Assessment and Analysis

To assess stage-wise compliance, data were collected through kobo based digital survey, field observations, and environmental and social assessments at each of the three stages. The key indicators for each stage are evaluated, and responses are categorized into "compliant" (Yes) or "non-compliant" (No). These responses are then calculated as percentages to determine the overall compliance rate at each stage.

The overall compliance rate for each stage is calculated as the percentage of "compliant" responses across all indicators, ensuring that higher compliance rates reflect stronger adherence to safeguards. The Stage-wise Compliance Analysis reveals the following patterns:

- **Pre-Implementation**: Compliance starts high due to thorough preparation, with a rate of 92.2%. This phase includes activities like site selection, risk screening, and the establishment of environmental and social safeguards, which have been consistently well-documented and monitored.

- **Implementation**: The compliance rate peaks at 97.6%, reflecting the successful application of safeguards and the robust management of project activities during the execution phase. This high rate is indicative of the project's strong operational management and ongoing monitoring mechanisms in place.

- **Post-Implementation**: The compliance rate slightly drops to 93.3%. While still very high, this decrease highlights the challenges faced in sustaining high levels of compliance after the project's direct interventions are concluded. The minor decline underscores the need for continued monitoring and post-project follow-up to ensure the sustainability of best practices.

6. Activity-wise Monitoring Results and Evaluation

6.1. Activity 1.1.1 Design and building of homesteads

The environmental and social compliance assessment for the homestead development activity shows generally strong safeguard performance across pre-implementation, implementation, and post-implementation stages. The monitoring results indicate low environmental risk, strong labor and safety arrangements during implementation, and notable improvements in climate-friendly practices (especially solar use and improved cookstoves use) by post-implementation. Stakeholder

engagement and grievance handling also remained consistently strong. The female participation was also very high (70%), reflecting the project's strong gender-responsive approach and its success in empowering women as active contributors to climate-resilient homestead development.

Table 1: Environmental and Social Compliance Trends Across Three Phases

Stage-wise comparison of positive responses (Yes %). For risk indicators, 'Yes' means risk/incident reported; lower is better.

Indicator Area	Key Measures	Pre (%)	Implementation (%)	Post (%)	Trend Summary
Environmental and Social Assessment	Possibility of pollution (soil/air/water) (risk = Yes)	3.17	3.72	0.00	Very low reported pollution risk overall, reduced to zero post-implementation.
	Topsoil removal from agricultural land (risk = Yes)	0.00	0.00	0.00	No topsoil removal reported.
	30 ft distance maintained (water source-latrine)	N/A	83.07	92.17	Strong progress in sanitation siting by post-implementation.
	RWHS filter installed at pipe mouth	N/A	64.64	80.70	Positive improvement, but coverage should increase further.
	Adverse groundwater impact reported (risk = Yes)	0.00	0.00	0.00	No groundwater overuse impact reported.
	Surface/groundwater quality impact reported (risk = Yes)	0.00	0.00	0.00	No reported water quality impact.
Labor and Working Conditions	Equal opportunities for work (women share %)	N/A	50.0	N/A	Equal women participation; scope to strengthen the women participation.
	Remuneration discrimination reported (risk = Yes)	N/A	0.0	N/A	No reported pay discrimination.
	Child/forced labor reported (risk = Yes)	N/A	0.0	N/A	No reported Child/forced labor incidence.
	Female worker safety ensured	N/A	100.00	N/A	Full compliance reported during implementation.
	Worker injury reported (risk = Yes)	N/A	1.50	N/A	Low injury incidence during implementation.
	Safe drinking water and first aid available	69.22	95.50	97.50	Strong improvement from pre to post stages.
	PPE used by workers	N/A	80.30	N/A	Moderate compliance; remains a key area for stricter follow-up.
	OHS awareness sessions conducted	72.31	93.30	93.30	High and sustained OHS awareness coverage.
	Sexual harassment occurred (risk = Yes)	0.00	0.00	0.00	No sexual harassment reported in any phase.
	SEAH awareness sessions conducted	38.53	55.93	81.48	Strong improvement by post-implementation; further strengthening still beneficial.
Resource Efficiency and Pollution Prevention	Solar/resource-efficient technology used	50.52	71.52	97.23	Very strong post-implementation improvement.
	Improved cookstove (ICS0 used	16.85	16.85	93.91	Major improvement by post-implementation.
	Dust control measures taken	N/A	96.81	N/A	Strong dust suppression during implementation.
	Environment-friendly transport used	N/A	83.86	N/A	Good practice adopted widely during implementation.
	Machinery maintained to reduce noise	N/A	94.60	N/A	Strong compliance in noise mitigation.
Community health and safety	Materials stored safely away from roads/drains	N/A	94.46	N/A	Strong implementation-stage compliance.
	Adverse health impact on local population (risk = Yes)	0	0	0	No reported adverse health impacts.

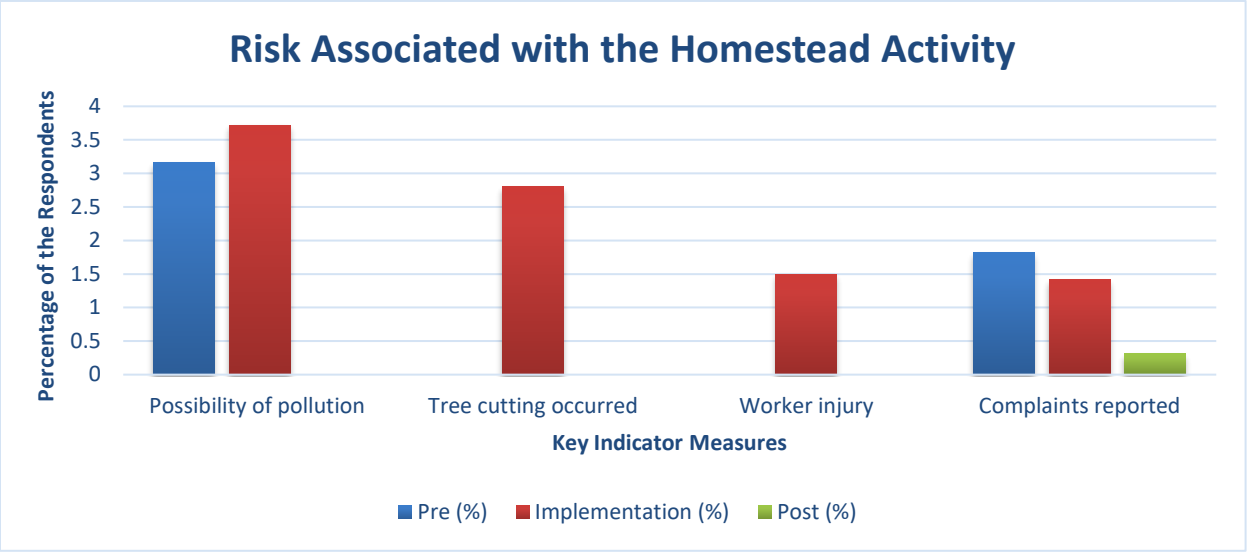
	Local workers hired	N/A	96.84	N/A	Strong reliance on local labor during implementation.
Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Land privately owned	100	100	100	Full compliance with private land use.
	Consent/no-objection obtained (where applicable)	100	100	100	Full compliance maintained.
	Govt. khas/disputed land used (risk = Yes)	0	0	0	No disputed/khas land use reported.
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Deforestation/tree cutting occurred (risk = Yes)	0	2.80	0	Fewer incidence reported in implementation stages.
	Homestead/embankment/pond bank planting practiced	0	81.50	83.90	Strong greening adoption during and after implementation.
	Impact on endangered species/ecosystems (risk = Yes)	0	0	0	No adverse biodiversity impacts reported.
Indigenous Peoples safeguards	Indigenous inclusion in activity	0	0	0	. 0 likely indicates not applicable due to no indigenous inclusion in all phases.
	FPIC/consent/rights/cultural respect ensured (where applicable)	0	0	0	
Stakeholder engagement and Information Disclosure	Complaints/obstacles reported (risk = Yes)	1.82	1.42	0.31	Very low complaint levels and declining by post-implementation.
	Grievances resolved	100	100	100	Full grievance resolution reported across all phases.
	CCAG disaster awareness participation	94.87	99.37	99.37	Very strong community preparedness engagement.
	CCAG discussion/community opinion prioritized	99.68	99.68	99.68	Consistently excellent participatory process.
	Local administration aware of the activity	100	100	100	Very high and improving institutional awareness.

Note: *N/A indicates indicators reported only for the implementation stage in the source structure. Indicators marked as risk = Yes are interpreted as lower is better.*

6.1.1. Analytical Interpretation:

Throughout all phases of the homestead activity implementation, environmental risk remained low, with minimal reports of pollution during both pre-implementation (3.17%) and implementation (3.72%) phases, dropping to 0% post-implementation. No topsoil removal, groundwater overuse, or water quality impacts were reported at any stage. Effective dust control was achieved through water spraying and polyethene sheet coverage (96.81%), machinery maintenance for noise mitigation (94.60%), and safe material storage (94.46%) during the implementation phase, reflecting excellent site management practices.

Figure 01: Risk Associated with the design and building of homesteads



Significant progress was observed in the adoption of climate-smart and resource-efficient practices, particularly post-implementation. The use of solar panel technology rose from 50.52% during pre-implementation and implementation to 97.23% post-implementation. Similarly, the adoption of improved cookstoves (ICS) saw a sharp increase from 16.85% to 93.91%, contributing to reduced greenhouse gas emissions and enhanced household energy efficiency. The rainwater harvesting filter system improved sharply from 64.64% during implementation to 80.70% post-implementation, although it remains an area for continued follow-up support.

Occupational health and safety (OHS) performance was also strong. The provision of safe drinking water and first aid facilities improved from 69.22% pre-implementation to 95.50% during implementation, reaching 97.50% post-implementation. OHS awareness sessions were conducted for 93.30% of workers, maintaining this level post-implementation. Worker injuries were low (1.50%) during implementation. However, the use of personal protective equipment (PPE), at 80.30%, was moderate and should be further strengthened.

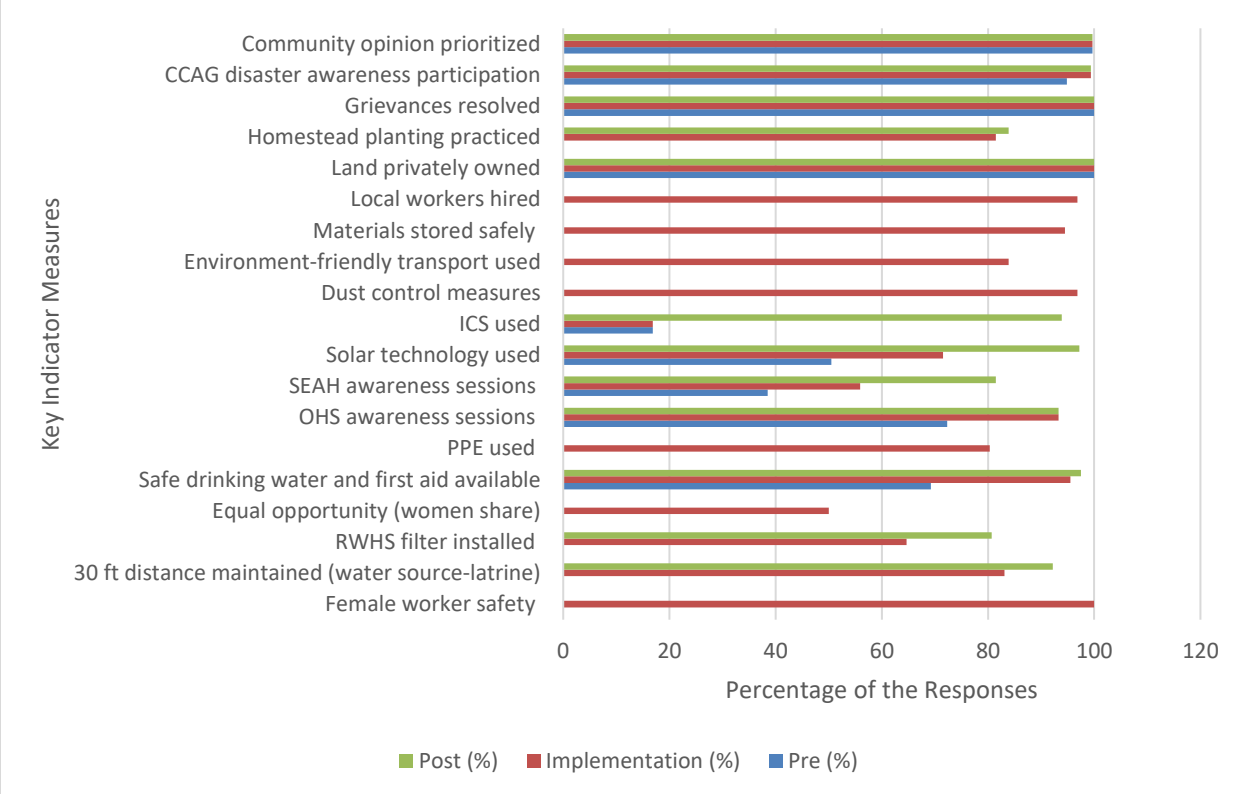
Social inclusion, gender equality, and safeguards for sexual exploitation, abuse, and harassment (SEAH) were prioritized during implementation. Local worker hiring was notably high (96.84%), equal women participation (50%) for work. Female worker safety was reported as 100%. No instances of child or forced labor were reported. No reports of sexual harassment or remuneration discrimination were made, and SEAH awareness sessions improved steadily from 38.53% to 81.48% post-implementation.

Water source protection and proper sanitation siting were effectively managed, with compliance for the 30-feet distance between water sources and latrines rising from 83.07% during implementation to 92.17% post-implementation. The remaining respondents used sand around the pit to prevent water pollution. No adverse groundwater or surface water quality impacts were reported, indicating that water-related safeguards were strong, though further technical follow-up

could improve sanitation siting and rainwater harvesting filter system coverage. Land-related safeguards showed exemplary performance. All land used was privately owned, with consent obtained where necessary, and no government khas or disputed land was utilized. Biodiversity conservation efforts were largely positive, with no reports of impacts on endangered species. Greening practices increased from 81.50% during implementation to 83.90% post-implementation, although the low risk of tree-cutting (2.80%) should remain under routine monitoring. Community engagement and grievance management were exceptionally strong throughout the project. Community participation in disaster awareness through the Climate Change Adaptation Group (CCAG) reached 99.37% during and after implementation, and community opinions were consistently prioritized in CCAG discussions (99.68%). Local administration awareness about the activity also fully maintained. Complaint reporting remained low and declined over time, from 1.82% to 1.42% to 0.31%, with all reported grievances being resolved in each phase.

Overall, the Design and Building of Homestead activity demonstrates excellent environmental and social safeguard compliance, strong community governance, and notable post-implementation improvements in climate-friendly household technologies. The key areas for continued attention are the further strengthening of PPE use during implementation, expanded SEAH awareness, and improvements in rainwater harvesting filter installation and sanitation siting compliance. The monitoring results indicate a strong positive trajectory, particularly in household resilience and sustainability practices post-implementation**.** See Annex 1A for the detailed indicator table.

Figure 02: Stage-wise ES Compliances of the design and building of the homestead activity



6.2.Activity 2.1.1 Construction of Slatted Houses for Goat/Sheep Rearing

The Environmental and Social (ESS) compliance performance for Goat/Sheep Rearing (slatted house construction) shows generally strong safeguard performance across the three stages, with particularly good results in stakeholder engagement, grievance handling, OHS awareness, and gradual improvement in resource-efficiency and waste-management practices. The monitoring results indicate lower overall environmental pollution risk, improved SEAH awareness by post-implementation, and stronger post-stage hygiene practices, while a few risks remain for continued follow-up, especially surface water contamination risks related to manure management. Notably, around 80% of the beneficiaries in this intervention are women, aligning with the project's gender-responsive approach and reinforcing women's active role in climate-resilient livelihood activities.

Table 3: Environmental and Social Compliance Trends Across Three Phases

Stage-wise comparison of positive responses (Yes %). For risk indicators, 'Yes' means risk/incident reported; lower is better.

Indicators	Key Measures	Pre (%)	Implementation (%)	Post (%)	Trend Summary
Environmental and Social Assessment	Environmental pollution (soil/air/water) risk (risk = Yes)	0.6	1.09	1.09	Very low pollution risk overall; slight increase from pre-stage but still minimal.
	Fertile topsoil removed (risk = Yes)	0.0	0.0	0.0	No topsoil removal reported.
	Adverse groundwater impact (excessive water use) (risk = Yes)	0.0	0.0	0.0	No groundwater overuse impact reported across all stages.
	Surface/groundwater quality impact possible (risk = Yes)	8.9	2.7	1.09	Risk reduced notably post-implementation; mitigation (composting/soak-well) appears to mitigate the water pollution.
Labor and Working Conditions	Worker injury (risk = Yes)	0.0	0.0	0.0	No worker injury reported.
	Safe drinking water & first aid available	80.1	80.1	88.3	Positive improvement by post-stage.
	PPE use	N/A	93.5	93.5	Very strong PPE use during and after implementation (*pre-stage not applicable in practice).
	OHS awareness sessions conducted	84.2	99.2	99.2	Strong and sustained OHS awareness coverage.
	Forced/child labor involved (risk = Yes)	0.0	0.0	0.0	No Forced/child labor reported.
	Equal opportunities for work (women share %)	N/A	55.0	55.0	Moderate women participation; scope to strengthen gender balance.
	Female worker safety ensured	N/A	100	100	Full compliance reported during and post implementation
	Remuneration discrimination (risk = Yes)	0.0	0.0	0.0	No pay discrimination reported.
	Sexual harassment occurred (risk = Yes)	0.0	0.0	0.0	No sexual harassment reported in any phase.
	SEAH awareness sessions conducted	32.7	52.3	91.3	Strong improvement, especially post-implementation.
Resource Efficiency & Pollution Prevention	Manure discharge to surrounding water bodies (risk = Yes)	8.9	8.9	1.09	Marked reduction post-stage; still requires continued manure management follow-up.
	Goat shed/litter cleaned regularly	25.1	34.7	89.9	Major improvement in hygiene practice by post-stage.
	Polythene sheet used under goat sheds	0.0	0.0	81.7	Significant post-implementation adoption.

	GHG emissions possibility (risk = Yes)	0.0	0.0	0.0	No GHG emission reported Risk identified; managed the waste through composting and regular cleaning.
	Composting awareness/training conducted	42.0	83.7	87.7	Strong and sustained improvement in waste-to-fertilizer awareness.
Community Health, Safety & Security	Adverse health impact on local population (risk = Yes)	0.0	0.0	0.0	No local health impacts reported.
	Local workers hired	N/A	98.9	N/A	Very high local labor recruitment during implementation
Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Land privately owned	100.0	100.0	100.0	Full compliance across all stages.
	No-objection/consent obtained	100.0	100.0	100.0	Full compliance maintained.
	Govt. khas/disputed land used (risk = Yes)	0.0	0.0	0.0	No disputed or khas land use reported.
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Deforestation/tree cutting incident/risk (risk = Yes)	9.8	2.8	0.0	Risk decreased substantially post-implementation.
	Greening (grass/shrubs/trees/vegetables cultivated)	100.0	100.0	100.0	Full greening practice reported across all stages.
	Adverse impact on endangered species/ecosystem (risk = Yes)	0.0	0.0	0.0	No biodiversity/ecosystem harm reported.
Indigenous People Inclusion	Indigenous community included	0.0	0.0	0.0	No inclusion reported
	FPIC/consent, rights, and cultural respect ensured (where applicable)	0.0	0.0	0.0	
Stakeholder Engagement and Information Disclosure	Complaints/obstacles encountered (risk = Yes)	0.5	0.0	0.5	Very low complaint incidence overall.
	Complaint/grievance resolved	100.0	N/A	100.0	Full resolution where complaints were reported.
	CCAG disaster-awareness participation	72.8	72.8	100.0	Strong improvement by post-implementation.
	Community opinion prioritized in CCAG meetings	100.0	100.0	100.0	Consistently strong participatory governance.
	Local administration aware of project activity	100	100	100.0	Fully maintained.

Note: Some values shown as 0.0 in pre or post stages are stage-specific indicators (for example, PPE use, female worker safety, and local labor hiring are primarily implementation-stage indicators).

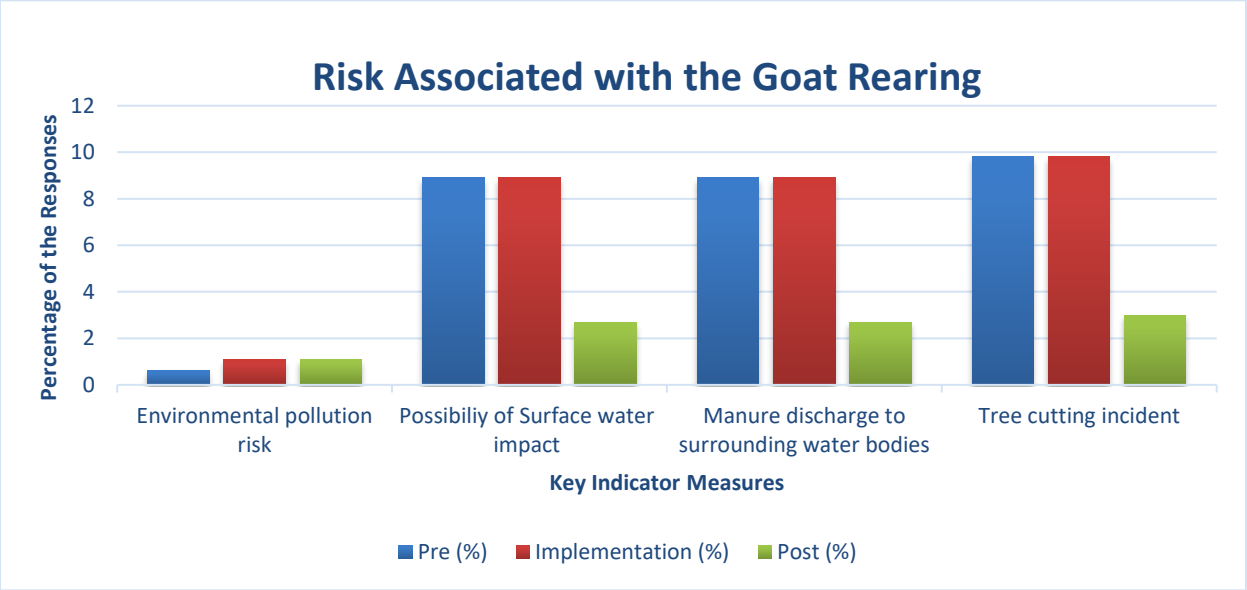
6.2.1. Analytical Interpretation

Environmental risks associated with the Goat/Sheep Rearing (Slatted House) activity remained low overall, with minimal environmental pollution reported across all three stages of the project (0.6% pre, 1.09% implementation, 1.09% post). No significant impacts such as topsoil removal or groundwater overuse were observed. However, the monitoring results still indicates some risk to surface water quality, specifically linked to manure disposal, which decreased from 8.9% in the pre and implementation stages to 1.09% post-implementation. This suggests that composting and soak-well practices around goat sheds should be continued to mitigate these risks.

Waste management, hygiene, and pollution prevention saw significant progress throughout the stages. Regular cleaning of goat sheds and litter disposal improved dramatically, rising from 25.1%

in the pre-stage to 34.7% during implementation, and then to 89.9% in the post-stage. The use of polythene sheets under goat sheds also increased substantially, reaching 81.7% by the post-implementation stage, supporting better manure management and hygiene. Composting awareness and training surged from 42.0% to 87.7%, signaling strong uptake of waste-to-fertilizer practices.

Figure 03: Risk Associated with the Construction of Slatted Houses for Goat/Sheep Rearing



Occupational health and safety (OHS) performance was particularly strong during implementation, with personal protective equipment (PPE) use reaching 93.5%, and OHS awareness sessions covering 99.2% of workers. Safe drinking water and first aid provisions also improved to 88.3% by the post-stage, and no worker injuries were reported. Female worker safety reached 100% during implementation, indicating excellent compliance during active construction or work periods. These results suggest that good protection standards are in place, with opportunities to further enhance safe water and first aid arrangements at all sites.

In terms of labor inclusion, gender equality, and safeguards against sexual exploitation, abuse, and harassment (SEAH), the project demonstrated high local worker recruitment (98.9% during implementation), which reflects a strong local economic inclusion outcome. Women's participation in the workforce was reported at 55%, a moderate figure that could be improved further in future stages. No remuneration discrimination or sexual harassment incidents were reported, and SEAH awareness increased significantly from 32.7% pre-stage to 91.3% post-stage, representing a strong positive shift.

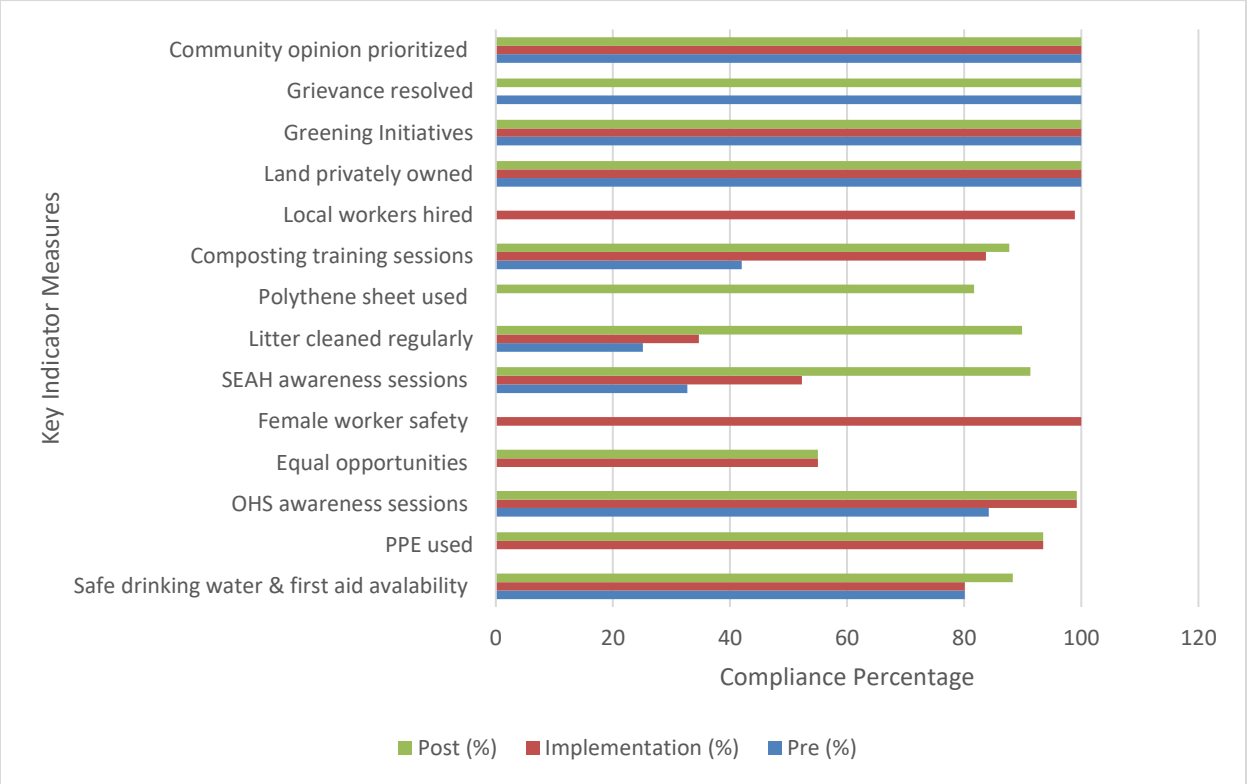
Land and biodiversity safeguards showed full compliance. There was 100% private land use, 100% consent or no-objection obtained, and no use of khas or disputed land. The project's biodiversity performance was also positive, with no adverse impacts on endangered species or ecosystems. The risk of tree-cutting decreased from 9.8% in the pre to zero percent in the post-stage, while greening

practices were reported at 100% across all stages, indicating strong integration of vegetation-based mitigation around homesteads.

Stakeholder engagement and grievance management remained consistently strong throughout the project. Community participation in CCAG meetings was 100% across all phases, and local administration awareness increased to 100% by the post-implementation stage. Disaster-awareness participation within CCAG improved from 72.8% to 100% by the post-stage, showing stronger community integration over time. Complaints were very low (0.5% in pre and post, and 0% in implementation), with all reported grievances resolved where applicable.

Overall, the Goat/Sheep Rearing (Slatted House) activity demonstrates strong environmental and social safeguard (ESS) compliance, with clear improvements post-implementation, particularly in hygiene practices, composting awareness, SEAH awareness, stakeholder engagement, and local community participation. The monitoring data suggests a stronger post-stage compliance trajectory than the earlier summary in several areas. The main areas for continued attention are manure-related water contamination risks, and further strengthening of women's participation in work opportunities. With continued reinforcement through CCAG sessions and practical manure-management support, the activity is on a strong path toward environmentally safe and socially inclusive implementation.

Figure 4: Stage-wise ES Compliances of the Construction of Slatted Houses for Goat/Sheep Rearing activity



6.3. Activity 2.2.1: Development of crab hatcheries (1st stage)

The Environmental and Social (ESS) compliance performance for the Crab Hatcheries activity shows very strong safeguard compliance across pre-implementation, implementation, and post-implementation stages. The monitoring data indicates zero reported environmental pollution, no adverse impacts on water quality or local health, and full compliance in labor safety arrangements during implementation and post-implementation. The activity also demonstrates strong land-use safeguards, biodiversity protection, and stakeholder engagement with relevant institutions and entrepreneurs reported at full coverage across all stages.

Table 4: Environmental and Social Compliance Trends Across Three Phases

Stage-wise comparison of positive responses (Yes %). For risk indicators, 'Yes' means risk/incident reported; lower is better.

Indicators	Key Measure	Pre (%)	Implementation (%)	Post (%)	Trend Summary
Environmental and Social Assessment	Environmental pollution (soil/air/water) risk (risk = Yes)	0.0	0.0	0.0	No reported pollution risk across all phases.
	Adverse groundwater impact (excessive water use) (risk = Yes)	0.0	0.0	0.0	No groundwater overuse impact reported.
	Surface/groundwater quality impact possible (risk = Yes)	0.0	0.0	0.0	No water quality risk reported; dichlorination noted.
Labor and Working Conditions	Worker injury (risk = Yes)	0.0	0.0	0.0	No worker injury reported.
	Safe drinking water and first aid available	0.0	100	100	Strong implementation-stage compliance maintained post-implementation.
	PPE use	0.0	100	100	Full PPE use reported during implementation and post-stage.
	OHS awareness sessions conducted	0.0	100	100	Full OHS awareness coverage during and after implementation.
	Forced/child labor involved (risk = Yes)	0.0	0.0	0.0	No forced or child labor reported.
	Equal opportunities for work (women share %)	0.0	0.0	0.0	No women workers reported in crab hatcheries operations.
	Equal opportunities for work (men share %)	0.0	100	100	Work opportunities reported for men during and post stages.
	Female worker safety ensured	0.0	0.0	0.0	No female workers reported; indicator appears not applicable.
	Remuneration discrimination (risk = Yes)	0.0	0.0	0.0	No remuneration discrimination reported.
	Sexual harassment occurred (risk = Yes)	0.0	0.0	0.0	No sexual harassment incidents reported.
	SEAH awareness sessions conducted	0.0	100	100	SEAH awareness fully covered during and after implementation.
Resource Efficiency and Pollution Prevention	GHG emissions possibility (risk = Yes)	0.0	0.0	0.0	No reported GHG emission risk from the activity.
	Machinery maintained/lubricated to reduce noise	0.0	100	100	Machinery maintenance reported from implementation onward.
	Antibiotic-mixed or saline water directly discharged (risk = Yes)	0.0	0.0	0.0	No direct discharge to open water bodies reported.
	Treatment facility available for antibiotic/saline water	0.0	100	100	Treatment facility available (small-scale ETP).

	National grid electricity used	0.0	100	100	Grid electricity used as hatchery power supply.
Community Health, Safety and Security	Adverse health impact on local population (risk = Yes)	0.0	0.0	0.0	No adverse health impact reported.
	Local workers hired	0.0	100.0	0.0	Local workers engaged during implementation (stage-specific indicator).
Land Use and Resettlement Safeguards	Land privately owned	100	100.0	100.0	Full compliance with private land use.
	No-objection/consent obtained	100	100	100	Full consent compliance maintained.
	Govt. khas/disputed land used (risk = Yes)	0.0	0.0	0.0	No khas or disputed land used.
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Deforestation/tree cutting incident or risk (risk = Yes)	0.0	0.0	0.0	No deforestation or tree-cutting risk reported.
	Greening (grass/shrubs/trees/vegetables cultivated)	0.0	100	100	Strong increase in greening practice from pre-stage.
	Adverse impact on endangered species/ecosystem (risk = Yes)	0.0	0.0	0.0	No biodiversity or ecosystem harm reported.
Indigenous People Inclusion	Indigenous community included	0.0	0.0	0.0	No indigenous community inclusion reported.
	FPIC/consent from indigenous community	0.0	0.0	0.0	Not applicable based on no indigenous inclusion.
Stakeholder Engagement and Information Disclosure	Complaints/obstacles encountered (risk = Yes)	0.0	0.0	0.0	No complaints or obstacles reported.
	Complaint/grievance resolved	0.0	0.0	0.0	No grievance cases recorded in the source table.
	CCAG disaster-awareness participation	100	100	100	Full participation reported across all phases.
	Community opinion prioritized in CCAG meetings	100	100	100	Consistently strong participatory governance.
	Relevant Stakeholder engagement	100	100	100	Full engagement reported.

Note: Several indicators are stage-specific (e.g., local worker hiring, PPE use, female worker safety), and 0.0 values in non-implementation stages may reflect non-applicability rather than non-compliance. Mitigation measures noted in the source include dichlorination for hatchery water quality management and a small-scale ETP for treatment of antibiotic-mixed or saline water.

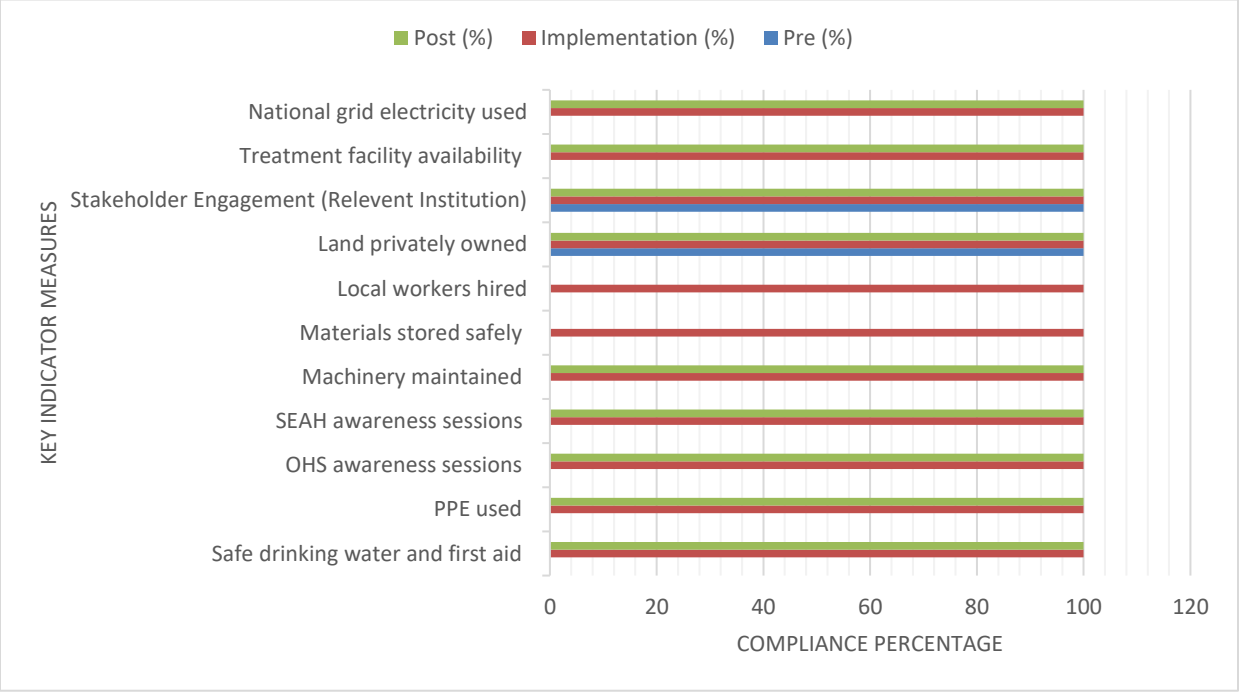
6.3.1. Analytical Interpretation:

The Crab Hatcheries activity demonstrates a robust environmental and social safeguards (ESS) profile, showing strong compliance across all phases of its implementation. Environmental control measures in the hatchery setup are well-managed, with no reported environmental pollution risks such as soil, air, or water contamination. There is also no adverse impact on groundwater sources or the quality of surface and groundwater, with dichlorination identified as an effective mitigation measure. Labor-related safeguard compliance improves significantly from pre-implementation to implementation, maintaining stability post-implementation. During implementation and post-implementation, all labor-related safety measures, including safe drinking water, first aid, personal protective equipment (PPE) use, and occupational health and safety (OHS) awareness sessions, are reported at 100%. Additionally, no worker injury, forced labor, child labor, remuneration discrimination, or sexual harassment is reported at any phase. However, the absence of women workers in the workforce is notable and should be addressed in future inclusion planning.

In terms of resource efficiency and pollution prevention, the activity shows strong performance in hatchery-specific waste and water management. There is no direct discharge of antibiotic-mixed or saline water into open water bodies, and a treatment facility (small-scale effluent treatment plant, ETP) is fully implemented and maintained. The activity is also compliant with national grid electricity use, which is consistently reported at 100%, and machinery maintenance for noise control is fully accounted for from implementation onward. The community health, land safeguards, and biodiversity conservation aspects are also robust. The activity reports no adverse health impacts on nearby populations, and land safeguards are fully compliant with 100% private land use, and no use of khas or disputed land. Biodiversity safeguards are strong, with no risk to deforestation or endangered species, and no adverse impact on ecosystems. Greening practices also show significant progress, increasing from 0% during pre-implementation to 100% during implementation, maintaining that level post-implementation.

Stakeholder engagement (relevant institution and entrepreneurs) is highly effective, with consistent performance across all phases. No complaints or obstacles have been reported, and participation from the community, prioritization of their opinions, and relevant institutional engagement are all recorded at 100% throughout the process. This indicates solid local coordination and sustained community-level support for the hatchery activity. Overall, the Crab Hatcheries activity shows very strong compliance with environmental and social safeguards, with particular strengths in labor safety compliance during implementation and post-implementation, strong water-treatment arrangements, complete land and biodiversity safeguard adherence, and effective stakeholder engagement. However, a key area for future improvement lies in increasing women's participation in the workforce, which should be addressed to enhance social inclusion. The overall monitoring data reflects a highly compliant and well-managed activity. See Annex 1C for detailed indicator table.

Figure 5: Stage-wise ES Compliances of the crab hatcheries



6.4. Activity 2.2.3 Technical and financial support for "crab nursers" (2nd stage)

The environmental and social compliance assessment for the crab nursers activity indicates generally strong safeguard performance across pre-implementation, implementation, and post-implementation stages. The monitoring results show high compliance in land-use safeguards, stakeholder engagement, and community consultation, together with marked improvements in occupational health and safety (OHS), SEAH awareness, water source protection and biodiversity-friendly planting practices. Most key indicators show stable or improving performance by post-implementation.

Table 5: Environmental and Social Compliance Trends Across Three Phases

Stage-wise comparison of positive responses (Yes %). For risk indicators, lower values are better.

Indicators	Key Measure	Pre (%)	Implementation (%)	Post (%)	Trend Summary
Environmental and Social Assessment	Environmental pollution (soil/air/water) risk (risk = Yes)	0.0	0.0	0.0	No reported risk
	Groundwater impact from excessive water use (risk = Yes)	0.0	0.0	0.0	No groundwater overuse impact reported.
	Surface/groundwater quality impact possible (risk = Yes)	0.0	0.0	0.0	No reported impact on surface or groundwater quality.
Labor and Working Conditions	Worker injury reported (risk = Yes)	0.0	0.0	0.0	No worker injury reported.
	Safe drinking water and first aid available	77.0	100.0	100.0	Improved to full compliance from implementation stage onward.
	PPE used by workers	57.7	100.0	100.0	Strong improvement to full compliance.
	OHS awareness sessions conducted	61.5	94.2	100.0	Steady improvement; reached full coverage post-implementation.
	Forced/child labor employed (risk = Yes)	0.0	0.0	0.0	No Forced/child labor reported.
	Equal opportunities for work (women share %)	0.0	50.0	50.0	Balanced men-women opportunity among reported workers during implementation and post-stage.
	Female worker safety ensured	N/A	100.0	N/A	Full compliance during implementation; pre/post values reflect stage-specific applicability.
	Remuneration discrimination (risk = Yes)	0.0	0.0	0.0	No pay discrimination reported.
	Sexual harassment occurred (risk = Yes)	0.0	0.0	0.0	No sexual harassment reported across all stages.
	Awareness sessions on sexual harassment conducted	63.5	77.0	100.0	Strong improvement in SEAH awareness coverage.
Resource Efficiency and Pollution Prevention	Greenhouse gas emissions possibility (risk = Yes)	0.0	0.0	0.0	No GHG emission risk reported in the source table.
	Saline land/water bodies used for crab farming	100.0	100.0	100.0	Full alignment with use of existing saline land/water resources.
	New pond/water body excavated for crab farming (risk = Yes)	0.0	0.0	0.0	No new pond excavation reported.
	Salinity intrusion or increased salinity in land (risk = Yes)	0.0	0.0	0.0	No salinity intrusion reported.
	Adverse health impact on local population (risk = Yes)	0.0	0.0	0.0	No adverse health impact reported.

Community Health and Safety	Local workers hired	N/A	100.0	N/A	Implementation-stage indicator shows full local labor hiring.
Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Land privately owned	100.0	100.0	100.0	Full compliance across all stages.
	Consent/no-objection obtained	100.0	100.0	100.0	Full consent compliance maintained.
	Government khas/disputed land used (risk = Yes)	0.0	0.0	0.0	No khas or disputed land use reported.
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Deforestation/tree cutting incident (risk = Yes)	0.0	0.0	0.0	No tree-cutting incident reported.
	Grass/shrubs/trees/vegetables cultivated	42.3	86.5	86.5	Strong improvement in planting and greening practices.
	Adverse impact on biodiversity/ecosystem (risk = Yes)	0.0	0.0	0.0	No adverse biodiversity or ecosystem impact reported.
Indigenous Peoples	Indigenous community included	0.0	0.0	0.0	No indigenous inclusion reported in the activity sample.
Stakeholder Engagement and Information Disclosure	Complaints/obstacles encountered (risk = Yes)	0.0	0.0	0.0	No complaints or obstacles reported.
	Complaint/grievance resolved	N/A	N/A	N/A	No complaints were reported; indicator effectively not applicable.
	CCAG disaster-awareness participation	100.0	100.0	100.0	Full participation maintained throughout.
	Community opinion prioritized in CCAG meetings	100.0	100.0	100.0	Consistently strong participatory governance.
	Local administration aware of project activity	100.0	100.0	100.0	Full local administration awareness across all stages.

6.4.1. Analytical Interpretation:

The environmental safeguards for the crab nursers activity have remained strong throughout all stages, with monitoring data indicating no negative impacts on groundwater, surface water quality, or greenhouse gas emissions. In terms of labor conditions and occupational health and safety (OHS), there was significant improvement over time. The provision of safe drinking water and first aid increased from 77.0% in the pre-stage to full coverage during implementation and post-implementation. The use of personal protective equipment (PPE) rose from 57.7% to 100%, and OHS awareness sessions saw a sharp rise from 61.5% to full coverage by the end of the project. Importantly, no worker injuries were reported, reflecting the institutionalization of effective workplace safety practices.

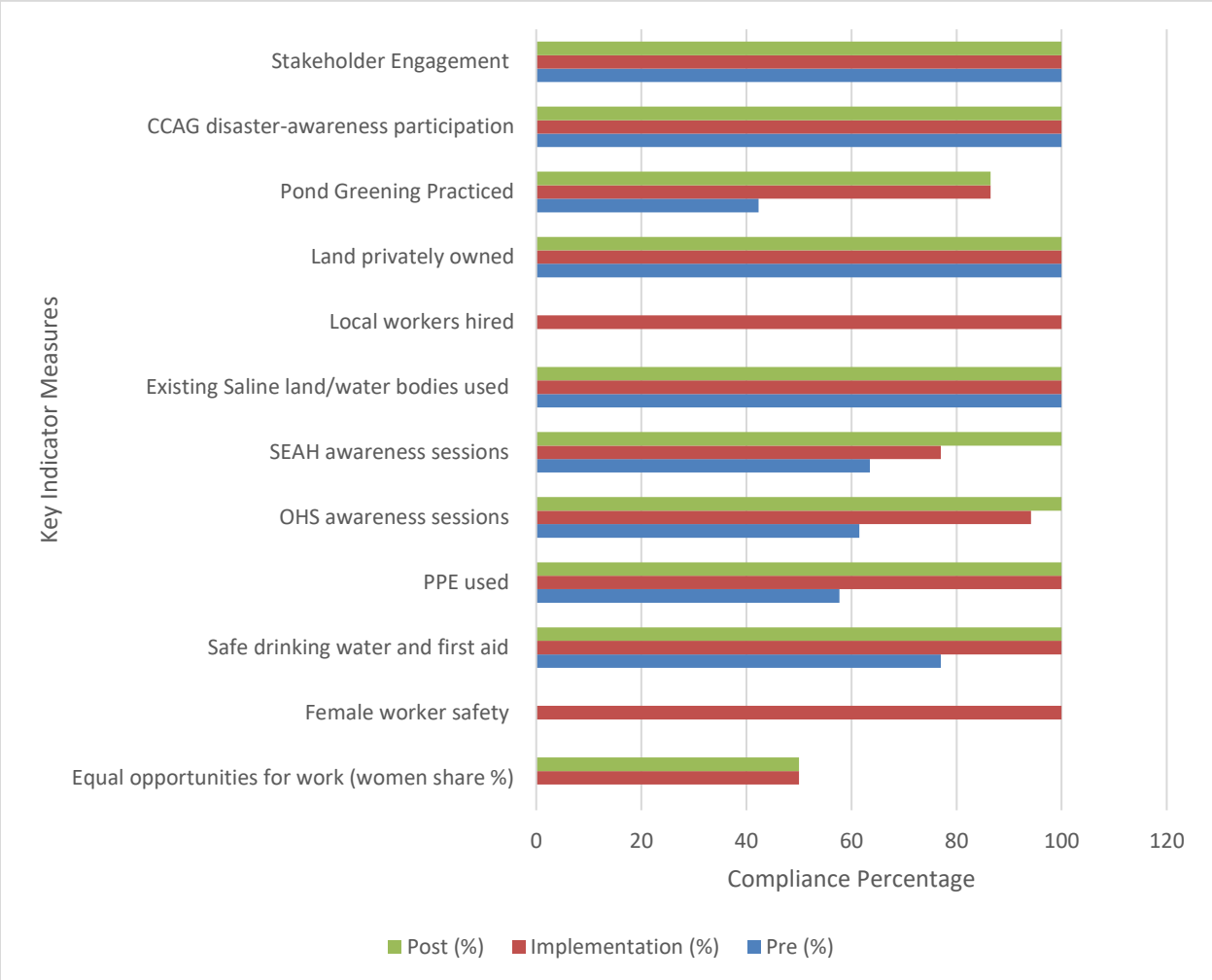
Regarding labor inclusion, gender safety, and preventing sexual exploitation, abuse, and harassment (SEAH), the project demonstrated robust social safeguards. There was no reported remuneration discrimination or sexual harassment during any phase of the activity. SEAH awareness improved significantly, rising from 63.5% in the pre-stage to full coverage post-implementation. Equal work opportunities were reported, with 50% women and 50% men participating in both the implementation and post-implementation stages. No reported incidence of forced/child labor. Female worker safety was fully ensured during the implementation phase.

The activity aligned well with resource-efficiency principles, utilizing existing saline land and water bodies without any new pond excavation or reported salinity intrusion. In terms of

community safety, land use, and biodiversity safeguards, the activity demonstrated full compliance. Community consultation, local administration awareness, and CCAG participation remained at 100% across all stages, with no complaints or barriers reported. The project adhered to land-use safeguards, using 100% private land with full consent and no disputed or khas land involved. Biodiversity indicators were also positive, with no tree cutting or harm to ecosystems, and an increase in greening practices from 42.3% to 86.5%.

Overall, the crab nursers activity showed strong compliance with both environmental and social safeguards, with a positive trajectory from pre-implementation to post-implementation, particularly in OHS, SEAH awareness, composting, and participatory governance. The monitoring data indicates that the activity is well integrated into community-based systems, ensuring compliance in key areas such as land use, consultation, and administration. Continued monitoring will be essential to maintain pollution prevention measures through stricter supervision and corrective actions. See Annex 1D for detailed indicator table.

Figure 07: Stage-wise ES Compliances of the Crab Nursers



6.5. Activity 2.2.4 Technical and financial support to crab farmers

The Environmental and Social (ESS) compliance performance for crab farming activity indicates very strong safeguard performance across the indicators, alongside clear improvements in occupational safety practices, SEAH awareness, and CCAG engagement over time. The monitoring results show zero reported pollution risks, zero SEAH incidents, and full compliance on land-related safeguards. Key areas that still require reinforcement include sustained OHS arrangements (safe water/first aid and PPE) through routine monitoring. Notably, around 60% of the beneficiaries in this intervention are women, aligning with the project's gender-responsive approach and reinforcing women's active role in climate-resilient livelihood activities.

Table 6: Environmental and Social Compliance Trend by Thematic Area

Stage-wise comparison of positive responses (Yes %). For risk indicators, 'Yes' indicates risk/incident reported (lower is better).

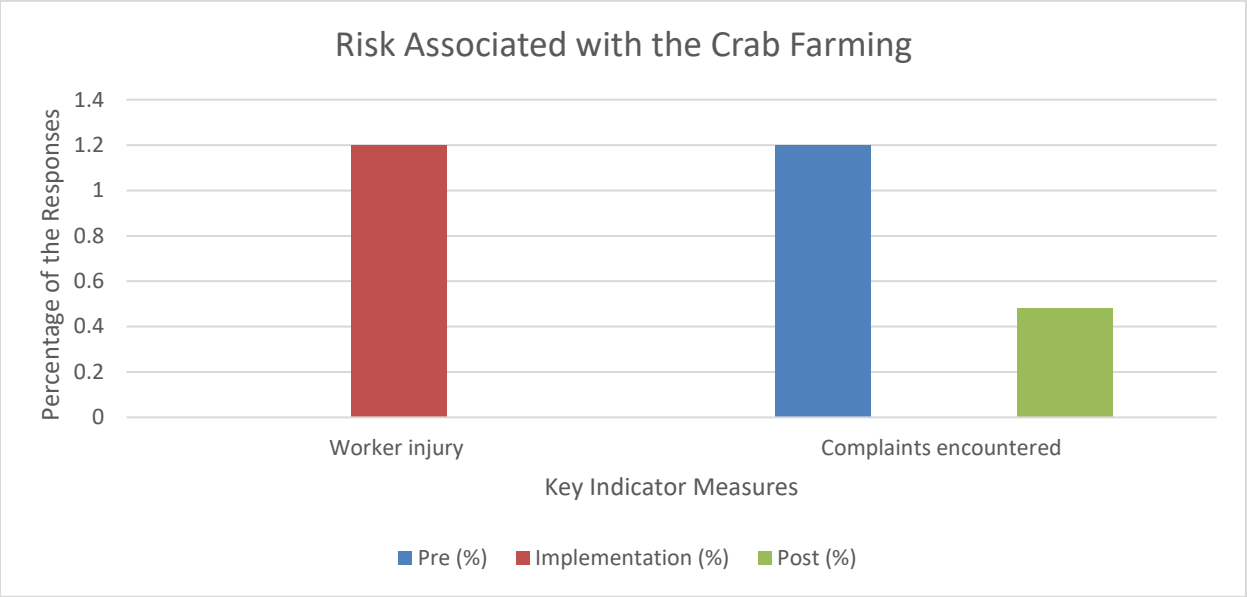
Indicators	Key Measures	Pre (%)	Implementation (%)	Post (%)	Trend Summary
Environmental and Social Assessment	General pollution risk (soil, air, water) [risk = Yes]	0.0	0.0	0.0	No pollution risk reported across all stages.
	Possible impact on surface/groundwater quality [risk = Yes]	0.0	0.0	0.0	No reported impact on surface or groundwater quality.
Labor and Working Conditions	Worker injury reported [risk = Yes]	0.0	1.2	0.0	Very low injury incidence during implementation; zero pre/post.
	Safe drinking water & first aid available	19.5	64.0	75.7	Substantial improvement from pre to post; still not universal.
	PPE used by workers	19.5	64.0	75.7	PPE use improved steadily and remains a key protective practice to sustain.
	OHS awareness sessions conducted	26.0	40.9	86.5	Strong increase by post-implementation, indicating improved safety sensitization.
	Child/forced labor involved [risk = Yes]	0.0	0.0	0.0	Zero incidents reported across all stages.
	Equal opportunity for work (Women / Men share)	0	50	50	Balanced participation reported during and after implementation.
	Female worker safety ensured	0.0	100.0	0.0	Full compliance during implementation (stage-specific indicator).
	Remuneration discrimination reported [risk = Yes]	0.0	0.0	0.0	Zero incidents reported across all stages.
	Sexual harassment occurred [risk = Yes]	0.0	0.0	0.0	Zero incidents reported across all stages.
	SEAH awareness sessions conducted	60.0	78.1	88.0	High and improving awareness coverage; sustain through refreshers.
Resource Efficiency and Pollution Prevention	Saline land/water bodies used for crab farming	100.0	100.0	100.0	Activity consistently uses saline-prone land/water bodies, aligning with intended practice.
	New pond/water body excavated [risk = Yes]	0.0	0.0	0.0	No new excavation reported.
	Contributing to saline intrusion/increased salinity [risk = Yes]	0.0	0.0	0.0	No salinity intrusion contribution reported.
Community Health,	Adverse health impact on local population [risk = Yes]	0.0	0.0	0.0	No adverse community health impacts reported.

Safety and Security	Local workers hired	N/A	96.4	N/A	Very high local worker hiring during implementation (stage-specific indicator).
Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Land privately owned	100.0	100.0	100.0	Full compliance with private land use across stages.
	Consent/no-objection obtained (where applicable)	100.0	100.0	100.0	Full consent compliance maintained.
	Government khas/disputed land used [risk = Yes]	0.0	0.0	0.0	No khas/disputed land use reported.
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Deforestation/tree cutting occurred [risk = Yes]	0.0	0.0	0.0	No deforestation/tree cutting reported.
	Cultivation/greening on homesteads/embankments/pond banks	93.3	93.3	93.3	Sustained greening practice across all stages.
	Adverse impact on endangered species/ecosystem [risk = Yes]	0.0	0.0	0.0	No biodiversity/ecosystem harm reported.
Indigenous People Inclusion	Indigenous community included	0.0	0.0	0.0	No inclusion reported
	FPIC/consent, rights, and cultural respect ensured (where applicable)	N/A	N/A	N/A	
Stakeholder Engagement and Information Disclosure	Complaints/obstacles encountered [risk = Yes]	1.2	0.0	0.48	Very low complaint incidence overall; slightly higher post-stage than implementation.
	Grievances resolved	100.0	N/A	100.0	All reported complaints were resolved.
	Participated in CCAG disaster awareness sessions	32.7	45.4	80.0	Strong improvement by post-stage; good platform for sustaining practices.
	CCAG discussion held and community opinion prioritized	100.0	100.0	100.0	Consistently strong participatory process.
	Local administration aware of activity	100.0	100.0	100.0	Full institutional awareness across stages.

6.5.1. Analytical Interpretation

The environmental safeguards for the crab farming activity remained robust, with no reported pollution risk across all stages of the project. Monitoring data indicating no negative impacts on groundwater, surface water quality, or greenhouse gas emissions. Salinity-related safeguards were consistently met, with all respondents (100%) confirming the use of saline land or water bodies for crab farming and no new pond excavation or salinity intrusion reported.

Figure 08: Risk Associated with the Crab Farming



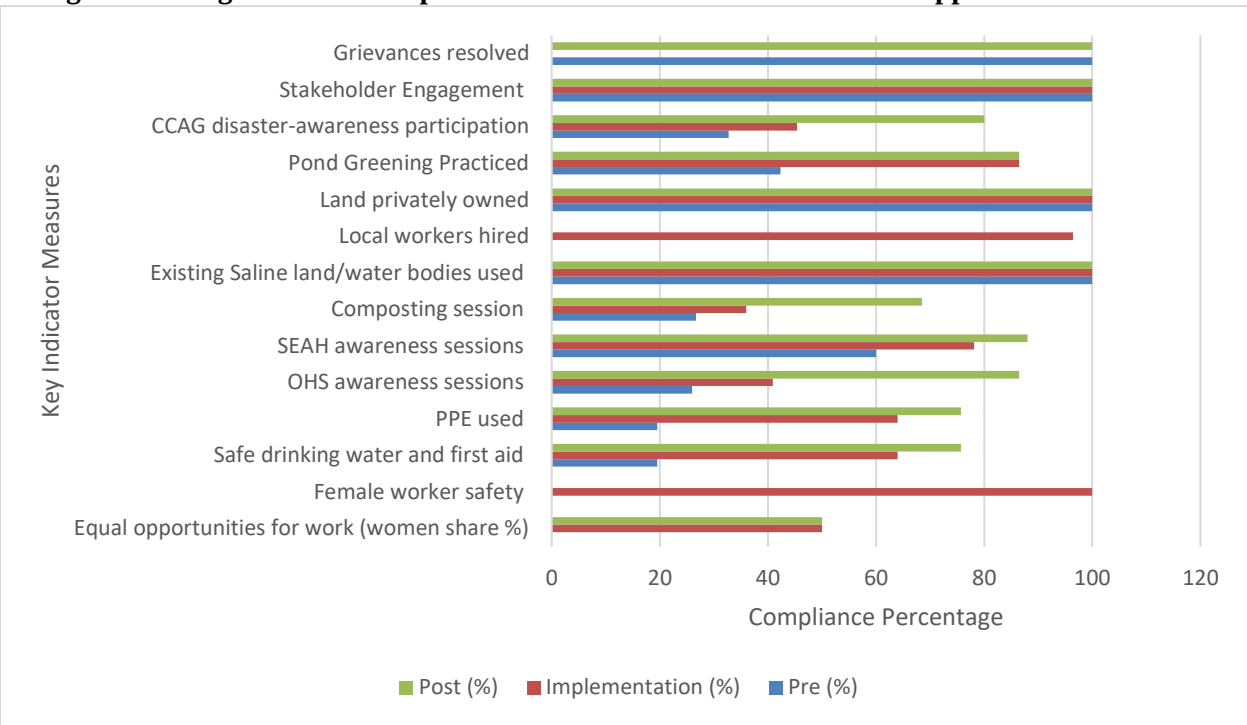
In terms of occupational health and safety monitoring results indicate a clear improvement over time. Arrangements for safe drinking water and first aid increased from 19.5% before the implementation phase to 64.0% during implementation and 75.7% after implementation. Similarly, personal protective equipment (PPE) use followed a similar trajectory. OHS awareness sessions saw a significant improvement, rising from 26.0% in the pre-implementation phase to 86.5% in the post-implementation phase. There was a small incidence of injury (1.2%) reported during implementation, with no injuries before or after the project.

The social safeguards also showed positive results. No incidents of sexual harassment were reported during any of the phases, and the coverage of SEAH awareness remained consistently high, improving from 60.0% pre-implementation to 88.0% post-implementation. Equal opportunity reporting revealed balanced participation during and after implementation, with both women and men participating equally (50% each). No child/forced labor incidence was reported during and after implementation. Stakeholder engagement remained consistently strong throughout the project. Complaints were minimal, with a slight decrease from 1.2% in the pre-implementation stage to 0% during and post-implementation. Furthermore, 100% of reported grievances were resolved. Participation in CCAG disaster-awareness sessions significantly increased from 32.7% pre-implementation to 80% post-implementation, proving to be an effective platform for promoting OHS and social safeguard practices. Local administration awareness and CCAG consultation and prioritization remained at 100% across all phases of the project.

Overall, the crab fattening activity demonstrated strong compliance with environmental, land, SEAH, biodiversity, and governance safeguards. Significant progress was also made in raising awareness of OHS and waste management by the post-implementation phase. Moving forward, priority areas for follow-up include maintaining workplace safety arrangements, such as PPE and access to safe drinking water, and reinforcing messaging and monitoring to mitigate any risks related to child or forced labor. Leveraging CCAG meetings and engaging local administrations

in refresher sessions and compliance checks can help sustain strong performance beyond the implementation phase. See Annex 1E for detailed indicator table.

Figure 09: Stage-wise ES Compliances of the Technical and financial support to crab farmers



7. Evaluation Against Environmental and Social Standards (ESS)

This section presents the evaluation of the Environmental and Social Standards (ESS) for the Resilient Homestead and Livelihood Support to the Vulnerable Coastal People of Bangladesh (RHL) project. The evaluation is based on the Environmental and Social Impact Monitoring (ESIM) analyses conducted during this reporting cycle and aligns with PKSF's ESS and GCF safeguard requirements.

The ESS evaluation relied on stage-wise ESIM data collected at pre-implementation, implementation, and post-implementation stages. Field officers from the Implementing Entities (IEs) conducted regular monitoring, and results were reviewed and consolidated into activity-level annex tables and narratives for this assessment period.

The ESS evidence, derived from the activity-wise annex analyses, confirms strong compliance across core safeguard indicators. However, a few post-implementation issues have been identified that require continued follow-up and refresher support. These findings are reflected in the annexes for climate-resilient homestead development, slatted houses for goat/sheep rearing, and crab livelihood activities (crab farming, crab nursers, and crab hatcheries).

Table 7: Compliance Trend Aligned with Environmental and Social Standards (ESS)

ESS No.	ESS Title	Evaluation Findings	Overall Compliance Trend
ESS 1	Environmental and Social Assessment	All monitored activities underwent systematic screening and stage-wise assessment (pre / implementation / post). The monitoring data analyses for homestead, goat/sheep rearing, and crab livelihood activities show generally low environmental risk, strong site-level monitoring, and structured KoBo-based data collection. Pollution risk remained very low in the homestead, goat rearing and crab livelihood activity analyses, with homestead pollution risk declining to 0% at post-implementation.	Nearly full compliance maintained across monitored stages
ESS 2	Labor and Working Conditions	Labor safeguards remained strong. Occupational health and safety performance remained strong across the activities. Safe drinking water and first-aid arrangements improved in homestead and goat/sheep interventions, OHS awareness remained high, and reported worker injuries were very low. However, post-implementation refresher sessions remain important to sustain PPE use, first-aid readiness, and hygiene practices across all livelihood interventions, including crab-related sites. Female worker safety during implementation was reported at 100% in both the homestead and goat rearing data analyses. Child/forced labor remained zero.	Strong compliance maintained; continue reinforcement in post-stage follow-up
ESS 3	Resource Efficiency and Pollution Prevention	The monitoring results show strong resource-efficiency gains and pollution prevention measures. In homestead development, post-stage adoption of solar/resource-efficient technology and ICS improved sharply, while water and sanitation safeguards also strengthened. In goat/sheep rearing, post-stage improvements in shed hygiene, composting awareness, and manure-management practices were notable. Continued follow-up is needed for manure-related water contamination risk in some goat/sheep rearing sites, and for sustained practices across crab livelihood sites.	Progressive trend observed; targeted post-implementation support required
ESS 4	Community Health, Safety, and Security	Local labor recruitment was high in implementation-stage activities (e.g., 96.84% in homestead development and 98.9% in goat/sheep slatted-house construction). No adverse impact on community were reported for all of the activities.	Full compliance maintained
ESS 5	Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	No involuntary resettlement, land acquisition, or economic displacement was reported in the updated analyses. Land-use safeguards remained very strong, with activities implemented on privately owned or consented land and no reported use of disputed or khas land.	Full compliance maintained
ESS 6	Biodiversity Conservation and Sustainable Management of Living Natural Resources	Biodiversity impacts remained minimal in the updated activity analyses. No adverse impacts on endangered species or ecosystems were reported. Homestead and goat/sheep activities showed strong greening practices, with vegetation planting and homestead greening integrated into implementation. A small residual tree-cutting risk persists in the early stages of the activities and should continue to be monitored.	High compliance maintained with continued monitoring of greening outcomes
ESS 7	Indigenous Peoples	No participation of Indigenous Peoples was reported during the implementation of the project activities.	Not applicable
ESS 10	Stakeholder Engagement and Information Disclosure	Stakeholder engagement remained one of the strongest safeguard areas. The homestead, goat/sheep rearing and crab nursing and farming analyses show very high CCAG participation, strong community voice in decision-making, and high local administration awareness. Complaint incidence remained low, and grievance resolution was consistently 100% where complaints were reported. Continued visibility of GRM channels and post-implementation engagement is recommended, especially for crab livelihood sites requiring behavior reinforcement.	Nearly full compliance maintained; strengthen post-implementation GRM visibility

7.1. Analytical Interpretation:

The ESS compliance results confirm that the RHL Project continues to institutionalize safeguard practices across key interventions, including climate-resilient homestead development, slatted houses for goat/sheep rearing, and crab livelihood activities (crab farming, crab nursers, and crab hatcheries). Core ESS indicators remain highly compliant: no involuntary resettlement or land acquisition was reported, no SEAH incidents were reported in the activity analyses, and labor-related risks such as child/forced labor remained absent.

The homestead monitoring result shows very low environmental pollution risk and strong implementation-stage controls in dust suppression, noise mitigation, and material storage, with clear post-implementation gains in climate-friendly household practices such as solar/resource-efficient technology and improve cookstove (ICS) use. The goat/sheep rearing result similarly demonstrates strong OHS performance, local labor engagement, and post-stage gains in shed hygiene and composting awareness. However, the goat/sheep results also highlight continued need for follow-up on manure-related contamination risks to nearby water bodies in some sites.

The crab livelihood monitoring result shows consistency across all livelihood activities and confirmed strong land-use safeguards, stakeholder participation, and grievance management. Across all activity, the main recurring issue is post-implementation receding risk in sustained practices (e.g., PPE use, first-aid readiness, safe waste management, and routine behavior reinforcement), indicating the importance of periodic follow-up visits and refresher messaging through CCAG platforms.

8. Discussion and Interpretation

The monitoring results indicate strong and generally improving environmental and social safeguard performance across the project's interventions. Regular on-site field monitoring and reporting through KoBo, supervision by Implementing Entities, and active Climate Change Adaptation Group (CCAG) engagement continue to support high compliance in OHS, labor safeguards, stakeholder participation, and land-use compliance. At the same time, the monitoring narratives show that safeguard performance is strongest during active implementation and can weaken after completion unless post-stage reinforcement is maintained.

8.1. Environmental Management

The environmental component focused on monitoring pollution control, water and waste management, vegetation and greening practices, land use, and resource-efficiency measures across pre-implementation, implementation, and post-implementation stages.

Waste Management: The goat/sheep rearing results show strong improvement in shed cleaning, composting awareness, and manure-management practices, while homestead development results show strong site-management and pollution prevention performance.

Water Management: Water-related safeguards remained strong in the homestead analysis, with improved compliance for sanitation siting (safe distance between latrines and water sources) and greater RWHS filter installation by post-implementation. In homestead and goat/sheep rearing, no groundwater overuse risk was reported, but follow-up is needed to further reduce residual surface contamination risks from goat manure. In crab nurser and farming activities, all sites used the existing saline water/land and no new pond excavated for crab farming.

Vegetation and Land Use: Land-use compliance remained very strong, with no reported use of disputed/khas land in the homestead, goat/sheep rearing and crab livelihoods analyses. Greening and plantation practices remained a positive co-benefit in all activities, while continued encouragement is recommended to sustain biodiversity co-benefits in all crab livelihood sites.

Pollution Control and Resource Efficiency: Homestead development showed major post-stage gains in climate-friendly practices, especially solar adoption and improve cookstove (ICS) use. Construction-stage controls (dust suppression, material management, and machinery maintenance) also remained strong. In goat/sheep rearing, post-stage gains in hygiene and composting support improved pollution prevention, though routine reinforcement remains necessary.

8.3. Social Management

The social monitoring assessed gender inclusion, occupational health and safety, community awareness, labor conditions, and grievance redress across monitored activities.

Women's Participation and Inclusion: The homestead component demonstrated strong equal-opportunity performance during implementation. Goat and sheep rearing showed balance women's labor participation. The crab livelihood component should continue ensuring equal-opportunity participation and identify areas for enhanced gender-inclusive outreach.

Occupational Health and Safety (OHS): OHS compliance remained robust in the homestead and goat/sheep analyses, with high awareness coverage, strong PPE performance during implementation, and very low worker injury incidence. The main challenge remains sustaining PPE use, first-aid readiness, and hygiene routines after implementation through refresher sessions and follow-up checks.

Grievance Redress Mechanism (GRM): Complaint incidence remained low across the activities, and grievance resolution was consistently 100% where complaints were reported. GRM channels should remain visible and regularly discussed through CCAG meetings to ensure continued access for women and other vulnerable groups.

SEAH Awareness: The homestead and goat/sheep results show no sexual harassment incidents and improved SEAH awareness, especially in post-implementation stages. Periodic refresher sessions through CCAG and field visits will help sustain these preventive gains.

8.4. Mitigation Measures:

- Tree plantation, homestead greening, and biodiversity conservation measures integrated into livelihood and housing interventions.
- Improved waste management practices, including composting awareness and better manure-management support in goat/sheep rearing sites.
- Safe storage of materials, drainage protection, and site management measures to reduce waterlogging and pollution risks.
- Dust and air-emission control through site housekeeping, cleaning, and construction-stage suppression practices e.g., water spraying and polyethene coverage.
- Water protection through filtration, improved sanitation siting, effluent management, small scale ETP and safe distance maintenance between toilets and water sources.
- Eco-friendly transport, improved cookstoves (ICS), and solar adoption contribute to reduce the GHG emissions.
- Provision of PPE and regular OHS awareness sessions for workers and households during implementation and follow-up periods.
- Gender sensitization, leadership strengthening, SEAH awareness, and climate-risk/disaster preparedness sessions through CCAG platforms.

8.5. Key Findings

- Strong environmental and social safeguard performance across homestead, goat/sheep rearing, and crab livelihood activities, supported by stage-wise KoBo monitoring and field supervision.
- Land-use safeguards remained fully compliant in the activity analyses, with no involuntary resettlement, no reported land acquisition, and no use of disputed/khas land.
- Homestead development showed major post-implementation gains in climate-friendly practices, especially solar technology and improve cookstove (ICS) adoption, alongside stronger water and sanitation safeguards.
- Goat/sheep rearing showed strong OHS, local labor recruitment, and major post-stage improvements in shed hygiene and composting awareness, while requiring continued follow-up on manure-related water contamination risk.
- Stakeholder engagement and grievance handling remained consistently strong, with very high CCAG participation and 100% grievance resolution where complaints were reported.
- The most persistent issue across the activities is post-implementation receding risk in sustained practices (e.g., PPE use, first aid readiness, waste management behaviors), which requires routine refresher support.

9. Recommendations:

- Continue periodic environmental and social monitoring and follow-up beyond implementation completion, with stronger emphasis on post-implementation stages.

- Provide regular refresher training through CCAG meetings on OHS, safe waste disposal, manure management, biodiversity conservation, SEAH prevention, and gender rights.
- Display ESS and safety information clearly at implementation sites to reinforce PPE use, safe practices, and equal participation of women and men.
- Maintain zero tolerance on child labor through contractual provisions, periodic site checks, and immediate corrective actions if incidents are found.
- Monitor wage and labor practices systematically to sustain equal opportunity and pay equity.
- Scale up successful mitigation practices, including composting, homestead greening, RWHS filter use, ICS, and solar technologies.
- Formalize simple low-cost pollution-control measures (e.g., drainage management, controlled manure disposal, soak-well or containment practices) where relevant.
- Keep GRM channels visible, accessible, and inclusive, and review grievance trends regularly in CCAG and project review meetings.
- Systematically document ESS good practices and challenges across all activities and share lessons for replication and future project design.

10. Conclusions:

The environmental and social impact monitoring results indicate high compliance with PKSF and GCF safeguard requirements across the project's major interventions. Mitigation measures are functioning effectively, and the results provide stronger evidence of post-implementation gains in several activities, especially homestead development and goat/sheep rearing. The primary safeguard management priority now is to prevent decline in good practices after implementation by strengthening routine follow-up and refresher engagement.

Annex 1A: Detailed Indicator Table of the Design and Building Homestead Activity (January-December 2025)

ESS Indicators	Question	Responses	Pre-implementation (%)	Implementation (%)	Post-Implementation (%)	Mitigation Measures Taken
Environmental and Social Assessment	Is there any possibility of environmental pollution (soil, air, water) as a result of implementing the activities	Yes	3.17	3.72	0	
		No	96.83	96.28	100	
	Has the fertile topsoil been removed from the agricultural land?	Yes	0	0	0	
		No	0	100	0	
	Has the implementation of the activities had any adverse impact on the groundwater source (such as excessive water usage)?	Yes	0	0	0	
		No	0	0	0	
	Is there any possibility that the implementation of the activities may affect the quality of surface and groundwater?	Yes	0	0	0	
		No	0	0	0	
	Has any sexual harassment occurred?	Yes	0	0	0	
		No	100	100	100	
Labor and Working Conditions	Has any worker been injured during the implementation of the activities?	Yes	0	1.5	0	
		No	0	95	0	
	Is there a proper arrangement for safe drinking water and first aid at the workplace?	Yes	69.22	95.5	97.5	
		No	30.78	4.5	2.5	
	Is personal protective equipment (PPE) used to ensure protection of the workers?	Yes	0	80.3	0	
		No	0	19.7	0	
	Have any awareness sessions on occupational health and safety been conducted?	Yes	72.31	93.3	93.3	
		No	27.69	6.7	6.7	
	Were or are there any forced laborers or child laborers (≤ 16) employed	Yes	0	0	0	
		No	0	100	0	
	Do both women and men have equal opportunities for work?	Men	0	50	0	
		Women	0	50	0	
	Is the safety of female workers ensured?	Yes	0	100	0	
		No	0	0	0	
		Yes	0	0	0	

	Has anyone ever been/is being discriminated against in terms of remuneration?	No	0	100	0	
	Have any awareness sessions been conducted about sexual harassment?	Yes	38.53	55.93	81.48	
		No	61.47	44.07	18.52	
Resource Efficiency and Pollution Prevention	Has a distance of 30 feet been maintained between the water source and the latrine?	Yes	0	83.07	92.17	Use sand around the pit
		No	0	16.93	7.83	
	Have any measures (such as water spraying or covering with polythene) been taken to prevent dust from construction materials?	Yes	0	96.81	0	
		No		3.19	0	
	Are environment-friendly vehicles used for transporting construction materials and other goods to prevent air pollution?	Yes	0	83.86	0	
		No	0	16.14	0	
	Is there any possibility of greenhouse gas emissions (carbon dioxide, methane) as a result of the implementation of the activities?	Yes	0	0	0	1. Tree Planation 2. Compost Production 3. ICS use
		No	0	0	0	
	Have the machinery been properly maintained or lubricated to prevent noise pollution?	Yes	0	94.6	0	Use machinery in day time
		No	0	5.4	0	
	Are resource efficient technologies such as solar used to mitigate greenhouse gases?	Yes	50.52	71.52	97.23	
		No	28.48	28.48	2.77	
	Is Bandhu Chula (ICS) used to mitigate greenhouse gases?	Yes	16.85	16.85	93.91	
		No	83.15	83.15	6.09	
	Is there a filter system installed at the mouth of the pipe for rainwater harvesting?	Yes	0	64.64	80.7	
		No	0	35.36	19.3	
	Have the materials/equipment used in the activities been properly stored at a distance from roads and drains to prevent obstruction of water flow and waterlogging?	Yes	0	94.46	0	
		No	0	5.54	0	
Community Health, Safety, and Security	Has the implementation of the activity had any adverse impact on the health of the local population?	Yes	0	0	0	
		No	100	100	100	
	Are local workers hired to carry out activities?	Yes	0	96.84	0	
		No	0	3.16	0	
Land Acquisition,	Is the land used for the activities privately owned?	Yes	100	100	100	
		No	0	0	0	

Restrictions on Land Use, and Involuntary Resettlement	If the land is owned by the husband/father/another family member, has a no-objection or consent letter been obtained?	Yes	100	100	100	
		No	0	0	0	
	Has the project activity been or is being implemented on government khas land or any disputed land?	Yes	0	0	0	
		No	100	100	100	
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Has there been any incident of deforestation or tree cutting, or is there any possibility of such an event due to implementation of the project activities?	Yes	0	2.8	0	
		No	100	97.2	100	
	Have grass, shrubs, trees, or vegetables been cultivated on homesteads, embankments, or pond banks?	Yes	0	81.5	83.9	
		No	100	18.5	16.1	
	Is the activity having or likely to have any adverse impact on any endangered species, biodiversity, or ecosystem?	Yes	0	0	0	
		No	100	100	100	
Indigenous People	Has any indigenous community been included in the implementation of the activity?	Yes	0	0	0	
		No	0	0	0	
	Has free prior written consent been obtained from the indigenous community for their inclusion in the activity?	Yes	0	0	0	
		No	0	0	0	
	Has the implementation of the activity ensured respectful recognition of the human rights, identity, social customs, religious and cultural practices of the indigenous community?	Yes	0	0	0	
		No	0	0	0	
	Has equal rights for the indigenous community, similar to those of the mainstream population, been ensured in the project activities?	Yes	0	0	0	
		No	0	0	0	
Stakeholder Engagement and Information Disclosure	Have there been any complaints or obstacles encountered in the implementation of the activities?	Yes	1.82	1.42	0.31	
		No	98.18	98.58	99.69	
	Has the complaint or grievance been properly resolved?	Yes	100	100	100	
		No	0	0	0	

	Have you participated in any CCAG Group awareness-raising sessions on dealing with various natural disasters such as cyclones?	Yes	94.87	99.37	99.37	
		No	5.13	0.63	0.63	
	Has the implementation of the activity involved discussion in CCAG group meetings and given priority to the opinions of the community?	Yes	99.68	99.68	99.68	
		No	0.32	0.32	0.32	
	Is the local administration aware of the project activities?	Yes	98.89	99.02	99.68	
		No	1.11	0.79	0.32	

Annex 1B —Construction of slatted houses for goat/sheep rearing Detailed Indicator Table (January-December 2025)

ESS Indicators	Question	Responses	Pre-implementation (%)	Implementation (%)	Post-Implementation (%)	Mitigation Measures Taken
Environmental and Social Assessment	Is there any possibility of environmental pollution (soil, air, water) as a result of implementing the activities	Yes	0.6	1.09	1.09	
		No	99.4	98.9	98.9	
	Has the fertile topsoil been removed from the agricultural land?	Yes	0	0	0	
		No	0	100	0	
	Has the implementation of the activities had any adverse impact on the groundwater source (such as excessive water usage)?	Yes	0	0	0	
		No	100	100	100	
	Is there any possibility that the implementation of the activities may affect the quality of surface and groundwater?	Yes	8.9	2.7	1.09	Composting from the solid waste and use of soak-well for litter
		No	91.1	97.3	98.9	
	Has any sexual harassment occurred?	Yes	0	0	0	
		No	100	100	100	

Labor and Working Conditions	Has any worker been injured during the implementation of the activities?	Yes	0	0	0	
		No	0	100	0	
	Is there a proper arrangement for safe drinking water and first aid at the workplace?	Yes	80.1	80.1	88.3	
		No	19.9	19.9	11.7	
	Is personal protective equipment (PPE) used to ensure protection of the workers?	Yes	0	93.5	93.5	
		No	0	6.5	6.5	
	Have any awareness sessions on occupational health and safety been conducted?	Yes	84.2	99.2	99.2	
		No	15.8	0.8	0.8	
	Were or are there any forced laborers or child laborers (≤ 16) employed	Yes	0	0	0	
		No	0	100	0	
	Do both women and men have equal opportunities for work?	Women	0	55	55	
		Men	0	45	45	
	Is the safety of female workers ensured?	Yes	0	100	0	
		No	0	0	0	
	Has anyone ever been/is being discriminated against in terms of remuneration?	Yes	0	0	0	
		No	0	100	0	
		Yes	32.7	52.3	91.3	

	Have any awareness sessions been conducted about sexual harassment?	No	67.3	47.7	8.7	
Resource Efficiency and Pollution Prevention	Has there any possibility of goat manure (urine and feces) being discharged into the surrounding water bodies?	Yes	8.9	8.9	1.09	Waste is dumped by digging and composting
		No	91.1	91.1	98.9	
	Is the goat shed/litter box cleaned regularly to prevent germs and bad odor?	Yes	25.1	34.7	89.9	1. Bury under the ground 2. Composting 3. Direct sell
		No	74.9	65.3	10.1	
	Is polythene sheet used under goat sheds?	Yes	0	0	81.7	
		No	100	100	18.3	
	Is there any possibility of greenhouse gas emissions (carbon dioxide, methane) as a result of the implementation of the activities?	Yes	0	0	3.5	1.Composting 2. Stored in a Bag and sell 3. Regular Cleaning the goat shed
		No	100	100	96.5	
	Have any campaigns, awareness meetings, or training sessions been conducted on composting waste into fertilizer?	Yes	42	83.7	87.7	
		No	58	16.3	12.3	
Community Health, Safety, and Security	Has the implementation of the activity had any adverse impact on the health of the local population?	Yes	0	0	0	
		No	100	100	100	
		Yes	0	98.9	0	

	Are local workers hired to carry out activities?	No	0	1.1	0	
Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Is the land used for the activities privately owned?	Yes	100	100	100	
		No	0	0	0	
	If the land is owned by the husband/father/another family member, has a no-objection or consent letter been obtained?	Yes	100	100	100	
		No	0	0	0	
	Has the project activity been or is being implemented on government khas land or any disputed land?	Yes	0	0	0	
		No	100	100	100	
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Has there been any incident of deforestation or tree cutting, or is there any possibility of such an event due to implementation of the project activities?	Yes	9.8	2.8	0	
		No	90.2	97.2	100	
	Have grass, shrubs, trees, or vegetables been cultivated on homesteads, embankments, or pond banks?	Yes	100	100	100	
		No	0	0	0	
	Is the activity having or likely to have any adverse impact on any endangered species, biodiversity, or ecosystem?	Yes	0	0	0	
		No	100	100	100	
Indigenous People	Has any indigenous community been included in the implementation of the activity?	Yes	0	0	0	
		No	100	0	0	
	Has free prior written consent been obtained from the indigenous	Yes	0	0	0	
		No	0	0	0	

	community for their inclusion in the activity?					
	Has the implementation of the activity ensured respectful recognition of the human rights, identity, social customs, religious and cultural practices of the indigenous community?	Yes	0	0	0	
		No	0	0	0	
	Has equal rights for the indigenous community, similar to those of the mainstream population, been ensured in the project activities?	Yes	0	0	0	
		No	0	0	0	
Stakeholder Engagement and Information Disclosure	Have there been any complaints or obstacles encountered in the implementation of the activities?	Yes	0.5	0	0.5	
		No	99.5	100	99.5	
	Has the complaint or grievance been properly resolved?	Yes	100	0	100	
		No	0	0	0	
	Have you participated in any CCAG Group awareness-raising sessions on dealing with various natural disasters such as cyclones?	Yes	72.8	72.8	100	
		No	27.2	27.2	0	
	Has the implementation of the activity involved discussion in CCAG group meetings and given priority to the opinions of the community?	Yes	100	100	100	
		No	0	0	0	
	Is the local administration aware of the project activities?	Yes	98.9	98.9	100	
		No	1.1	1.1	0	

Annex 1C —Development of crab hatcheries Detailed Indicator Table

ESS Indicators	Question	Responses	Pre-implementation (%)	Implementation (%)	Post-Implementation (%)	Mitigation Measures Taken
Environmental and Social Assessment	Is there any possibility of environmental pollution (soil, air, water) as a result of implementing the activities	Yes	0	0	0	
		No	100	100	100	
	Has the implementation of the activities had any adverse impact on the groundwater source (such as excessive water usage)?	Yes	0	0	0	
		No	100	100	100	
	Is there any possibility that the implementation of the activities may affect the quality of surface and groundwater?	Yes	0	0	0	Dichlorination
		No	100	100	100	
	Has any sexual harassment occurred?	Yes	0	0	0	
		No	100	100	100	
Labor and Working Conditions	Has any worker been injured during the implementation of the activities?	Yes	0	0	0	
		No	0	100	100	
	Is there a proper arrangement for safe drinking water and first aid at the workplace?	Yes	0	100	100	
		No	100	0	0	
	Is personal protective equipment (PPE) used to ensure protection of the workers?	Yes	0	100	100	
		No	100	0	0	
	Have any awareness sessions on occupational health and safety been conducted?	Yes	0	100	100	
		No	100	0	0	

	Were or are there any forced laborers or child laborers (≤ 16) employed	Yes	0	0	0	
		No	0	100	100	
	Do both women and men have equal opportunities for work?	Women	0	0	0	
		Men	0	100	100	
	Is the safety of female workers ensured?	Yes	0	0	0	
		No	0	0	0	
	Has anyone ever been/is being discriminated against in terms of remuneration?	Yes	0	0	0	
		No	0	100	100	
	Have any awareness sessions been conducted about sexual harassment?	Yes	0	100	100	
		No	100	0	0	
Resource Efficiency and Pollution Prevention	Is there any possibility of greenhouse gas emissions (carbon dioxide, methane) as a result of the implementation of the activities?	Yes	0	0	0	
		No	100	100	100	
	Have the machinery been properly maintained or lubricated to prevent noise pollution?	Yes	0	100	100	
		No	0	100	100	
	Is antibiotic-mixed or saline water being directly discharged from the hatchery into open water bodies?	Yes	0	0	0	
		No	0	100	100	
	Is there a treatment facility available for antibiotic-mixed or saline water?	Yes	0	100	100	Small scale ETP
		No	0	0	0	

	Is national grid electricity used as the hatchery power supply?	Yes	0	100	100	
		No	0	0	0	
Community Health, Safety, and Security	Has the implementation of the activity had any adverse impact on the health of the local population?	Yes	0	0	0	
		No	100	100	100	
	Are local workers hired to carry out activities?	Yes	0	100	0	
		No	0	0	0	
Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Is the land used for the activities privately owned?	Yes	100	100	100	
		No	0	0	0	
	If the land is owned by the husband/father/another family member, has a no-objection or consent letter been obtained?	Yes	100	100	100	
		No	0	0	0	
	Has the project activity been or is being implemented on government khas land or any disputed land?	Yes	0	0	0	
		No	100	100	100	
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Has there been any incident of deforestation or tree cutting, or is there any possibility of such an event due to implementation of the project activities?	Yes	0	0	0	
		No	100	100	100	
	Have grass, shrubs, trees, or vegetables been cultivated on homesteads, embankments, or pond banks?	Yes	0	100	100	
		No	100	0	0	
	Is the activity having or likely to have any adverse impact on any endangered species, biodiversity, or ecosystem?	Yes	0	0	0	
		No	100	100	100	

Indigenous People	Has any indigenous community been included in the implementation of the activity?	Yes	0	0	0	
		No	100	0	0	
	Has free prior written consent been obtained from the indigenous community for their inclusion in the activity?	Yes	0	0	0	
		No	0	0	0	
	Has the implementation of the activity ensured respectful recognition of the human rights, identity, social customs, religious and cultural practices of the indigenous community?	Yes	0	0	0	
		No	0	0	0	
	Has equal rights for the indigenous community, similar to those of the mainstream population, been ensured in the project activities?	Yes	0	0	0	
		No	0	0	0	
Stakeholder Engagement and Information Disclosure	Have there been any complaints or obstacles encountered in the implementation of the activities?	Yes	0	0	0	
		No	100	100	100	
	Has the complaint or grievance been properly resolved?	Yes	0	0	0	
		No	0	0	0	
	Have you participated in any CCAG Group awareness-raising sessions on dealing with various natural disasters such as cyclones?	Yes	100	100	100	
		No	0	0	0	
	Has the implementation of the activity involved discussion in CCAG group meetings and given priority to the opinions of the community?	Yes	100	100	100	
		No	0	0	0	
	Is the relevant institutions (Stakeholders) aware to the project activities?	Yes	100	100	100	
		No	0	0	0	

Annex 1D —Technical and financial support for "crab nursers" Detailed Indicator Table (January-December 2025)

ESS Indicators	Questions	Responses	Pre-implementation (%)	Implementation (%)	Post-Implementation (%)	Mitigation Measures Taken
Environmental and Social Assessment	Is there any possibility of environmental pollution (soil, air, water) as a result of implementing the activities	Yes	0	0.0	0	
		No	100	100	100	
	Has the implementation of the activities had any adverse impact on the groundwater source (such as excessive water usage)?	Yes	0	0	0	
		No	0	0	0	
	Is there any possibility that the implementation of the activities may affect the quality of surface and groundwater?	Yes	0	0	0	
		No	100	100	100	
	Has any sexual harassment occurred?	Yes	0	0	0	
		No	100	100	100	
Labor and Working Conditions	Has any worker been injured during the implementation of the activities?	Yes	0	0	0	
		No	0	100	100	
	Is there a proper arrangement for safe drinking water and first aid at the workplace?	Yes	77	100	100	
		No	23	0	0	
	Is personal protective equipment (PPE) used to ensure protection of the workers?	Yes	57.7	100	100	
		No	42.3	0	0	
	Have any awareness sessions on occupational health and safety been conducted?	Yes	61.5	94.2	100	
		No	38.5	5.8	0	
	Were or are there any forced laborers or child laborers (≤ 16) employed	Yes	0	0	0	
		No	0	100	100	
	Do both women and men have equal opportunities for work?	Women	0	50	50	
		Men	0	50	50	
	Is the safety of female workers ensured?	Yes	0	100	0	
		No	0	0	0	
	Has anyone ever been/is being discriminated against in terms of remuneration?	Yes	0	0	0	
		No	0	100	0	
	Have any awareness sessions been conducted about sexual harassment?	Yes	63.5	77	100	
		No	36.5	23	0	

Resource Efficiency and Pollution Prevention	Is there any possibility of greenhouse gas emissions (carbon dioxide, methane) as a result of the implementation of the activities?	Yes	0	0	0	
		No	100	100	100	
	Has saline land/water bodies been used for crab farming?	Yes	100	100	100	
		No	0	0	0	
	Is a new pond or water body being excavated for the purpose of crab farming?	Yes	0	0	0	
		No	100	100	100	
	Is the activity (crab farming) contributing to the intrusion of saline water or an increase in salinity in the land?	Yes	0	0	0	
		No	100	100	100	
Community Health, Safety, and Security	Has the implementation of the activity had any adverse impact on the health of the local population?	Yes	0	0	0	
		No	100	100	100	
	Are local workers hired to carry out activities?	Yes	0	100	0	
		No	0	0	0	
Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Is the land used for the activities privately owned?	Yes	100	100	100	
		No	0	0	0	
	If the land is owned by the husband/father/another family member, has a no-objection or consent letter been obtained?	Yes	100	100	100	
		No	0	0	0	
	Has the project activity been or is being implemented on government khas land or any disputed land?	Yes	0	0	0	
		No	100	100	100	
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Has there been any incident of deforestation or tree cutting, or is there any possibility of such an event due to implementation of the project activities?	Yes	0	0	0	
		No	100	100	100	
	Have grass, shrubs, trees, or vegetables been cultivated on homesteads, embankments, or pond banks?	Yes	42.3	86.5	86.5	
		No	57.7	13.5	13.5	
	Is the activity having or likely to have any adverse impact on any endangered species, biodiversity, or ecosystem?	Yes	0	0	0	
		No	100	100	100	
Indigenous People	Has any indigenous community been included in the implementation of the activity?	Yes	0	0	0	
		No	100	0	0	
		Yes	0	0	0	

	Has free prior written consent been obtained from the indigenous community for their inclusion in the activity?	No	0	0	0	
	Has the implementation of the activity ensured respectful recognition of the human rights, identity, social customs, religious and cultural practices of the indigenous community?	Yes	0	0	0	
		No	0	0	0	
	Has equal rights for the indigenous community, similar to those of the mainstream population, been ensured in the project activities?	Yes	0	0	0	
		No	0	0	0	
Stakeholder Engagement and Information Disclosure	Have there been any complaints or obstacles encountered in the implementation of the activities?	Yes	0	0	0	
		No	100	100	100	
	Has the complaint or grievance been properly resolved?	Yes	0	0	0	
		No	0	0	0	
	Have you participated in any CCAG Group awareness-raising sessions on dealing with various natural disasters such as cyclones?	Yes	100	100	100	
		No	0	0	0	
	Has the implementation of the activity involved discussion in CCAG group meetings and given priority to the opinions of the community?	Yes	100	100	100	
		No	0	0	0	
	Is the local administration aware of the project activities?	Yes	100	100	100	
		No	0	0	0	

Annex 1E —Technical and financial support to "crab farmers" Detailed Indicator Table (January-December 2025)

ESS Indicators	Questions	Responses	Pre-implementation (%)	Implementation (%)	Post-Implementation (%)	Mitigation Measures Taken
Environmental and Social Assessment	Is there any possibility of environmental pollution (soil, air, water) as a result of implementing the activities	Yes	0	0	0	
		No	100	100	100	
	Has the implementation of the activities had any adverse impact on the groundwater source (such as excessive water usage)?	Yes	0	0	0	
		No	0	0	0	
	Is there any possibility that the implementation of the activities may affect the quality of surface and groundwater?	Yes	0.0	0	0	
		No	100	100	100	
	Has any sexual harassment occurred?	Yes	0	0	0	
		No	100	100	100	
Labor and Working Conditions	Has any worker been injured during the implementation of the activities?	Yes	0	1.2	0	
		No	0	98.8	0	
	Is there a proper arrangement for safe drinking water and first aid at the workplace?	Yes	19.5	64	75.7	
		No	80.5	36	24.3	
	Is personal protective equipment (PPE) used to ensure protection of the workers?	Yes	19.5	64	75.7	
		No	80.5	36	24.3	
	Have any awareness sessions on occupational health and safety been conducted?	Yes	26	40.9	86.5	
		No	74	59.1	13.5	
	Were or are there any forced laborers or child laborers (≤ 16) employed	Yes	0	0	0	
		No	0	100	100	
	Do both women and men have equal opportunities for work?	Women	0	50	50	
		Men	0	50	50	
	Is the safety of female workers ensured?	Yes	0	100	0	
		No	0	0	0	
	Has anyone ever been/is being discriminated against in terms of remuneration?	Yes	0	0	0	
		No	0	100	0	
	Have any awareness sessions been conducted about sexual harassment?	Yes	60	78.1	88	
		No	40	21.9	12	

Resource Efficiency and Pollution Prevention	Is there any possibility of greenhouse gas emissions (carbon dioxide, methane) as a result of the implementation of the activities?	Yes	0	0	0	
		No	0	0	0	
	Has saline land/water bodies been used for crab farming?	Yes	100	100	100	
		No	0	0	0	
	Is a new pond or water body being excavated for the purpose of crab farming?	Yes	0	0	0	
		No	100	100	100	
	Is the activity (crab farming) contributing to the intrusion of saline water or an increase in salinity in the land?	Yes	0	0	0	
		No	100	100	100	
Community Health, Safety, and Security	Has the implementation of the activity had any adverse impact on the health of the local population?	Yes	0	0	0	
		No	100	100	100	
	Are local workers hired to carry out activities?	Yes	0	96.4	0	
		No	0	3.6	0	
Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	Is the land used for the activities privately owned?	Yes	100	100	100	
		No	0	0	0	
	If the land is owned by the husband/father/another family member, has a no-objection or consent letter been obtained?	Yes	100	100	100	
		No	0	0	0	
	Has the project activity been or is being implemented on government khas land or any disputed land?	Yes	0	0	0	
		No	100	100	100	
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Has there been any incident of deforestation or tree cutting, or is there any possibility of such an event due to implementation of the project activities?	Yes	0	0	0	
		No	100	100	100	
	Have grass, shrubs, trees, or vegetables been cultivated on homesteads, embankments, or pond banks?	Yes	93.3	93.3	93.3	
		No	6.7	6.7	6.7	
	Is the activity having or likely to have any adverse impact on any endangered species, biodiversity, or ecosystem?	Yes	0	0	0	
		No	100	100	100	
Indigenous People	Has any indigenous community been included in the implementation of the activity?	Yes	0	0	0	
		No	100	0	0	
		Yes	0	0	0	

	Has free prior written consent been obtained from the indigenous community for their inclusion in the activity?	No	0	0	0	
	Has the implementation of the activity ensured respectful recognition of the human rights, identity, social customs, religious and cultural practices of the indigenous community?	Yes	0	0	0	
		No	0	0	0	
	Has equal rights for the indigenous community, similar to those of the mainstream population, been ensured in the project activities?	Yes	100	0	0	
		No	0	0	0	
Stakeholder Engagement and Information Disclosure	Have there been any complaints or obstacles encountered in the implementation of the activities?	Yes	1.2	0	0.48	
		No	98.8	100	99.5	
	Has the complaint or grievance been properly resolved?	Yes	100	100	100	
		No	0	0	0	
	Have you participated in any CCAG Group awareness-raising sessions on dealing with various natural disasters such as cyclones?	Yes	32.7	45.4	80	
		No	67.3	54.6	20	
	Has the implementation of the activity involved discussion in CCAG group meetings and given priority to the opinions of the community?	Yes	100	100	100	
		No	0	0	0	
	Is the local administration aware of the project activities?	Yes	100	100	100	
		No	0	0	0	

Annex F- Pictures of the Environmental and Social Compliance across activities

Figure 1: Use of Solar and RWHS and Homestead Greening

Figure 2: Goat Manure Management and OHS Practices

Figure 3: Use of Improved Cookstoves (ICS)

Figure 4: Use of PPE during Construction

Figure5: Awareness Building Session through CCAG Meeting

Figure 6: Complaints Received Through GRM Box