**ENVIRONMENTAL AND SOCIAL MANAGEMENT REPORT *(ESMR)***

**Haiti**

**Sustainable Coastal Tourism Program**

***(HA-L1095)***

***October 2014***

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**List of acronyms**

|  |  |
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| **IDB** **ESDD** | Inter-American Development Bank Environmental and Social Due Diligence  |
| **ESMF**  | Environmental and Social Management Framework  |
| **ESMR**  | Environmental and Social Management Report |
| **GoH** | Government of Haiti  |
| **LIP** | Low-Income People  |
| **MARNDR**  | Ministry of Agriculture Natural Resources and Rural Development  |
| **MCI**  | Ministry of Commerce and Industry |
| **MDE**  | Ministry of Environment |
| **MEF**  | Ministry of Finance |
| **MSPP**  | Ministry of Public Health and Population |
| **MT** | Ministry of Tourism of Haiti |
| **PSDH** | Plan of the Development for Haiti |
| **PNUE**  | United Nations Environment Program(me) |
| **PPRC**  | Strategic Program for Climate Resilience |
| **SEA**  | Strategic Environmental Assessment  |
| **TVCA** | Tourism Value Chain Analysis of the South  |
| **UTE** | *Unité Technique d’Exécution*  |
|  |  |

# INTRODUCTION

## Context/background

The Strategic Plan of the Development for Haiti (PSDH) presented by the Government of Haiti (GoH) in 2012 clearly sets tourism as a pillar for the country’s economic recovery, targeting the sector as a means of generating wealth and creating jobs[[1]](#footnote-1). In its strategy for economic recovery, the PSDH calls for investment in sectors that can contribute to competitiveness such as tourism and manufacturing, deploying resources in a regionally-based approach to structure and balance economic and land based-development.

In early 2014, the Ministry of Tourism of Haiti (MT) requested investment support from the Inter-American Development Bank (IDB) for the design and development of a tourism project in South Haiti, (hereinafter the “Project” or “Tourism Program”). This Program will be funded by the Bank and executed by the MT and the Ministry of Finance Technical Execution Unit (MEF/UTE). The investments under consideration are located between Jacmel and Port-à-Piment on the South Coast, in the South Department (Région Sud, hereafter “South”) with the most concentrated focus between the towns of Aquin and Port Salut. These range from hard investments such as beach restoration in Port Salut, to softer investments focused on building the capacity of the MT to support destination tourism.

The objective of the Tourism Program is to increase tourism employment and income for local population and Low Income People (LIP) in the South Coast, thereby contributing to socioeconomic development in Haiti´s South Coast. In particular, the Program will focus on sustainable and inclusive tourism development, which, through specific and targeted investments and support, will help to increase the participation of the poor and vulnerable local population –LIP - in the tourism value chain thereby supporting not only overall economic development but the specific and expanded participation of the poor in that development process.

It is structured in two parts. These are: Component 1: Enhancement of the tourism product. Component 2: Tourism governance and local capacity building.

## The Program Components

### **Component 1. Enhancement of the tourism product**

Component 1 will finance works and the procurement of goods and services including studies (strategic baseline, pre-feasibility and feasibility, plans) for:

(a) Enhancing and developing unique tourism attractions such as historical sites (e.g., Fort des Oliviers, Fort des Anglais, Citadelle des Platons), interpretation of immaterial and cultural heritage (e.g., central plaza and regional welcome and interpretation center in Aquin with exhibits on taino culture and vodoo) and natural assets and protected areas (Caves Jeanne-Marie, beaches, waterfalls);

(b) Improving basic infrastructure and services attending to Low Income People (LIP) and tourist needs (basic services and connectivity of Cote de Fer, piers at Aquin, Les Cayes, St Jean du Sud, solid waste management); and

(c) Improving environmental and social sustainability and resilience (vulnerability and water availability assessments in Aquin and Cote de Fer, beach and mangrove restoration in Port Salut, Aquin and Cote de Fer) with several studies needed to ascertain the feasibility and increase the investment potential of new nearby tourism development projects.

The design of investments in each locality strives for: (a) the integration of local communities, including LIP in the tourism value chain by expanding and diversifying the opportunities for locally-provided tourism goods and services; and (b) the sustainability of investments in the future taking into account vulnerability to natural disasters and climate change mitigation and adaptation measures.

### **Component 2. Tourism governance and capacity building for inclusive tourism**

Component 2 will provide financing for:

(a) Strengthening of institutions responsible for governing the sector at the national and local levels including the MT through: (i) the development of a National Tourism Information System with public access to tourism sector data; (ii) consolidation of tourism norms and regulations[[2]](#footnote-2) ; (iii) training of civil servants (MT, Departmental Delegation, Municipalities) in public tourism policy and destination management; (iv) a Regional Sustainable and Inclusive Tourism Plan; (v) establishment of a procurement unit in MT and an Inclusive and Sustainable Tourism Unit based on the South coast; and (vi) a Marketing Plan.

(b) Increasing local and LIP capacity to participate in the tourism value chain by financing:

(c) An inclusive tourism awareness, outreach and participation plan; (ii) studies of business opportunities for key segments of the tourism value chain that benefit LIP most in the South coast coupled with plans and technical assistance to build networks and improve the design, quality and innovation of their products and services; (iii) training in hospitality skills and business administration in the tourism sector.

## Geographical Coverage/Scope

The program will be deployed in the South Department of Haiti with the most concentrated focus between the towns of Aquin and Port-Salut. The SEA was undertaken on a regional scope, as well as on seven specific sites between Côtes–de-Fer and Port-à-Piment.

**Map of Haiti’s South and Primary Program Zones of Influence; source: Google Maps, 2014**



The southern peninsula of Haiti is marked by the presence of small coastal plains and two imposing mountain formations, the Massif de la Selle to the East and the Massif de la Hotte to the West. The former includes the highest peak of the country, the Pic de la Salle, at 2,680m above sea level, and the Foret de Pins and La Visite National Parks. The Massif de la Hotte (also known as the Massif du Sud), includes the Pic Macaya National Park and reaches to 2,345m at its highest point.

Haiti can be divided into six main watersheds[[3]](#footnote-3); Northwest, North, Central-North, Central South, Southeast, and Southwest with a total drainage area of 27,750 km2. The project area falls within the South West watershed, which is both the largest, and generally the wettest area in Haiti, although to the east within this watershed, it contains arid semi-desert with limited precipitation.

According to the Earth Institute’s Land Use and Land Cover Baseline Report (2012), only 3% of the land in the South Department has dense forest cover*.* The area with the highest forest cover (>60%) is located around the Pic Micaya National Park in the western portion of the Department.

The Earth Institute study references and endorses five main agro-ecological zones in the South defined by a 2005 USAID study. These zones “summarize both the type of livelihood that prevails within the region and biophysical parameters of the corresponding area”. The Aquin / Côtes–de-Fer corridor falls entirely within the only dry agro-pastoral zone found in the region, which by virtue of its natural conditions possesses the least amount of water. It is surrounded by two dry-agriculture and fishing zones (Jacmel and Aquin) which also have limited water resources and therefore limited agriculture. The Aquin – Saint Luis du Sud – Cavaillon – Les Cayes corridor stands out as the only agro-pastoral zone with good a quality soils and sufficient water for agriculture.

The total population of South Haiti is 739,565, comprising 7.1% of the total population of Haiti. Of those, 51.7% are men and 48.3% women, which is a slightly higher proportion of men to women than the general population in Haiti. Figures for 2003, when the last census was collected in Haiti, suggest that 86% of people in the South are living in poverty, and 68% in extreme poverty, numbers which are 10% and 13% higher than for the country as a whole[[4]](#footnote-4). Large numbers of households live a basic subsistence life style with lack basic services such as electricity and running water. In rural areas, livelihoods vary from small scale agriculture to artisanal crafts (i.e. basket or rope making, furniture making), and trading. In the large urban centers of Les Cayes, livelihoods are considerably more diversified including government, education, commercial activities including banking as well as trading of goods, service industries in transportation, tourism etc. A household survey undertaken by Eptisa in 2012 suggests that almost 100% of women in the South gain their livelihood from commercial activities, whereas livelihoods for men were considerably more varied according to their location in an urban or rural area, or adjacent to the sea.

## Execution of the Program

The Program will be implemented by the MT and the MEF through its Technical Project Unit Unité Technique d’Exécution (UTE/MEF). The UTE/MEF will execute Component I of this Program related to tourism infrastructure and the MT will execute Component II focusing on the institutional strengthening and local capacity building.

## Objective and Organization of this ESMR

This ESMR provides a summary of the Bank’s environmental and social due diligence (ESDD) of the Tourism Program. As such, it presents the main impacts and risks identified, the mitigation and management measures proposed, and presents an indicative implementation budget. It is structured as follows:

* Introduction;
* Description of the project
* Compliance with applicable legislation, national and international standards
* Consistency with IDB safeguard policies
* Summary of consultation and public disclosure undertaken;
* Summary of the environmental and social, health and safety (ESHS) impacts and risks of the project, and proposed mitigation measures in the SEA;
* Framework for the ESMF;
* Requirements to be included the legal agreements

# COMPLIANCE STATUS AND PROJECT STANDARDS

## Compliance with National Legislative Framework

While there is important national legislation in place with respect to environmental and social issues in Haiti, which provides a basic legislative framework, there are few requirements and enforcement is lacking. As such a summary is provided below, along with the consistency of the Program with IDBs environmental and social standards.

***The 1987 Constitution***

One of the most important sources of laws regarding environmental matters in Haiti and applicable to the program is the 1987 Constitution. Indeed, this constitution was the first among the many versions, twenty-seven (27) experienced by the country since 1803, to include a chapter entirely (Title IX - Chapter II) devoted to the environment (see sections 253, 254, 255, 256, 257 and 258). In this Chapter, all practices which may alter the ecological balance of the environment are prohibited. It should also be noted that the environmental sector is directly concerned by other sections of this Constitution, particularly: Section 8 (Title I - Chapter II) related to the Republic’s territory, Sections 22 and 23 (Title I, Chapter II, Section A) related to the right to life and health; Section 52-1 h) deals with the citizen’s civic duty to respect and protect the Environment; Sections 36-3, 36-4, 36-5, 36-6 and 37 (Title I, Chapter II, Section II relate to property); and Sections 248, 248-1,249 and 251 (Title IX, Chapter I) deal with the economy and agriculture.

***The Environmental and Social Legislative Framework***

Despite the lack of environmental laws signed by the Executive and Legislative branches, several decrees have been published. Two of them are relevant with the purpose of this Program:

* *Décret portant sur la Gestion de l'Environnement et de Régulation de la Conduite des Citoyens et Citoyennes pour un Développement Durable (Decree on Environmental Management and the Conduct of Citizens for Sustainable Development)* , passed in January 2006. It requires that all plans, policies, projects or activities which may have an impact on the environment be screened for potential environmental impacts before a permit is issued. To date, this has not been followed up with regulations that categorize exactly which projects and sub-projects should be subject to an Environmental Impact Assessment (EIA). This is determined, project-by-project, by the Ministry of the Environment (MDE).
* *Décret déclarant Aire protégée de Resources Naturelles Gérées de Port-Salut/Aquin* (Natural Resource Protected Area, or Marine Protected Area, Port Salut/Aquin), published in the official newspaper of Haiti «Le Moniteur», No.156 on 26 August 2013. In this decree, the marine and coastal zones located in the southwest area of the southern peninsula is designated as part of the national system of protected areas (Port-Salut/Aquin Marine Protected Area).

### **The Cultural Legislative Framework**

As regards Cultural Heritage, the Loi Vincent (Vincent law) was passed in 1940 to protect Haiti’s cultural heritage. While this Law does not define what a historical monument is, it provides the conditions for designation, classification and protection of sites that have historical, archeological, or artistic value, or are of public interest. It provides for public and private property, all of which is restored with the Administration Générale des Impôts (DGI) (General Tax Administration). No encroachment is allowed on these sites without prior approval of the Council of Ministers of Haiti. This law was followed in 1941 by a decree-law that created the Bureau National d’Ethnologie (BNE) aimed at safeguarding the popular cultural riches of the country. Haiti ratified the Convention concerning the Protection of the World Cultural and Natural Heritage in 1980.

### **Urban Planning**

There is no legislation regarding urban planning in Haiti. Several institutions can give construction authorizations: department, municipalities, and several ministries (notably, the Ministry of Public Works, Transport and Communications; and the Ministry of Finance).

 Nevertheless, there has been a recent effort to design and implement regional plans, as well as to create an institutional setting able to administer these plans. The Comité Interministériel d'Aménagement du Territoire (CIAT) is a committee formed by delegates from several ministries and has been moving this agenda forward.

## Consistency with IDB Policies and Directives

Specific IDB safeguard policies and directives triggered project are: OP-102 (*availability of public documents*), OP-704-A-2 (*natural disasters risk management*); and from OP-703: B.2 (*compliance with the national environmental legislation and international ratified conventions*), B.3 *(assessment and classification of activities according to their potential environmental impacts*), B.5 (*environmental and social analysis*), B.6 (*public consultation*), B.7 (*monitoring of the implementation of environmental and social measures*), B.9 *(natural habitats and cultural sites).* Appendix 1 presents a summary of the Program’s compliance with each directive of the Bank’s safeguard policies.

The potential negative environmental and social impacts and risks are expected to be minor to moderate, and manageable through the implementation of readily available mitigation measures. The project is therefore classified as "B", in accordance with the Bank’s Environment and Safeguards Compliance Policy (OP- 703).

A Category B project requires that the following measures/steps are undertaken:

* Identification of potential environmental and social impacts and risks, as well as mitigation and management measures proposed;
* Analysis of the national, legal and institutional framework related to the environment;
* Analysis of the potential effects of natural disasters and climate change on infrastructure to be financed by the Bank and the identification of mechanisms to minimize risk;
* Identification of the institutional responsibilities, the schedule/timetable and the budget for the implementation of proposed mitigation measures; Public consultation to gather/retrieve input from people who may be affected by the program activities (at minimum one public consultation on the potential environmental and social impacts among those likely affected or likely to be affected).
* Disclosure of relevant environmental and social information related to the Program, in particular the environmental and social analysis;
* Development of a monitoring mechanism for environmental and social indicators;

## Environmental and Social Analysis Process

In accordance with Directive B.5 of this Policy (environmental and social analysis) a Strategic Environmental Assessment (SEA) of Tourism in the South of Haiti was undertaken. The SEA was designed to assess the direct and indirect environmental and social impacts[[5]](#footnote-5) and risks associated with the development and implementation of the Tourism Program. This involved the following activities:

* Collection and consolidation baseline information on the South Coast, including the consideration/review of the National Tourism Plan;
* Visits to the key sites (targeted tourist destinations) where infrastructure will be constructed;
* Analysis of the activities of all entities involved in the management of tourism assets, services and facilities;
* Discussion with resource persons (MT, MEF/UTE, *Institut de Sauvegarde du Patrimoine National* (ISPAN), *Autorité Portuaire Nationale* (APN),the *Bureau National d’Ethnologie* (BNE) and CIAT involved in the conception/design, the structure and the implementation of the program at the central level and on the field;
* Interviews with people involved in the management and/or commercialization and marketing of tourism products, including suppliers in the South;
* Analysis and inventory of the applicable national, legal and institutional framework and of the international standards;
* Land use analysis: identification of restrictions for tourism and fisheries development and associated settlements;
* Identification of risks related to natural disasters, including specifically coastal erosion and flooding, hillside erosion, storm surges and climate change variables;
* Analysis of the Program’s potential direct and indirect impacts and of the socio-environmental risks in the short and long-term risks, related to the program.
* Analysis of alternative development scenarios, based on visitor projections.
* Proposal of a series of recommendations to mitigate and manage the identified environmental and social impacts and risks identified.

This ESMF will be further developed Prior to First Disbursement as an annex of the Operation Manuals for Components 1 and 2 and its implementation will be a condition of the legal agreement.

## Public Consultation

In accordance with the Directive B.6 of the Environment Policy, the MT convened three official Public meetings in August 2014 as part of the SEA development process (i) official public meetings with stakeholders, (ii) individual meetings with Ministry Officials in Port-au-Prince, and (iii) unofficial ad-hoc consultation with stakeholders throughout the project area. The meetings were held in Aquin, Les Caves and Les Caves/Port Salut respectively. The objective of the public meetings was to present the project “Destination Sud” to stakeholders, to get feedback on project design and focus, and to seek support in implementation.

The main results of the meetings were as follows:

* Overwhelming support for the project concept from stakeholders present, both government and private sector.
* Agreement that the project should be undertaken with the full participation of all stakeholders.
* Support for the idea of developing local committees (*comités locales de suivi*) in each location to interface with the MdT for the project development and implementation process.
* Agreement that the project needs to include a combination of infrastructure development and restoration/conservation of both built and natural environments, with a focus on integration of tourism into the local economy, to be sustainable and successful.

The ESMF includes ongoing stakeholder consultation and engagement through the Communication, Outreach and Awareness Strategy.

## Access to Information

In accordance with the IDBs Access to Information Policy, the SEA will be disclosed on the IDBs website: [www.iadb](http://www.iadb).org

## Applicable Environmental and Social Standards and Requirements

### **Standards and regulation of terrestrial soil and ecosystems**

The construction of tourist infrastructure will require material inputs, which are expected to be sourced locally. Any site (mine, quarry, depot or discharge) having been the subject of an exploitation by mining, dumping or landfill to source these inputs for the Project will be restored. This rehabilitation is the responsibility of the operator and is done according to the conditions laid down by the competent authorities in compliance with local standards.

### **Standards on air quality**

Any air pollution, beyond the standards set by the laws and regulations, is prohibited. The standards relative to air quality are set by the Ministry of the Environment. This is not considered a risk issue for the Program as the works are relatively small in scale.

### **Standards on the cultivation/exploitation of Quarries**

All non-metallic substance(s) extraction sites for materials are considered as quarries. According to the March 2nd 1984 decree, the quarries are part of the public domain of the State and their utilization/development is considered a commercial act. The exploitation of a quarry is subject to an authorization by the Bureau of Mines and Energy (BME). To this end, simply fill out/complete the BME 96-001 and BME 96-002 Form. The March 3rd 1976 Decree, assures the Haitian government to ensure the perceived value of 25 cents per m3 gourdes of quarries and river sands, to the special account of the National Institute of Mineral Resources. This is not considered a risk issue for the Program as the works are relatively small and the requirements for extracted materials are limited.

### **National Building code of Haiti (2012)**

The infrastructure to be built within the Program fall into the Category II which is a general category that encompasses all public facilities with the exception of buildings with very low occupancy rates, buildings likely to be used as shelters such as schools, and civil protection buildings. There are no special provisions in terms of design or operation except the standard safety code.

**Labor Code (1984 Decree updating the 1961 Code)**

Chapter V of the Code requires that employers take all measures necessary to ensure occupational health and safety in the work place. Specific provisions are provided for waste disposal, air quality, noise and toxic substances.

# SUMMARY OF ENVIRONMENTAL AND SOCIAL, HEALTH AND SAFETY IMPACTS AND RISKS

As a result of the IDBs ESDD, which included a detailed review of the SEA and site visits to the Program area in Haiti, the IDB has concluded that there are moderate potential direct and indirect ESHS impacts and risks, in the short, medium and long term, related to the implementation of the Program., and that these can be managed through mitigation and management measures, as presented below. Significant adverse impact are not anticipated, however, there may also be longer term cumulative impacts related to the introduction and expansion of future private sector tourism developments under consideration by the Government. The Tourism Program to be financed by the Bank is not associated with these future developments however if they were to proceed, they would have cumulative impacts on the South Coast. On the other hand, this Program will result in a positive environmental and social impact, particularly through increased jobs and income for Low Income People (LIP).

## Positive Environmental and Social impacts

A Tourism Value Chain Analysis of the South (TVCA) was undertaken to map vulnerable populations involved in the tourism value chain. It entailed: (a) collecting and analyzing field data on the functioning of the current tourism value chain within the South Coast. The value chain was analyzed in order to understand where tourism expenditure is going in the local economy, particularly what is reaching Low-Income People (LIP); (b) the destination and each key sector of the value chain was analyzed for the potential to boost engagement of low-income people, whether as employees, entrepreneurs or suppliers. This analysis draws on data from the existing value chain, but also brings in good practice from other destinations, evidence of potential demand for goods and services of the poor, and established principles of inclusive tourism; and (c) based on the findings of the analysis provide priority recommendations for how the benefits to low income people and the local economy can be enhanced as tourism develops.

This was the first time that a tourism public sector investment in Haiti has benefitted from an analysis with an explicit intent of increasing Income to LIP through the design and execution of the Program. As such it is expected that the Program will have positive social impacts will accrue from the creation of new job opportunities and increased income for local populations including Low Income People (LIP), improvements in basic services attending to LIP and the needs of other local residents and the higher value placed on cultural identity.

Positive environmental impacts are also expected from the Program’s focus on restoration and enhancement of natural areas (beaches, mangroves, caves), thereby contributing to the conservation of biodiversity and ecosystem services including coastal resilience.

## Environmental, Social, Health and Safety Risks and Impacts

### **Environmental risks:**

According to the SEA, solid waste and waste water are perhaps the most visible issues affecting the region. Equally problematic, although less immediately visible, is the high level of coliform bacteria present in sea water along tourist beaches. This is a direct result of the lack of sewage treatment in any of the population centers. Finally, poorly conceived, constructed and maintained open sewers along the streets in urban areas, prone to pooling in dry weather and flooding in wet, pose a major health hazard from risk of accidents, to direct contamination of water supply by raw sewage, to documented rises in water and mosquito borne diseases such as typhoid, cholera, malaria, dengue and chikungunya.

### **Waste from construction activities**

Construction of tourism infrastructure (e.g., regional welcome center in Aquin, small tourism facilities and piers) will require a series typical construction inputs (stone, concrete, brick, wood, steel, plastics, water-based paints, aqueous-solvent adhesives, glass, metals, insulation etc). Typical construction waste will be generated. The SEA proposes a series of waste controls. To that end, the final ESMF to be annexed to the Operation Manuals for Components 1 and 2 of the Tourism Program will include a Waste Management Control Procedure that must be implemented by the Construction Contractor.

### **Waste related to increased visitor use (solid waste and wastewater)**

Although tourism projections indicate that the increase of tourists over the life of the Program and beyond is small, increased waste generation can be expected particularly at the sites where tourism assets will be enhanced and expanded. The Tourism Program includes financing for the development of solid waste collection systems established in cooperation with the municipalities, local hotels and other tourism businesses in existing tourism destinations in the South Coast.

### **Demand for water resources related to increased visitor use**

In the South, disruption of the surface water systems, which were traditionally relied upon by local populations for the majority of their water needs from drinking and bathing to irrigation has resulted in increased exploitation of ground water sources which, combined with the poor recharge caused by deforestation and drought is causing water tables to drop, resulting in salt water intrusion. This is noticeable along much of the South coast where residents complain about the salinity of water from Aquin to Port Salut. NGOs such as Gret and Water for Life have been instrumental in sinking wells for communities to provide increased access to water, but much of the population relies on water deliveries by tankers from Port-au-Prince, and, when they can afford it, on bottled water for drinking

Although tourism projections carried out for this Program forecast a relatively small increase in tourists annually, demand for water supply services from both hotels and a growing resident population could result in additional pressures on groundwater resources. The SEA recommended an in-depth study of availability of water in critical areas including the Aquin, Cote de Fer and Port Salut watersheds. The study for Aquin and Port Salut is included in the financing of the Tourism Program[[6]](#footnote-6) and will be part of the ESMF, and the results of this study will inform the Program design.

### **Disturbance of coastal habitats and marine biodiversity due to construction**

Limited dredging and the installation of piles in the nearshore are expected for the construction or rehabilitation of small-scale touristic piers. Disturbance of submarine soils immediately located near piles may occur. Localized increase in turbidity may occur during pile driving and installation. The area in which the Program will be developed includes mangroves (interspersed along the coast), seagrasses and fringing reef (particularly along the shore of Point Abacou and between Ile a Vache and Les Cayes), which provide a critical sea defense from storms, a nursery for key aquatic species (finfish and crustaceans, including species such as shrimp, conch and lobster that are important for local livelihoods), and a potential tourism resource. There is a history throughout the area of mangrove clearance mainly due to harvesting for charcoal production particularly in Aquin and Les Cayes. The most intact patch of mangrove in the study area is located on the peninsula south of St Jean du Sud and there is a grassroots effort in the local communities to protect these mangroves. The ESMF includes a technical study focused on Conservation and Restoration for coastal ecosystems (Cote a Fer) and a Plan for the restoration of Caves (Port a Piment) to remove graffiti from cave walls and promote the recovery of the fragile cave environment. At the same time, while significant conversion is not expected as a result of the Program, the individual projects are not yet fully defined, and as such it will be important to ensure that appropriate environmental and social impact analysis (ESIA) is undertaken for individual projects during the respective design phase as required by national laws and the ESMF which will be annexed to the Operations Manuals for Components 1 and 2 of the Tourism Program as a requirement of the legal agreement.

### **Disturbance of terrestrial habitats and biodiversity**

All the sites targeted for construction and restoration as part of the Program are highly altered sites with limited vegetation and do not involve significant conversion of natural habitats. The most important terrestrial biodiversity in the South Department lies within the Pic Macaya National Park located in the western portion of the study area in the *Massif de la Hotte*. This park contains the Country’s only remaining stands of cloud forest. The park retains extremely high plant diversity (> 665 vascular plant species have been identified), of which 30 percent are endemic to Hispaniola (found exclusively within Haiti and Dominican Republic). The park also supports the World’s only known populations of several species of new to science frogs. Although this park is outside the study area for this assessment, it is mentioned here because of its close proximity to two of this study’s focal areas, the Citadelle des Platons and the south-western peninsula (Port Salut), and the potential for ecotourism here, potentially in conjunction with the marine sites along the coast and the Citadelle. The Bank is currently administering a GEF-financed project for the Pic Macaya National Park which includes actions for the conservation of terrestrial habitats and biodiversity in the protected area. The Tourism Program has been designed to be complementary to this GEF operation.

### **Degradation of Cultural Resources**

Despite the rich tangible and intangible cultural heritage of the South, there is a lack of awareness of its value at all levels of society. When cultural heritage is not understood or valued by society, resources are damaged by unsympathetic alterations or lost entirely. In many cases, a minimal amount of education about what cultural heritage is, how it relates to the community, and what is important about it will translate into pride and respect for the resource, and a desire to preserve.

The first step to increasing awareness of cultural heritage both in country and abroad is to collect baseline information on what cultural heritage, built and intangible, is present in the target area, and to establish the relative significance of those resources through publications, talks, exhibits, websites and other publicly available materials. Very little formal cultural resources investigation has been conducted in the South, and the existing information on cultural heritage is likely to only represent a small fraction of the larger whole.

The primary cultural heritage resources identified prior to the field work conducted for this study – Fort des Oliviers, Fort des Anglais, Citadelle des Platons, and Grotte de Marie Jeanne – are only a few of the historically and culturally significant resources in the South, any of which have the potential to contribute towards a successful tourism industry. The SEA revealed that in addition to these recognized cultural resources, the South Department has a significantly intact 19th century building stock as well as a high potential for prehistoric and historic (particularly French colonial) terrestrial and underwater archaeological resources.

In the absence of formal technical studies conducted according to professional standards, there is the risk of adversely affecting resources through inappropriate alterations, interpretations, restorations or uses. To that end, the Tourism Program includes archeological/historical restoration studies for each of the historical sites included for development in Component 1.

Another significant challenge in the integration of cultural heritage into tourism projects is the direct adverse physical impact of visitation on cultural resources that are not properly stabilized and protected. Fort des Oliviers, for example, is currently entirely accessible to the public, resulting in wear and tear, vandalism (i.e., removal of artifacts or pieces of the building as souvenirs), and structural compromise. Any proposal that would bring additional visitors to the fort, or any other cultural heritage site, needs to include provisions for the protection of the resource to ensure its long-term preservation. The archaeological/historical restoration studies, referenced above, will include specific guidance to mitigate these risks which will be incorporated in the visitor use plans for each site and monitored accordingly.

### **Occupational Health and Safety Risks**

There are moderate to high occupational health and safety risks such as accidents during construction activities associated for example with the handling of heavy equipment and contamination risks associated with the use of products.To address these risks the ESMF will include a Health and Safety Plan which will be a requirement for Construction Contractors undertaking works as part of the Program.

### **Resettlement and Loss of Livelihood**

While no involuntary resettlement is expected as a result of the Program, the individual projects are not yet fully defined, and as such it will be important to ensure that appropriate environmental and social impact analysis (ESIA) is undertaken for individual projects during the respective design phase, including a social baseline and assessment of resettlement/loss of livelihoods. For example, this will look at issues such as whether new developments will result in the restriction of activities undertaken by local population, such as restrict local people’s access to water resources. As such the ESMF should include a framework for resettlement/loss of livelihoods and compensation measures should this become necessary.

### **Other Social Risks**

The following social risks and potential impacts were also identified by the SEA:

* Commoditization of cultural identity;
* Migration of laborers from outside the South Coast Region, including Dominican Republic;
* Increased commodity prices;
* Increased demand for basic services;
* Disruptions in pedestrian and vehicular access during construction;
* Noise pollution;
* Land use conflicts: (for example, increasing the visitor numbers could create tension with the local communities if the beach assets and resources that they currently utilize become unavailable to them;
* Loss of traditional livelihoods and associated skills, such as fishing, net making and boat building will be lost.

In addition the Inclusive Tourism Value Chain Analysis identifies the following risks for Low Income People targeted by the Program:

* Representatives of formal market establishments may be prejudiced against low-income artisans. Multi-stakeholder engagement of actors can ease tensions and provide a platform to address possible issues in cooperation.
* Tourism sites can become oversaturated, impeding on the tourists experience. Destination level management is necessary to foresee market developments and adjust the offer of A&Cs in the destination accordingly.
* Training opportunities can be unsuitable or have a negative impact on livelihoods in the short term. Course will need to be tailored to an illiterate studentship. Student working patterns muse be taken into consideration to minimize negative impacts on livelihoods.
* Artisans may be reluctant to diversify product range because their current product offer has sold successfully in the past. An understanding of dynamic customer preferences and market segments can motivate product diversification.
* Artisans may not receive proper payment for visitations without facilitation of excursions aimed to increase LIP opportunities.

The ESMF will include measures to link families implicated in alternative livelihoods programs with opportunities already identified in the Inclusive Tourism Action Plan developed during preparation and included in the financing of Component 2 of the Tourism Program.

## Risks Related to Natural Disasters

Haiti faces a number of natural hazards, which can represent severe risks to the communities due to the vulnerability of the local populations due to the endemic poverty, poor forms of construction and locations of most settlements often in high-risk areas. Key hazards identified for the south comprise inland flooding (following heavy rain), coastal flooding, landslide risks due deforestation and resulting soil erosion, hurricanes and seismic events. All but the seismic are of hydro-meteorological origin and potentially made more severe by climate change.

Active subduction zones are located off the northern and southern coasts of Hispaniola. The Northern Hispaniola subduction zone produced a series of powerful earthquakes from 1946 and 1953[[7]](#footnote-7). The focal mechanisms for these earthquakes indicate a southwestward subduction of the North American Plate. The Muertos Trough subduction zone is located south of Hispaniola and extends eastward to south of Puerto Rico. There is evidence that this zone ruptured in 1751 in a large earthquake and produced a tsunami[[8]](#footnote-8).

Floods in Haiti, as in other Caribbean islands, follow tropical weather patterns. Haiti has two distinct rainy seasons, one from April to June and another from October to November. There have been a number of large-scale devastating flooding events in Haiti through time, including in the south (see Table 1. below). Historically, most of the flooding events have been tied to large-scale climatic events (i.e. tropical cyclones) and have historically had the greatest impact. Recently, however, smaller low-pressure systems have impacted Haiti on an annual or bi-annual basis.

***Table 1. History of Floods in Southern Haiti***

|  |  |  |
| --- | --- | --- |
| **Year** | **Event** | **Description** |
| 1986 | Flooding | Rains in Les Cayes city caused significant severe crop/animal losses; significant road/bridge damage this area, but water receding.  |
| 1986 | Flooding | Serious flooding southern coastal town of Les Cayes following heavy rainfall 3/4 June; 13 dead, 1360 displaced persons, extensive crop damage |
| 2002 | Flooding | An estimated 4,000 families were affected and 27 people were killed when heavy rains and floods hit the southern peninsula of Haiti at the end of May. Roads and bridges have been seriously damaged making deliveries of emergency supplies difficult or impossible. Over 1,400 houses and 17 schools were also damaged. |
| 2004 | Flooding | 23–24 May, torrential rains pounded the south-east of Haiti |
| 2005 | Flooding | Between 7 and 15 June 2005, torrential rain beat down on the commune of Côtes-de-Fer in the South-East Department, resulting in both the swelling of the river and serious flooding in the commune. |
| 2012 | Flooding | Tropical Storm Isaac hit Haiti on 25 Aug 2012, killing at least 19 people. 15,000 people had to be evacuated and 335 homes were destroyed.  |
| 2012 | Flooding | Flooding caused by Hurricane Sandy killed 60 people and significantly damaged critical infrastructure such as roads, schools and hospitals. 1.8 million people have been affected, and more than 18,000 homes have been flooded, damaged or destroyed. ([UN News, 2 Nov 2012](http://reliefweb.int/report/haiti/un-relief-agency-estimates-18-million-haitians-have-been-affected-hurricane-sandy)) |

*Source:* [*Relief web*](http://reliefweb.int/disasters?f%5B%5D=field_country%3A113&f%5B%5D=field_disaster_type%3A4611)*, accessed on December 10, 2013.*

Haiti’s rugged and mountainous terrain coupled with environmental degradation, deforestation and poor watershed management has created optimal conditions for over bank flooding problems. Haiti’s surface waters are concentrated in a restricted number of important rivers that account for about 60 percent of the flow regime[[9]](#footnote-9). At present, it is not unusual for Haiti’s rivers to reach or exceed the high water line twice each year[[10]](#footnote-10). This is particularly true in the south where consultations confirmed the frequent (twice a year or more) flooding that occurs in Aquin.

To address the long-term risk that this poses to the development of new tourism infrastructure and of a tourism product for the South of Haiti, the Tourism Program already includes financing for the development and implementation of norms for building tourism infrastructure in the coastal zone to be applied to both public and private tourism sector investments. This will include an analysis of flood risk in the determination of infrastructure siting. This will be included in the ESMF.

## Implications of Climate Change

For the last forty years, climate in Haiti appears to have changed. Mean annual temperatures have increased and the rainy season has been delayed for almost three months[[11]](#footnote-11). This trend is expected to continue based on climate changes projections for Haiti (See *Table 2 below*). Future climate change is expected to intensify current environmental problems generating more extreme droughts and more intense precipitation during dry and wet seasons respectively. Sea level rise and storm surges are also projected for Haiti according to the IPCC (2007), which will exacerbate floods and erosion on coastal areas of South and South East[[12]](#footnote-12). Historically, Haiti’s coastal plains are affected by saltwater intrusion increasing salt levels in soils and therefore impacting agriculture. *Table* below shows the projected sea level rises generated from Global Climate Models (GCM) under different greenhouse emission scenarios (B1, A1B and A2) for the Caribbean Islands reported by IPCC[[13]](#footnote-13). These sea level rise projections for the Caribbean Islands can be applied to Haiti to evaluate potential risks due to climate change.

***Table 2. Projected changes in mean annual temperature and precipitation at Atlantic and Caribbean Sea***

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter | 2020s | 2050s | 2080s |
| Mean annual temperature (°C) | 0.9+/-0.16 | 2.03+/-0.43 | 3.06+/-0.84 |
| Mean annual precipitation (%) | 0.9+/-0.16 | -5.2+/-11.9 | -6.8+/-15.8 |

*Source: Lal et al, 2002.*

***Table 3. Sea level rise projections for the Caribbean Islands by the 2090s, relative to 1980-1999 Sea level***

|  |  |  |
| --- | --- | --- |
| SRES B1\* | SRES A1B\* | SRES A2\* |
| 0.13 to 0.43 m | 0.16 to0.53 m | 0.18 to 0.56 m |

*\*Note: B1 describes a convergent work with the same global population; A1B describes a very rapid economic growth with a balance across all sources where balanced is defined as not relying too heavily on one particular energy source; and A2 describes a very heterogeneous world resulting in continuously increasing global population (IPCC, 2007).*

*Source: McSweeney et al, 2010.*

Haiti is considered one of the most vulnerable countries in dealing with climate change, due to the significant environmental deterioration resulting from the excessive exploitation of forest resources, soil, water, quarries and coastal waters. This deterioration reduces the country’s ability to mitigate the effects of extreme meteorological events and demonstrations of climate change, of which the expected impacts include reduced water resources, increased soil erosion, and an increased of coastal erosion and deterioration of coastal ecosystems*.* In order to assist the Country in addressing the urgent and immediate needs with regard to its vulnerability and adaptation to the adverse effects of climate change, adaptation options have been identified, characterized and defined following eight steps of action:

1. Watershed management and soil conservation
2. Coastal zone management
3. Valuation and conservation of natural resources
4. Preservation and strengthening of food safety
5. Protection and conservation of water
6. Construction and rehabilitation of infrastructure
7. Waste management
8. Information, education and sensitization

In the Framework of the Pilot Program for Climate Resilience (PPRC), several interventions have been identified to contribute to the country's adaptation to climate change[[14]](#footnote-14).

These interventions will fund:

1. The strengthening of the management of hydrometeorological, climatic data and water resources (US*$8 million, World Bank*);
2. The strengthening of capacity, generation and dissemination of knowledge and maintenance of the dialogue in regard to policies about resilience to change *(US$5.5 million, World Bank).*

The Program will finance measures to increase the resilience of tourism destinations to climate change. The Tourism Program includes financing for the development and application of norms for building tourism facilities in the coastal zone and this will be included in the ESMF.

## Cumulative Impacts

Cumulative impacts were not addressed in the SEA however the IDB Project Team was informed that CIAT was initiating the development of a Regional Land Use Plan for the South Department which will assess the economic, social and environmental implications of all tourism developments and associated facilities under consideration by GoH and the private sector for the region. It is expected that this Plan will be undertaken in the first quarter of 2015 and the results of this will help inform the long-term planning associated with the Program?

## Other Risks

Institutional capacity of the MT also presents risks for the implementation of the Program and the oversight of the environmental and social mitigation measures. An institutional capacity assessment of MT and MEF/UTE with respect to implementation of the Program was conducted during preparation; however the SEA did not conduct an assessment of capacity of the MT in applying environmental and social safeguards. This issue was discussed during the ESDD with the MT and the MEF/UTE. To address these risks the ESMF will include a study to assess the capacity of Haiti’s tourism governance framework (institutional and regulatory) to promote and oversee the implementation and management of inclusive and sustainable tourism development that is climate-resilient. Additionally the Program includes the development of a multi-faceted Capacity Building Program, as well as the appointment of two specialists (Tourism, and Environmental Sustainability Specialist).

# MANAGEMENT AND MONITORING OF ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY (ESHS) RISKS AND IMPACTS

The SEA set out a series of recommendations and studies that should be undertaken to mitigate and manage the ESHS impacts and risks associated with tourism expansion activities in the South of Haiti. As a result of the ESDD, the IDB has prioritized these studies, as well as a series of measures identified above, and established a framework for the ESMF.

## Framework for an ESMF

In the context of the planning, design and implementation of the Program, the ESMFs objective is to minimize and manage potential adverse effects to the social well-being of local residents, particularly the vulnerable segments (LIPs) and on natural resources, which may result from Program activities. The ESMF will include a series of studies, plans and procedures planned, under development or already existing, into one overarching framework for the Program. It should take into consideration existing or prospective/prospect national strategies, programs and plans (including for example the Regional Land Use Plan for the South of Haiti that is under development by CIAT), thus strengthening the synergies and complementarities while avoiding duplication.

Specifically, the ESMF includes the following elements:

* An institutional and regulatory capacity assessment.
* A series of strategic risk reduction studies
* A series of ESHS mitigation measures for construction activities
* A series of conservation and restoration of coastal ecosystems and natural habitats measures
* Capacity building program
* Communication, Outreach and Awareness Raising Strategy
* A Monitoring Plan

The ESMF will be accompanied by a detailed implementation schedule and budget.

### **Institutional and Regulatory Capacity Assessment**

This plan will assess the capacity of Haiti’s tourism governance framework (institutional and regulatory) to promote and oversee the implementation and management of inclusive and sustainable tourism development that is climate-resilient.

### **Strategic Risk Reduction Studies**

To address the main strategic risks at the regional level for which additional information and analysis are required parallel to the design and initiation of the construction phase of the Program the SEA determined the need for.

* Regional hazard and risk study including detailed coastal flooding and erosion mapping for highly vulnerable tourism sites such as the Aquin town Center, Cote de Fer which is situated by a river mouth that floods regularly, and Port Salut beach.
* Urban plans for risk resilient tourism towns (Aquin, Port Salut, Cote de Fer) to establish for example the delimitation of coastal and river bank setbacks, urban green spaces, and the siting of tourism facilities and related access and commercial facilities work with the urban fabric of the destination.
* Hydrological and water availability studies (Aquin, Port Salut) to address water scarcity in these areas.
* Socio-economic baseline, alternative livelihoods and local engagement plan for the Baie de Lozandieu area located east of Aquin. ONACA (Office National du Cadastre) is completing a cadaster in view of potential large scale tourism resorts being developed. As a preventive strategic measure, the MT and the Bank agreed to include the development of a detailed socio-economic baseline of local residents in the area to map needs for basic services and existing livelihoods in order to eventually address these issues in advance of the construction of the tourism resorts.
* Archaeological restoration studies to be conducted under the supervision of ISPAN.

### **ESHS Mitigation and Management Plans for Construction Activities**

The specific details of the individual tourism infrastructure projects under the Program are not yet known and to that end the IDB will require that individual projects will undertake appropriate environmental and social analysis (EIA or similar) prior to the procurement and contracting of engineering and construction firms. The IDB will review these on a project-by-project basis and provide its non-objection.

The ESMF for the Program will include a series of overarching plans and measures, which will be a requirement for contractors for the design and construction of the infrastructure works under the Program. Additional measures may be defined by individual EIAs. Overarching plans will include:

Norms for building tourism infrastructure in the coastal zone to be applied to both public and private tourism sector investments;

* Contractor Health and Safety Plan (including but not limited to use of PPE)
* Health and Hygiene (measures to protect workers against certain diseases including (i) respiratory diseases due to the volume of dust and gases emitted during the works; (ii) cholera, (iii) gastroenteritis, diarrheal diseases and illnesses due to the changes in area and social habits related to the moving of workers and the quality of food and water consumed;
* Waste Management Plan (all solid and liquid waste produced by the construction site, including packaging, food waste, etc, will be collected and moved to an appropriate landfill and/or garbage. In particular, the used oil will be carefully collected in sealed containers, deposited in places where they do not threaten the environment and shall in no event be discharged into the lateral/side ditches or roadside in water bodies);
* Construction Best Management Practices, including but not limited to:
* Dust Control: For works not carried out during the rainy season, the soil should be watered during the work to avoid excessive dust emissions;
* Noise Control: application of best practice with respect to noise mitigation measures to ensure compliance with noise standards.
* Restoration of excavated lands: In borrow areas, the surface topsoil will be cleaned and set aside prior to extraction of usable materials. Borrow areas should be redeveloped after the exploitation to restore as much as possible the morphology of the natural environment by filling excavations and restoring the topsoil in reserve/standby;
* The construction site machines and vehicles will have to use existing tracks, as much as possible, to access the construction site and avoid cutting through the surrounding soil. Cultivated land and the trees located outside the influence zones and circulation lanes will not be impacted, and local residences will not be negatively impacted;
* Access Routes: firms will take into account the concerns of local residents during the drawings of access roads to the construction site and the quarries, in order to minimize the deterioration of nearby areas. The deviations layout will be developed by the firm under the supervision of the local tourism management committee. The MEF/UTE Environmental Unit and the MT/UEP Sustainability Specialist will be responsible for ensuring compliance with the residents rights with respect to the limitation of access;
* Community Engagement: The companies will be encouraged to organize awareness campaigns on the management of work-related conflicts, the exploitation of quarries and natural resources of the locality and induced development. This activity should support the implementation of the project at all stages in order to manage the outbreak of potential conflicts between the workers and the population.
* Chance Find Procedure.

### **Measures for the Conservation and Restoration of Coastal Ecosystems and Other Natural Habitats**

Recognizing that several coastal ecosystems either at the tourism destinations or their vicinity have already suffered a significant level of degradation, the ESMF includes investments for conservation and restoration of coastal ecosystems and other natural habitats. The targeted natural habitats are

* The mangroves in the Baie d’Aquin and at Cotes de Fer where investments will be made to map and conduct a diagnostic of mangrove cover, resources and current uses (primarily for charcoal), work with traditional users to developing a sustainable use zoning scheme for mangroves, and conduct a pilot effort of participatory monitoring.
* The beach and dune complex at Port Salut where investments will be made to conduct a in-depth oceanographic baseline (shoreline currents, sediment transport etc..) and diagnostic of the dune complex as well as design and restore the dune habitat.
* The caves at Port a Piment where investments will be made to restore cave walls and enhance their protection.

### **Capacity Building Plan**

Training is a crucial aspect for compliance with inclusive and sustainable tourism standards. The overall objective of the training program is to develop awareness on specific environmental and social issues pertaining to the tourism sector and to create an understanding on how to best resolve these issues in the context of the Project. It must focus on the roles and responsibilities of each actor involved in the implementation of the Project and subsequent operation.

The following topics are proposed for the training that will be financed by the program:

1. Risk-resilient urban design and planning (applied to tourism sector)
2. Building codes for reducing natural disaster risks
3. Application of tourism building norms in the coastal zone (MEF/UTE)
4. Low-maintenance (non-structural) beach erosion control technology (MEF/UTE)
5. Low-impact pier construction (APN, MEF/UTE)
6. Use of renewable energy technology in the design of tourism facilities
7. Solid waste management for tourism destinations
8. Water conservation for tourism facilities
9. Low-cost technology for wastewater treatment for tourism facilities
10. Health and safety practices for contractors

### **Communication, Outreach and Awareness Strategy**

To continue with the communication and participation process initiated as part of the SEA process, into execution, the ESMF will include a Communications, Outreach and Awareness Strategy focused on reaching LIPs involved in the tourism value chain, among other critical stakeholders. The plan will, among other:

* Use methods of locally-adapted media communication to educate tourism entrepreneurs about the importance of the use of sustainable practices for constructing, expanding tourism facilities and/or provided tourism services;
* Disseminate information throughout the year and not just during the launch of control operations;
* Train managers and field staff to communicate with the public and teach them how to provide educational messages in the population.

### **The Monitoring Plan**

The ESMF will include an Environmental and Social Monitoring Plan, which at a minimum will include:

Solid waste management

* Number of solid waste management diagnostics conducted in tourism destinations
* Number of solid waste management pilot projects completed
* Number of tourism attractions with solid waste collection services

Coastal resilience

* Number of vulnerability assessments conducted
* Number of norms approved for building tourism facilities in coastal zone
* Number of tourism facilities built according to building norms

Training, awareness raising and participation

* Number of elaborated inclusive and sustainable tourism training modules and guides;
* Number of training sessions carried out;
* Number of civil servants trained by category;
* Number of tourism enterprises in key segments receiving technical assistance in waste reduction, energy efficiency and water use.
* Percentage of the population touched by the awareness campaigns; and
* Number of local tourism committees created and functioning

Specific monitoring requirements will be determined at the individual project level.

## Implementation of the ESMF

The development and implementation of the ESMF will be undertaken jointly by the Environmental Section of the MEF/UTE and the UEP of the MT, which will hire an Inclusive Tourism Specialist and an Environmental Sustainability Specialist to be assigned to the South coast, and with the support of consultants hired to develop the Operations Manuals (with the ESMF as an annex) for Components 1 and 2 and subject to the review and satisfaction of the IDB.. Under the supervision of the Program coordinators for MEF/UTE and MT to be hired with financing of the Tourism Program, the responsibilities of this team will be to:

* Develop TORs for EIAs, strategic risk reduction studies, biodiversity studies;
* Anticipate the needs to undertake appropriate environmental and social analysis for individual infrastructure works to be financed under the Program;
* Conduct field visits as many times as necessary to ensure proper implementation of the ESMF;
* Monitor continuously the conditions under which the infrastructure works are carried out;
* Serve as a spokesperson to the various entities involved on the field on the implementation and monitoring of environmental and ESHS measures;
* Ensure the systematic management of the program’s ESHS documentation and archives
* Anticipate the information and provide clear instructions to prevent or minimize nuisance;
* React early enough when certain activities are conflicting *a priori*;
* Conduct spot checks at regular intervals on the ESHS aspects of the different phases of the Program;
* Certify all nonconformities with photos and written notes (*keep an updated list of outstanding issues*);
* Participate in Program coordination sessions;
	+ Be available to respond quickly to any unforeseen event that arise during the ongoing execution;
	+ Organize site visits for specialized units of the MT and other ministries (ISPAN and CIAT), the donor and/or environmental protection organizations, local, departmental and national authorities, and will support the implementation of an open public policy of information about the project in the environmental field;

The specific terms of reference for the Specialists will be further developed with the support of the IDB.

In summary, the implementation of the ESMF will take place both at the national and local levels as follows:

1. At the national level, by:
* MT/UEP (strategic supervision)
* MEF/UTE Environmental section (operational supervision)
1. At the departmental and municipal level (in areas of the program), by:
* Inclusive Tourism and Sustainable Tourism specialists of MT/UEP
* MEF/UTE (local delegation)

Prior to the initiation of the bidding process, training will be given by consultants hired with financing of the Program to the personnel responsible for monitoring and reporting to increase technical capacity in specific areas related to tourism investments including for example coastal erosion control, sediment control, on-site waste management and appropriate restoration of cultural resources.

Finally, two evaluations will be conducted; a mid-term internal one and another external one during the month following the end of the Program’s implementation. The mid-term assessment to be completed no later than 36 months after the date of entry into force of the grant agreement will be carried out jointly by the MEF/UTE environmental section and the Inclusive and Sustainable Tourism Unit of the UEP. The purpose will be to determine the status of the development and implementation of the ESMF and the mid-term results. The financial partners, project beneficiaries, and other partners involved will participate in this assessment. The final evaluation to be completed within 90 days after the date on which 90% of the grant proceeds have been disbursed is to measure the effectiveness of its implementation the ESMF and its performance and identify lessons learned. This assessment will be incorporated into the final evaluation of the Program. These evaluations are requirements included in the legal agreement.

#  ESTIMATED BUDGET FOR THE IMPLEMENTATION OF THE ESMF

**The estimated cost of the implementation of the ESMF is US$3,630,000 or approximately 10% of the budget.** US$2,120,000 will come from Component I: Enhancement of the Tourism Product, given that several strategic studies have been incorporated into its design, to complement the feasibility analysis for tourism infrastructure including vulnerability assessments, water availability studies and urban plans. The remainder of the budget will come from Component II: Tourism Governance and Local Capacity Building. This will include the measures to address the weak governance capacity of the MT. The costs of supervision, monitoring, and audit will come from the monitoring and evaluation section of the Program budget. Costs managing waste generated in the construction phase of tourism facilities will be financed by the construction firm and stated/mentioned in the bidding documents.

*Table 4.Indicative execution budget of the ESMF*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Strategic studies** |  |  |  |  |  |  |  |  | **2,120,000.00** |
| 1. Plan of a communication and participation strategy and inclusive tourism awareness raising | 50,000.00 |  |
| 2. Regional hazard and risk study (Cotes de Fer, Aquin) |  |  |  | 250,000.00 |  |
| 3. Urban plans for risk resilient tourism towns (Aquin, Port Salut, Cotes de Fer) |  | 400,000.00 |  |
| 4. Hydrological and water availability studies (Aquin, Port Salut) |  |  | 800,000.00 |  |
| 5. Socio-economic baseline, alternative livelihoods and local engagement plan (Cotes de Fer) | 400,000.00 |  |
| 6. Archaeological restoration studies |  |  |  |  |  | 200,000.00 |  |
| 7. Environmental and social audit of program (end of 4th year) |  |  | 20,000.00 |  |
|  |  |  |  |  |  |  |  |  |  |
| **Implementation** |  |  |  |  |  |  |  |  | **1,520,000.00** |
| 1. Implementation of the communication Plan |  |  |  |  | 150,000.00 |  |
| 2. Building norms for construction of tourism facilities in coastal zones[[15]](#footnote-15) |   |  | 300,000.00 |  |
| 3. Conservation and restoration measures for coastal ecosystems (Cotes de Fer) |  | 600,000.00 |  |
| 4. Restoration of caves (Port a Piment) |  |  |  |  |  | 50,000.00 |  |
| 5. Recruitment of sustainable and inclusive tourism specialists for MT in South Coast | 100,000.00 |  |
| 6. Environmental mitigation measures for infrastructure (included in infrastructure cost estimates) | 320,000.00 |  |
|  |  |  |  |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |  |  |  |

A detailed schedule and budget will be incorporated into the final ESMF to be annexed to the Operations Manuals for Components 1 and 2 to be submitted to the satisfaction of the Bank as a Condition Prior to First Disbursement.

# 6 REQUIREMENTS TO BE INCLUDED IN THE LEGAL AGREEMENTS

Based on the ESMR conclusions, the conditions described below are required to be fulfilled for the Project prior to loan approval/financial close and throughout the life of the grant, in form and substance satisfactory to IDB:

1. Throughout the Life of the Grant

The IDB will require within its Grant Agreement that the Program and each Executing Agency and Participating Agencies and other Environmental Parties and Project Parties, including construction companies and operators, and any contractors and sub-contractors will, at all times during the life of the Grant Agreement, comply with the following requirements:

* + - 1. All applicable Environmental and Social, Health and Safety (ESHS), and labor regulations of Haiti, including the National Building Code, and all requirements associated with any ESHS and labor related permits, authorizations, or licenses that apply to the Program, the Beneficiary or any Environmental or Project Party responsible for executing the Project or its ESHS and labor mitigation measures.
			2. Submission for Bank non-objection of an Environmental and Social Impact Assessment (ESIA) or Environmental and Social Analysis (ESA) for investments planned in Component 1.

3. All relevant IDB policies such as the Environment and Safeguards Compliance Policy (OP-703), the Disaster Risk Management Policy (OP-704) and the Disclosure of Information Policy (OP 102), the Involuntary Resettlement Policy (OP-710), and the Gender and Equity in Development Policy (OP-270) and their respective guidelines.

4. Comply with all ESHS and labor plans, procedures and studies to be included in the Environmental and Social Management Frameworks (ESMFs) referred to in Section 6.ii below.

1. Prior to First Disbursement
	* Approval of the Operation Manuals of the Program, including the Environmental and Social Management Framework (ESMF) for each component: (a) by MEF/UTE for the implementation of Component 1 of the program; and (b) by MT for the implementation of Component 2 of the program. .

**Appendix 1. Program Compliance with IDB Safeguard and Other Relevant Policies**

| *Policy/Directive* | *Applicable Aspects* | *Compliance Rationale*  |
| --- | --- | --- |
| OP-703 Environmental and Safeguards Compliance  |  |  |
| B.1 Bank Policies  | Compliance with applicable IDB policies  | The Program has been designed to comply with applicable IDB Policies (see below). Monitoring and reporting of compliance has been incorporated in the ESMF which will be included in the Operating Manuals of both EAs.  |
| B.2 Country laws  | Compliance with country laws and regulations  | The Program will be in full compliance with all Haitian laws and regulations as set out in the ESMR |
| B.3 Screening and Classification  | Application of appropriate classification  | The Project has been classified as a Category B operation owing to localized and mainly temporary impacts from construction and operation of infrastructure for which standard mitigation measures exist.  |
| B.4 Other Risk Factors  | Other risk factorsmay include elements such as the governance capacity of executing agencies/borrower and of third parties, risks associated with highly sensitive environmental and social concerns, and vulnerability to disasters. | A risk analysis has been conducted for the Program. Limited governance capacity and vulnerability to disasters have been identified as risks and specific investments are included in the Program to mitigate risks (creation of Inclusive and Sustainability Unit, detailed vulnerability assessments for Aquin and Cote de Fer and beach recovery for Port Salut for example).  |
| B.5 EA Requirements  | Application of adequate assessment process  | Individual EIAs will be prepared for infrastructure aspects of the project including pier construction/ improvement, beach restoration.  |
| B.6 Consultations  | Project has undergone appropriate public consultation  | Public consultation began in August 2014, initiated by the MdT which held meetings in Aquin and Les Cayes (2). See Section xx for details. Additional public consultation will be necessary during any EIA process, for the development of the project as a whole, and around individual investments to ensure appropriate participation of stakeholders in the process. This will be necessary for aspects of IDB compliance, but more especially given the need to involve stakeholders closely in the process to ensure the overall success of the project. |
| B.7 Supervision and Compliance  | Internal supervision and reporting and Bank supervision  | Supervision and reporting and Bank supervision will need to be addressed later in the project development cycle. |
| B.8 Transboundary Impacts  | N/A | There are no transboundary issues associated with this Program. |
| B.9 Natural Habitats and Cultural Sites | No conversion of natural habitat is anticipatedEnhancement and Protection of Cultural Sites is a main focus of the project | The Program sites are located in already impacted areas without sensitive species of flora or fauna documented. The overall project area includes Marine Protected Areas and a National Park, but the specific investments will not impact these or result in conversion of natural habitat. On the contrary, the project, as proposed here, should be net positive in relation to natural habitat protection and reconstruction.The project sites includes a number of cultural resources that are currently unprotected from degradation from weather, use, vandalism, etc. (e.g., forts, citadelle, building ruins, etc.). The Program includes investments to restore sites and control public use. The project will develop a chance finds plan where archaeological resources are likely to occur. Little archaeology has been conducted in Haiti, but many of the areas targeted in these projects are high sensitivity areas for archaeology resources.  |
| B.10 Hazardous Materials  | Waste management  | Aspects of the project are focused on improving waste management in the area. Any issues relating to waste generated by specific investments will be addressed through investment specific EIAs. |
| B.11 Pollution Prevention  | Pollution control and CO2 emissions  | Aspects of the project are focused on improving pollution control. Any issues relating to pollution control around specific investments will be addressed through investment specific EIAs. An overarching assessment of CO2 emissions will need to be carried out once the specific investments have been identified. |
| B.12 Projects Under Construction  | Potentially applicable  | The Project is not currently in construction |
| B.13 Non-Investment and Flexible Lending Instruments  | Potentially applicable | Non-investment support will be helpful in supporting the successful implementation of this project |
| B.16 In-Country Systems  | N/A | N/A |
| B.17 Procurement  | Suitable safeguard provisions for procurement of goods and services in Bank financed projects may be incorporated into project-specific loan agreements, operating regulations and bidding documents as appropriate, to ensure environmentally responsible procurement. |  |
| OP-710 Involuntary Resettlement  | N/A | No involuntary settlement will be required as a result of the investments of the Program which are limited to public lands. In addition, the Program will support a socio-economic baseline and local engagement plan for future tourism areas. |
| OP-765 Indigenous Peoples  | N/A | There are no indigenous communities or peoples in the area to be negatively affected by the Project.  |
| OP-270 Gender Equality  | Avoiding gender discrimination within the Project or as a result of the Project. Providing opportunities for women | The project will need to focus on opportunities for women in tourism and small businesses. A representative of the Ministry for Women attended the Public Meeting in Les Cayes, vocally supported the project and offered the Ministry as a partner for the MdT to ensure gender equality in project design and development. [[no mention of gender issues until now and policy wasn’t triggered – check]] |
| OP-102 Access to Information Policy  | Project information disclosure  | IDB will make all relevant project documentation available on their website, in French. The MT has committed publicly to an open and participatory process in project design and development.  |
| OP -726 Tourism  | Attracting international tourism and promoting and facilitating national tourism, with a view to improving the country's balance of payments and raising local income levels | The project will focus on investments designed to attract international tourists for the development of sustainable tourism embedded in the local economy, so as to raise local income levels (with a focus on LIP) and quality of life for the long term |
| OP-706 Social Entrepreneurship  | Promotion of social equity and the economic development of poor and/or marginalized groups | Recommendations of an inclusive tourism study to look at the existing tourism value chain have been incorporated into the design of the Program (Component 2) to ensure increased flow of project benefits to poor and vulnerable communities |
| OP- 704 Disaster Risk Management | Risk and disasters management | The SEA includes an analysis of the specific vulnerability levels of the destinations. Building codes for construction of tourism facilities in coastal areas will be developed and implemented as part of the Program. |

**Appendix 2: ESHS Mitigation Measures for Construction of Tourism Infrastructure**

| **Environmental risks associated** | **Prevention or mitigation measures**  | **Monitoring indicators / means of verification**  |
| --- | --- | --- |
| **RISKS LINKED TO THE SITE/ TO THE LOCATION OF THE LAND IN RELATION TO NATURAL RISKS** |
| Locations of facilities highly vulnerable to natural disasters  | Strengthen the fence (if appropriate, with biomechanical structures (fences, quickset hedges, railings/ramps) | History of disasters that hit the site (frequency, damage) |
| Seismic slope stability to be addressed during final design and slope construction. Measures may include improved draining, flatter slope angles near facilities and slope bencing |
| Ensure/make sure that the construction firms provide evidence of familiarization of earthquake-proof building codes and best practices |
| Flood risks  | Inquire about the history of the site/field in regard to flooding (flood periods, water level, recorded damage, etc..) in order to adapt the construction in terms of the risk  | Vulnerability assessment included in the Program and history of floods that hit the site  |
| Slope erosion and landslides | Temporary erosion control measures include efficient channeling of surface water draining, minimizing disturbance areas, applying erosion preventing slope cover and channel liners and constructing trench dissipaters, diversion ditches or levees | Slope stability |
| **RISKS RELATED TO ACCESS TO THE SITE** |
| Atmospheric pollution due to the use of motor vehicles by the company’s staff to get on the site  | Limit the use of motor vehicles. Designate a resident team that would work with the local tourism management committee  | Number of motor vehicles used by the firm to visit/access the site |
| **RISKS ARISING FROM THE DESTRUCTION OF RESOURCE BASE** |
| Deforestation: Destruction of vegetation to establish the building or as wood for cooking  | Strengthen the perimeter of the land by planting trees | Quantity of destroyed trees relative to the amount of trees planted  |
| Adapting whenever possible, the architecture of the building, according to the distribution of trees on the site |
| Deforestation due to the demand for local plant species (timber)  | Use of imported wood in construction  | Origin and type of wood used in construction  |
| Purchase or lease of iron posts for formwork instead of using 2x4 wood made ​​with local species, which would reduce the pressure exerted on local natural resources (wood).  |
| **RISKS RELATED TO AIR QUALITY** |
| Pollution by the release of unpleasant odors  | Build temporary latrines during the construction phase for the workers.  | Number of latrine outlets  |

| **Environmental risks associated** | **Prevention or mitigation measures** | **Monitoring indicators / means of verification** |
| --- | --- | --- |
| **RISK OF ACCIDENTS/ACCIDENT RISKS DURING CONSTRUCTION WORKS**  |
|
| Accident risk (injuries, fractures, etc.) For workers/laborers during the construction  | Implementation of prevention measures/measures to prevent accidents and to comply strictly with the safety instructions and standards on the construction site  | Existence and implementation of safety instructions on the construction site  |
| Information and training session for workers / laborers on the use of tools and construction equipment/materials | Number of injured workers  |
| Provision of materials and appropriate security tools to workers (clothing, helmets, scarves, gloves, goggles, boots, etc.). | Supervision and regular evaluation of construction Works  |
| Accident risks related to the establishment of formwork structures during concreting  | Verification on a regular basis of the strength of scaffolds and formwork to avoid the risk of accidents during construction | Assessment of the strength of the structures put in place by a competent third party  |
| Accident risks for people attending/visiting the sites during the works  | Prevent access to others on the site during construction. Delimitation/definition by a temporary fence of the site during construction (perimeter security)  | Presence of a security perimeter on the construction site  |
| Risk of diseases/disease risks related to air pollution during construction (respiratory diseases, risk of allergies)  | Provision of materials and security tools (helmets, mufflers, gloves, goggles, boots) to workers  | Availability of and compliance with the health, safety and security plan  |
| Contamination risks associated with the use of chemical products (varnishes, paints, solvents, glues, etc....) | Wear Scarves/mufflers and gloves when handling chemical products that may cause contamination risks  | Availability of safety instructions during use of products  |
| Choice of the least toxic products and respect/conformance of doses and safety instructions dictated by the manufacturers before applying the product  |
| **RISKS OF NUISANCES/NOISE** |
| Noise generated during the construction that could harm/affect people living in the vicinity of the construction site | Inform/advise the persons concerned of the noise that can be generated during construction works.  | Number of complaints for nuisance/ presence of protective structures |
| Choice of appropriate times to perform construction works that can generate a lot of noise in the population.  |
| Noise standards |
| Boundary/delimitation of the worksite by a protective structure capable of reducing noise generated during construction works.  |
| **RISKS RELATED TO AIR QUALITY (POLLUTION)** |
| Degradation/deterioration of the air quality caused by dust and other particles generated during the handling and transportation of building/construction materials  | Replanting and conservation of forested areas to purify the air and the surrounding environment.  | Rate of plant cover  |
| Use of protective equipment (masks, gloves, scarves/mufflers, etc.) by workers, against dust and the spraying/watering of the site, every morning before the opening of the sites. | Availability of security tools for workers  |
| Choosing an appropriate period for the construction (ideally at the end of the rainy season) | Availability of a calendar for the construction  |
| Release of harmful pollutants for the health of people attending/visiting the site | Minimize the use of harmful products during the construction (glues, varnishes, etc.). | Availability of safety instructions for each product  |
| Risk of diseases related to the inhalation of dust generated during the construction  | Wear mufflers/scarves to avoid inhalation of toxic substances during construction.  | Availability of protective equipment/material |
| **RISKS RELATED TO POOR MANAGEMENT OF CONSTRUCTION WASTE** |
| Contamination and accident risks related to improper/inappropriate handling of construction waste | Limit the risks associated with the handling of waste generated by the construction, by putting in place a waste management and safety measures to help workers  | Control of the salubrity/hygiene conditions of the environment/field |
| Achievement/realization of leaflets suggesting/proposing the actions to be taken/measures to take by workers to better manage hazardous waste  | Training plan for workers |
| Pollution related to/associated with waste generated during the construction excavation (land/soil, rocks, etc.). | Use and recovery of waste generated/produced during excavations for backfill and for the rehabilitation of holes at certain stretches/sections of the road.  | Implementation of a plan for using/the use of waste during excavations  |
| Pollution of the construction site by construction waste during the works (cement bags/pouches, waste of unused wood, wire/barbed wire, etc.). | Implementation of a recycling/use plan of cement pouches to cover/conceal school supplies and as an energy source,  | Recycling plan for cement bags |
| Recycling cement bags for the manufacture of briquettes | Recycling plan for cement bags |
| Avoid the use of cement pouches for the packaging of products intended for nutrition, which could result in a risks of poisoning and contamination  | Recycling plan for cement bags |
| **RISKS RELATED TO THE POLLUTION OF GROUND WATER AND SURFACE WATER (see previous phase)**  |
| **RISKS RELATED TO MARINE HABITATS** |
| Disturbance of submarine soils immediately located near each pile | Design-level oceanographic, hydraulic, geotechnical, and structural engineering studies for the proposed pier including studies for the stability of the submarine slope | Baseline near shore studies |
|  | Piers to be installed in portions of the sand flat areas with limited or no benthic habitats | Distance of piers to benthic habitat |
| Loss of benthic and epibenthic fauna (expected to be small and limited to the areas where piles are placed) | Detailed benthic mappingPiers will be designed to avoid interference with natural littoral drift and natural processes affecting the recruitment and productivity of benthic communities | Distance of piers to benthic habitat |
| **RISKS RELATED TO AIR POLLUTION**  |
| Pollution due to the release of unpleasant odors from latrines and septic tanks | Establishing a structure to evacuate odors generated from latrines and pits/ditches | Air quality of the environment/field |
| Regular cleaning and maintenance of latrines using the disinfectants suitable for this purpose.  | Calendar for cleaning latrines  |
| Poor air renewal/poor ventilation causing the growth of bacteria, mold | Equipment to facilitate proper/adequate ventilation inside tourism facilities which provide thermal comfort and reasonable humidity / brightness in the building  | Disposal/disposition plan of devices  |
| **RISKS RELATED TO NUISANCE/NOISE POLLUTION AND NOISE GENERATED DURING CONSTRUCTION** |
| Noise generated during the repair works of the building and car traffic/circulation  | Choosing the right time to perform the work to minimize the disruption of neighborhoods  | Number of complaints received |
| Informing/giving notice to people living near the building on the potential noise created during the works  | Number of persons informed/aware out of the amount of people involved |

1. Strategic Plan for the Development of Haiti. 2012. [↑](#footnote-ref-1)
2. The legal norms to be updated are: (i) Regulation of the Organic Law of the Tourism Sector; (ii) Regulation of the Law of Travel and Tourism Agencies; (iii) Regulation of the Law creating the National Tourism Council; (iv) Regulation of the Law creating the National Institute for Training in Hospitality and Tourism; (v) Regulation of basic rules for quality in tourism sector; (vi) Regulation of bars and restaurants; (vii) Regulation of food handling; (viii) Regulation of professional tour guides; (ix) Regulation of adventure activities and nature tourism; and (x) Regulation of nautical tourism activities on the coast. [↑](#footnote-ref-2)
3. FAO, 2014 [↑](#footnote-ref-3)
4. MEF-PNUD-FAFO, La pauvreté en Haïti, Un profil de la pauvreté en Haïti à partir des données de l’ECVH, Novembre 2003 [↑](#footnote-ref-4)
5. Cumulative impacts were not addressed in the SEA and are being subject to analysis in the context of a Regional Land Use Plan for the South under development by CIAT with results expected to be available in 2015. [↑](#footnote-ref-5)
6. The Cote de Fer water availability study is underway (Phase I) with Phase II to be financed separately. [↑](#footnote-ref-6)
7. USGS, 2010 [↑](#footnote-ref-7)
8. McCann, 2006 [↑](#footnote-ref-8)
9. World Bank, 1991 [↑](#footnote-ref-9)
10. USAID,2007 [↑](#footnote-ref-10)
11. Singh and Cohe, 2014 [↑](#footnote-ref-11)
12. Singh and Cohe, 2014 [↑](#footnote-ref-12)
13. McSweeney et al, 2010 [↑](#footnote-ref-13)
14. [*https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/PPCR\_SC.12\_presentation.2Haiti\_SPCR.pdf*](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/PPCR_SC.12_presentation.2Haiti_SPCR.pdf)[*https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/PPCR\_SC.12\_4\_Strategic\_Program\_for\_Climate\_Resilience\_for\_Haiti.pdf*](https://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/PPCR_SC.12_4_Strategic_Program_for_Climate_Resilience_for_Haiti.pdf). [↑](#footnote-ref-14)
15. Includes training for control and dissemination [↑](#footnote-ref-15)