

South Asia Co-operative Environment
Programme (SACEP) Plastic free Rivers and Seas
for South Asia (P171269)

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN
FOR COMMUNITY-BASED REDUCTION OF PLASTIC
POLLUTION: CASE OF CIRCULAR ECONOMY AND
BIODEGRADABLE PRODUCTS

GRANTEE: ARANNAYK FOUNDATION
BANGLADESH

Implemented by:



SACEP

Supported by:



Supported by:



Environmental and Social Management Plan (ESMP) for Component-1: Arannayk Foundation

1. Subproject Information

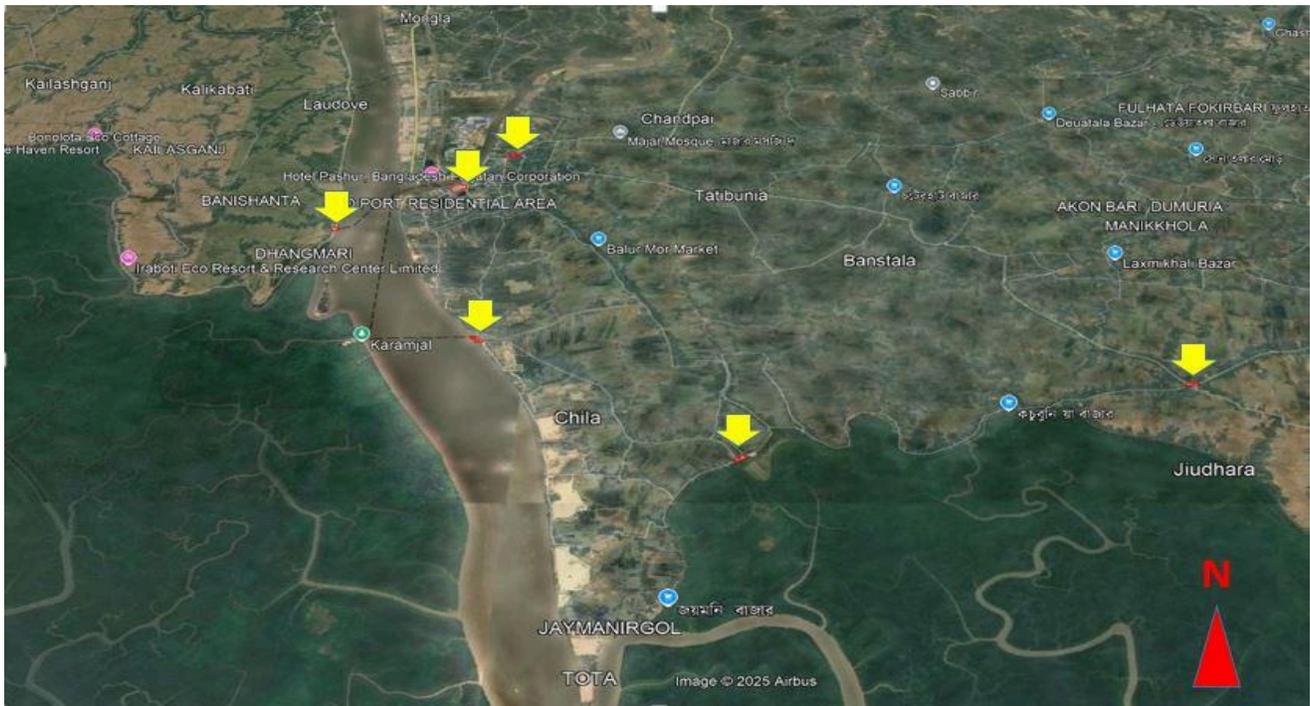
Subproject Title:	Plastic Reduction Initiative in Sundarbans Transboundary International Natural Ecosystems (PRISTINE)
Estimated Cost:	119,996 USD
Start/Completion Date:	01/01/2025-15/05/2025

2. Site Location and Description:

The Plastic Reduction Initiative in Sundarbans Transboundary International Natural Ecosystems (PRISTINE) project, implemented by the Arannayk Foundation in collaboration with the Environment and Social Development Organization (ESDO) and RecycleJar Ecosystems (RJE), addresses plastic pollution in the Sundarbans. Grounded in the AIR (Avoid, Intercept, Redesign) framework, the project targets both upstream (Mongla Upazilla) and downstream (ecotourism sites) pollution. Upstream interventions focus on training marginalized waste collectors to collect single-use plastics (SUP) and establishing a market chain by channeling the collected SUP to recyclers. The project facilitates this process but does not engage in recycling itself. This is aiming to prevent plastic discharge into the Sundarbans and Bay of Bengal

Downstream activities focus on behavior change and awareness campaigns to mitigate plastic pollution within the Sundarbans and prevent its entry into the Bay of Bengal. The markets and locations identified as hotspots are situated in close proximity to the Sundarbans, the world's largest mangrove forest, and are interconnected by various rivers, primarily the Pashur River. For instance, Mongla Sadar Market is approximately 85 km from the core area of the mangrove forest. Chila Market is about 83 km away, while Joymoni Market is roughly 82 km distant. Badiyamari Market is situated approximately 85 km from the mangroves, and Baniashanta Market is around 82 km away. Kumarkhali Market lies about 87 km from the mangrove region, with Mithakhali Market at approximately 89 km distance. Digraj Market is roughly 89 km away, Perikhali Market is about 94 km away, and Jiodhara Market is approximately 93 km from the mangrove forest. Karamjol, known for its wildlife breeding center, is situated about 81 km from the core mangrove area. The Mongla region experiences significant seasonal variations in temperature, humidity, and rainfall. Average temperatures range from approximately 15°C in the cooler months to around 34°C during the warmer periods. Humidity levels are consistently high year-round, typically exceeding 70%, with the highest levels occurring during the monsoon season. Rainfall is markedly seasonal, with the monsoon months (June to September) receiving the majority of the annual precipitation, while the winter months (December to February) are relatively dry.

The project also aims to improve plastic waste management within the ecotourism sector and foster partnerships for long-term sustainability. These efforts are expected to yield both environmental (e.g., mangrove ecosystem protection, habitat conservation for six globally endangered and threatened species, enhanced ecosystem services) and social benefits (e.g., women's empowerment through improved social status).



Refer to [Google earth Link](#) for detailed link of the map of the project locations

3. Subproject Description and Activities

This ESMP has been developed for all project activities under the Plastic Reduction Initiative in Sundarbans Transboundary International Natural Ecosystems (PRISTINE). It encompasses both soft components, including training for waste workers, vulnerability assessments, surveys and mapping of hotspots, awareness programs, and the renovation of SUP collection points. The ESMP provides a comprehensive framework to ensure the responsible and environmentally conscious implementation

of the project's capacity-building component, facilitating successful behavior change and awareness initiatives.

The activities outlined in this ESMP are categorized into two distinct phases:

1. **Project Pre-Activity Phase**
2. **Project Activity Phase**

Pre-activity Phase:

- Project staff training and implementation planning
- Vulnerability assessment of the waste workers
- Stakeholders Perception Survey

Activity Phase:

- Plastic Waste inventory and hotspot mapping
 - Training on safe waste handling and SUP processing
 - Awareness-raising session with the relevant local stakeholder
 - Plastic waste audit in Sundarbans
 - SUP transit Point Renovation
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- The direct project beneficiaries (waste collectors) have been identified through a survey and vulnerability assessment. During the initial phase of project implementation, community consultations were held through Focus Group Discussion (FGD) and Interview process.
 - In Mongla, the project has secured a leased office and adjacent land. This land, safeguarded from rainwater runoff by a boundary wall and shading structures, functions as the designated SUP transit point. This area serves as a temporary storage facility where collected single-use plastics (SUP) are accumulated before being transported to recycling facilities.
 - The organization also implements age verification procedures before recruitment to ensure compliance with labor regulations.
 - It has been noted that since waste workers are heavily involved in the project activities, they will be provided with essential health and hygiene materials, including gum boots, vests, gloves, masks, hand sanitizers, and sanitary napkins for female waste collectors.
 - Furthermore, as a part of the project, waste collectors will receive training on occupational health and safety, encompassing proper PPE usage, hazard awareness, and efficient single-use plastic (SUP) processing techniques. Consequently, the risk of hazard exposure is relatively low.

- The project will not require setting up a worker's camp. The initiative collaborates with experienced waste collectors who are already familiar with waste collection practices and the associated risks. The project's contribution is to generate income through the collection of single-use plastics (SUP), which does not introduce any additional risks of accidents or injuries
- Proper PPE, training, and safety measures are already provided for waste collectors to minimize these risks and ensure safety.
- The sub-project activities include adequate plans for SUP collection and transfer of collected SUPs to the recycling company. It can be noted that the hazardous waste will not be generated as part of this project.
- The only land required for the project is leased from a private owner for office use, and no additional land is necessary. The project does not result in any land use losses, and the designated SUP transit point is situated within the leased yard. This SUP transit point, located in Mongla and far from the mangrove areas, is solely for the temporary storage of single-use plastics (SUPs). The project does not contribute to the degradation of any natural habitats or environmentally sensitive areas.

4. ESMP Matrix: Risk and Impacts, Mitigation, Monitoring

The ESMP tables below reflect the E&S risks and impacts related to the design of the facilities and the operation and take into account the local specificities of the respective sites.

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
Risk of low engagement (of waste workers or community members) in consultations, surveys, and vulnerability risk assessments	<p>I. Ensure that all waste workers and community members are informed about the significance of the project/long-term benefits</p> <p>II. provide training to waste workers on the value of community consultations, surveys, and vulnerability risk assessments to help them understand their role in the process and how their input is valuable.</p> <p>II. work around the flexible schedules of the waste</p>	On-site during vulnerability risk assessments of waste workers and perception surveys	Project Manager from Arannyak foundation	Consent forms and attendance sheets	Attendance sheets/orientation sessions to be recorded during surveys	<p>Project Manger-Arannyak foundation</p> <p>Technical Expert -Environment, UNOPS PLEASE project - Bangladesh</p>	150 USD

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
	<p>workers to conduct these surveys</p> <p>V. Involve labor unions or worker groups in the planning process to ensure that workers' voices are represented and that they feel more inclined to engage (if needed and where participation is minimum)</p>						
<p>Risk of Occupational Health and Safety (OHS) hazards from working at heights and hygiene concerns during plastic waste receiving and sorting</p>	<p>I. Ensure that all workers are equipped with appropriate PPE such as helmets, gloves, safety boots, goggles, and high-visibility vests to minimize physical injuries.</p> <p>II. Provide health insurance to project</p>	On-site/ Monthly	MEL Manager-Arannyak Foundation	<p>Availability of PPE used by workers during waste handling and sorting</p> <p>Availability of a first aid box and accident register.</p> <p>Availability of</p>	<p>Daily records on site examination activities</p> <p>Monthly health reports</p>	<p>Project Manager and MEL Manager-Arannyak Foundation</p> <p>Technical Expert - Environment UNOPS PLEASE project - Bangladesh</p>	USD 500

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
	<p>workers to safeguard against health risks and ensure timely emergency support, if needed.</p> <p>II. Provide accessible first aid kits on-site</p> <p>V. Provision of proper sanitary facilities and safe drinking water</p>			sanitary facilities and safe drinking water			
Environmental Contamination or Plastic Leakage from SUP Transit Point	<p>I. Ensure that the temporary plastic storage unit is fully enclosed and sealed to prevent spillage or leakage.</p> <p>II. Regularly monitor and manage the amount of plastic stored to prevent overflow and improper disposal.</p> <p>II. Ensure that the site is regularly cleaned and</p>	Onsite/ Weekly	Technical Officer from RJE and MEL Manager-Arannyak Foundation	<p>Physical observation of no plastic leakage from the SUP transit point</p> <p>Availability of plastic storage record</p> <p>Availability of cleaning</p>	<p>Monthly monitoring of the cleaning report</p> <p>Report on plastic storage and leakage history</p>	<p>Technical Officer - RJE and MEL Manager-Arannyak Foundation</p> <p>Technical Expert - Environment UNOPS PLEASE project - Bangladesh</p>	100

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
	<p>maintained.</p> <p>V. Ensure dry conditions are maintained at the storage site.</p>			records			
<p>Risks of Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) between Project workers, and between Project workers and local community members</p>	<p>I. Development of PSEA policies.</p> <p>II. Appoint a PSEA Focal Point at the site.</p> <p>II. Provide awareness training on recognizing, and preventing SEA/SH for a) Project workers, and b) affected communities</p> <p>V. Provide training on the GRM, including for SEA/SH-related grievances to a) Project workers, and b) affected communities</p> <p>V. Request all Project workers to sign a Code of Conduct (CoC)</p>	<p>Training and awareness are conducted before the commencement of work.</p> <p>Implementation of Focal Points and signing of CoC at the site during the activity phase</p>	<p>MEL manager and Gender specialist-Arannyak Foundation</p>	<p>Number of training sessions provided to workers</p> <p>Number of awareness sessions provided to communities</p> <p>Number of training sessions on GRM provided to communities</p> <p>Percentage of workers who</p>	<p>Monthly monitoring</p>	<p>MEL manager and Gender specialist-Arannyak Foundation</p> <p>Technical Expert - Environment UNOPS PLEASE project - Bangladesh</p>	<p>300</p>

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
	including instructions for SEA/SH prevention /I. Provide specific SEA/SH response mechanism as part of the Project GRM, including referral to SEA/SH services			have signed the CoC Number of SEA/SH Focal Points appointed Availability of a complaint box on-site and actions taken in response to a complaint			
Lack of understanding of EHS risks and impacts, and mitigation measures leads to accidents and health impacts	I. Assess the company's capacity in OHS II. Train workers on OHS through toolbox talks II. Provide health insurance to project workers to safeguard against health risks and ensure timely emergency support, if needed.	On site Bi-weekly monitoring during project period	Project coordinator and MEL manager-Arannyak Foundation	Percentage of the companies whose OHS capacity has been assessed Number of toolbox talks conducted	Monthly monitoring	Project coordinator and MEL manager-Arannyak Foundation Technical Expert - environment UNOPS PLEASE project - Bangladesh	500

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
Lack of a Grievance Redress Mechanism (GRM)	<p>I. Create awareness of the Project GRM and its reporting channels, implemented by the PIU</p> <p>II. Provide an additional reporting channel through complaint boxes installed at the sub-project site.</p> <p>II. Ensure that the contact details of the SEA/SH Focal Point are placed on notice boards in the project location.</p> <p>V. Ensure that complaints received through the complaint boxes at the site are handled appropriately or transferred to the Project GRM</p> <p>V. Ensure that complaints received</p>	<p>Sub-Project Location/Through out the Project period</p> <p>SEA/SH referral service mapping to be conducted prior to the commencement of project activity</p> <p>Linkages to the Project GRM established before the project activity</p>	<p>Project Manager and MEL Manager-Arannyak Foundation</p>	<p>Number of awareness sessions held</p> <p>Number of complaint boxes installed</p> <p>Number of SEA/SH Focal Points appointed</p> <p>Number of SEA/SH cases reported that receive referral services</p> <p>Map of local SEA/SH service providers available</p>	<p>Monthly monitoring report</p>	<p>Project Manager and MEL Manager-Arannyak Foundation</p> <p>Technical Expert - Environment UNOPS PLEASE project - Bangladesh</p>	300

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
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	<p>through additional complaint boxes or the SEA/SH Focal Point in relation to SEA/SH are handled with strict confidentiality and in a survivor-centered manner.</p> <p>VI. Establish a map of local SEA/SH service providers and ensure every case reported is provided with referrals, if the survivor wishes that.</p>						
Lack of compliance with labor laws and labor management procedures	<p>I. Waste workers will be trained and made aware of the (GRM). A complaint box and the contact number of the Project GRM focal person will be visibly displayed on-site.</p>	Bi-weekly on-site throughout the Project Period	Project manager and MEL manager- Arannyak Foundation	<p>A number of workers' grievances were filed.</p> <p>Availability and implementation of the Code of Conduct.</p>	<p>Review of GRM register, Bi-weekly on site</p> <p>Discussions with waste workers once a month</p>	<p>Project manager and MEL manager- Arannyak Foundation</p> <p>Technical Expert - Environment UNOPS PLEASE</p>	150

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
	<p>II. Workers will have the option to raise concerns anonymously, either by phone or through the complaint box</p> <p>II. Development and implementation of a code of conduct in line with national labor laws and ESF of the PLEASE Project</p> <p>V. Wages will be paid in accordance with Labor Management Procedures (LMP)</p>			<p>Availability of payrolls.</p> <p>Project site visits and review of received complaints</p>		project - Bangladesh	
Risk of child labor	I. Comply with minimum age requirements of the Project workforce (in compliance with national laws and ESS2 of the World Bank) and document the age of workers upon hiring with	On-site/ Weekly throughout the Project Period	MEL Manager and Project Manager from Arannyak foundation	<p>Number of workers' grievances filed</p> <p>Number of track record searches conducted</p>	Monthly monitoring	<p>MEL Manager and Project Manager from Arannyak foundation</p> <p>Technical Expert - Environment UNOPS PLEASE project -</p>	100

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
	necessary evidence, document II. Verify the age of workers with the communities where required					Bangladesh	
Risk of forced labor	I. Establish a confidential and accessible Grievance Redress Mechanism (GRM) for workers to report issues. II. Raise awareness in local communities	Monthly on-site throughout the project period	MEL Manager and Project Manager from Arannyak foundation	Number of grievances filed in workers' GRM	Monthly monitoring	MEL Manager and Project Manager from Arannyak foundation Technical Expert - environment UNOPS PLEASE project - Bangladesh	100
Lack of stakeholder engagement	I. Establish a site-specific stakeholder map that includes vulnerable groups, project-affected parties, and other interested parties (based on the Project	Weekly to Bi-weekly on site	Project Manager from Arannyak foundation	Availability of stakeholder mapping Number of project information	Evaluation of stakeholder engagement plan and review of community perception survey	Project Manager from Arannyak foundation Technical Expert	100

Anticipated E&S Risks and Impacts	Risk Mitigation and Management Measures	Impact Mitigation		Monitoring			Mitigation and Monitoring cost
		Location/Timing/Frequency	Responsibility	Indicators to be monitored	Methodology, including Location and Frequency	Responsibility	
	<p>Stakeholder Engagement Plan - SEP)</p> <p>II. information dissemination channels for the identified stakeholders and provide sub-project-related information</p> <p>III. Define consultation channels of the mapped stakeholders and conduct consultations with all stakeholders, including on environmental and social risks and mitigation measures</p>			<p>dissemination events</p> <p>Number of consultations with identified stakeholders</p> <p>Number of consultations with identified members of vulnerable groups</p>		- Environment UNOPS PLEASE project - Bangladesh	

5. Capacity Development & Training

The PRISTINE Project is committed to building the capacity of waste collectors, communities, and stakeholders through comprehensive training programs that enhance plastic waste management and promote environmental sustainability in the Sundarbans region. These initiatives align with the AIR (Avoid, Intercept, Redesign) framework, addressing both upstream and downstream pollution sources to prevent plastic discharge into the Sundarbans and the Bay of Bengal.

Upstream, in Mongla Upazilla, training focuses on marginalized waste collectors, equipping them with the skills and knowledge required to effectively collect, sort, and safely handle single-use plastics (SUP). Training modules cover waste segregation techniques, proper use of personal protective equipment (PPE), and safe waste handling practices to enhance recycling efficiency while ensuring occupational health and safety (OHS). Additionally, the training will facilitate the establishment of a structured market chain, ensuring collected SUP is efficiently directed toward recyclers, although the project itself does not directly engage in recycling.

Downstream, in ecotourism sites and market hotspots near the Sundarbans and Pashur River, training programs will emphasize behavior change, waste reduction, and responsible plastic disposal. Awareness campaigns will educate local businesses, tourists, and community members on sustainable waste management and the importance of preventing plastic pollution in interconnected rivers leading to the Bay of Bengal. These training sessions aim to foster long-term environmental stewardship, creating a sustainable and community-driven waste management system in the Sundarbans region.

Training Component:

1. Capacity Building for Waste Collectors, Communities, and Stakeholders

Specialized training will be provided to waste collectors, local communities, and relevant stakeholders to improve plastic waste collection, sorting, and safe disposal. The training will cover:

- Waste Sorting and Collection Techniques – Best practices for segregating plastic waste to maximize recycling potential.
- Occupational Health & Safety (OHS) – Training on safe waste handling, the use of PPE, and strategies to prevent health hazards.
- Gender Inclusion & Social Safeguards – Awareness sessions on gender-based violence (GBV), sexual exploitation, abuse, and harassment (SEA/SH) prevention, and ethical labor practices to create a safe and inclusive work environment.
- Grievance Redress Mechanism (GRM) – Ensuring transparency and accountability through training on the project's grievance system for reporting concerns.

2. Training Programs for Facility Workers

Workers engaged in waste collection, sorting, and processing will receive hands-on training to ensure safe and efficient operations. The training will include:

- Standard Operating Procedures (SOPs) – Guidelines for safe loading, unloading, and storage of plastic waste.
- Occupational Safety & PPE Usage – Emphasis on protective measures to minimize workplace risks.
- Environmental Compliance – Adherence to environmental and social safeguards in waste management operations.
- Worker Rights & Ethical Practices – Training on labor standards, codes of conduct (CoCs), and fair working conditions to ensure dignified employment.

3. Production Team Training

The production team will receive regular training to enhance their skills in plastic waste processing and recycling value chain management. Key training areas will include:

- Machine Operation & Maintenance – Training in collaboration with equipment suppliers to ensure the efficient use and upkeep of machinery.
- Health, Safety, and Environment (HSE) Standards – Compliance with workplace safety regulations and sustainable waste processing techniques.
- Gender-Based Violence & Social Safeguarding – Awareness programs to promote inclusivity and workplace respect.

Long-Term Impact

These training programs will be systematically implemented throughout the project lifecycle, ensuring the adoption of sustainable waste management practices, stakeholder engagement, and compliance with environmental and social regulations. By equipping waste collectors, facility workers, and the production team with specialized skills, the PRISTINE Project will contribute to a cleaner, safer, and more sustainable Sundarbans ecosystem while empowering local communities in the fight against plastic pollution.

6. Implementation Schedule and Cost Estimates

Mitigation Measure	Estimated Cost (USD)	Implementation Schedule
Training Programs designing & Record-Keeping Tools	200	Jan 2025
Provision of Workplace Safety & Security Equipment	500	Jan 2025
HSE (Health, Safety & Environment) Monitoring & Compliance Tools	500	Feb 2025
Monitoring of Leakages and dry conditions in the SUP transit point	100	Feb- May 2025
On-Site Capacity Building & Training (waste handling, social and environmental safeguards)	200	Feb 2025
Workforce Health & Safety Initiatives	300	Mar 2025
Community Communication, Awareness & Stakeholder Engagement Programs	200	Jan- Mar 2025
Grievance Redress Mechanism (GRM) Implementation Costs	300	Feb-Mar 2025
Total Cost	2300	

7. Attachments

- [Environmental and Social Screening Report](#)
- [Pictures of the project locations](#)
- [Office Rent MOU](#)
- [Agreement with downstream partners](#)
- [Gender Policy of Aranyak Foundation](#)
- [Equal Job Opportunity Policy](#)