Palli Karma Sahayak Foundation (PKSF)

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

Tracking Implementation Gaps in the Resilient Homestead Design Component under COAST Foundation: An Assessment of Environmental and Social Management Framework (ESMF) Compliance

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DECLARATION OF AUTHORSHIP

I hereby declare that the research work of internship " **Tracking Implementation Gaps: A Comparative Assessment of Project Progress and Environmental & Social Management Framework Evaluation in the RHL Project under Coast Foundation** " has been carried out under the Department of Resilience and Risk Management of PKSF for Partial Fulfilment of the Internship requirements**.**. I have completed this report based on original research findings. This has not been submitted in part or full to any other institution for any other degree. I also certify that there is less than 20% similarity in the content of this report as per plagiarism standards (Maximum 20%).

18 August, 2026

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CERTIFICATE

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TABLE OF CONTENTS

Declaration of the Authorship…. ii

Certification from Supervisor…. iii

Acknowledgement iv

Table of Contents v

List of Tables viii

List of Figures viii

List of Appendices viii

List of Abbreviation…. viii

Executive Summary… x

1. Chapter One : Introduction…. 1

1.1 Background of the Study…. 2

1.2 Objectives of the Internship…. 4

1.3 Rationale of the study…. 5

1.4 Problem Statement 5

1.5 Literature Review 6

1.5.1 Climate Vulnerability and Adaptation in Coastal Bangladesh…. 6

1.5.2 Environmental and Social Safeguards in Development Projects 7

1.5.3 Environmental and Social Management Framework and Risk Management 7

1.5.4 Monitoring and Evaluation of Climate Adaptation Projects 8

1.5.5 Environmental Risks Associated with Resilient Homestead Activities 9

1.5.6 Social Safeguards, Stakeholder Participation and Grievance Redress 9

1.5.7 Research Gap and Relevance to the Present Study… 10

1.6 Principles of ESMF 11

1.7 Legal and Regulatory Requirements 12

1.7.1 Bangladesh Environment Conservation Act, 1995…..... 12

1.7.2 Environment Conservation Rules (ECR), 1997… 12

1.7.3 Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2009…..... 13

1.7.4 National Water Policy 1999…..... 14

1.7.5 National Safe Drinking Water Supply and Sanitation Policy 1998…..... 14

1.7.6 National Agricultural Policy, 2010…..... 14

1.7.7 National Fisheries Policy, 1996…..... 14

1.7.8 National Livestock Development Policy, 2007…..... 15

1.7.9 Standing Orders on Disaster, 2010…..... 15

1.7.10 Coastal Zone Policy, 2005…..... 15

1.7.11 Coastal Development Strategy, 2006… 15

2. Chapter Two : Methodology…..... 16

2.1 Research Design…..... 17

2.2 Study Area 17

2.3 Study Period…..... 17

2.4 Data Sources..... 18

2.5 Data Collection Methods..... 18

2.6 Data Analysis..... 19

2.7 Quality Assurance..... 20

3. Chapter Three : Field -Level Findings and Discussions..... 21

3.1 Environmental Issues 22

3.2 Environmental Management 24

3.3 Social Issues 25

3.4 Social Management 26

3.5 Analysis and Interpretations 27

3.6 Evaluation Against Environmental and Social Standards (ESS)…..... 39

3.7 Root Causes of Analysis 34

4. Chapter Four : Conclusion and Recommendations 36

4.1 Conclusion…..... 37

4.2 Recommendations 37

4.3 Recommendations for Future Interns 38

4.4 Self Reflection…..... 38

References 39

LIST OF TABLES

Table 1 : Total Beneficiaries included in RHL project (Homestead activities) under COAST……19

Table-2 : Total percentage of beneficiaries in three stages.....20

Table 3: Environmental Issues Associated with the project implantation… 22

Table 4 : Mitigation measures taken to prevent environmental Degradation… 23

Table 5 : Social issues figured out during the RHL project implementation (Positive trend)… 25

Table 6 : Compliance Trend Aligned with Environmental and Social Standards (ESS)… 30

LIST OF FIGURES

Figure 1 : Location of RHL Project Implementation Area under Coast Foundation.….....3

Figure 1 : Total percentage of beneficiaries in each stages 19

Figure 3 : Types of vehicles used in homestead activity… 28

Figure 4 : Risk associated with the homestead activity….....29

LIST OF APPENDICES

Appendix-AI : Detailed Indicator Table of the Design and Building Homestead Activity (January-December 2025)… 41

Appendix-AII : Risk Associated with the Homestead Activity….....45

Appendix-AIII : Internship Work Schedule.....45

LIST OF ABBREVIATION

GCF Green Climate Fund

PKSF Palli Karma- Sahayak Foundation

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

Bangladesh Project

CCAGs Climate Change Adaptation Groups

ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan

ESS Environmental and Social Safeguards

SEAH Sexual Exploitation, Abuse and Harassment

Executive Summary

Bangladesh is highly vulnerable to climate change, particularly its coastal communities, which are frequently exposed to cyclones, tidal surges, salinity intrusion, flooding, and other climate-related hazards. The Resilient Homestead and Livelihood Support to Vulnerable Coastal People of Bangladesh (RHL) project, implemented by Palli Karma-Sahayak Foundation (PKSF) and financed by the Green Climate Fund (GCF), aims to strengthen the resilience and adaptive capacity of vulnerable coastal communities through climate-resilient livelihood and homestead activities. The project is classified as a Category B project under the Environmental and Social Standards (ESS) requirements. This internship focused on assessing the implementation of the Environmental and Social Management Framework (ESMF), monitoring project compliance, and evaluating environmental and social safeguard performance at the field level. Field data were collected through digital surveys using KoboToolbox and monitoring of relevant environmental and social indicators.

The assessment found that the RHL project generally follows the requirements of the ESMF, GCF Environmental and Social Safeguards, and relevant national environmental and social regulations. Most project activities were implemented with consideration of potential environmental and social risks. However, some gaps were identified in the consistency of field-level safeguard practices, documentation, monitoring, and stakeholder awareness. These issues are manageable through timely corrective and mitigation measures.

Overall, the project demonstrates a generally satisfactory level of environmental and social safeguard compliance. To further improve safeguard performance, the report recommends strengthening regular field-level monitoring, improving documentation and reporting, increasing awareness of ESMF requirements among implementing stakeholders, and ensuring timely identification, mitigation, and follow-up of environmental and social risks.

This internship was conducted at PKSF with the objectives to understand the Environmental and Social Management Framework (ESMF) implementation, monitoring project compliance, and evaluating field-level environmental and social safeguard performance for RHL project. The internship experience provides a practical exposure to environmental monitoring, safeguard compliance assessment, field data conducting and management, and project evaluation processes.

Keywords : Climate change, RHL, Exposure, ESSs, Awareness.

CHAPTER ONE : INTRODUCTION

1.1 Background of the Study

Climate is changing drastically around the world and it's causing phenomenons that has never occurred. Dramatical changes in Climate are diminishing the environmental productivity and agricultural yields, making an endangered zone for food security in many nations specially in developing countries (Afifah et al., 2025). Developing countries are facing challenges in mitigating and adapting the climate induced changes. Bangladesh lying in the southern part of the Asia between 20º 34'-26º 38' North latitude and 88º 01'- 92º 41' East longitude due to it's low-lying alluvial plains and complex geography characterised as the most climate-vulnerable country and the coastal part is the most vulnerable to the climatic changes. The climate risk are mostly happens in 19 coastal districts of Bangladesh which comprises 22% of the country's population (PKSF, 2025). Every year the country face different climate related disaster such as- cyclone, sidr, nargis, aila, fani, bulbul amphan, yeas and many more. This cost the country by losing and causing damage to the houses, properties and livelihood of the people of the coastal communities. Some of the common environmental problems found in the coastal areas of Bangladesh include cyclone, tidal flooding, salinity infiltration, and riverbank erosion that have affected their livelihoods, agriculture, water, and habitat (MoEFCC, 2021). Different government and non-government, public and private organisations has taken initiatives to tackle the climate induced disasters and negative externalities. In Bangladesh, there are also organizations which directly associated with the international funds which gives them support to help their countries to mitigate and adapt with climate changes. PKSF is such an organisation which have direct accredited entity to the GCF and financed with loan or grant based aid which is delivered for supporting the climate vulnerable people living in the coastal low-lying areas. To carry on such activities they have initiated so many projects and Resilience Homestead and Livelihood support (RHL) project is one of them. This project was initiated to support coastal people adapting vulnerability related to climate change and was approved by GCF 36th board meeting to support the coastal people from vulnerability. RHL project was funded by GCF with 42.2 million USD grants and co-financed by PKSF with 7.7 million USD. The period of the project is 5 years and it was implemented in seven districts of Bangladesh situated in coastal part and they are- Khulna, Satkhira, Barguna, Bhola, Patuakhali, Bagerhat and Cox's Bazar. There are total 18 partner organisations who worked with the RHL project and Coast foundation is one of them which working on the cox's bazar. During the implementation of the project the Environmental and Social Impact Monitoring (ESIM) was conducted all over the seven districts to ensure environmentally sound and socially accountable implementation. The field officers from

Implementing Entities (IEs) assess the environmental and social compliance for the activities at three stages- (pre-implementation, implementation and operational & maintenance) by daily site visiting. The project was started on August 17, 2023 and supposed to be end on August 16, 2028. Total 362,475 beneficiaries was directly benefited from this project and 770,050 beneficiaries was benefited indirectly from the project. The project is categorised as "B" category project which means the project has some negative impacts which can be eradicated by proper measurements and maintenance. The RHL project needs Environmental and Social Management Plan implementation throughout the implementation period of the project.

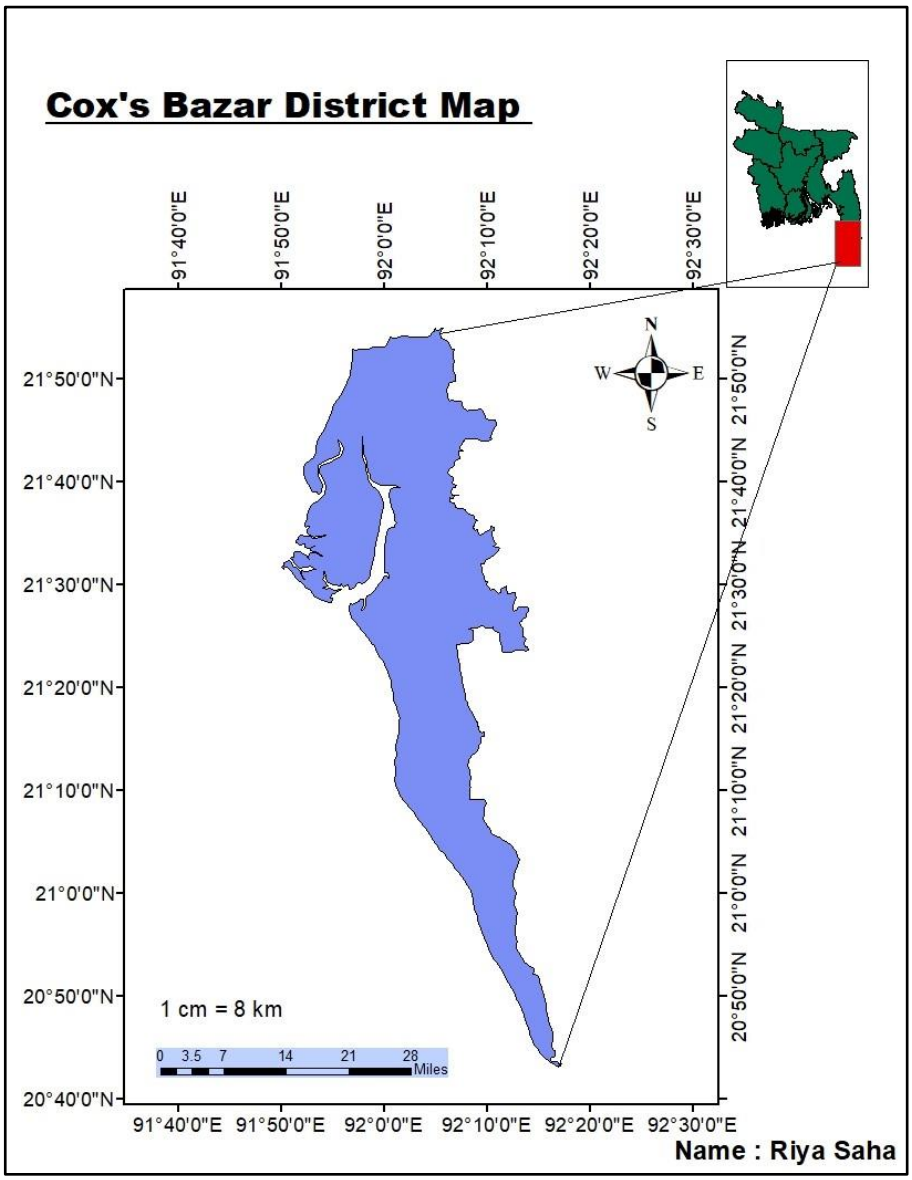

Figure 01 : Location of RHL Project Implementation Area under Coast Foundation (Prepared by Riya Saha, 2026)

Within this project context, the present study is directly linked to the RHL Project's requirement for continuous environmental and social standard monitoring. The study focuses exclusively on the Resilient Homestead activities implemented by COAST Foundation under the RHL Project, as these activities involve physical construction and household-level interventions that have comparatively greater potential for environmental and social impacts than other project interventions. Therefore, assessing their field-level implementation provides an opportunity to examine how effectively the ESMF requirements are being applied in practice. The study assesses the environmental and social standard performance of the Resilient Homestead activities using monitoring information from the three implementation stages. It examines selected environmental and social aspects, including pollution risks, water and sanitation issues, resource use, vegetation and tree cutting, occupational health and safety, stakeholder participation, land-related issues, gender inclusion, and grievance management. The assessment therefore connects the project's planned standard requirements with actual field-level implementation and identifies areas where further monitoring, mitigation, or corrective measures may be required.

This internship under PKSF was a meaningful journey and the main goal was to learn about the ESMF framework, safeguard monitoring mechanisms, and assessment of project compliance.The internship mostly comprised desk-based analysis of a set of raw data, monitoring reports, safeguards-related documents, and evaluation reports assessed in different times for the RHL project.

1.2 Objectives of the Internship

The core objectives of the internship for two month period are-

1. To learn how PKSF align their project with the ESS standards.
2. To learn how PKSF follow and maintain the regulations of GCF, ESMF during the implementation of their projects.
3. To evaluate the overall environmental and social safeguard progress of the RHL Project activities implemented by Coast Foundation from January to December.
4. To identify environmental and social safeguard gaps between planned project activities and field-level implementation.

5. To evaluate the effectiveness of mitigation measures adopted to minimize environmental and social impacts and provide recommendations for improving long-term sustainability and compliance.

1.3 Rationale of the Study

The implementation of environmental and social safeguards is essential to ensure that project activities under the RHL Project are carried out in accordance with the requirements of the Environmental and Social Management Framework (ESMF). Although the project has established safeguard requirements and monitoring procedures, assessing their actual application at the field level is necessary to identify gaps between the prescribed framework and practical implementation. This study was undertaken to assess the implementation progress of the RHL Project and examine the extent to which environmental and social safeguard requirements were followed during the reporting period from January to December 2025, based on the available data from Coast Foundation. The assessment focuses on selected environmental and social indicators, including pollution risks, waterlogging, impacts on groundwater, stakeholder participation, land-related issues, and other relevant project activities. It also examines whether identified risks were appropriately managed through the measures prescribed under the ESMF.

The rationale of the study lies in identifying areas where actual project implementation may differ from planned activities or safeguard requirements. By examining field-level performance and compliance, the study can highlight implementation gaps, areas requiring closer monitoring, and issues that may require corrective measures. The findings can support PKSF and relevant implementing stakeholders in strengthening environmental and social monitoring, improving documentation and reporting, and ensuring more consistent application of the ESMF during the remaining implementation period. Ultimately, the assessment provides practical evidence that can contribute to better project management and stronger environmental and social safeguard compliance.

1.4 Problem Statement

Bangladesh faces most of the associated with the climate change externalities that's why a appropriate initiatives is necessary to tackle with the problems properly with hand to hand practices

and maintenance. Without regular monitoring and evaluation, deviations between planned safeguard measures and actual field practices may reduce project effectiveness and compromise long-term sustainability. Therefore, assessing implementation progress alongside compliance with environmental and social standards is essential to identify existing gaps, evaluate safeguard performance, and recommend practical improvements. This study addresses that need by examining the implementation status of the RHL Project under Coast Foundation and evaluating its conformity with PKSF's Environmental and Social Management Framework. RHL project or Resilience Homestead and Livelihood Support for coastal people of Bangladesh aims to support the climate vulnerable communities living in the coastal areas. The aim of this project is to strengthen the adaptive capacity and resilience of those vulnerable communitites. Throuhout the project activities safeguard was integrated but there are variations in compliance in different project stages. This report evaluates the gaps between planned safeguard measures and actual field-level findings and how to address them.

1.5 Literature Review

1.5.1 Climate Vulnerability and Adaptation in Coastal Bangladesh

Bangladesh is highly exposed to climate-related hazards because of its low-lying deltaic geography, dense population, and dependence on climate-sensitive livelihoods. Coastal communities are particularly vulnerable to cyclones, tidal flooding, salinity intrusion, and changes in water availability. Coastal households in Bangladesh face increasing risks from cyclonic inundation and rising river and soil salinity, with poor households being particularly vulnerable (World Bank, 2016). More recent assessments also indicate that Bangladesh continues to face increasing climate risks despite substantial progress in disaster preparedness and climate adaptation (World Bank, 2022). These conditions demonstrate the importance of adaptation interventions that strengthen household resilience while avoiding additional environmental and social risks.

Climate adaptation, however, cannot be assessed only in terms of whether physical interventions are completed. Monitoring and evaluation are important for determining whether adaptation interventions are achieving their intended outcomes, identifying risks and trade-offs, and informing

adjustments during implementation (IPCC, 2022). Therefore, continuous monitoring is particularly important for projects involving construction, livelihood support, natural resource use, and community participation.

1.5.2 Environmental and Social Safeguards in Development Projects

Environmental and social safeguards provide a systematic approach for identifying, avoiding, minimizing, and managing the potential adverse impacts of development projects. Environmental and social management systems help organizations identify risks and impacts, establish mitigation measures, engage stakeholders, and address complaints from affected communities (IFC, 2012). The IFC Performance Standards cover major areas relevant to projects such as environmental and social risk assessment, labor and working conditions, resource efficiency and pollution prevention, community health and safety, land-related impacts, biodiversity, and stakeholder engagement.

The importance of safeguards is also reflected in the Green Climate Fund (GCF) framework. The GCF Environmental and Social Management System incorporates environmental and social policies, safeguards, stakeholder engagement, and related guidance to ensure that environmental and social risks are identified and appropriately managed (GCF, 2018). The GCF further emphasizes meaningful stakeholder engagement, grievance redress, and information disclosure as important components of responsible climate-financed project implementation (GCF, 2022). These principles are directly relevant to the RHL Project because its implementation involves physical homestead activities as well as community participation and livelihood-related interventions.

1.5.3 Environmental and Social Management Framework and Risk Management

An Environmental and Social Management Framework (ESMF) provides a structured mechanism for integrating environmental and social considerations throughout the project cycle. Rather than assessing impacts only after implementation, an ESMF supports early risk identification, screening, mitigation planning, monitoring, and corrective action. This approach is consistent with the broader principle that environmental and social risks should be managed throughout the project life cycle.

The ESMF used by PKSF incorporates environmental sustainability, social inclusion, risk screening, community participation, grievance redress, pollution prevention, public health and safety, land-related issues, biodiversity conservation, and information disclosure. The framework is also aligned with relevant national environmental legislation and international safeguard standards. This makes ESMF compliance an important basis for evaluating whether project activities are being implemented according to planned safeguard requirements.

The literature and international safeguard frameworks indicate that the existence of a safeguard framework alone does not guarantee effective implementation. Actual performance depends on field-level monitoring, institutional capacity, stakeholder engagement, documentation, and timely corrective action. The GCF Independent Evaluation Unit (2020) similarly identified the need for stronger operationalization of environmental and social safeguards, monitoring, reporting, accountability, and grievance mechanisms within climate-financed activities. This supports the importance of examining the difference between formal safeguard requirements and their practical application.

1.5.4 Monitoring and Evaluation of Climate Adaptation Projects

Monitoring and evaluation (M&E) is an important component of climate adaptation because adaptation outcomes may change over time and may produce both intended and unintended effects. Monitoring involves continuous collection of information, while evaluation assesses the effectiveness and equity of interventions and provides information for decision-making (IPCC, 2022). M&E can therefore support learning, accountability, and adjustment of project activities during implementation.

The IPCC (2022) also emphasizes that adaptation interventions can create trade-offs or unintended consequences, making continuous assessment necessary. Similarly, the continuing gap between adaptation needs and actual implementation and financing, demonstrating the importance of strengthening the effectiveness of adaptation actions rather than focusing only on the volume of investment (UNEP, 2025). For project-level assessment, monitoring environmental indicators, occupational health and safety, stakeholder participation, resource use, pollution risks, and grievance management can provide evidence of whether safeguard measures are functioning as intended.

This perspective is consistent with the monitoring approach used in the RHL Project. In the present study, environmental and social information was assessed across three implementation stages : pre-implementation, implementation, and operational and maintenance to identify changes in safeguard performance over time.

1.5.5 Environmental Risks Associated with Resilient Homestead Activities

Resilient housing and homestead development can contribute to climate adaptation by improving household safety and resilience. However, construction-related activities may also create environmental risks such as dust, waste generation, pollution, resource use, disturbance of vegetation, and potential impacts on surface and groundwater. Consequently, environmental safeguards need to be incorporated into both the design and implementation stages.

The importance of water and salinity management for climate-vulnerable coastal communities in Bangladesh is crucial, particularly because increasing salinity can affect drinking water, agriculture, and livelihoods (World Bank, 2015). This is relevant to homestead interventions where sanitation, water sources, drainage, and construction activities must be managed carefully. The RHL monitoring framework therefore considers issues including pollution, groundwater protection, waste management, dust control, vegetation, and resource efficiency.

The findings of the present report provide a project-specific application of these broader principles. The assessment found generally low environmental risks across the monitored homestead activities, although some risks increased during the operational and maintenance stage, including potential impacts on surface and groundwater quality and tree cutting. These findings demonstrate why safeguard monitoring should continue beyond the construction stage.

1.5.6 Social Safeguards, Stakeholder Participation and Grievance Redress

Social safeguards are important because development interventions may affect land use, community participation, labor conditions, gender inclusion, and access to decision-making. Effective stakeholder engagement allows affected communities to participate in project decisions and communicate concerns. Early, continuous, and meaningful stakeholder engagement is an important component of environmentally and socially responsible climate-financed projects (GCF, 2022).

Similarly, consultation and grievance mechanisms plays as an part of effective environmental and social risk management (IFC, 2012).

The RHL Project incorporates social safeguard measures related to land use, community participation, gender equality, occupational health and safety, Sexual Exploitation, Abuse and Harassment (SEAH) awareness, and grievance redress. The project's monitoring framework specifically includes stakeholder engagement, grievance mechanisms, gender equality, and community participation.

The findings of this study show that social safeguard performance was generally strong. No involuntary resettlement or use of disputed or khas land was reported, while gender participation and SEAH awareness remained high. However, complaints increased during the implementation and operational stages, and not all reported grievances were resolved. This indicates that the presence of a grievance mechanism is not sufficient by itself; continued visibility, accessibility, documentation, and timely resolution are necessary for effective social safeguard performance.

1.5.7 Research Gap and Relevance to the Present Study

Existing literature provides substantial evidence on climate vulnerability in coastal Bangladesh, the importance of climate adaptation, and the role of environmental and social safeguards in development projects. International safeguard frameworks also provide established principles for risk assessment, mitigation, stakeholder engagement, grievance redress, and monitoring. However, there is comparatively less project-level evidence examining how these safeguard requirements are translated into day-to-day implementation within specific climate adaptation interventions in coastal Bangladesh.

The present study addresses this practical gap by assessing the Resilient Homestead and Livelihood Support to Vulnerable Coastal People of Bangladesh (RHL) Project under Coast Foundation, focusing specifically on the “Design and Building of Homesteads” activity. It compares field-level monitoring results from January to December 2025 across the pre-implementation, implementation, and operational and maintenance stages with the requirements of the PKSF ESMF and relevant ESS standards. The study therefore moves beyond describing the existence of safeguards and evaluates their practical application, identifies implementation gaps, examines the effectiveness of mitigation

measures, and determines areas requiring continued monitoring and improvement. The research design and objectives of the report explicitly focus on evaluating safeguard progress, identifying gaps between planned and field-level implementation, and assessing mitigation measures.

Overall, the literature establishes that effective climate adaptation requires not only physical interventions but also continuous environmental and social risk management. The present assessment contributes to this perspective by providing field-level evidence on safeguard implementation and compliance within a climate-resilience project in coastal Bangladesh.

1.6 Principles of the ESMF

PKSF has prepared their own Environmental and Social Management Framework on 2018 to ensure the sustainability of the field level activities. The ESMF was formulated by following the legislations and policies of government such as- Bangladesh Environment Conservation Act 1995 (Amended 2010), Environment Conservation Rules (2023), Solid Waste Management Rules (2023), Hazardous Waste Management Management Rules (2021), Bangladesh Biodiversity Act (2017), National Environment Policy (2018) and Bangladesh Water Act (2018) which was aligned with the World Bank and GCF's Environmental and Social Safeguard Standards. The purpose of ESMF is to ensure the sustainability of the environment and project activities which means that the project activities will not be compromised for the environment and environment safety will not be compromised due to the intervention of project during the the project activities. The objectives of the ESMF is to identify the environmental and social impacts of the proposed interventions, enhancing environmental and social outcomes of the proposed activities, to prepare an environmental and social management plan, preventing or mitigating the negative impacts of the project and ensuring longterm sustainability of the proposed interventions. ESMF ensure the environmental sustainability by minimising the negative impacts that may hamper the environment, ensure the equality irrespective of gender, class and includes all people such as-climate migrants, poor people, women. By screening ESMF categorise the risk associated the project activities. ESMF ensure communities engagement and consultation meetings, ensure participants decision-making. The negative impacts of the projects are addressed by following the ESMF standards. ESMF minimise the complaints of project's activities through Grievance Redress Mechanism (GRM) which ensure the resolving of the complaints in time by keeping records. The framework determines the following 10 compliance issues-

1) Environmental and Social Impact Assessment and Management Plan;
2) Employees' working environment and economic and other benefits;
3) Natural resource use, pollution prevention and management;
4) Public health and safety;
5) Land acquisition, land use control and involuntary resettlement;
6) Biodiversity conservation and sustainable management;
7) Conservation of the rights of indigenous people or local ethnic groups;
8) Conservation of cultural heritage;
9) Capacity building of financial intermediaries and
10) Mainstreaming sustainability and information disclosure.

1.7 Legal and Regulatory Requirements

PKSF prepare environmental and social management framework (ESMF) aligning with the government's laws, rules and regulations. The legal and regulatory standards guide how environmental and social risks must be managed during project implementation. The legal and regulatory requirements of ESMF in RHL project are-

1.7.1 Bangladesh Environment Conservation Act, 1995

Bangladesh Environment Conservation Act provide conservation of the environment, improvement of environmental standards and control and mitigation of environmental pollution. It was implemented in 1995 and amended in 2000, 2002 and 2010. Department of Environment (DoE) under the Ministry of Environment, Forest (MoEF) implements the act.

1.7.2 Environment Conservation Rules (ECR), 2023

The Environment Conservation Rules provide the first set of rules under the Environment Conservation Act, 1995. It was implemented in 1997 and this rule was amended in 2002, 2003 and

2023. This rules provide standards and guidelines regarding the categorization of industries based on their activities and production., procedure for obtaining environmental clearance and environmental quality standards to pollution and permitted emission levels of pollutants.

The Environment Conservation Rules categorize industries in four categories which are-

i) **Green Category**- which are pollution free industries and they doesn't require initial environmental examination (IEE) and Environmental Impact Assessment (EIA). An Environment Clearance Certificate (ECC) from the Department of Environment (DoE) is adequate for these industries.
ii) **Yellow Category**- these category industries are known for causing moderate pollution in the environment. They need to acquire location certificate first and then after following several procedures they need to obtain environmental clearance certificate to establish their facilities.
iii) **Orange Category**- these are the industries which creates pollution but not much than the red category industries and the emission can be controlled. These industries need to submit an IEE report along with the application .
iv) **Red Category**- these are the industries which re responsible for significant adverse impact through their activities. They need to submit an EIA report after obtaining clearance based on an IEE report.

According to ECR, 2023 all existing industries and projects in Amber and Red categories require an Environmental Management Plan (EMP) to be prepared and submitted along with other necessary papers while applying for environmental clearance.

1.7.3 Bangladesh Climate Change Strategy and Action Plan (BCCSAP) 2009

The Government of Bangladesh prepared the Bangladesh Climate Change Strategy and Action Plan (BCCSAP) in 2008 and revised in 2009. It follows six themes which are- Food security, social, protection and health, Comprehensive disaster management, Infrastructure to ensure that existing assets (e.g., coastal and river embankments) are well maintained and fit for purpose, Research and knowledge management, Mitigation and low carbon development and Capacity building and institutional strengthening.

1.7.4 National Water Policy 1999

The National Water Policy was implemented in 1999 with the intention of guiding both public and private actions to ensure optimal development and management of water in order to benefit both individuals and the society at large. It's provide a comprehensive framework to guide the harnessing, development and management of surface and groundwater resources. The policy ensures equitable access of water to all with a particular access of the poor, underprivileged communities. It promotes participatory water management with engagement of local communities.

1.7.5 National Safe Drinking Water Supply and Sanitation Policy 1998

The National Safe Drinking Water Supply and Sanitation Policy (NSDWSSP, 1998) was adopted in 1998 that sets basic framework to ensure improved environment and better public health and sanitation. The framework ensures access of all citizens to have safe drinking water and sanitary latrines at an affordable cost.

1.7.6 National Agricultural Policy, 2010

This policy was adopted in 2010 to ensure that each nation will be self sufficient in food by increasing production of all crops and the agriculture will be sustainable and environment friendly. National Agriculture Policy (NAP) 2010 of Bangladesh, formulated by the Ministry of Agriculture, Government of the People's Republic of Bangladesh. It replaced the earlier National Agriculture Policy 1999 and provides a strategic framework for achieving food security, poverty reduction, sustainable agricultural development, and climate resilience.

1.7.7 National Fisheries Policy, 1996

National Fisheries Policy, 1996 was adopted to take action on declined fish production due to environmental imbalances, adverse environmental impacts. It was formulated to ensure the sustainable development, conservation, management, and utilization of fisheries resources. The policy recognizes fisheries as a vital sector for food security, employment, poverty reduction, export earnings, and biodiversity conservation

1.7.8 National Livestock Development Policy, 2007

This policy was developed to address the key challenges in the sustainable development of the livestock. NLDP, 2007 is a comprehensive policy adopted by the Ministry of Fisheries and Livestock (MoFL), Government of Bangladesh to guide the sustainable development of the livestock sector. It aims to improve livestock productivity, strengthen rural livelihoods, enhance food and nutritional security, and encourage private-sector participation while ensuring sustainable resource use.

1.7.9 Standing Orders on Disaster, 2010

The Standing Orders on Disaster, 2010 works on outlining disaster management regulative framework, multi-agency disaster incident management system, maintaining risk reduction roles and responsibilities for all committees and agencies. It operationalizes the country's disaster management framework by clearly defining the roles and responsibilities of ministries, departments, local governments, armed forces, NGOs, and communities before, during, and after disasters. The revised SOD 2010 replaced the earlier 1997 version to reflect Bangladesh's shift from disaster response to disaster risk reduction (DRR).

1.7.10 Coastal Zone Policy, 2005

The Coastal Zone Policy (CZP), 2005 is a national policy adopted by the Ministry of Water Resources (MoWR), Government of the People's Republic of Bangladesh to provide an integrated framework for the management and sustainable development of Bangladesh's coastal zone.Coastal zone policy provides general guidance to the coastal people so that they can pursue their livelihoods under secured conditions in a sustainable manner without impairing the integrity of the natural environment.

1.7.11 Coastal Development Strategy, 2006

The strategy is based on the Coastal Zone policy and takes into account the emerging trends: increasing urbanization, changing pattern of land use, declining land and water resources, unemployment and visible climate change impacts.

CHAPTER TWO : METHODOLOGY

2.1 Research Design

This study employed a descriptive and evaluative research design to assess the implementation progress of the Resilient Homestead and Livelihood Support (RHL) Project and evaluate compliance with the Environmental and Social Management Framework (ESMF). The research combined quantitative monitoring data with qualitative information obtained from project documents, safeguard reports, and field observations. The descriptive approach was used to summarize the environmental and social safeguard performance of the project, while the evaluative approach was applied to compare field-level implementation with the Environmental and Social Standards (ESS) prescribed by PKSF and the Green Climate Fund (GCF). The study focused on identifying implementation gaps, evaluating mitigation measures, and assessing safeguard compliance throughout different phases of the project implementation.

2.2 Study Area

The study was conducted on the Resilient Homestead and Livelihood Support (RHL) Project implemented by Coast Foundation under the supervision of Palli Karma-Sahayak Foundation (PKSF). The RHL Project is a climate resilience initiative financed by the Green Climate Fund (GCF) and implemented in seven climate-vulnerable coastal districts of Bangladesh, namely Khulna, Satkhira, Bagerhat, Barguna, Patuakhali, Bhola, and Cox's Bazar. This internship study specifically focused on the homestead development activities implemented by Coast Foundation in Cox's Bazar. The project area was selected because of its high exposure to cyclones, storm surges, salinity intrusion, coastal erosion, and other climate-induced hazards, making it one of the priority intervention areas for climate adaptation and resilient livelihood development.

2.3 Study Period

The internship was conducted over a **two-month period** at PKSF. However, the environmental and social safeguard evaluation was based on project monitoring data collected from **January 2025 to December 2025**, covering the three implementation stages of the homestead development activities.

During the project implementation regular check-up and monitoring was ensured by visiting the sites, doing survey of the beneficiaries, structured field observations and environmental assessments.

2.4 Data Sources

Data consisted of Environmental and Social Impact Monitoring (ESIM) information collected by field officers of the partner organization (PO) assigned in seven district project implementation. Data were collected through beneficiary surveys, structured observations, environmental assessments, and safeguard monitoring using the KoBo Toolbox digital platform. The monitoring process incorporated GPS verification, geo-tagged photographs, and logical consistency checks to improve data quality. No direct primary data were collected for this internship report. More information were obtained from the PKSF Environmental and Social Management Framework (ESMF), Environmental and Social Standards (ESS), project progress reports.

2.5 Data Collection Methods

Data collection involved documentary review and analysis of field monitoring information. Environmental and social monitoring was carried out at three stages of project implementation :

Pre-implementation stage : Baseline assessment, environmental and social risk screening, site selection, and stakeholder consultation.

Implementation stage : Monitoring of construction activities, occupational health and safety, environmental pollution control, biodiversity conservation, resource efficiency, labor conditions, and stakeholder participation.

Operational and Maintenance stage : Evaluation of post-implementation environmental impacts, safeguard sustainability, community participation, grievance management, and maintenance of project interventions.

Environmental and Social Impact Monitoring (ESIM) data were collected using standardized questionnaires in KoBo Toolbox which was collected by the PKSF's field officers. There are no primary data directly used in evaluating the overall progress of this report. The monitoring covered key safeguard indicators, including environmental pollution, groundwater protection, waste management, occupational health and safety, land acquisition, biodiversity conservation, stakeholder engagement, grievance redress mechanisms, gender equality, and community participation. Structured field observations and beneficiary interviews were conducted by the implementing agencies, while project reports and monitoring documents were reviewed during the internship for analysis and interpretation.

2.6 Data Analysis

The collected data were cleaned, validated, and analyzed using descriptive statistical techniques. Responses were categorized as compliant ("Yes") or non-compliant ("No") and converted into percentages to determine compliance levels across the three implementation stages. Comparative analysis was then performed to identify trends, evaluate changes over time, and assess the effectiveness of mitigation measures. Graphs, tables, and figures have been used to visualize compliance patterns and environmental and social safeguard performance. The findings were interpreted in accordance with PKSF's Environmental and Social Standards (ESS), the Environmental and Social Management Framework (ESMF), and relevant national environmental regulations.

From the RHL project, 19% people were benefitted in pre-implementation stage, 32% were benefitted in implementation stage and 49% people were benefitted in post-implementation stage. This illustrates that people were interested in this project's outcomes and beneficiaries were increased due to their interest.

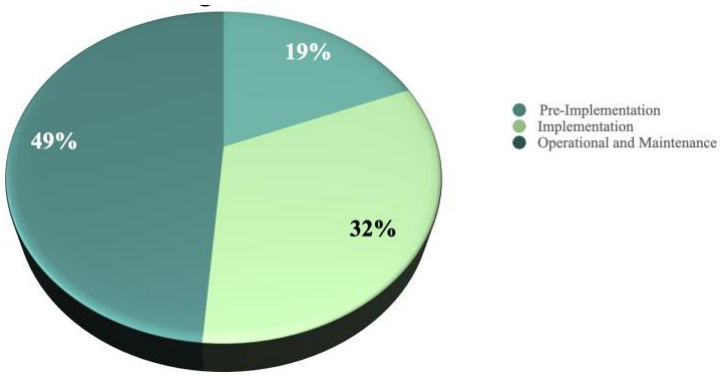

Figure 02 : Total percentage of beneficiaries in each stages

Total Number of Beneficiaries		
Male	Female	Total
0	29	29

0	50	50
2	73	75
Total		154

Table-01 : Total Beneficiaries included in RHL project (Homestead activities) under COAST.

Table-02 : Total percentage of beneficiaries in three stages

Stages	Total Percentage of beneficiaries
Pre-Implementation	19
Implementation	33
Operational and Maintenance	49

The Resilient Homestead activities implemented by COAST Foundation involved 154 beneficiaries, representing approximately 0.014% of the RHL Project's total beneficiary coverage of 1,132,525 (362,475 direct and 770,050 indirect beneficiaries).

2.7 Quality Assurance

To ensure the reliability and accuracy of the collected information, several quality control measures were followed:

- GPS-based location verification
- Geo-tagged field photographs
- Logical consistency checks in KoBo Toolbox
- Cross-validation with project monitoring reports
- Review of safeguard documentation by PKSF
- Standardized monitoring protocols across all implementation stages

These procedures minimized data entry errors and enhanced the credibility of the analysis.

CHAPTER THREE : FIELD-LEVEL FINDINGS & DISCUSSIONS

3.1 Environmental Issues

RHL project was implemented across different activities such as- design and building of homesteads, Construction of Slatted Houses for Goat/Sheep Rearing, Development of crab hatcheries (1st stage), and Technical and financial support for "crab nursers" (2nd stage). The progress report covers the analysis of one activity which is design and building of homesteads. The Environmental changes was observed during the project implementation period are- risk of pollution, fertile soil removal, adverse impact on the surface and groundwater quality, dust prevention, possibility of GHG

Table-03 : Environmental Issues Associated with the project implantation

Environmental Issues			
Key Areas	**Pre-implementation**	**Implementation**	**Operational & Maintenance**
Possibility of Environmental Pollution	3.45 (Less Risk)	0 (No Risk)	6.67 (Chances Increased for activities in implementation stage)
Maintenance of Latrine distance	0 (Not Necessary)	78 (Moderately Maintained)	94.67 (Highly Maintained)
Measures for dust prevention	0 (Not Necessary)	94 (Highest presentation measures were taken)	0 (Not Necessary)
Environment friendly vehicles	0	90 (Highly Ensured)	0 (Not necessary because it was ensured in implemented stage)
Possibility of GHG emissions	0 (No Associated Risk)	0 (No Associated Risk)	0 (No Associated Risk)
Machinery maintenance	0 (Not Necessary)	100 (Highly Maintained)	0 (Not necessary because it was already maintained in implemented stage)
Adverse impact on the GW source	0 (No Associated Risk)	0 (No Associated Risk)	10.67 (Lower risk due to activities done in implementation stage)
Impacts on surface and GW quality	0 (No Associated Risk)	4 (Lower Risk)	13.33 (Risk become a bit higher due to implementation activities)

Fertile topsoil removal	0 (No Associated Risk)	0 (No Associated Risk)	0 (No Associated Risk)
Deforestation or tree cutting	0 (No deforestation occurred)	0 (No deforestation occurred)	12 (Lower risk due to implementation activities)
Herb, shrubs or vegetables cultivation	0 (No Associated Risk on Cultivation)	100 (Positive trends shows no risk)	80 (Risk Lowered a little bit due to activities during implementation stage)
Adverse impact on endangered species or ecosystem	0 (No Associated Risk)	0 (No Associated Risk)	0 (No Associated Risk)

emissions, adverse impact on groundwater source, deforestation and adverse impact on biodiversity. The findings are shown on a table.

The table shown above, implies the environmental risks and outcomes associated with the project working phases. The table explains that the environemntal degradation was less occurred due to GHG emissions and topsoil removal and adverse impacts on biodiversity, possibility of environmental pollution, adverse impact on groundwater source, impact on surface, groundwater quality, deforestation, distance of latrine from water sources, dust prevention measures, environmental friendly vehicles, machinery maintenance and herb, shrubs or vegetables cultivation The trend shows positive result. Which means in the entire cycle of RHL project there was less deviation of environmental damages due to the implementation of the project. There were almost less possibility of environmental degradation. If any deviation occurred, it was slightest and mitigation measures were taken to prevent them.

Table 04 : Mitigation measures taken to prevent environmental Degradation

Mitigation Measures

Measures	Pre-implementation	Implementation	Operational & Maintainance
Measures to prevent contamination		Heavy sand filling around the ring of the toilet	

Mitigation Measures

Measures	Pre-implementation	Implementation	Operational & Maintainance
Waste Management		The Produce waste reused, dispose away from home within safe distance and buried in the ground by digging holes	The Produce waste buried in the ground by digging holes

3.2 Environmental Management

The environmental components were monitored properly to prevent negative impacts in each stages of RHL project activities. RHL project make people aware of the pollution concept, occurrence, impacts and mitigations. It includes training people about the environment, pollution causes, types of pollution and preventative measures.

Water Management : Water in the homestead activities were managed by proper sanitation, RWHS filter installation in post-implementation stage. Measures were taken to prevent contamination. Heavy sand filling around the ring of the toilet were taken as preventive measures to prevent the contamination from latrine if 30 feet distance weren't maintained and through follow-up further reduction of residual surface contamination risks were addressed.

Waste Management : Generated waste was managed in the implementation stage by reusing the materials that can be reused or by disposing away from home within safe distance or burring in the ground.

Vegetation : Greening and plantation practices were practiced in all stages of RHL project activities and it's encouraged the conservation of biodiversity.

Pollution Control and Resource Efficiency: Dust suppression and material management were maintained in all stages and climate-friendly sustainable practices such as- resource efficient technology, solar adoption, cookstove use were encouraged.

3.3 Social Issues

In the RHL project there were less social problems arose. Social activities were taken place but there were less negative results were faced during the period of project implementation. During the pre-implementation stage, privately owned land were used for the activities. But in implementation stage and operational & maintenance stage no privately owned land were used which means land acquisition were less and it illustrate RHL project focused on the less using the natural resources for sustainability of the assets of environment. Has or disputed land weren't used which illustrates the less consumption of land. No indigenous community were included in this project. RHL project ensure the uniformity irrespective of class, religion and gender. Gender equality were ensured in the RHL project. RHL project ensured about 0% sexual harassment and 100% awareness on it during pre-implementation stage, 98% and 97.33% respectively in implementation stage and operational & maintenance stage. The percentage were less than the pre-implementation stage because the ensurance was obtained already during pre-implementation stage. In implementation stage it was 2% less than the pre-implementation stage but in post implementation stage it was 97.33%. Because there were less problems arose on the implementation stage and operational & maintenance stage due to adoption of pre-cautions. There were 2% obstacles encountered during the implementation stage and 10.67% operational & maintenance stage.

Table 05 : Social issues figured out during the RHL project implementation (Positive trend)

Key Areas	Pre-implementation	Implementation	Operational & Maintenance
Privately owned land	100 (Privately owned land were used)	0 (Not Necessary)	0 (Not Necessary)
Objection or Obtaining consent letter	0 (No objection from the family living in that area because all the lands were privately owned)	0 (No objection from the family living in that area)	0 (No objection from the family living in that area)
Khas or disputed land	0 (No land were used)	0 (No land were used)	0 (No land were used)
Inclusion of indigenous community	Not applicable	0	0

Prior written consent	Not applicable	Not applicable	Not applicable
Respectful recognition	Not applicable	Not applicable	Not applicable
Equal rights	Not applicable	Not applicable	Not applicable
Occurrence of sexual harassment	0	0	0
Awareness on sexual harassment	100 (Fully Ensured)	98 (Declined because awareness was ensured from the beginning)	97.33 (Declined but needs to strengthen more)
Complaints or obstacles encountered	0 (No complaints were encountered)	2	10.67
Complaint or grievance resolving	0	2 (Resolved)	6.67 (Resolved)

RHL project also prioritized the general people's consent. Complaints were addressed in Grievance Readdress Mechanism (GRM) which also implies that PKSF were aware about the transparency, responsive bahavior and activities of their projects.

3.4 Social Management

Social monitoring included following components-

Women's Participation and Inclusion: In the homestead activities strong and equal opportunities and participation of women were demonstrated.

Occupational Health and Safety (OHS) : OHS were ensured by covering high awareness, strong encouragegement and use of PPE, taking measures for the infectious and contagious diseases prevention, making aware about the effects of chemicals and how to maintain distance from toxic or hazardous chemicals while working.

Grievance Redress Mechanism (GRM) : GRM ensured no objections during the project implementation by involvement of CCAG group and through Grievance Redress Mechanism (GRM).

SEAH Awareness: The homestead activity results no sexual harassment incident and ensure SEAH awareness in the operational & maintenance stage.

3.5 Analysis and Interpretations

The indicators for the homestead activity remained strong and positive throughout the RHL project.

Pre-implementation Stage : In pre-implementation stage the possibility of pollution was lower which is 3.47%. The possibility of pollution was less. So the risk associated with the RHL project was less. The distance of latrine from the water source were properly maintained to prevent contamination. Possibility of GHG emissions were 0% in this stage. As there were no activities in this stage measurement for dust prevention wasn't necessary in this stage. Safe drinking water was ensured from the beginning. Awareness session also conducted strongly in each stages. Theere was no adverse impact of groundwater pollution through the activity. Resource efficient technology were used 100% in this stage. Figure-03 shows that the compliance trends was positive in each categories or indicators.

Implementation Stage : In this stage pollution risk was 0%, latrine distance from water source were maintained properly (78%) and dust prevention measures were ensured 94%. Environment friendly vehicles were used 90% efficiently. There was no possibility of GHG emissions and machinery maintained 100% effectively to prevent noise pollution. Safe drinking water were supplied 100% and 98% people used PPE which indicates that the awareness among people were strong. There were engagement of forced labor or child labor inclusion. In this stage surface and groundwater quality was slightly impacted due to activities. But proper site visit and monitoring can reduce this percentage. Filter system compliance were moderate. There was 2% grievance resolved in this stage due to less obstacles encounter. As the activities started from this stage local worker needed to be hired and Local administration were aware about it.

Operational and Maintenance Stage : Possibility of pollution rise a little bit due to previous activities took place. But the pollution level can be decline by taking proper steps and regular monitoring. Latrine distance maintained 94.67% efficiently. Deforestation was observed 12% due to

implement the activity such as- building construction. Vegetable or other tree cultivation were ensured 80%. There was 10.67% complaints encountered due to inclusion of more people and activity impacted some indicators that affected the community. But it was resolved 6.67% though it was moderate. Adverse impact due to the activity was 13.33% and it rises than the previous stages because of running works.

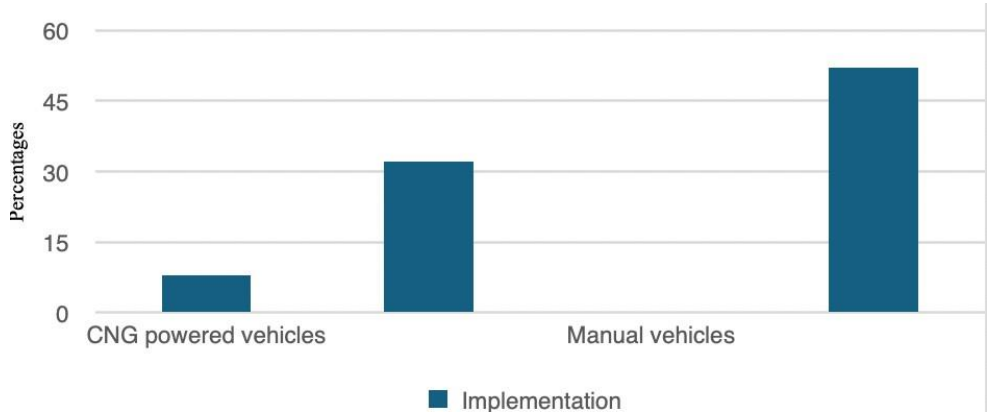

Figure 03: Types of vehicles used in homestead activity

Environment friendly vehicles were used in Implementation stage effectively. The graph shows four types of vehicles were listed to be used in the implementation stage. CNG powered vehicles were used 8%, Battery powered vehicles were used 32% and 52% vehicles were diesel or petrol powered. Diesel or petrol powered vehicles used more than the battery powered which illustrate the project activity ensured the less consumption of energy to sustain them.

Among the beneficiaries, no male were engaged in the pre-implementation stage but 1% women were engaged. In the last or operational & maintenance stage 2.67% male were included and women were benefited in highest amount from the project activity. It also demonstrate that women participation were encouraged and due to proper safety more women were interested to be engaged. The participation of women indicates the high profile overview of PKSF as PKSF ensures the women participation. Also shows women empowerment is a target of PKSF.

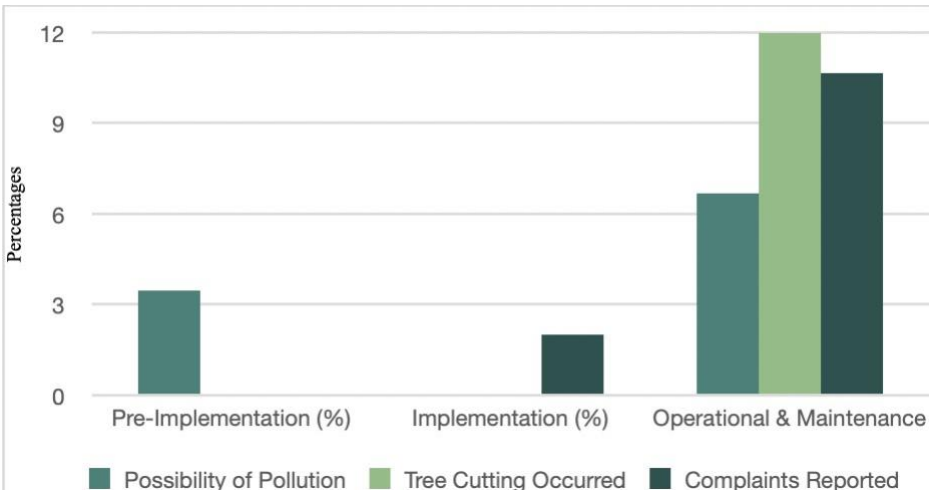

Figure 04 : Risk associated with the homestead activity

Throughout the activity there were higher risk associated with complaint reported. It shows report was obtained highly in operational & maintenance stage than the previous stages. Possibility of pollution was less than the complaints but it was higher in operational & maintenance stage. That means pollution will be higher slightly in the last stage. If activity causes low to moderate pollution risks at the last stage after implementation thus more adoption of measurement to mitigate the risks is necessary. Tree cutting also increased in operational & maintenance stage because of the need to build resilient house. But regular checking and preserving the space for house building rather than cutting trees can prevent the risk. Child labor and workers injury rate was lower in all stages than the tree cutting and pollution risks.

3.6 Evaluation Against Environmental and Social Standards (ESS)

RHL project Design and building of homesteads activity's results evaluation against the Environmental and Social Standards (ESS) will help to understand what improvements have been conducted or fulfilled and how much is needed. The evaluation was conducted during the reporting cycle of the project and it aligns with the PKSF's ESS and GCF standards of safeguard requirements. The ESS evaluation was done based on the data collected at pre-implementation, implementation and operational & maintenance stages. The ESS evaluation implies confirms strong compliance across core safeguard domains.

Table 06 : 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 were systematically screened and evaluated at different stages (pre, implementation and post). Analysis of monitoring data for homestead activity indicates overall low environmental risk, effective site-level oversight, and organized data collection using KoBo. Pollution risk was consistently minimal across these activities, with homestead-related pollution dropping to 0% after implementation.	Nearly full compliance maintained across monitored stages. A full time monitoring can upgrade the risks which was arose during last stage.
ESS 2	Labor and Working Conditions	Labor safeguards remained robust, with strong occupational health and safety performance across the activity. Access to safe drinking water and first-aid facilities improved in homestead intervention, while OHS awareness stayed high and reported worker injuries remained minimal. However, post-implementation refresher sessions are still necessary to maintain the use of PPE, first-aid preparedness, and proper hygiene practices across the entire activity. Female worker safety during implementation was recorded at 100% in homestead analyses. Incidents of child or forced labor were negligible or absent, though ongoing routine monitoring is recommended.	Strong compliance maintained; continue reinforcement in post-stage follow-up. Regular monitoring needed.
ESS 3	Resource Efficiency and Pollution Prevention	The monitoring results indicate significant improvements in resource efficiency and pollution prevention. In homestead development, the post-implementation phase saw a sharp increase in the adoption of solar and resource-efficient technologies, along with improved use of ICS, while water and sanitation safeguards also became stronger. However, continued follow-up is necessary to address potential water contamination and minor GHG emission risks.	Progressive trend observed; targeted post-implementation support required
ESS 4	Community Health, Safety, and Security	Local labor recruitment was high in implementation-stage activities (100% in homestead development). Lower adverse impact on community were reported for the activity.	Full compliance maintained. But a little monitoring and check-up required to prevent adverse impact on health.
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 activity showed strong greening practices, with vegetation planting and homestead greening integrated into implementation. A small residual tree-cutting/deforestation risk persists, caused to lessen the plantation due to it 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. Analyses of homestead activity show very high CCAG participation, strong community involvement in decision-making, and high awareness among local authorities. The number of complaints was low, and but all reported grievances weren't resolved, this site should be investigated and monitored. However, maintaining the visibility of GRM channels and ensuring continued engagement after implementation is recommended.	Nearly full compliance maintained; strengthen post-implementation GRM visibility

The findings of the environmental and social impact monitoring indicate that the design and building of homesteads activity under the RHL Project generally maintained a strong level of environmental and social safeguard performance during the January-December 2025 reporting period. The stage-wise analysis shows that most safeguard indicators remained compliant throughout the project cycle, although some risks and management gaps became more visible during the implementation and operational stages. Therefore, the results suggest that the project has been able to integrate the ESMF requirements into its activities, but continued monitoring is necessary to maintain this level of performance.

The environmental findings indicate that the overall environmental risk associated with the homestead activity remained relatively low. Pollution-related risks were limited and, according to the monitoring results, homestead-related pollution declined to 0% after implementation. This suggests that the mitigation measures applied during project activities were generally effective in controlling major environmental disturbances. The systematic screening and monitoring at different stages also indicate that environmental risks were considered before and during implementation rather than being addressed only after problems occurred. However, the increase in pollution possibility and tree-cutting risk during the operational and maintenance stage requires attention. This does not necessarily indicate a major environmental failure, but it shows that environmental risks can continue even after the main construction activities are completed. Tree cutting may be associated with the requirements of homestead development, while pollution may result from continued household or maintenance activities. Therefore, the findings demonstrate that post-implementation monitoring is as important as construction-stage monitoring. Regular inspection of homestead surroundings, vegetation, waste disposal, and possible sources of water or soil contamination would help prevent these relatively low risks from becoming persistent problems.

The findings on resource efficiency also show a positive trend. Increased adoption of solar and resource-efficient technologies and improvements in sanitation indicate that the project interventions have the potential to generate environmental benefits beyond the immediate construction of resilient houses. Nevertheless, continued monitoring of water quality, resource

consumption, and minor emission risks is necessary to ensure that these positive outcomes are sustained during the operational period.

The findings demonstrate comparatively strong performance in occupational health and safety. Access to safe drinking water and first-aid facilities improved, awareness of occupational health and safety remained high, and reported worker injuries were minimal. Female worker safety during implementation was also reported at 100%, while child and forced labor were negligible or absent. These results indicate that basic labor and workplace safeguards were incorporated effectively into the implementation process.

Nevertheless, strong performance during implementation should not be interpreted as a reason to reduce monitoring. The need for refresher sessions on PPE, first aid, and hygiene indicates that safeguard awareness and practices may weaken over time if they are not reinforced. Therefore, the findings support the continuation of routine OHS monitoring, particularly during maintenance activities and any future construction-related work.

The social findings demonstrate that the project performed strongly in areas such as stakeholder participation, gender inclusion, land-related safeguards, and community engagement. No involuntary resettlement, land acquisition, or economic displacement was reported, and activities were implemented on privately owned or consented land without reported use of disputed or khas land. This indicates that the project was able to avoid some of the major social risks commonly associated with infrastructure and construction activities.

The increasing number of beneficiaries across the implementation stages also indicates expanding project coverage. However, the increase should be interpreted primarily as evidence of the progression of project activities rather than as direct evidence of project effectiveness. The participation of women in the later stage is encouraging and suggests that the project created opportunities for greater inclusion.

Stakeholder engagement was one of the strongest areas of social safeguard performance. High participation of Climate Change Adaptation Groups (CCAGs), community involvement in decision-making, and awareness among local authorities indicate that the project maintained a participatory implementation approach. Such participation is important because it allows beneficiaries and local stakeholders to communicate their needs and concerns during implementation.

However, the grievance findings require closer attention. Although the overall number of complaints was relatively low, not all reported grievances were resolved. This creates a small but important gap between the existence of the Grievance Redress Mechanism (GRM) and its complete operational effectiveness. A grievance mechanism should not only receive complaints but also

ensure proper recording, investigation, resolution, and follow-up. Therefore, unresolved complaints should be tracked systematically until closure, particularly during the operational and maintenance stage.

The comparison among the three implementation stages provides an important understanding of how safeguard performance changed over time. The pre-implementation stage generally involved screening, consultation, and baseline assessment, while the implementation stage introduced more direct environmental, labor, and community-related risks. The operational and maintenance stage showed that some risks continued even after the major implementation activities had progressed.

The higher level of complaints and the increase in pollution and tree-cutting risks during the later stage suggest that safeguard management should not end immediately after physical implementation. Instead, some risks may shift in nature as the project moves from construction to use and maintenance. This is particularly important for the RHL Project because the objective is long-term climate resilience; therefore, the sustainability of the intervention depends not only on constructing resilient houses but also on maintaining environmentally sound and socially responsible practices afterward.

The overall ESS assessment indicates that the project maintained strong to nearly full compliance across the major applicable safeguard areas. ESS 1 showed nearly full compliance through systematic screening and monitoring; ESS 2 demonstrated strong labor and OHS performance; ESS 4 and ESS 5 maintained full compliance; ESS 6 showed high compliance with a small residual tree-cutting risk; and ESS 10 showed nearly full compliance because of strong stakeholder participation but some unresolved grievances.

This indicates that the major issue is not the absence of safeguard measures, but rather the need to maintain consistency and strengthen follow-up in specific areas. In particular, post-implementation environmental monitoring, continued OHS awareness, biodiversity protection, and grievance resolution require greater attention. Thus, the findings support the conclusion that the RHL homestead activity is broadly compliant with the applicable ESMF and ESS requirements, while some indicators require continuous monitoring and corrective action.

Overall, the findings demonstrate that the RHL Project's safeguard system is functioning relatively effectively at the field level. The low environmental risks, strong occupational safety performance, absence of reported land displacement, high stakeholder participation, and strong ESS compliance indicate that the ESMF has been substantially integrated into project implementation. However, the findings also demonstrate that compliance should be understood as an ongoing process rather than a one-time achievement.

The main areas requiring continued attention are post-implementation environmental risks, tree cutting, consistent use of PPE and safety practices, and the resolution and follow-up of grievances. Strengthening these areas would help prevent small or emerging risks from developing into significant environmental or social problems. Therefore, the most appropriate management approach is to maintain the existing safeguard practices while strengthening regular follow-up, documentation, awareness, and corrective action during the remaining project period. This interpretation is consistent with the study's objective of identifying gaps between planned safeguard requirements and actual field-level implementation and assessing the effectiveness of mitigation measures.

3.7 Root Causes of Analysis

The progress report analyse the time to time changes over the project cycle in design and building homesteads activity in all stages. The main purpose of the analysis is to show how the ESS standards were maintained and what is required for further improvement in the activity. ESS frameworks (such as those used by the World Bank) require projects to identify, assess, and manage environmental and social risks throughout the project cycle. A stage-wise analysis (pre-, during, and post-implementation) helps verify that risks such as pollution, occupational hazards, or social exclusion are not only identified early but also effectively mitigated and monitored over time.

The analysis provides evidence of compliance. ESS standards emphasize documentation and measurable results. Data on low pollution levels, strong occupational health and safety (OHS) performance, absence of child or forced labor, and effective grievance redress demonstrate that the project is meeting key requirements under standards like ESS1 (Assessment and Management of Risks and Impacts), ESS2 (Labor and Working Conditions), and ESS10 (Stakeholder Engagement).

Additionally, it also strengthens accountability and transparency by documenting stakeholder participation, community involvement in decision-making, and grievance resolution, the analysis ensures that affected groups have a voice and access to redress mechanisms.

Moreover, this process supports adaptive management and continuous improvement. Highlighting areas that require further attention such as consistent PPE use, more complaints resolved enables timely corrective actions in line with ESS expectations.

Finally, the analysis contributes to long-term sustainability. ESS standards aim not only to prevent harm but also to promote efficient resource use, social inclusion, and resilience. Monitoring improvements in sanitation, resource efficiency, and livelihood practices helps ensure that project benefits are environmentally and socially sustainable over time.

CHAPTER FOUR : CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The environmental and social impact monitoring results show a high level of compliance with PKSF and GCF safeguard requirements across the project's key interventions. Mitigation measures are working effectively, and the findings offer stronger evidence of improvements after implementation, in homestead development. The main priority for safeguard management now is to sustain these good practices by enhancing regular follow-up and refresher engagement to prevent any decline over time.The internship provided an excellent opportunity to learn about the analysis of data on a field level and also to know about the management practices. Overall, it was a great learning experience for me to learn more about environmental monitoring, safeguard assessment, and sustainable development project management.

4.2 Recommendations

To upgrade the project compliances, align more strongly with the ESS standards and to ensure sustainability of the project and climate resiliency over the activity more improvement is required. Recommendations for the improvement are-

- Continuing regular and periodical environmental and social monitoring and follow-up after implementation stage which will enhance the strength of later requirements on post-implementation stage.
- Displaying ESS safety standards more effectively and clearly so that people can understand and awareness raise.
- Improving and providing training session on CCAG meetings, safe waste disposal, biodiversity conservation, SEAH prevention and gender equality.
- Making people aware about the necessity to follow safety concern standards and how to follow them. General people aren't easily willing to obey the rules. Making the procedure easier to follow.
- Making documentations, real life story telling which will help to understand general people how pollution occurs, sources, impacts and why it is necessary to prevent pollution and sustain the nature. More importantly, resource management necessity should be explained precisely and easily for lessen the rate of consumption.

- Formalize simple low-cost pollution control measurements such as- contaminants dispersions prevention, making eco-friendly biochar and using them to prevent the toxic metal prevention from the chemicals used during house building.

- Ensuring the dye used for building aren't synthetic and pollute the environment. Direct discharge of residues into environment should be prevented and alternative route should be created for their discharge.

4.3 Recommendations for Future Intern

Through the internship activities took place in PKSF, students who will come in future for doing internship will learn insightful information and gain knowledge. They can enhance their knowledge in many ways.

➢ Acquire experience of the environmental safeguards framework before going out for work.

➢ Become proficient in using data management software like KoBo Toolbox.

➢ Keep up-to-date with your organizational supervisors in communication.

➢ Pay attention to both practical field observations and theories.

4.4 Self-Reflection

With the help of this internship, I was able to relate classroom studies with real-world problems related to environmental management. Through this internship, I gained confidence in analyzing data, organizational reporting, technical writing, and evaluation of environmental safeguards. Simultaneously, I was also able to acquire knowledge regarding climate change adaptation and environmental safeguarding systems.

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APPENDICES

Appendix-AI: 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	3.45	0	6.67	
		No	96.5	100	93.33	
	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	10.67	
		No	100	100	89.33	
	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	100	100	98.67	
		No	0	0	1.33	
	Is personal protective equipment (PPE) used to ensure protection of the workers?	Yes	0	98	0	
		No	0	2	0	
	Have any awareness sessions on occupational health and safety been conducted?	Yes	100	100	100	
		No	0	0	0	
	Were or are there any	Yes	0	0	0	

	forced laborers or child laborers (≤ 16) employed	No	0	100	0	
	Do both women and men have equal opportunities for work?	Men	0	100	0	
		Women	0	0	0	
	Is the safety of female workers ensured?	Yes	0	98	0	
		No	0	2	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	100	98	97.33	
		No	0	2	2.67	
Resource Efficiency and Pollution Prevention	Has a distance of 30 feet been maintained between the water source and the latrine?	Yes	0	78	94.67	Use sand around the pit
		No	0	22	4	
	Have any measures (such as water spraying or covering with polythene) been taken to prevent dust from construction materials?	Yes	0	96.8194	0	
		No		3.196	0	
	Are environment-friendly vehicles used for transporting construction materials and other goods to prevent air pollution?	Yes	0	90	0	
		No	0	10	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	100	100	100	
	Have the machinery been properly maintained or lubricated to prevent noise pollution?	Yes	0	100	0	Use machinery in day time
		No	0	0	0	
	Are resource efficient technologies such as solar used to mitigate greenhouse gases?	Yes	100	100	92	
		No	N/A	N/A	8	
	Is Bandhu Chula (ICS) used to mitigate greenhouse gases?	Yes	100	100	90.67	
		No	N/A	N/A	9.33	
	Is there a filter system installed at the mouth of the	Yes	0	38	54.67	

	pipe for rainwater harvesting?	No	0	8	18.67	
	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	100	0	
		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	13.33	
		No	0	100	78.67	
	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	0	0	
		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	0	0	0	
		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	0	0	
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	12	
		No	100	100	88	
	Have grass, shrubs, trees, or vegetables been cultivated on homesteads, embankments, or pond banks?	Yes	0	100	80	
		No	0	0	4	
	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	100	100	

	Has free prior written consent been obtained from the indigenous community for their inclusion in the activity?	Yes	96.5	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	96.5	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	96.5	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	10.67	
		No	100	0	89.33	
	Has the complaint or grievance been properly resolved?	Yes	0	2	6.67	
		No	0	0	4	
	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	98.67	
		No	0	0	1.33	
	Is the local administration aware of the project activities?	Yes	100	98	100	
		No	0	2	0	

Appendix-AII: Risk Associated with the Homestead Activity

Risk Associated with the Homestead Activity			
Key Indicator Measures	**Pre-Implementation (%)**	**Implementation (%)**	**Operational & Maintenance (%)**
Possibility of Pollution	3.45	0	6.67
Tree Cutting Occurred	0	0	12
Forced/ Child Labour	0	0	0
Worker Injury	0	0	0
Complaints Reported	0	2	10.67

Appendix-AIII: Internship Work Schedule

Week	Activities
Week 1	Collect data and review documents
Week 2	Identify environmental indicators
Week 3	Organize and summarize data
Week 4	Analyze environmental impacts
Week 5	Draft report writing
Week 6	Final report preparation and submission