

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**HAITI**

**TRANSPORT AND DEPARTMENTAL CONNECTIVITY**

**(HA-L1104)**

**PROJECT PROFILE**

The project team consisting of prepared this document: Carlos Mojica, Team Leader; Raúl Rodríguez Molina, Alternate Team Leader; Pablo Guerrero; Giovanna Mahfouz (INE/TSP); Alejandro Fros (TSP/CHA); Manuel Rodríguez (TSP/CCO); María Elena Castro-Muñoz, Andrew Drumm, France Francois (VPS/ESG); Romina Kirkagacli, Takady Konate (FMP/CHA); and Louis-Francois Chretien (LEG/SGO)

Under the Access to Information Policy, this document is subject to Public Disclosure.

## PROJECT PROFILE

### HAITI

#### I. BASIC DATA

<b>Project Name:</b>	Transport and Departmental Connectivity	
<b>Project Number:</b>	HA-L1104	
<b>Project Team:</b>	Carlos Mojica, Team Leader; Raúl Rodríguez Molina, Alternate Team Leader; Pablo Guerrero; Giovanna Mahfouz (INE/TSP); Alejandro Fros (TSP/CHA); Manuel Rodríguez (TSP/CCO); María Elena Castro-Muñoz, Andrew Drumm, France Francois (VPS/ESG); Romina Kirkagacli, Takady Konate (FMP/CHA); and Louis-Francois Chretien (LEG/SGO)	
<b>Borrower:</b>	Republic of Haiti	
<b>Executing Agency:</b>	Ministry of Public Works, Transport and Communications (MTPTC) through the Central Execution Unit (UCE)	
<b>Financial Plan:</b>	IDB/Grant Facility (GRF):	US\$50,000,000
	Local:	US\$0
	Total:	US\$50,000,000
<b>Safeguards:</b>	Policies triggered:	OP-102, OP-710, OP-703 (B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.9, B.10, B.11)
	Classification:	"A"

#### II. GENERAL JUSTIFICATION AND OBJECTIVES

- 2.1 **Economic and social background.** Haiti has committed to improving and enhancing the living conditions of its inhabitants. Some progress has been achieved in recent years: (i) Gross Domestic Product (GDP) of US\$8.71 billion (US\$819 per capita)<sup>1</sup> with growth rates at 2.7% for the Fiscal Year (FY) 2014; (ii) a decline in extreme poverty from 31% to 24% between 2000 and 2012; and (iii) some gains in access to education and sanitation among others. While the country is still vulnerable to external changes, Haiti's competitiveness is improving and will be key in bringing economic growth. According to the 2014 Global Competitiveness Report<sup>2</sup> the country presented an improvement from the FY/2013 to the FY/2014, improving its total ranking from the 143<sup>rd</sup> to the 137<sup>th</sup> position. This result is partly attributed to improvements in infrastructure. Major challenges still remains in a country where almost 60% of its 10.6 million population lives under the poverty line<sup>3</sup>. Haiti still stands out as the one of western hemisphere's poorest countries<sup>4</sup>. Large efforts are still pending to

<sup>1</sup> The World Bank (WB), 2013.

<sup>2</sup> See [The Global Competitiveness Report 2014 - 2015 \(World Economic Forum\)](#).

<sup>3</sup> The World Bank (WB) data: <http://data.worldbank.org/country/haiti>.

<sup>4</sup> Global index data.

compensate and increase the historic low levels of investment in the sector and the chronic weaknesses of its institutions.

- 2.2 **Road transport.** Road transport is the leading mode of transportation for cargo and passengers in Haiti<sup>5</sup> and henceforth a fundamental mechanism for economic development and internal<sup>6</sup>/interregional integration. The national road network has a total length of 3,572 km, consisting of 953 km of primary roads (27%), 1,315 km of secondary roads (37%) and 1,304 km of tertiary roads (36%). Although the quality of the road infrastructure in Haiti is improving, it lags behind other Caribbean countries: (i) while 24% of the total road network is paved, this figure is higher among regional peers;<sup>7</sup> and (ii) the country has a low road coverage levels for both the size of the population (0.4 km/1,000 inhabitants) and the surface area of the country (0.12 km/km<sup>2</sup>).<sup>8</sup> Only 15% of the total road networks and 64% of the primary network are in good condition. Moreover, only 35% of the roads received routine maintenance.<sup>9</sup> Road safety is also an issue in Haiti, given the evidence of poor conditions of roads and vehicles, lack of road signage and enforcement of transit regulations<sup>10</sup>. At the local community level, the MTPTC is present through Departmental Directions (DD) in each of the nation's 10 regions.
- 2.3 **The *Route Nationale 5 (RN5)* and the Nord-Ouest region.** In partial isolation to the rest of the country, the *Nord-Ouest* department and the northern region of the *Artibonite* department are connected to the country's main road network roughly through three main roads: (i) the RN5 connecting Port-de-Paix through the center of the department to Plaisance and Gonaïves (both along RN1); (ii) the alignment provided by *Routes Départementales* that connect Port-de-Paix with Limbé/Cap Haitian along the north seaboard and; (iii) a rural route in precarious conditions along the southern coastline connecting Gonaïves with the town of Mont Saint Nicholas. As a whole, the physical conditions of these roads are critically low. None of this roads are paved. Over 50% of the existing traffic is represented by motorcycles as these are the most suitable vehicles capable to navigate in a rather efficient way the array of boulders, potholes and riverbeds sections that currently constitute the available right of way.
- 2.4 The agriculture is the main economic activity of the region with a mix between food crops (i.e. corn, millet, sorghum, sweet potato, peas, plantain) and cash crops (i.e. coffee, sugar cane, mango, banana). Cropping techniques are typically rustic and largely dependent on man powered tools and intensive labor without major technologies in place to boost productivity and output. The

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<sup>5</sup> Estimates indicate 80% of the country's traffic being by land (WB and IDB).

<sup>6</sup> Improvement of the capacity and the quality of the road infrastructure reduces transportation costs and travel times, thus enabling less developed regions to increase their access to domestic and international markets and to basic services (health and education).

<sup>7</sup> Dominican Republic (49%), Trinidad and Tobago (51%), and Jamaica (73%). World Development Indicators 2010, the WB.

<sup>8</sup> Other countries have higher coverage both relative to surface area and population. For example, Dominican Republic: 1.98 km/1,000 hab., 0.41 km/km<sup>2</sup>; El Salvador: 1.75 km/1,000 hab., 0.48 km/km<sup>2</sup>; Honduras: 3.34 km/1,000 hab., 2.31 km/km<sup>2</sup>; and Nicaragua: 3.92 km/1,000 hab., 1.64 km/km<sup>2</sup>.

<sup>9</sup> For the FY 2013-2014 a total of US\$8.4 million was invested in maintenance works from Fund for Road Maintenance (FER). Source: MTPTC.

<sup>10</sup> There are a few official statistics regarding injuries and deaths caused by road accidents in Haiti. The Bank is financing baseline of accidents for *Route Nationale* (National Road, RN-1). (HA-L1079/3085/GR-HA) that will be further expanded to other roads.

development of a more robust agricultural-based economy and the inclusion of the production in the export markets has traditionally been hindered by infrastructure shortcomings as previously explained with ineffective and abandoned roads and port facilities. Mango production in the region represents a market segment with great potential for growth primarily due to the appreciated quality of the local crops however remains under exploited given the deficient accessibility to distribution channels.

**Figure 1. Haiti Road Network and RN5**



2.5 **Justification.** Inadequate basic public infrastructure constitutes a serious barrier for investment. A lack of infrastructure means that companies must cope with higher costs in transport and logistics. These bottlenecks have been shown to be a significant constraint to growth (IMF 2014). Literature confirms a significant positive correlation between investment in transportation infrastructure, competitiveness, and economic growth<sup>11,12,13</sup>. Such growth is the result of a reduction in transport times and costs, which enhances production efficiency. The reliability of transport services also increases, facilitating domestic and international trade and the diversification of the economic productive structure. These commercial exchanges are, in the context of the RN5, few to nonexistent

<sup>11</sup> Agénor, P. R. 2013. "Public Capital, Growth and Welfare. Analytical Foundations for Public Policy." Princeton University Press.

<sup>12</sup> World Economic Forum. (2012). The Global Competitiveness Report 2012-2012. Geneva.

<sup>13</sup> Calderón, C. and L. Servén. (2003). "The Output Cost of Latin America's Infrastructure Gap." In: W. Easterly and L. Servén (eds.). The Limits of Stabilization: Infrastructure, Public Deficits and Growth in Latin America, pp. 95-118. Stanford, CA: Stanford University Press.

given this physical isolation. These weaknesses constitute the main contributors to the chronic poverty witnessed within the area of influence of the RN5. Urgent measures need to be put in place to unblock and provide connectivity to these neglected communities.

- 2.6 This operation will support the improvement of the transport network by rehabilitating and reconstructing road infrastructure in Haiti's *Artibonite* department with impact on a large area of influence including the neighboring departments of *Nord-Ouest* and *Nord*. It will contribute to connecting Port-au-Prince with Port-de-Paix the second largest city in the north (Pop. 250.000). The existing right of way (Carrefour Joffre – Gros Morne – Port-de-Paix), classified under Haitian Road Inventory as RN5, is currently in conditions far below the standards. It has no pavement, inadequate alignments, no drainage system and lacks road safety measures. The latest recorded heavy intervention dates back to its construction during the 1920's. Over five hours of travel time are required to transit the 72 km link between the intersection with RN1 and the coastal capital. This time is reduced to approximately three hours if the journey is done by motorbike which is currently the dominant mode of transportation given the deplorable circulation conditions of the road.
- 2.7 **Bank's sector involvement.** In the last decade, the GoH and the Bank have made significant efforts to overcome the important restrictions in coverage, capacity, level of service and safety conditions in the road network. Projects financed by the Bank have concentrated in the rehabilitation, improvement and maintenance of the national road network, and in the institutional strengthening of the MTPTC. In the past four years, the Bank approved a total of US\$318.5 million for investments in the transport sector<sup>14</sup> supporting an extensive program of rehabilitation of the road network including interventions in the trunk network of National Routes, including RN1, RN2, RN7 and RN8 as well as the rehabilitation of some of the RN5 bridges.
- 2.8 **Objectives and components.** The objective is to improve the competitiveness of Haiti's northwestern region and to promote its inclusion in the national economy by enhancing the connectivity and accessibility to the main road network and ports. The specific objectives of the project include: (i) to improve the infrastructure quality and road safety of RN5; (ii) to improve the quality of the departmental and rural roads; and (iii) strengthen the capacity of the departmental directions to manage and maintain the road network. The project will support the Country's national and international integration and will contribute to strengthen transport institutions in Haiti.
- 2.9 **Component 1. Civil works on the primary road network.** This component will finance: (i) rehabilitation and improvement of a 25 km segment in the RN5 between Carrefour Joffre and Gros Morne; (ii) mitigation of social and environmental impacts; and (iii) supervision of all civil works.
- 2.10 **Component 2. Civil works on the secondary and rural road networks.** This component will finance: (i) rehabilitation and improvement of departmental and

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<sup>14</sup> Approved operations, amounts and % disbursed as of 08/05/2015: 2348/GR-HA for US\$29M (100%), 1922/GR-HA for US\$100M (94.13%), 2663/GR-HA for US\$55M (72.05%), 2794/GR-HA for US\$53M (52.71%), 3085/GR-HA for US\$50M (22.94%), 3175/GR-HA for US\$12M (100%), 2898/GR-HA for US\$17.5M (99.9%), and 3190/GR-HA for US\$50M (17.83%).

rural roads; (ii) mitigation of social and environmental impacts; and (iii) supervision of all civil works.

- 2.11 **Component 3 – Institutional strengthening and technical studies.** This component will finance: (i) sector studies, engineering designs, environmental and social impact assessments for future operations; (ii) studies related to the identification, analysis, prioritization and execution of rural roads; (iii) review of the legal and regulatory framework of roads; and (iv) training and equipment for the Artibonite Departmental Direction and the UCE.
- 2.12 The project will finance expenditures related to project administration including: (i) administration of the works and services by the Central Execution Unit UCE; (ii) monitoring; (iii) baseline data for an impact evaluation; and (iv) social, environmental and financial audits.
- 2.13 **Strategic alignment.** The project is aligned with the Bank's institutional priorities as outlined in the Report on the Ninth General Capital Increase in Resources for the (GCI-9) (AB-2764). The project contributes to the lending program priorities of: (i) lending to small and vulnerable countries; (ii) lending for poverty reduction and equity enhancement<sup>15</sup>; and (iii) lending to support regional cooperation and integration. The project is consistent with the Bank's Country Strategy 2011-2015 (GN-2646). In this strategy, transport is one of the six priority sectors specifying that the Bank's resources will be directed to: (i) rehabilitating and improving the primary network to consolidate a trunk road system that provides a safe and reliable connection between Haiti's main cities, seaports and airport; and (ii) strengthening of MTPTC to plan, execute and monitor project execution.

### III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 **Technical studies.** In 2010 the Ministry of Transport, Public Works and Communications (MTPTC) contracted with IDB funding<sup>16</sup> the preparation of studies for the 72 km RN5 rehabilitation/reconstruction project. These studies include engineering designs, cost estimates, economic feasibility and preliminary social-environmental assessments. The studies produced were delivered late 2011 and an update was requested in early 2012 with the objective of revisiting the proposed construction specifications in order to reduce costs and related financial impacts to the project. These studies need to be updated to current figures considering the time elapsed since their completion and to adjust and incorporate recent infrastructure modifications, particularly those originated from the road rehabilitation works ongoing along the RN1. The consulting team originally involved in the elaboration of the studies has been contacted and arrangements are being outlined on the Bank's side to extend the cooperation so as to revisit the designs and obtain an up to date version. The environmental and social assessments (including the resettlement plan) will be commissioned as well. These assessments will be the basis for the preparation of the ESMR.
- 3.2 **Multiple works program.** The operation is designed as an investment grant for a multiple-works program to be implemented in a period of five years. The RN5

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<sup>15</sup> The project contributes for the country strategy objective of de-concentrating economic activity in less developed regions outside the metropolitan area of Port-au-Prince.

<sup>16</sup> Recursos del prestamos 1922/GR-HA.

segment between Carrefour Joffre and Gros Morne will be presented as the sample of the program. This sample will meet the technical, economic, environmental and social criteria that will be agreed with UCE before the operation approval. An additional set of road segments might be identified during the execution of the program and will be required to meet the agreed criteria before financing is approved.

- 3.3 **Multi-sectorial impact and freight logistics:** The project complements efforts of previous operations approved by the Bank in the Agriculture sector (HA-L1009) and in the Artibonite Department. The project will contribute to the improvement of the agricultural productivity of the area by reducing transportation costs, facilitating market access of the products, mainly mangoes. In addition, flood mitigation measures adopted in the HA-L1009 operation will also help to prevent major damages in the RN-5 due to flash flooding events. The project will contribute, through sector studies in component 3, to better understand the value chain of key agricultural products and the logistic arrangements of transport services. The project also presents synergies with social programs supported by the Bank in the Artibonite Department, as through the rehabilitation of the RN5, populations will gain reliable and quality access to schools, health care and services in general.

#### **IV. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING**

- 4.1 **Execution.** This operation will be executed by MTPTC, through the UCE. This unit supports the execution of transport projects financed mainly by the IDB, and in recent years, in the execution of projects financed by the World Bank and other donors.
- 4.2 **Safeguards.** Based on the available information, the sample project of the multiple works program will have a positive impact on the country and the region, and would improve communications and ease of travel in the department of Artibonite and its connection to the main national road network and ports. It is expected that other roads, if selected under the program, will also have a positive impact. The potential negative impacts of the project, associated with standard impacts of road construction, are expected to be moderate. However, involuntary resettlement is expected to occur; therefore, the project was tentatively classified as Category "A". This category will be corroborated during the analysis mission.
- 4.3 Potential environmental impacts and risks associated with the Project during the construction phase are mainly linked to the clearing of the right of way, the mining and disposal of materials and associated facilities such as equipment storage areas, asphalt production plant and quarries. Main construction impacts are likely to be: (i) habitat disturbance and modification including loss of vegetation and barrier to movement of endangered species; (ii) soil erosion; (iii) dust generation; (iv) increased heavy traffic; (v) loss of vegetation; (vi) noise; (vii) resettlement and/or economic displacement and; (viii) occupational health and safety hazards for the workforce.
- 4.4 Of specific importance for the Carefour Joffre- Project may be the process of consultation and negotiation with those affected by the liberation of the right-of-way and impacts to natural habitats particularly in rivers and the key biodiversity area. The draft Environmental Impact Assessment (EIA), including a preliminary resettlement plan, will be completed prior to the analysis mission. An

Environmental and Social Management Plan (ESMP), including a full resettlement plan, should be completed, satisfactory to the Bank, prior to Board presentation.

- 4.5 **Procurement and fiduciary aspects.** Based on the 2014 update of the institutional capacity assessment (SECI), recent audit reports and site visits conducted by IDB fiduciary team, the proposed operation is expected to have a medium financial risk. While UCE has experience in managing fiduciary aspects, the above-mentioned reports have identified weaknesses in aspects such as budget planning, accounting, auditing and monitoring. The Bank is monitoring and supporting the implementation of corrective actions that gradually lead to an improvement of the fiduciary function.
- 4.6 With regards to procurement activities, UCE has acquired good knowledge of the Bank's Procurement policies. The procurement supervision method will be ex ante for most of the procurement processes for the time being. Some processes implying a low level of risk will be supervised on an ex post basis and some additional activities may shift to ex post during the execution of the project, subject to an evaluation of capacities to be conducted by the Bank's Procurement Specialist. UCE will need to continue strengthening its procurement planning and contract management capacity and work towards the establishment of a solid filing system. The level of risk in procurement matters can be defined as medium level.
- 4.7 Procurement for the proposed project will be carried out, as set out in the project operation document Annex III and in accordance with: (i) the Policies for the Procurement of Works and Goods financed by the Bank (GN-2349-9); and (ii) the Policies for the Selection and Contracting of Consultants financed by the Inter-American Development Bank (GN-2350-9), of March 2011. These will be complemented by the special procurement provisions for Haiti while in place.

## **V. OTHER ISSUES**

- 5.1 **Technical and Economic Feasibility.** The benefits of the project are expected to be measured in terms of time and cost savings. However, the current traffic of the road is relatively low at around 2,500 vehicles per day, including motorcycles. Traffic counts and growth rates will be revised throughout project preparation to ensure reasonable projections. In addition, the scope and costs of the technical solution will also be revised to ensure that the civil works are proposed in accordance to the traffic levels and that the project is deemed feasible.

## **VI. RESOURCES AND TIMETABLE**

- 6.1 Annex V details the timeline and resources required for project preparation. The Proposal for Operation Development (POD) will be presented to the Operations Policy Committee (OPC) on June 9<sup>th</sup> of 2016 and distributed for approval by the Executive Board of Directors on August 3<sup>rd</sup> of 2016. Resources estimated for project preparation, provided from administrative budget, amount up to US\$62,200.



CONFIDENTIAL

<sup>1</sup> The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.

### SAFEGUARD POLICY FILTER REPORT

PROJECT DETAILS	
<b>IDB Sector</b>	[Not Set]
<b>Type of Operation</b>	Other Lending or Financing Instrument
<b>Additional Operation Details</b>	
<b>Investment Checklist</b>	Infrastructure Road and Rail
<b>Team Leader</b>	Mojica, Carlos Hernan (CMOJICA@iadb.org)
<b>Project Title</b>	Transport and Regional Connectivity
<b>Project Number</b>	HA-L1104
<b>Safeguard Screening Assessor(s)</b>	Drumm, Andrew Francis (adrumm@IADB.ORG)
<b>Assessment Date</b>	2015-10-02

SAFEGUARD POLICY FILTER RESULTS		
<b>Type of Operation</b>	Loan Operation	
<b>Safeguard Policy Items Identified (Yes)</b>	Potential disruption to people's livelihoods living in the project's area of influence (not limited to involuntary displacement, also see Resettlement Policy.)	(B.01) Resettlement Policy– OP-710
	Activities to be financed by the project are in a geographical area and sector exposed to natural hazards* (Type 1 Disaster Risk Scenario).	(B.01) Disaster Risk Management Policy– OP-704
	Does this project offer opportunities to promote gender equality or women's empowerment through its project components?	(B.01) Gender Equality Policy– OP-761
	The operation is in compliance with environmental, specific women's rights, gender, and indigenous laws and regulations of the country where the operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	(B.02)
	The Borrower/Executing Agency exhibits weak institutional capacity for managing environmental and social issues.	(B.04)
	An Environmental Assessment is required.	(B.05)
	The Bank will monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.	(B.07)

	Environmental or culturally sensitive areas, defined in the Policy as critical natural habitats or critical cultural sites in project area of influence.	(B.09)
	Conversion of Natural Habitats in project area of influence.	(B.09)
	The operation has the potential to impact the environment and human health and safety from the production, procurement, use, and disposal of hazardous material, including organic and inorganic toxic substances, pesticides and Persistent Organic Pollutants (POPs).	(B.10)
	The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases...).	(B.11)
	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.	(B.17)
<b>Potential Safeguard Policy Items(?)</b>	No potential issues identified	
<b>Recommended Action:</b>	<p>Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.</p> <p>The project triggered the Disaster Risk Management policy (OP-704). A Disaster Risk Assessment (DRA) may be required (see Directive A-2 of the DRM Policy OP-704) in case of high risk, a limited DRA in case of moderate risk. Next, please complete a Disaster Risk Classification along with Impact Classification.</p>	
<b>Additional Comments:</b>		
<b>ASSESSOR DETAILS</b>		
<b>Name of person who completed screening:</b>	Drumm, Andrew Francis (adrumm@IADB.ORG)	
<b>Title:</b>	VPS/ESG	
<b>Date:</b>	2015-10-02	
<b>COMMENTS</b>		
No Comments		

### SAFEGUARD SCREENING FORM

PROJECT DETAILS				
<b>IDB Sector</b>	[Not Set]			
<b>Type of Operation</b>	Other Lending or Financing Instrument			
<b>Additional Operation Details</b>				
<b>Country</b>	HAITI			
<b>Project Status</b>				
<b>Investment Checklist</b>	Infrastructure Road and Rail			
<b>Team Leader</b>	Mojica, Carlos Hernan (CMOJICA@iadb.org)			
<b>Project Title</b>	Transport and Regional Connectivity			
<b>Project Number</b>	HA-L1104			
<b>Safeguard Screening Assessor(s)</b>	Drumm, Andrew Francis (adrumm@IADB.ORG)			
<b>Assessment Date</b>	2015-10-02			
PROJECT CLASSIFICATION SUMMARY				
<b>Project Category:</b> A	<b>Override Rating:</b> A	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;"><b>Override Justification:</b> Elevate: additional impacts likely</td> </tr> <tr> <td style="padding: 2px;"><b>Comments:</b></td> </tr> </table>	<b>Override Justification:</b> Elevate: additional impacts likely	<b>Comments:</b>
<b>Override Justification:</b> Elevate: additional impacts likely				
<b>Comments:</b>				
<b>Conditions/ Recommendations</b>	<p><input type="checkbox"/> Category "A" operations require an Environmental Impact Assessment or a Strategic Environmental Assessment (see Environment Policy Guideline: Directive B.5 for EIA and SEA requirements) and at least two consultations with affected parties.</p> <p><input type="checkbox"/> These operations will require an environmental assessment (EA), normally an Environmental Impact Assessment (EIA) for investment operations, or other environmental assessments such as a Strategic Environmental Assessment (SEA) for programs and other financial operations that involve plans and policies. Category "A" operations are considered high safeguard risk. For some high safeguard risk operations that, in the Bank's opinion raise complex and sensitive environmental, social, or health and safety concerns, the borrower should normally establish an advisory panel of experts to provide guidance for the design and/or execution of the operation on issues relevant to the EA process, including health and safety. However, these operations will also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.).</p> <p><input type="checkbox"/> The Project Team must send to the ESR the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports.</p>			

<b>SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS</b>	
<b>Identified Impacts/Risks</b>	<b>Potential Solutions</b>
The project will require significant involuntary resettlement and/or economic displacement (i.e. it is a direct impact of the project)	<b>Develop Resettlement Plan (RP):</b> The borrower should be required to develop a RP (as part of the ESMP) that demonstrates the following attributes: (a) detailed socio-economic survey and baseline of the affected households and groups; (b) successful engagement with affected parties via a process of Community Participation; (c) mechanisms for delivery of compensation in a timely and efficient fashion; (d) a livelihoods restoration program; (e) budgeting and internal capacity (within borrower's organization) to monitor and manage resettlement activities as necessary over the course of the project; and (f) a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, credit and operating regulations, project completion tests, etc.), require regular (quarterly, bi-annual or annual) reporting and independent review of implementation, including participatory monitoring.
The project will or may require involuntary resettlement and/or economic displacement of a minor to moderate nature (i.e. it is a direct impact of the project) and does not affect indigenous peoples or other vulnerable land based groups.	<b>Develop Resettlement Plan (RP):</b> The borrower should be required to develop a simple RP that could be part of the ESMP and demonstrates the following attributes: (a) successful engagement with affected parties via a process of Community Participation; (b) mechanisms for delivery of compensation in a timely and efficient fashion; (c) budgeting and internal capacity (within borrower's organization) to monitor and manage resettlement activities as necessary over the course of the project; and (d) if needed, a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, project completion tests etc.), require regular (bi-annual or annual) reporting and independent review of implementation.
Significant conversion and degradation of natural habitats (such as forests, wetlands or grasslands) without full consideration of alternatives, without an analysis showing that the overall benefits outweigh the environmental costs or without adequate mitigation and compensation measures.	<b>Potential Biodiversity Issues Indicate Significant Risk of Non-Compliance:</b> The Bank will not support operations involving the significant conversion or degradation of natural habitats where no feasible alternatives have been considered or where there is no demonstration that overall benefits from the operation substantially outweigh the environmental costs or where no mitigation and compensation measures are acceptable by the Bank. Develop and evaluate alternative projects options and discuss with ESG specialist(s), relevant team members and others before proceeding.
Minor or moderate conversion or degradation impacts	<b>Ensure Proper Management and Monitoring of the Impacts of Natural Habitat Loss:</b> A Biodiversity Management Plan (BMP) should be prepared that defines how impacts will be mitigated (roles

<p>to natural habitats (such as forests, wetlands or grasslands).</p>	<p>and responsibilities, monitoring, budget, etc.) and could be incorporated in the ESMP. Depending on the financial product, the BMP should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.). Confirmation should be obtained from competent experts that they are confident that the plan can mitigate impacts and also that the relevant authorities have approved the BMP.</p>
<p>Conversion or degradation of critical natural habitat is minor to moderate in nature, as confirmed by a specific ecological assessment.</p>	<p><b>Ensure Adequacy of Biodiversity Management Plan (BMP):</b> The borrower should be required to develop a BMP that demonstrates how impacts have been mitigated and what consultation activities are planned. The borrower should confirm that: (a) there are no feasible alternatives acceptable to the Bank; (b) benefits substantially outweigh environmental costs; and (c) mitigation and compensation measures are acceptable by the Bank. In addition this plan should be part of the ESMP. In all situations, impacts to biodiversity should be avoided in first instance (i.e. relocate or reconfigure proposed activities). If avoidance is not possible impacts should be mitigated by restoration, offsetting impacts or other means. Professional support from suitably qualified experts should be sought and confirmation should be obtained that they are confident that the BMP can mitigate impacts and also that relevant authorities have approved the BMP. Require regular (bi-annual or annual) reporting. Require independent audits of BMP implementation and depending on the financial product, the BMP should be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).</p>
<p>Significant conversion or degradation of critical natural habitat.</p>	<p><b>Potential Biodiversity Issues Indicate Significant Risk of Non-Compliance with IDB policy OP-703:</b> The Bank will not support operations that, in its opinion, significantly convert or degrade critical natural habitats or that damage critical cultural sites. Develop and evaluate alternative projects options and discuss with ESG specialist(s), relevant team members and others before proceeding.</p>
<p>The negative impacts from production, procurement and disposal of hazardous materials (excluding POPs unacceptable under the Stockholm Convention or toxic pesticides) are minor and will comply with relevant national legislation, IDB requirements on hazardous material and all applicable International Standards.</p>	<p><b>Monitor hazardous materials use:</b> The borrower should document risks relating to use of hazardous materials and prepare a hazardous material management plan that indicates how hazardous materials will be managed (and community risks mitigated). This plan could be part of the ESMP.</p>

<p>Generation of solid waste is moderate in volume, does not include hazardous materials and follows standards recognized by multilateral development banks.</p>	<p><b>Solid Waste Management:</b> The borrower should monitor and report on waste reduction, management and disposal and may also need to develop a Waste Management Plan (which could be included in the ESMP). Effort should be placed on reducing and re-cycling solid wastes. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.</p>
<p>Likely to have minor to moderate emission or discharges that would negatively affect ambient environmental conditions.</p>	<p><b>Management of Ambient Environmental Conditions:</b> The borrower should be required to prepare an action plan (and include it in the ESMP) that indicates how risks and impacts to ambient environmental conditions can be managed and mitigated consistent with relevant national and/or international standards. The borrower should (a) consider a number of factors, including the finite assimilative capacity of the environment, existing and future land use, existing ambient conditions, the project's proximity to ecologically sensitive or protected areas, and the potential for cumulative impacts with uncertain and irreversible consequences; and (b) promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants, including strategies that contribute to the improvement of ambient conditions when the project has the potential to constitute a significant source of emissions in an already degraded area. The plan should be subject to review by qualified independent experts. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.).</p>
<p>Moderate Greenhouse Gas Emissions are predicted.</p>	<p><b>Greenhouse Gas (GHG) Assessment:</b> The borrower should promote the reduction of project-related greenhouse gas emissions in a manner appropriate to the nature and scale of project operations and impacts. The borrower should quantify direct emissions from the facilities owned or controlled within the physical project boundary and indirect emissions associated with the off-site production of power used by the project. Quantification and monitoring of GHG emissions should be conducted annually in accordance with internationally recognized methodologies (i.e. IPCC - <a href="http://www.ipcc.ch/">http://www.ipcc.ch/</a>). In addition, the borrower should evaluate technically and financially feasible and cost-effective options for the reduction/offset of emissions that may be achieved during the design and operation of the project. The Sustainable Energy and Climate Change Initiative (SECCI) can help with this task (<a href="http://www.iadb.org/secci/">http://www.iadb.org/secci/</a>).</p>
<p>Safety issues associated with structural elements of the project (e.g. dams, public buildings etc).</p>	<p><b>Address Community Health Risks:</b> The borrower should be required to provide a plan for managing risks which could be part of the ESMP; (including details of grievances and any independent audits undertaken during the year). Compliance with the plan should be monitored and reported. Requirements for independent audits</p>

<p>or road transport activities (e.g. increase in heavy vehicle movements, transport of hazardous materials, etc.) exist which could result in moderate health and safety risks to local communities.</p>	<p>should be considered if there are questions over borrower commitment or potential outstanding community concerns.</p>
<p>The project will result in a minor to moderate increase in community risks from disease (e.g. from water borne diseases) or natural resources risks (e.g. landslides, erosion etc).</p>	<p><b>Manage Increased Risk of Disease:</b>Where a project will generate environmental health risks (such as increased risk from disease and environmental hazards), the borrower should be required to develop a environmental health risk plan (this will require input from professionally competent advisers/ consultants). There should be engagement with affected communities and compliance with the plan should be monitored and reported. Where specific diseases are endemic in communities in the investment area of influence, the borrower is encouraged to explore opportunities to reduce their incidence.</p>
<p>Project construction activities are likely to lead to localized and temporary impacts (such as dust, noise, traffic etc) that will affect local communities and workers but these are minor to moderate in nature.</p>	<p><b>Construction:</b> The borrower should demonstrate how the construction impacts will be mitigated. Appropriate management plans and procedures should be incorporated into the ESMP. Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).</p>

<p><b>DISASTER RISK SUMMARY</b></p>	
<p><b>Disaster Risk Category:</b> High</p>	
<p><b>Disaster/ Recommendations</b></p>	<ul style="list-style-type: none"> <li>• The reports of the Safeguard Screening Form (i.e. of the Safeguards Policy and the Safeguard Classification Filters) constitute the Disaster Risk Profile to be summarized in and annexed to the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.</li> <li>• The Borrower should consider including disaster risk expertise in the organization of project oversight, e.g. in the project's panel of experts. For the Bank's requirements, the Borrower addresses the screened disaster risks in a Disaster Risk Management Summary reviewing disaster and climate change risks associated with the project on the basis of a Disaster Risk Assessment (DRA) Based on the specified</li> </ul>



	<p>hazards and the exposure of the project area, it demonstrates the potential impact of the rapid onset events and/or slow inset changes for the project and its area including exacerbated risks for people and environment, given local vulnerability levels and coping capacities. Furthermore the DRM Summary presents proposed measures to manage or mitigate these risks in a Disaster Risk Management Plan (DRMP). The DRA /DRMP to which the DRM Summary refers may be a stand-alone DRA document (see Directive A-2 of the DRM Policy OP-704) or included in other project documents, such as feasibility studies, engineering studies, environmental impact assessments, or specific natural disaster and climate change risk assessments, prepared for the project. These documents should be accessible for the Project Team.</p> <ul style="list-style-type: none"> <li>• The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency.</li> <li>• Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options for climate change, and consult the INE/CCS adaptation group for guidance.</li> </ul>
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<b>SUMMARY OF DISASTER IMPACTS/RISKS AND POTENTIAL SOLUTIONS</b>	
<b>Identified Impacts/Risks</b>	<b>Potential Solutions</b>

<p>Significant <a href="#">Earthquake</a> may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the various seismic risks for the project and address potential exacerbated risks for people and the environment during construction and operation. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account the country's disaster alert and prevention system, general seismic design standards and other related regulations. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. Some sectors have developed comprehensive best practice.</p>
<p>Significant <a href="#">hurricane</a> and other winds may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the storm and flood risks for the project and address potential exacerbated risks for people and the environment during construction and operation, as specified in the Disaster Risk Assessment, which must take into consideration changes in the frequency and intensity of tropical storms that could occur with climate change. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the country's disaster alert and prevention system, general design standards, coastal retreat and other land use regulations and civil defense recommendations in coastal areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. The amplified uncertainties due to climate change may be considered in hazard scenarios and an efficient combination of measures in the DRMP.</p>
<p>Tropical Storms are prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of storm risks for the project and address potential exacerbated risks for people and the environment during construction and operation, which must take into consideration changes in the frequency and intensity of tropical storms that could occur with climate change. Appropriate measures to reduce risks (predominantly engineering), prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included.</p>
<p>Significant <a href="#">riverine flooding</a> from sustained <a href="#">rainfall</a> and/or melting water and/or failing dam may occur in the project area and the</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the flood risks for the project and address potential exacerbated risks for people and the environment during construction and operation, as specified in the Disaster Risk Assessment, which must take into consideration changes in the frequency and intensity of intensive rainfall and in the patterns of snowmelt that could occur with climate change. The DRMP includes</p>

<p>likely severity of impacts is major or extreme.</p>	<p>risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the area's disaster alert and prevention system, general design standards, land use regulations and civil defense recommendations in flood prone areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. The amplified uncertainties due to climate change may be considered in hazard scenarios and an efficient combination of measures in the DRMP.</p>
<p>Area <a href="#">flooding</a> from sustained <a href="#">rainfall</a> is prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of areal flooding risks for the project which must take into consideration changes in the frequency and intensity of precipitations that could occur with climate change. Areal floods may be exacerbated by the project outside the project boundary by modifying draining patterns for heavy precipitations and increase risks for people and the environment during construction and operation. Appropriate measures to reduce risks (predominantly engineering), prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included.</p>
<p>Significant <a href="#">drought</a> because of extended period of <a href="#">precipitation</a> deficiency may occur in the project area and the likely severity of impacts is major or extreme.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of the drought risks for the project and address potential exacerbated risks for people and the environment during construction and operation, as specified in the Disaster Risk Assessment, which must take into consideration changes in the frequency and intensity of droughts that could occur with climate change. The DRMP includes risk reduction measures (siting and engineering options for water supply and heat protection), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the area's prevention system, general design standards, land use regulations and civil defense recommendations in drought prone areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives. The amplified uncertainties due to climate change may be considered in hazard scenarios and an efficient combination of measures in the DRMP.</p>
<p><a href="#">Heat waves</a> as extended periods of extremely high temperatures and moisture are prevalent in the project area and the likely severity of impacts is moderate.</p>	<p>The Disaster Risk Management Plan should secure a design for the project at an acceptable level of heat wave risks for the project and address potential exacerbated risks for people and the environment during construction and operation, which must take into consideration changes in the frequency and intensity of heat waves that could occur with climate change. Appropriate measures to reduce risks (predominantly engineering), prepare for impact (predominantly environmental and social safeguards) and to include financial protection will need to be included.</p>

Reduction or prolongation of rainy season in the project area and the likely severity of impacts is moderate.	Possible future modified seasonal water availability for residential consumption and use, hydropower, irrigation, etc., should be adequately addressed in the hydrological assessment, with risks for the project's viability taken into account. Appropriate adaptation measures (predominantly alternative project design and engineering) will need to be examined, evaluated and selected.
<b>ASSESSOR DETAILS</b>	
<b>Name of person who completed screening:</b>	Drumm, Andrew Francis (adrumm@IADB.ORG)
<b>Title:</b>	VPS/ESG
<b>Date:</b>	2015-10-02

<b>COMMENTS</b>
No Comments

## TRANSPORT AND REGIONAL CONNECTIVITY CARREFOUR JOFFRE - GROS MORNE SEGMENT ENVIRONMENT AND SOCIAL STRATEGY (ESS)

### I. SUMMARY

<b>Date:</b>	September 30 <sup>th</sup> , 2015
<b>Project Number:</b>	HA-L1104
<b>Country:</b>	Haiti
<b>Beneficiary:</b>	Government of Haiti
<b>Funding:</b>	IDB Grant Total Project Cost: US\$50,000,000
<b>Safeguards Policies Identified:</b>	OP-102, OP-710, OP-703 (B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.9, B.10, B.11)
<b>Environmental Category:</b>	"A"

### II. PROJECT DESCRIPTION

- 2.1 **The *Route Nationale (RN) 5* and the North-Western region.** In partial isolation to the rest of the country, the *Nord-Ouest* department and the northern region of the *Artibonite* department are connected to the country's main road network roughly through three main roads: (i) the RN5 connecting Port-de-Paix through the center of the department to Plaisance and Gonaïves (both along RN1); (ii) the alignment provided by *Routes Départementales 152/117/14* connecting Port-de-Paix with Limbé/Cap Haitian along the north seaboard; and (iii) a rural route in precarious conditions along the southern coastline connecting Gonaïves with the town of Mont Saint Nicholas. As a whole, the physical conditions of these roads are so critically low that over 50% of the existing traffic is represented by motorcycles as these are the most suitable vehicles capable to navigate in a 25 km stretch from Carrefour Joffre to Gros Morne which consists of boulders, potholes and riverbeds sections that currently constitute the available right of way.
- 2.2 Agriculture is the main economic activity of the region with a mix between food crops (i.e. corn, millet, sorghum, sweet potato, peas, plantain) and cash crops (i.e. coffee, sugar cane, mango, banana). The development of a more robust agricultural-based economy has traditionally been hindered by weather/nature related obstacles such as droughts and subsequent soil salinization, severe flooding due to hurricanes and cyclonic events, sustained deforestation and infrastructural shortcomings as previously explained with ineffective, abandoned and roads and port facilities.
- 2.3 **Justification.** This operation will support the improvement of the transport network by rehabilitating/reconstructing road infrastructure in Haiti's *Nord-Ouest* department with impact on a large area of influence including the neighboring departments of *Artibonite* and *Nord*. It will provide the necessary means to connect the country's main transport corridor RN-1 with Gros Morne. The existing right of way (Carrefour Joffre – Gros Morne), classified under Haitian Road Inventory as National Route 5, is currently in conditions far below the regular standards seen of a tertiary level road.

- 2.4 **Objectives and components.** The objective is to improve the competitiveness of Haiti's northwestern region and to promote its inclusion in the national economy by enhancing the connectivity and accessibility to the main road network and ports. The specific objectives of the project include: (i) to improve the infrastructure quality and road safety of RN5; (ii) to improve the quality of the departmental and rural roads; and (iii) strengthen the capacity of the departmental directions to manage and maintain the road network. The project will support the Country's national and international integration and will contribute to strengthen transport institutions in Haiti.
- 2.5 **Component 1. Civil works on the primary road network.** This component will finance: (i) rehabilitation and improvement of a 25 km segment in the RN5 between Carrefour Joffre and Gros Morne; (ii) mitigation of social and environmental impacts; and (iii) supervision of all civil works.
- 2.6 **Component 2. Civil works on the secondary road network.** This component will finance: (i) rehabilitation and improvement of the departmental roads that feed RN5; (ii) mitigation of social and environmental impacts; and (iii) supervision of all civil works.
- 2.7 **Component 3. Institutional strengthening.** This component will finance: (i) sector studies, engineering designs, and environmental and social impact assessments for future operations; and (ii) training and equipment for the Artibonite Departmental Direction.
- 2.8 **Component 4. Project administration.** This component will finance: (i) administration of the works and services by the UCE; (ii) monitoring; (iii) baseline data for an impact evaluation; and (iii) social, environmental and financial audits.

### III. INSTITUTIONAL AND REGULATORY CONTEXT

- 3.1 The Haitian Ministry of the Environment (MDE) is responsible for national environmental and social laws and regulations. An Environmental Impact Assessment (EIA) law has been drafted and approved by the Parliament, and the decree for its application approved<sup>1</sup>; however the Ministry has limited capacity to enforce it. Similarly, the department within the MDE responsible for EIA is under creation but is not yet fully operational. As such, the MDE does not review or approve EIAs, nor deliver environmental permits.
- 3.2 The legal and institutional framework in Haiti regulating compensation and resettlement is outlined by a number of laws that directly or indirectly impact the right of ownership, expropriation, and compensation. In Article 36-1, the Haitian Constitution provides the Government with the right to expropriate land for public purposes as long as it follows certain procedural safeguards and provides appropriate compensation to entitled individuals. Expropriation is generally managed through the expropriation law (August 22<sup>nd</sup>, 1951) as amended on September 18<sup>th</sup>, 1979. It tasks the Comité Permanent d'Acquisition Amiable (CPA) in MTPTC to manage the expropriation process and clarifies that the expropriation process should contain three steps: (i) identification of affected properties and asset inventory; (ii) verification of land deeds; and (iii) valuation

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<sup>1</sup> Décret du 12 octobre 2005 sur la Gestion de l'Environnement.

of assets. The CPA includes two MTPTC engineers who are part of the Expropriation Commission (*Commission d'Expropriation*, CE).

- 3.3 The MTPTC is the Government executing agency which has established a Central Execution Unit (UCE) to manage project design, execution and monitoring, including social and environmental matters as required.

#### **IV. IDB POLICY AND REQUIREMENTS**

- 4.1 The Project is expected to prepare an Environmental and Social Impact Assessment (EIA) focusing on the 25km stretch of road between Carrefour-Joffre and Gros Morne. This EIA will be commissioned by UCE and should be submitted for IDB's approval and disclosed on IDB website prior to the Analysis Mission. The EIA will be assessed against Bank standards to ensure it is fit for disclosure.
- 4.2 The Project triggers the following directives of IDB's OP-703 Environmental and Safeguards Policy: B.1, Resettlement Policy, Disaster Risk Management Policy, Gender Equality, B.2, Country Laws and Regulations; B.4 Institutional capacity of borrower B.5, Environmental Assessment Requirements; B.7, Supervision and Compliance; B.9 Natural Habitats and Cultural Sites; B.10, Hazardous Materials; B.11 Pollution Prevention; and, B.17 Safeguard provisions for procurement. The OP-102, Disclosure of Information Policy also applies for this Project. It is expected that the Bank's OP-710 on Involuntary Resettlement will be triggered according to a previous EIA prepared for RN5. Based on available information, the Project had been classified by the Bank as a Category "A" operation to be confirmed during analysis.

#### **V. ENVIRONMENTAL AND SOCIAL SETTING AND CONTEXT**

- 5.1 The project is located in a region of mostly dry forest habitat, although some areas are seasonally flooded. The proposed road passes through the Dubedou – Morne Balance Key Biodiversity Area (KBA) which includes vulnerable, endangered and critically endangered species of reptiles, amphibians, crustaceans and trees. The road also traverses rivers multiple times, including several times without bridges, and also seasonally flooded wetlands.
- 5.2 An EIA was prepared in 2011 for the entire Carrefour Joffre - Port de Paix section of RN5. However, the social component is now outdated as it was based on 2003 data and the environmental component was incomplete, and therefore it needs to be re-done to reflect environmental characteristics and recent socioeconomic trends in the region while limiting the focus to the Carrefour Joffre-Gros Morne Section. It will also need to address the deviation or by-pass that is proposed. The road traverses small villages mostly rural. According to initial studies involuntary resettlement is expected. However the specific impact on the selected section is yet to be determined.

## VI. KEY POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS, RISKS AND CONTROL MEASURES

- 6.1 Potential environmental impacts and risks associated with the Project during the construction phase are mainly linked to the clearing of the right of way, the mining and disposal of materials and associated facilities such as equipment storage areas, asphalt production plant and quarries. Main construction impacts are likely to be: (i) habitat disturbance and modification including loss of vegetation and barrier to movement of endangered species; (ii) soil erosion; (iii) dust generation; (iv) increased heavy traffic; (v) loss of vegetation; (vi) noise; (vii) resettlement and/or economic displacement; and (viii) occupational health and safety hazards for the workforce. The EIA should pay particular attention to the impacts of the project on natural habitats, particularly on rivers and the key biodiversity areas identified along the proposed road segment. The resettlement plan should be developed in consultation with the affected persons. It should cover physical and economic displacement caused by right-of-way acquisition and construction activities. Right-of-way acquisition will be required for the proposed by-pass and may be required to accommodate changes in the road alignment. Construction activities could displace structures and economic activities within the existing right of way.
- 6.2 Once in operation, main impacts and risk associated with the Project are: (i) air emissions (CO<sub>2</sub>, PM<sub>10</sub>, dust) on the road; (ii) storm-water discharges and contamination to nearby water bodies; (iii) separation of habitat of endangered species; (iv) access and indirect impacts to surrounding areas; (v) community health and safety hazards on the road; and (vi) noise from road traffic.
- 6.3 The Project has also the potential to cause indirect and cumulative impacts, including changes to land use, natural habitats, tenure and value, as well as increased migration to the Project area of influence due to improved accessibility. The EIA will need to analyze such impacts and define mitigation measures, if necessary.
- 6.4 Regarding control measures, site selection for mines, quarries, waste and materials storage areas and asphalt plants must be justified on environmental grounds; Threatened and endangered species habitats should be avoided, and tunnels to facilitate transit of species should be built if the road crosses critical habitat for these species. Native species nurseries should be established at the commencement of operations and a plan for planting and monitoring the well-being of plants for a period of three years after the end of operations.
- 6.5 In general, the Project is expected to produce a number of positive impacts to the region as the local communities such as: (i) improved traffic flow and connectivity; (ii) reduced travel time; and (iii) improved safety conditions. A well-implemented revegetation process using the required native species will improve biodiversity health.
- 6.6 It will be necessary to incorporate specialized social and environment support to supplement the UCE's capacity. The Project should incorporate a consulting firm/ and or consultants to prepare the EIA, and the resettlement plan.



- 6.7 During analysis the actual impacts of the project should be fully assessed in order to agree with the UCE mitigation measures and tools to address impacts in order to comply with Bank policies.

## **VII. ENVIRONMENTAL AND SOCIAL STRATEGY FOR ANALYSIS**

- 7.1 The Bank will conduct an Analysis Mission to verify that all of the Project's relevant environmental and social impacts and risks have been, or will be, properly and adequately evaluated, and mitigated, in terms of their completeness, sufficiency of detail, feasibility, cost, definition of responsibility, schedule, and quality control.

- 7.2 Analysis will specifically focus on the following aspects:

- a. assess if all environmental and social studies have been conducted before board presentation including an Alternatives Analysis, which should be included in the EIA, describing the process of Project redesign to avoid sensitive areas and reduce impacts;
- b. assess potential adverse socio-economic impacts of construction activities along the road such as involuntary resettlement or economic displacement, as well as indirect and cumulative impacts, if any;
- c. ensure that adequate and timely consultation process is in place comprising key stakeholders namely: local authorities and population potentially affected by involuntary resettlement and/or economic displacement;
- d. corroborate that an adequate Archaeological Study has been conducted within the Project area and ensure that a Chance Find Procedure will be in place during construction;
- e. assess the adequacy of the Traffic Plan to warrant road safety during construction and once the road becomes is in operation;
- f. evaluate the adequacy of the Environmental and Social Management System including health and safety procedures to be implemented during construction and operation; adequate level of training to be performed, and sufficient resources to be made available to ensure adequate implementation;
- g. promote the establishment and effectiveness of the Project's Grievance Mechanism to be in place by construction;
- h. determine if the Project has been developed and will be implemented in compliance with the environmental laws and regulations of Haiti;
- i. ensure the Project's compliance with IDB's Environmental and Safeguards Compliance Policy (OP-703) and that an Environmental Action Plan will be in place order to address identified risks;
- j. review the Preliminary Resettlement Plan to ensure compliance with Bank's Involuntary Resettlement Policy (OP 710) comprising adequate consultation;

- k. a determination of key indicators and requirements for the project execution, complete with timelines and milestones;
  - l. an evaluation to confirm adequate contingency plans (i.e. emergency and spill plans), including confirmation that all relevant project-specific environmental risks have been identified, proper procedures have been developed, and sufficient resources will be made available to ensure adequate implementation;
  - m. an evaluation of project-related information disclosure and public consultation activities that have been performed and the proposed future actions to provide adequate ongoing information disclosure and public consultation with the local population;
  - n. an evaluation, and further development as necessary, of project (loan agreement) monitoring/supervision procedures to ensure proper implementation of environmental, social, and health and safety actions and requirements;
  - o. an evaluation of environmental, social and health and safety terms and conditions in relevant project legal documents (e.g. concession contract, construction contract, operations and maintenance contract, etc.), in terms of sufficiency e.g. of penalties for non-compliance, potential risks or liabilities, or issues.
- 7.3 An Environmental and Social Management Report (ESMR) will be prepared by the Project Team to analyze and propose the management of the environmental and social aspects of the Project.

### COMPLETED AND PROPOSED SECTOR WORK

Study	Description	Date
RN-5. Engineering designs	Topographic analysis, geotechnical studies, hydrological studies, road geometrical designs, pavement designs.	2011
RN-5. Economic study	Cost and benefit analysis for the Carrefour Joffre to Port de Paix full 75 km segment.	2011
RN-5. Environmental and Social Analysis	Preliminary analysis of environmental and social impacts including management plan.	2011
Revision and update of 2011 studies	Includes revisions of all the above mentioned studies, additional designs in the Carrefour Joffre area and rearrangement of the bidding documents in accordance to the procurement strategy	2015-2016
Artibonite maintenance direction diagnostic	Assessments of the investment, training and strengthening needs at the departmental direction.	2015-2016
Impact evaluation methodology	Includes indicators to be measured, methodology to capture baseline/end - of - project data and methodology to perform econometric analysis.	2015-2016
Departmental roads technical solution	Develop a set of conceptual solutions to improve the condition of low-traffic roads in Haiti.	2015-2016

CONFIDENTIAL

<sup>1</sup> The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.