



# Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

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Concept Stage | Date Prepared/Updated: 19-Sep-2018 | Report No: PIDISDSC25469

**BASIC INFORMATION****A. Basic Project Data**

Country Ecuador	Project ID P167752	Parent Project ID (if any)	Project Name Ecuador Forest Investment Program (P167752)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date Sep 30, 2019	Estimated Board Date Feb 28, 2020	Practice Area (Lead) Environment & Natural Resources
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Finance	Implementing Agency Ministry of Environment	

**Proposed Development Objective(s)**

To improve management of forest and agricultural landscapes in selected areas of the coastal provinces.

**PROJECT FINANCING DATA (US\$, Millions)****SUMMARY**

<b>Total Project Cost</b>	45.45
<b>Total Financing</b>	45.45
<b>of which IBRD/IDA</b>	0.00
<b>Financing Gap</b>	0.00

**DETAILS****Non-World Bank Group Financing**

Counterpart Funding	21.89
Borrower	21.89
Trust Funds	23.56
Strategic Climate Fund Credit	23.56



Environmental Assessment Category

B - Partial Assessment

Concept Review Decision

Track I-The review did authorize the preparation to continue

Other Decision (as needed)

n/a

## B. Introduction and Context

### Country Context

**Ecuador is an upper middle-income country (GDP per capita at purchasing power parity USD 11,617 in 2017) that saw above-regional average real GDP growth of 4.5 percent during 2001-2014.** The government translated this boom, fueled by high oil prices and a number of structural reforms,<sup>1</sup> into impressive social gains. Between 2008 and 2017, the poverty rate measured at the national poverty line fell from 35.1 to 21.5 percent.<sup>2</sup> Based on the international poverty line for middle income countries (US\$5.5 per person per day at 2011 purchasing power parity), the poverty headcount in Ecuador stood at 30 percent in 2015.<sup>3</sup> Extreme poverty (less than US\$1.90 a day at purchasing power parity) fell from 7.5 to 3.6 percent.

**The income of the poorest 40 percent of Ecuadorians (the ‘bottom 40’) increased substantially faster than the national average.** As a result, Ecuador’s Gini coefficient fell from 53.3 in 2007 to 45 in 2016.<sup>4</sup> The country is fairly urbanized, with 64 percent of the population living in cities, though less so than the Latin America & Caribbean average of 80 percent. While still higher than the national poverty rate, rural poverty fell faster than urban poverty from 64 percent in 2005 to 35 in 2014.<sup>5</sup> However, poverty in Ecuador continues to mostly be a rural phenomenon, as rural areas are home to more than half of the country’s poor (58 percent in 2017) and 70 percent of those classified as extremely poor.<sup>6</sup>

**Owing to Ecuador’s heavy dependence on natural resources—in particular oil with its rapidly falling prices in 2014—and the private sector’s inability to compensate for rapidly falling state spending, growth slowed markedly in recent years.** As a result, the country has been facing macroeconomic and fiscal challenges linked to the recent fall in oil prices and the appreciation of the dollar. The government has been performing fiscal adjustments since 2015, and adopted austerity plans in 2017 and 2018. Owing to lower living standards, rural areas were also harder hit by the fall in oil prices. Rural Ecuador recorded an increase in poverty rates of about 6 percentage points between 2014 and 2017.<sup>7</sup> Inequality also crept up again in this period.

<sup>1</sup> World Bank 2018.: Ecuador Strategic Country Diagnostic.

<sup>2</sup> World Bank: data.worldbank.org. Accessed July 13, 2018.

<sup>3</sup> World Bank. 2018. Ecuador Strategic Country Diagnostic.

<sup>4</sup> All data from: World Bank: data.worldbank.org. Accessed July 13, 2018.

<sup>5</sup> All data from: World Bank: data.worldbank.org. Accessed July 13, 2018.

<sup>6</sup> World Bank. 2018. Ecuador Strategic Country Diagnostic.

<sup>7</sup> World Bank. 2018. Ecuador Strategic Country Diagnostic.

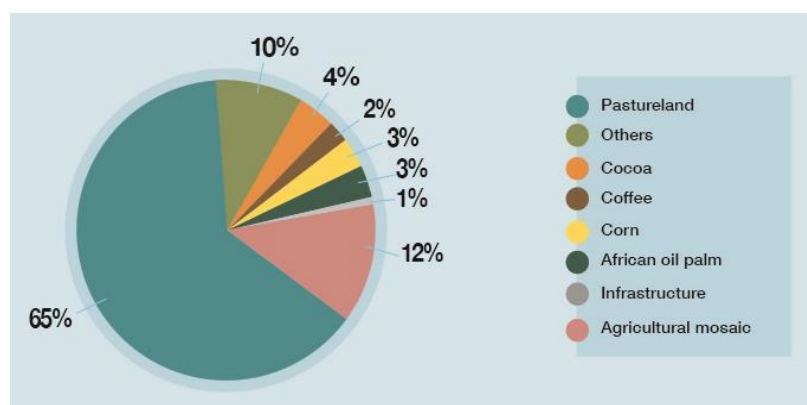


Sectoral and Institutional Context

### Drivers of Deforestation: The Interplay between Forests and Agriculture

**More than half (51 percent) of Ecuador’s land area is forested and 23 percent is under agricultural use.** Although agriculture represents a lower share of land cover than forestry, it contributes significantly more to Ecuador’s GDP and employment: In 2015, the forestry sector contributed 2.3 percent to GDP, and 8 percent to total employment, while agriculture made up 10 percent of GDP and employed a quarter of the country’s population. Currently, the agri-food sector is the most important source of livelihoods for the rural poor and accounts for 21 percent of female employment.<sup>8</sup> Similarly, native forests provide livelihoods for many indigenous peoples (IPs) and local communities. **Ecuador suffers from high gross rates of deforestation, at an average 0.77 percent per year between 2008 and 2014.** In that period, average annual gross deforestation was 97,917 hectares.<sup>9</sup> Deforestation leads to the loss of biodiversity and the exacerbation of natural disasters, such as landslides and flooding. It can also generate social conflict where land tenure systems are unclear and IPs have unresolved land claims or territories. Most importantly, deforestation and land use changes are one of the main sources of GHG emissions in Ecuador (25 percent).<sup>10</sup>

Figure 1: Percentage deforested area (2008-2014) under different land uses<sup>11</sup>



**The main driver of deforestation in Ecuador is agricultural expansion for pasture (65 percent) and crop cultivation (24 percent, see Figure 1).** Crops like coffee, cacao, corn, and oil palm are generally grown extensively and with low efficiency. The average productivity of palm oil production 12.79 t/ha, for example, is well below comparators: In Colombia, productivity averages 17 t/ha, in Panama 23, and Guatemala 32. Only 16 percent of cacao is shade-grown. Cultivation practices frequently deplete the soil, are vulnerable to pests, and depend on pesticides and fertilizers, leading to frequent shifts in production. Livestock raising, primarily in the Amazon and the along the coast, is characterized by extensive practices with low productivity.

**Beyond causing deforestation, unsustainable agricultural expansion is also a major factor in land degradation.**

Approximately 47 percent of the Ecuadorian territory, most of which on arable lands, faces soil degradation. Of this territory, nearly 22 percent is vulnerable to desertification. Most of these at-risk areas are located in the coastal and

<sup>8</sup> Among all the rural poor that were employed, 82 percent were employed in agriculture in 2017 (ENEMDU, INEC).

<sup>9</sup> Ministry of Environment. 2016. Bosques para el Buen Vivir - Plan de Acción REDD+ Ecuador (2016-2025). Quito, Ecuador.

<sup>10</sup> Ministry of Environment. 2017. Third National Communication on Climate Change. Quito, Ecuador.

<sup>11</sup> Based on: Ministry of Environment. 2016. Bosques para el Buen Vivir - Plan de Acción REDD+ Ecuador (2016-2025). Quito, Ecuador.



Sierra regions.<sup>12</sup>

**Agriculture in Ecuador has growth potential, provided a number of bottlenecks are resolved, including:** (i) making producers more productive and resilient; (ii) integrating producers into domestic and global value chains; (iii) strengthening institutions and the provision of public goods; and (iv) ensuring sustainable use and management of land and water.<sup>13</sup>

**Indirect drivers of deforestation in Ecuador are primarily threefold:** 1) Policies that drive the expansion of sectors that generate deforestation, in particular in mining, oil, agriculture (including ill-targeted public credits), and land settlement; 2) lack of clear tenure systems and formal land demarcation; and 3) lack of updated zoning in areas of permanent forest production within the state's forest patrimony.<sup>14</sup>

## Policy Context

**Ecuador's 2017-2021 National Development Plan (NDP) gives prominence to rural development and environmental sustainability as key contributors to development.** The NDP's overall objective of creating an inclusive, equitable, and solidary society based on sustainable development, includes among its nine priorities the following:

**Objective 3: Guarantee the rights of nature for the current and future generations.** Ecuador's commitment to environmental sustainability is anchored in its 2008 constitution, which was the world's first to enshrine the rights of nature to exist, persist, maintain and regenerate its vital cycles. As a result, the NDP puts forward a strong vision to sustainably manage the country's natural resources, especially in light of climate change, and as concerns deforestation and land use change, biodiversity loss, erosion and desertification. From this vision springs a commitment to include environmental quality as an essential part in all policy formulation and economic development. The government program establishes that "the Ecological Revolution must change the productive and energy matrices as a basis for generating employment and wealth, reducing emissions, and conserving and maintaining our natural heritage."<sup>15</sup> The NDP therefore adopts a series of policies, including to 1) conserve, reclaim and regulate the use of the natural and social, rural and urban, continental, island, and coastal marine heritage to that it can safeguard the rights of the present and future generations; 2) promote good practices that contribute to pollution reduction, conservation, climate change mitigation and adaptation, and that foster these globally; 3) foster an urban economy based on the sustainable and value-adding use of renewable resources, enhancing social responsibility and the development of a bioeconomy. Among others, the NDP puts forward goals for 2021 of reducing gross deforestation by 15 percent compared to the reference emission level, and of reducing the expansion of the urban and agricultural frontiers.<sup>16</sup>

**However, there is a mismatch between government policy and their implementation.** This is due partly to a lack of technical and financial capacity at local levels, to the misalignment of incentives, and to reactive governance. In addition, neither local communities nor the private sector have the necessary incentives required to come together for a more efficient and inclusive way of exploiting natural resources.<sup>17</sup>

**Objective 6: Develop productive capacities and an enabling environment to achieve food self-sufficiency and good**

<sup>12</sup> Three previous paragraphs based on: World Bank. 2018. Ecuador Strategic Country Diagnostic

<sup>13</sup> World Bank. 2018. Ecuador Strategic Country Diagnostic

<sup>14</sup> Ministry of Environment. 2017. FIP Investment Plan for Ecuador. Quito, Ecuador.

<sup>15</sup> Movimiento Alianza PAIS, 2017

<sup>16</sup> National Secretariat for Planning and Development. 2017. National Development Plan 2017-2021. Quito, Ecuador.

<sup>17</sup> World Bank. 2018. Ecuador Strategic Country Diagnostic



**living standards in rural areas.** The NDP places an emphasis on connecting producers to the natural resources on which their production depends, on blending traditional and new agricultural practices, and on incentivizing subsistence and agroecological production by ensuring equitable access to factors of production. The NDP therefore adopts policies including 1) developing dignified work and employment with a focus on rural areas, enhancing productive capacities, combatting precariousness, reinforcing state support, and boosting entrepreneurship; 2) boosting the production of sufficient and healthy food, as well as access to markets and alternative production systems that satisfy national demand while respecting local production and cultural values; and 3) promoting fair trade, with an emphasis on the rural peasant economy while reducing the intermediation between the rural and urban sectors, and incentivizing the environmental preservation and soil conservation. Targets for 2021 include reducing rural poverty from 38.2 to 31.9 percent, reducing rural multidimensional poverty from 59.9 to 49.2 percent, and increasing adequate rural employment from 27.8 to 35.2 percent.

**Ecuador's Intended Nationally Determined Contribution under the Paris Agreement on Climate Change sets out its tentative international commitments relating to climate change.** They include, among others, 1) the country's intention to restore 100,000 ha of forests annually until 2025 through its National Forest Restoration Program and the Socio Bosque Program, contingent upon international support, and 2) the introduction of technology and knowledge into agriculture.<sup>18</sup> A forthcoming Nationally Determined Contribution is expected to add detail to Ecuador's contributions toward the Paris Agreement.

**Ecuador's climate change strategy includes agriculture and land use, land use change, and forests (LULUCF) as priority sectors for climate mitigation.** In these domains, it sets forth the following objectives: 1) identify and adopt appropriate agricultural practices to mitigate climate change and improve efficiency and competitiveness; and 2) implement measures that support the integrity and connectedness of appropriate ecosystems to capture and store carbon and sustainably manage said ecosystems.<sup>19</sup> Ecuador's REDD+ Action Plan picks up these themes by dividing actions into four strategic components: 1) policies and institutional management, 2) transition to sustainable production systems, 3) sustainable forest management, and 4) conservation and restoration.

**In December 2017, the Forest Investment Program (FIP) Sub-Committee endorsed Ecuador's Forest Investment Plan, opening to the door to FIP financing.** The FIP supports developing countries' efforts to reduce deforestation and forest degradation (REDD+) and promotes sustainable forest management that leads to emission reductions and the protection of carbon stocks. REDD+ consists of three phases: 1) Readiness, during which countries develop national strategies and implementation tools; 2) investment, during which countries implement these strategies, making up-front investments in reforms and actions that result in emission reductions; and 3) results-based payments, during which countries are remunerated for measured, reported, and verified emission reductions. FIP resources fund the second, investment stage of REDD+.

**The government has nominated the World Bank as its implementation partner for its FIP project.** The government is pursuing a unified approach to implementing its REDD+ programs, having identified three priority regions for funding: 1) the Amazon forest, where it is investing US\$ 54 million in GEF and Green Climate Fund resources with the support of UNDP; 2) and the woodlands and dry valleys of the south, which currently remain unfunded; and 3) the coastal provinces, which it has designated as the target area for the FIP project. In the target area, GIZ, Conservation International, and WWF have small project activities, lessons of which can be integrated into project design, and coordination with whom will be important. On the national level, the German and Norwegian government-funded REDD Early Movers Program has signed an agreement with the government to provide US\$ 50 million in performance-based

<sup>18</sup> Government of the Republic of Ecuador. 2015. Ecuador's Intended Nationally Determined Contribution. Quito, Ecuador.

<sup>19</sup> Ministry of Environment. 2012. National Climate Change Strategy of Ecuador 2012-2025. Quito, Ecuador.





financing for emission reductions. The government intends to use these to fund the Socio Bosque Program.

### Description of Project Area

The project would take place in the provinces of Esmeraldas, Manabí, and Santa Elena. These provinces form one of three aggregate priority areas the government identified for REDD+ based on their homogenous deforestation patterns and drivers.<sup>20</sup> Based on a multicriteria analysis that incorporated future deforestation risks (see Figure 2) and other parameters,<sup>21</sup> the government identified three priority investment areas within these provinces for investment using FIP resources (see Figure 3). These areas are located in close proximity to protected areas, including national parks and protected forests.

Figure 3: Projected deforestation risk 2008-2035 (Darker red = higher risk)<sup>22</sup>

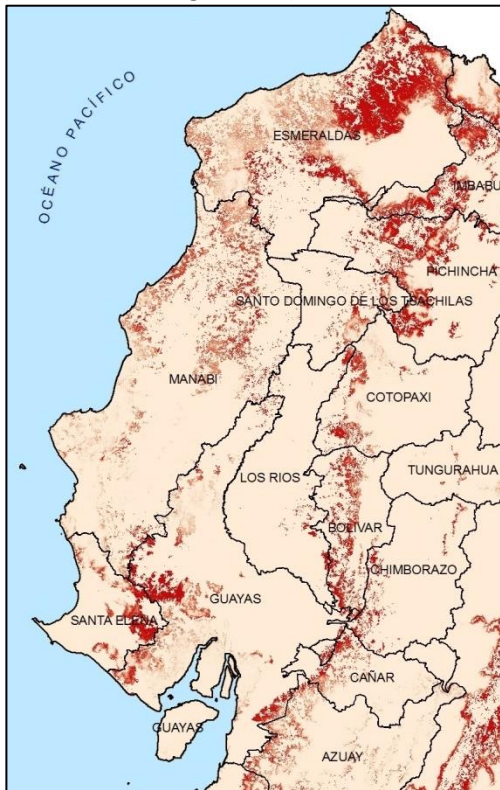
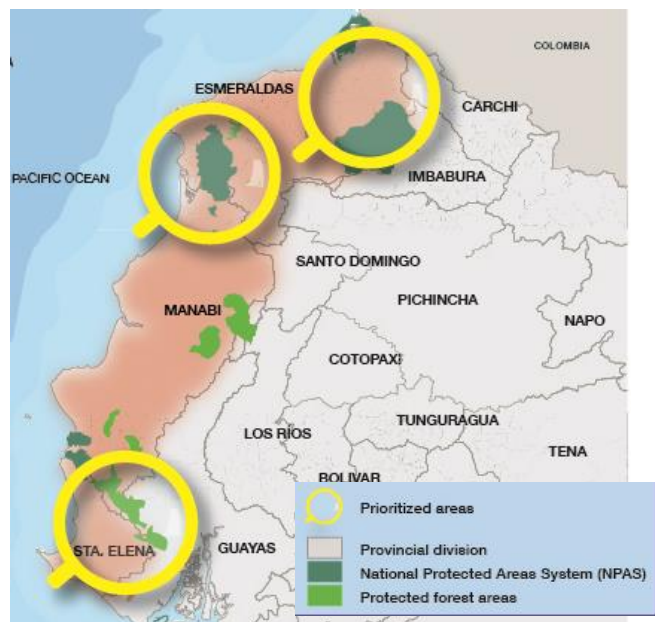


Figure 3: FIP Ecuador Project Areas



<sup>20</sup> Castro, M., R. Sierra, O. Calva, J. Camacho, F. López y P. Lozano. 2013. Zonas de Procesos Homogéneos de Deforestación del Ecuador. Factores promotores y tendencias al 2020. Quito: Programa GESOREN-GIZ y Ministerio de Ambiente del Ecuador. Cited in Ministry of Environment. 2016. Bosques para el Buen Vivir - Plan de Acción REDD+ Ecuador (2016-2025).

<sup>21</sup> Historical deforestation patterns and agricultural land in proximity to forest area were also taken into account. These areas were then aggregated along micro-watersheds, and put in relation to their proximity to protected areas.

<sup>22</sup> Based on: Sierra, Rodrigo & Calva, Oscar & Silva, Ariel. 2015. Estrategias Regionales REDD+ en la Amazonia y Costa Centro-Norte del Ecuador. Reducción de emisiones y co-beneficios potenciales bajo tres escenarios de deforestación futura. UN-REDD and Ministry of Environment. Quito, Ecuador.



Table 1: General characteristics of the three coastal provinces that form the project area

	Esmeraldas	Manabí	Santa Elena
Surface area (km <sup>2</sup> )	14,893	18,400	3,763
Inhabitants (2010) <sup>23</sup>	491,168	1,369,780	308,693
Population density (Inhabitants per km <sup>2</sup> , 2010)	32	74	82
Multidimensional poverty rate (2016) <sup>24</sup>	Above national average	Above national average	Below national average

Between 2008 and 2014, gross rates of deforestation in the general project area were generally higher than the national average of 0.77 percent, as illustrated in Table 2: Forest cover and deforestation rates 2000-2008 in the homogeneous deforestation priority zones that make up the intervention area the homogenous deforestation priority zones the government identified:

Table 2: Forest cover and deforestation rates 2000-2008 in the homogeneous deforestation priority zones that make up the intervention area<sup>25</sup>

Homogeneous Deforestation Priority Zone	Forest Cover (%)	Deforestation Rate (%)
North Esmeraldas and northern coastal foothills	56.1	1.30
North Manabí and South Esmeraldas	24.6	2.27
Central Manabí (central semi-dry coast)	8.3	-1.57
Semi-dry mountain ranges and valleys of the central coast	59.1	1.87
Guayas river basin	20.4	1.37

Table 3: Gross deforestation in the Project Area (2008-2014)<sup>26</sup>

Province	Gross Deforestation (hectares)
Esmeraldas	12,006
Manabí	6,159
Santa Elena	793

The main driver of deforestation in the project area is cattle ranching, followed by the creation of agricultural mosaics, as well as oil palm in Esmeraldas, and to a lesser degree cacao (see Figure 4Error! Reference source not found.). Land titles are relatively complete in the project area, meaning that this otherwise important indirect driver of deforestation is less relevant in the project area.

<sup>23</sup> National Statistics and Census Institute. 2010. Population and Household Census 2010. Quito, Ecuador.

<sup>24</sup> National Secretariat for Planning and Development. 2017. National Development Plan 2017-2021. Quito, Ecuador. Poverty levels are likely to be higher following the 2016 earthquake.

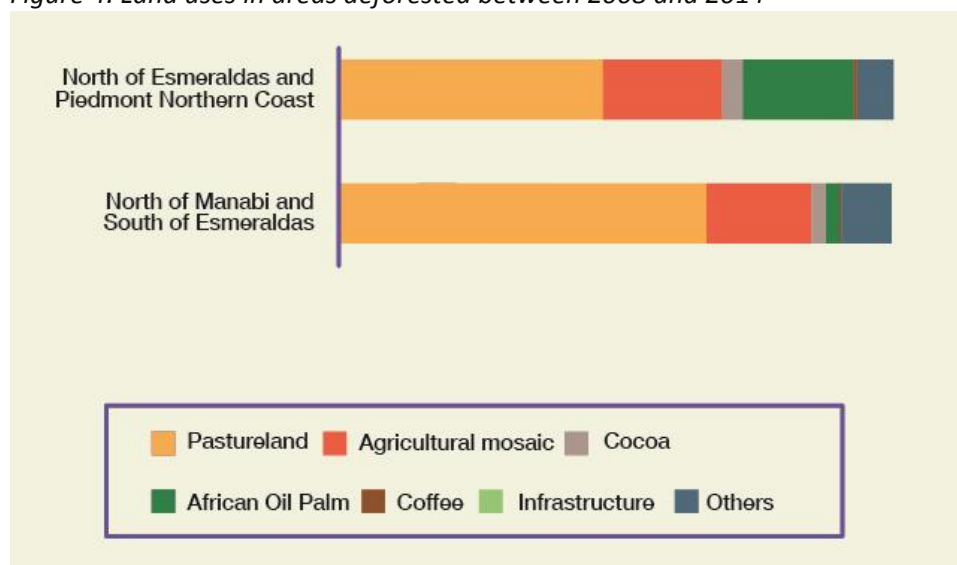
<sup>25</sup> Ministry of Environment. 2017. FIP Investment Plan for Ecuador. Quito, Ecuador

<sup>26</sup> Ministry of Environment. 2016. Bosques para el Buen Vivir - Plan de Acción REDD+ Ecuador (2016-2025). Quito, Ecuador.





Figure 4: Land uses in areas deforested between 2008 and 2014<sup>27</sup>



**Agriculture dominates the economy in these provinces.** The primary crops are as follows: African oil palm in Esmeraldas (206,000 ha); banana and plantain (52,000 ha) and corn (97,000 ha) in Manabí; and corn in Santa Elena (4,000 ha). The area is also an important for animal husbandry, with 893,000 heads of cattle in Manabí and 331,000 in Esmeraldas.<sup>28</sup> Esmeraldas, especially its northern parts, and Manabí, especially in the foothills of the *cordillera* and the coastal mountains, suffer from soil degradation and deforestation. In Manabí, subsistence agriculture dominates, often on poor and overtaxes soils, generating limited revenues for farmers.<sup>29</sup>

**Poverty in these provinces is particularly concentrated in Northern Esmeraldas, and in the foothills of the *cordillera* and the coastal mountains, where it coincides with unsustainable natural resource use.** Parts of the project area were also heavily afflicted by the April 2016 earthquake, which left 663 people dead, 80,000 people displaced, and destroyed much infrastructure. Reconstruction costs are estimated at US\$ 3.3 billion.<sup>30</sup>

**The population in the general project area includes several minority groups, including Afroecuatorians, Montubios, and indigenous groups** (see

<sup>27</sup> Based on: Ministry of Environment. 2016. Bosques para el Buen Vivir - Plan de Acción REDD+ Ecuador (2016-2025). Quito, Ecuador.

<sup>28</sup> National Statistics and Census Institute. 2015. Encuesta de superficie y producción agropecuaria continua. Quito, Ecuador.

<sup>29</sup> National Secretariat for Planning and Development. 2017. National Development Plan 2017-2021. Quito, Ecuador.

<sup>30</sup> World Bank. 2018. Ecuador Strategic Country Diagnostic



Figure 5 and Table 4). Incidence of extreme poverty is 2.9 times higher in indigenous households and 1.5 times higher in Afroecuadorian households compared to mestizo families.<sup>31</sup>

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<sup>31</sup> National Secretariat for Planning and Development. 2017. National Development Plan 2017-2021. Quito, Ecuador.

Figure 5: Distribution of the population by primary self-identification (2010)<sup>32</sup>

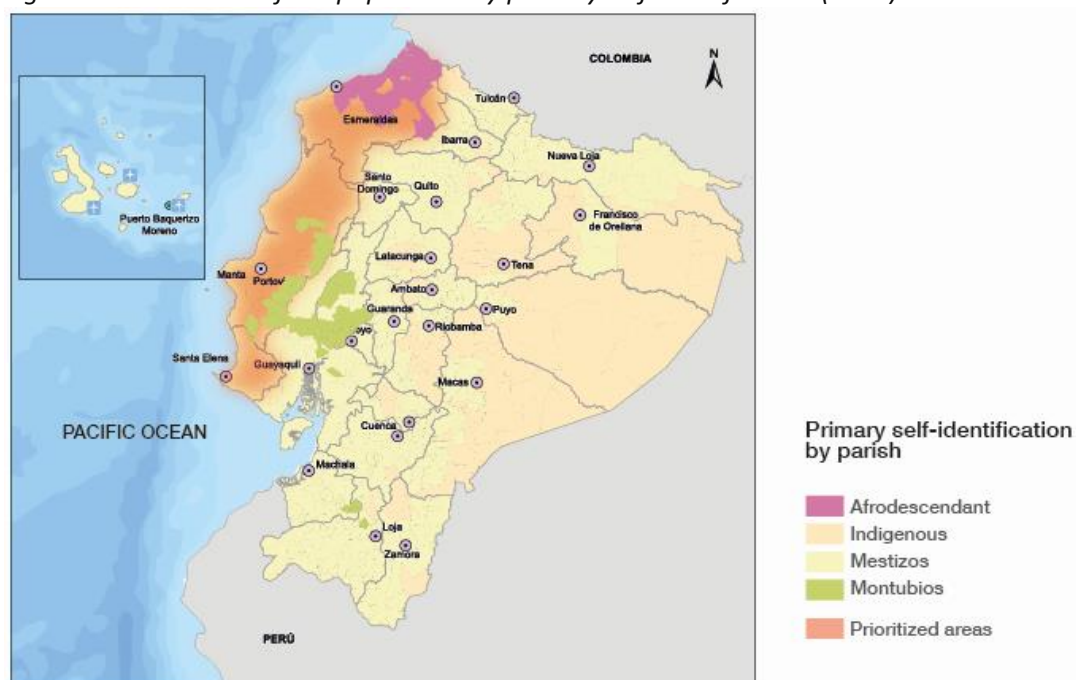


Table 4: Demographic characteristics in the project area (2010)<sup>33</sup>

	Esmeraldas	Manabí	Santa Elena
Share of the population self-identifying as Afrodendants (%)	43.9	6.0	8.5
Share of the population self-identifying as Montubios (%)	2.4	19.2	4.9
Share of the population self-identifying as Indigenous (%)	2.8	0.2	1.4

## Gender

**The project design will consider gender aspects as an important feature for leveraging the full potential of the planned investments to create economic opportunities and the associated impact on social protection.** While rural households are already disadvantaged in terms of access to services and financing for realizing economic opportunities, it is especially female-headed households that suffer from adverse conditions for economic development in rural areas. Lack of access to services and financing, but also lack of education and empowerment are especially pronounced for women and form significant constraints for the commercialization of products and formalizing business relationships. As a consequence, the potential of women to participate in the rural economy, contribute to family income, and improve the social protection situation of their households is limited. This situation is even further magnified for women with indigenous status.

**In contrast, there are many untapped opportunities for women to actively participate in the rural economy, especially in the forest and agriculture sectors.** This untapped potential relates not only to artisanal manufacturing but is

<sup>32</sup> National Secretariat for Planning and Development. 2017. National Development Plan 2017-2021. Quito, Ecuador.

<sup>33</sup> National Statistics and Census Institute. 2010. Resultados del censo de población y vivienda en el Ecuador 2010: Fascículo provinciales de Esmeraldas, Manabí, y Santa Elena. Quito, Ecuador.



embedded in any value chain related to timber, non-timber forest products, and agriculture. Already at present, women play a crucial part in the commercialization of such products, only that it is frequently informal and without them being directly in charge of the associated business management, especially resource management and strategic decision making. As many examples have shown, enhancing the capacity of women to develop and manage businesses commonly results in positive impacts on the economic situation of households. Similarly, enhancing women's skills, for example in manufacturing, can open new employment opportunities, especially for young women that have elevated economic aspirations that at present can only be met by migrating to urban areas. The higher degree of mobility of young women to seek opportunities outside of their area of origin compared to young men is a phenomenon that is observed in many other countries. Hence, providing economic opportunities to women is of importance for ensuring social integrity and social cohesion in rural areas.

### Forest Landscape-Poverty Context

**Despite outstanding successes in poverty reduction over the last 15 years, continued investments in economic opportunities in rural areas remain important to further close the poverty gaps between urban and rural areas.**

Ecuador displays large regional disparities in well-being, with poorer regions experiencing large gains during the boom years but being hit harder when the economy slowed down owing to their greater initial vulnerability caused by lower overall living standards. Rural Ecuador recorded an increase in poverty rates of about 6 percentage points between 2014 and 2017. Poverty in Ecuador thus continues to mostly be a rural phenomenon, and half of the country's poor (58 percent in 2017) and 70 percent of those classified as extremely poor are rural dwellers.

**Poverty is highest among individuals employed in agriculture.** This stands in contrast to the economic importance of the agricultural sector at the national level. As most of the poor are concentrated in the coastal regions and highlands, the FIP investments will be of particular importance to address rural poverty. The relatively densely populated coastal regions have a relatively high absolute poverty prevalence. As a result, investments targeted at creating economic opportunities based on the management of its natural capital can reach a relatively large number of people.

**Another aspect of the FIP investments in Ecuador is that it is targeted at regions and areas with Indigenous Peoples.**

As in most other Latin American countries, indigenous populations continue to suffer from high poverty rates in Ecuador. In 2016, the national poverty headcount for indigenous people (IP) stood at 53 percent. This was almost three-times as high as the poverty headcount rate for Mestizos, the least poor ethnic group in the country. The deterioration of the rural-urban poverty gap over the last couple of years has particularly affected the indigenous population, who reside mainly in rural areas; almost 8 out of 10 indigenous live in rural areas. In 2017, almost 60 percent of rural indigenous households were poor relative to only 15 percent of urban poor indigenous households.

**Moreover, poverty rates are higher among female headed households, which experienced higher than average rates of poverty, especially those in rural areas.** For instance, 39 percent of rural female headed households were poor compared to 37 percent for rural male-headed households. Nonetheless, the pace of poverty reduction does not vary significantly by gender of the household head.

### Climate Risks

**Exposure of the Project Location:** While there is no clear trend in precipitation changes in Ecuador at the national level, a greater propensity toward decline in rainfall has been observed, especially on the coast. However, an increase in extreme rainfall events has been observed in the coastal Ecuador (1961-1990), which implies a greater risk of flooding. Runoff levels are expected to rise in coastal regions and could affect areas that already exhibit floods and landslides,



increasing through erosion and the occurrence of natural disasters. Man-made changes to the natural environment, not least sealing of surface areas through infrastructure developments (buildings and roads) without appropriate drainage system or escape areas will magnify the problem. Assuming a correlation between climate change and increases in the El Niño/Southern Oscillation (ENSO), the associated extreme weather events, including heavy though erratic rainfall resulting in floods, droughts, and heat waves could produce severe socioeconomic and environmental stress, including crop failure and forest fires. Increases in La Niña events might lead to higher incidence of droughts, affecting water supplies and crop production. Overall, while exposure is rated moderate in the present, it is possible that it will become high in the future.

**Impacts on the Project's Physical Infrastructure and Assets:** The mean monthly temperature in the coastal regions is expected to increase by about 1 degree C in coastal Ecuador by 2039 compared to the 1985-2005 reference period. Precipitation levels are expected to increase throughout the year on average. If climate change exacerbates the ENSO, the related dry conditions could negatively impact crop yields in some years, with potential negative spillover effects on illegal logging as rural dwellers are forced to seek alternative income sources in the short-term as a coping mechanism. ENSO-related flood events that damage crops could lead to similar effects. While current projections predict increased overall precipitation levels, drought events linked to ENSO could weaken trees and make them susceptible to insect outbreaks. However, given the uncertainty surrounding the link between climate change and the ENSO, which is the main determinant of extreme weather events in the region, there is still insufficient understanding of the overall potential impact of climate change on the project's assets.

**Mitigation of project climate risk:** By the nature of the design of the project, project investments are expected to display a higher resilience to climate risk. For example, for forest regeneration and restoration of degraded lands, climate aspects will be taken into consideration. Supporting regeneration through native and mixed species systems will help increase resilience to climate shocks. Similarly, climate-smart agriculture will not only create immediate, on-site positive effects for climate resilience, but also secondary knock-on effects through increased knowledge and capacity of farmers and the way they manage their land and other physical property.

#### Relationship to CPF

**The World Bank Group's Country Engagement Note (CEN) for Ecuador, approved on March 15, 2016 and valid until the finalization of the CPF, identified climate change, other environmental threats (El Niño, water and energy production due to weather fluctuations, etc.), as well as agriculture and rural development as key priorities to contribute to the country's goal of inclusive and sustainable growth (Pillar 2).** Similarly, the Strategic Country Diagnostic (SCD) includes the improvement of the use of physical and natural capital as a main priority (Pillar 4). The SCD recognizes the importance of improving environmental and natural resource management with a view to providing productive employment for its most vulnerable populations and protecting habitat, and of mainstreaming sustainable use of environmental resources into its broader economic development agenda.<sup>34</sup> In addition, the proposed project is in line with Ecuador's 2017-2021 National Development Plan, which puts particular emphasis on environmental policy as part of a strategy to "balance the use of natural resources, the regenerative capacity and assimilation of nature, that will support to the eradication of poverty".

<sup>34</sup> World Bank. 2018. Ecuador Strategic Country Diagnostic.



### C. Proposed Development Objective(s)

To improve management of forest and agricultural landscapes in selected areas of the coastal provinces.

Key Results (From PCN)

- (i) Area under climate smart agriculture practices (ha)
- (ii) SMEs with score on forest product commercialization (number) (Score: 1. identification of products, 2. business plan, 3. access to credit, 4. marketing strategy)
- (iii) Area under improved forest management practices (ha) (Disaggregated: incentives scheme, certification, forest landscape restoration)
- (iv) Net GHG emissions (tCO<sub>2</sub>eq) (CRI)
- (v) Share of target beneficiaries with rating 'Satisfied' or above on project interventions (climate smart agriculture, benefits and benefit sharing, other) (disaggregated by sex) (citizen engagement indicator)

### D. Concept Description

**The Ecuador FIP is designed to achieve a reduction in deforestation and forest degradation through investments in sustainable forest management and conservation and complementary sustainable agriculture production in selected forest landscapes in the Coastal Areas of Ecuador.** The investments will target improvements in the capacity of public institutions, the private sector, and civil society for managing forests and agriculture, improving income opportunities from forest and agriculture for the local population through improved sustainable use and the provision of resources for direct investments in improved forest and agricultural management.

**The project would pursue its goal of reducing deforestation and forest degradation by increasing the direct use value of forest landscapes for the local population, rather than pursuing a strict no-use conservation approach.** This is expected to lead to more and better investments in sustainable management practices and, as such, ensure the overall



sustainability of this project beyond its own investment period.

The project's theory of change illustrates this approach:





Problem Statement	Activities/Outputs	Short-Term Outcomes	Medium-Term Outcomes (PDO)	Long-term Outcomes (Higher-Level Objective)
<p>High deforestation and forest degradation rates → increased GHG emissions, erosion of natural capital for economic development and poverty alleviation, biodiversity loss, land degradation, exacerbation of natural disasters → Poverty, climate change</p> <p><b>Direct Causes</b></p> <ul style="list-style-type: none"> <li>- Conversion of forests to agriculture</li> <li>- Poor forest management</li> </ul>	<p>Wood tracking system; third-party certification of practices and products; capacity-building; technical assistance; natural regeneration; enrichment planting; GIS-database connected to MRV system; R&amp;D on commercialization; development of business plans and marketing strategies for selected products; alternative sources of finance; identification and selection of additional areas under Socio-Bosque; capitalization of FIAS</p>	<p><b>Component 1:</b> Strengthened capacity for improved management of forest landscapes</p>	<p><b>PDO:</b> Improved management of forest and agricultural landscapes in selected areas of the coastal provinces</p> <p><b>Indicators:</b></p> <ol style="list-style-type: none"> <li>1. Area under climate smart agriculture practices (ha);</li> <li>2. SMEs with score on forest product commercialization (number) (Score: 1. identification of products, 2. business plan, 3. access to credit, 4. marketing strategy)</li> <li>3. Area under improved forest management</li> </ol>	<ul style="list-style-type: none"> <li>- Implementation of the National Development Plan</li> <li>- Progress towards NDCs</li> <li>- Reduction in deforestation</li> <li>- Improved forest governance</li> <li>- Reduction in rural poverty</li> <li>- Increase in agricultural production</li> <li>- Improvements in job and income opportunities in rural areas</li> <li>- Improved climate resilience</li> </ul>



<ul style="list-style-type: none"> <li>- practices</li> <li>- Soil depletion</li> <li>- Low agricultural productivity</li> <li>- Weak integration of agricultural producers into markets and value chains</li> </ul> <p><b>Indirect Causes</b></p> <ul style="list-style-type: none"> <li>- Insufficient government control over forests</li> <li>- Lack of capacity</li> <li>- Misalignment and absence of incentives</li> <li>- Lack of equitable access to factors of production</li> <li>- Lack of resources for restoration</li> </ul>	<p>Capacity building; technical assistance; Farmer Field Schools; investments in improved agricultural practices; R&amp;D on commercialization; elaboration of business plans and marketing strategies for selected products; alternative sources of finance</p>	<p><b>Component 2:</b> Strengthened capacity for improved management of agricultural landscapes</p>	<p>practices (ha) (Disaggregated: incentives scheme, certification, forest landscape restoration)</p> <ul style="list-style-type: none"> <li>4. Net GHG emissions (tCO<sub>2</sub>eq) (CRI)</li> <li>5. Share of target beneficiaries with rating 'Satisfied' or above on project interventions (climate smart agriculture, benefits and benefit sharing, other) (disaggregated by sex) (citizen engagement indicator)</li> </ul>	
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**To achieve its objective, the project is designed with two principal components:** The first focuses on investments in the sustainable management and conservation of forests, including the management of non-timber forest products. The second focuses on sustainable agriculture in areas adjacent to forests to reduce the expansion of agriculture into forests. In terms of addressing deforestation and forest degradation, investments in forests and forest management are largely addressing reducing forest degradation, whereas investments in agriculture adjacent to forests is targeting deforestation as agriculture is the key driver for permanent land-use change away from forests.

**Component 1: Improved management of forest landscapes (Total: US\$21 million; FIP US\$11 million; Counterpart US\$10 million).**

The degradation of forests in Ecuador result from the following structural shortcomings: (a) insufficient capacities of public institutions (including MAE), the private sector (especially small-scale land owners), and civil society organization to sufficiently address and manage the social, economic, cultural, and natural complexities surrounding management of forest landscapes, including the tradeoffs between different land uses; (b) a lack resources for investments in the management and restoration of degraded forest areas; (c) weaknesses in the commercialization of timber and non-



timber forest products to increase the direct use value of forests for the local population; and (d) insufficient participation of local forest owners in schemes that provide economic incentives for the provision of ecosystem services (Socio-Bosque Program). A key feature of the investments mobilized through this project is the promotion of locally controlled forest management, e.g. private landowners, but also communities and communal arrangements, like cooperatives, to trigger associated income opportunities for local people, which is expected to lead to a complementary leverage of investments in sustainable forest management from private and public resources.

**Component 2. Sustainable Management of Agricultural Lands Adjacent to Forests (Total: US\$19.6 million; FIP US\$9.6 million; Counterpart US\$10 million).**

To reduce the pressure of agricultural extension into forest areas and, thus, address the full suite of drivers of deforestation, the FIP Ecuador project will also mobilize investments to (i) increase the area under sustainable and climate-smart agricultural production adjacent to forests at high risk of deforestation; (ii) restore degraded agricultural lands through tree planting activities, including through mixed tree-agricultural systems (agroforestry and agro-silvopastoral systems) ; (iii) and enhance the commercialization of sustainable and deforestation-free agricultural products to increase the direct economic incentives to local landowners for adopting such practices.

**Component 3. Project Management (Total: US\$4.9 million; FIP US\$3 million; Counterpart US\$1.9 million).**

This component will support the MAE by covering the operational and investment costs of a project implementation unit, including staffing, operational expenses, vehicles, travel, monitoring and evaluation, outreach and communications, and audit.

## SAFEGUARDS

### A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project would take place in the provinces of Esmeraldas, Manabí, and Santa Elena. These provinces respectively cover 14,893, 18,400, and 3,763 km<sup>2</sup>, and have respective populations of 491,168, 1,369,780, and 308,693. The estimated project area would be about 200,000 ha, located in areas that are dominated by forest cover, with some agricultural land. The three project sites are located close to the Cotacachi-Cayapas and Mache-Chindul Ecological Reserves, as well as protective forests of Santa Elena. Deforestation rates are generally higher than the national average, and reach up to 2.27% in some areas.

Agriculture dominates land use in these provinces. The primary crops are as follows: African oil palm in Esmeraldas (206,000 ha); banana and plantain (52,000 ha) and corn (97,000 ha) in Manabí; and corn in Santa Elena (4,000 ha). The area is also an important for animal husbandry, with 893,000 heads of cattle in Manabí and 331,000 in Esmeraldas. Esmeraldas, especially its northern parts, and Manabí, especially in the foothills of the cordillera and the coastal mountains, suffer from soil degradation and deforestation. In Manabí, subsistence agriculture dominates, often on poor and overtaxes soils, generating limited revenues for farmers.



The population in Esmeraldas, Manabi, and Santa Elena includes several minority groups, including Afroecuadorians (43.9, 6.0, and 8.5 percent, respectively), Montubios (2.4, 19.2, and 4.9 percent), and indigenous groups (2.8, 0.2, and 1.4 percent).

### B. Borrower’s Institutional Capacity for Safeguard Policies

The MAE will be the project implementing agency. As this ministry does not have prior experience with World Bank projects, during preparation the Bank will assess the needs and capacity of the MAE to implement safeguards. To strengthen the MAE’s capacity for project preparation, MAE is requesting a project preparation grant that will allow the ministry to hire a team of consultants to prepare the project. This will include safeguards specialists. Similarly, a dedicated PIU with an environmental and a social safeguards specialist will strengthen MAE’s project implementation capacity.

While MAE will be the implementing agency, many project activities will involve the MAGAP. While MAE will retain overall responsibility for safeguards, during project preparation, the MAGAP's institutional capacity will be assessed, as well as the need to include safeguards specialists within that ministry.

### C. Environmental and Social Safeguards Specialists on the Team

- Carlos Tomas Perez-Brito, Social Specialist
- Gabriela Encalada Romero, Environmental Specialist
- Ximena Rosio Herbas Ramirez, Environmental Specialist

### D. Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The policy is triggered as the outputs, if not managed adequately, could lead to down-stream impacts (e.g. conservation activities could restrict access to natural resources to communities). The project will focus on investments in the sustainable management and forest and agricultural land, including non-timber forest and agricultural products This includes lands adjacent to forests and protected areas. MAE will prepare an Environmental and Social Management Framework (ESMF) during the project design stage before appraisal. The ESMF will take stock of and analyze the salient environmental and socio-economic characteristics of the proposed project areas, and assess potential negative and positive impacts of the activities and outputs. A full baseline database for all participating project communities will be compiled as part of this assessment process. The ESMF will incorporate outputs of the REDD+ Strategy, which lays out a comprehensive plan for sustainably



		<p>managing its forest resources. Guidance on ESMF implementation will be included in the Operations Manual.</p> <p>In line with FIP operational procedure, Ecuador’s Investment Plan, which is a key document for this operation, was widely consulted with relevant stakeholders in the country before it was presented to FIP’ Subcommittee. In addition, the government will conduct a consultation process for this operation, including key technical documents, safeguards documents such as Social Assessment, IPPF, and ESMF. The ESMF will delineate the process to ensure that the proposed investments are supported by stakeholders and appropriately designed.</p>
Performance Standards for Private Sector Activities OP/BP 4.03	No	The operation will not finance activities in the private sector.
Natural Habitats OP/BP 4.04	Yes	These policy is triggered because potential project areas may be located in conservation areas. The ESMF will include provisions to assess possible impacts prior to any actions being undertaken on the ground. Alternative use/NTFP projects that could be supported should be accompanied by an assessment of sustainability of the resource use.
Forests OP/BP 4.36	Yes	This policy is triggered as the investments focus on sustainable management and conservation of forests, including the management of non-timber forest products, and the facilitation of third-party forest certification. The ESMF will provide provisions for screening and scoping activities within the selected areas and incorporate measures to assess site-specific impacts of plantation and enrichment investments, as well as include management measures in line with the policy's provisions.
Pest Management OP 4.09	TBD	Agriculture, forest plantations, tree nurseries, and some timber and non-timber product processing could require insecticides, herbicides, or fungicides. If during ESMF preparation pesticide use is determined to be likely, whether or not the pesticides are procured with project funds, the policy will be triggered and the ESMF will include a Pest Management Plan template for use in the environmental assessments for the activities.
Physical Cultural Resources OP/BP 4.11	TBD	Since the project will not finance new infrastructure, the need to trigger this OP will be assessed during preparation, and mitigation and management



		measures will be included in the ESMF as appropriate. Nevertheless, mapping and protection of PCR will be incorporated in forest use planning in and in the selection, design and implementation of forest management plans and activities in the project.
Indigenous Peoples OP/BP 4.10	Yes	This policy is triggered because the main community beneficiaries will be from the provinces of Esmeraldas, Manabi, and Santa Elena. These areas comprise a significant number of indigenous peoples (IPs), Afro-Ecuadorian and Montuvio communities. As such, the project will incorporate safeguard measures related to OP 4.10 and will carry out a process of free and informed consultation to foster community support. An Indigenous Peoples Policy Framework (IPPF) will be prepared because specific areas and investments won't be clearly defined during preparation. In addition, a Social Assessment of the intervention areas will be carry out to inform the project particularly in relation to land tenure, social conflict, gender and socio-economic activities.
Involuntary Resettlement OP/BP 4.12	TBD	From a safeguard point of view and following FIP general operational guidelines, no involuntary resettlement of population or land acquisition will result from any activities financed by the project. As part of conservation efforts, the team will evaluate whether some conservation activities will restrict access to natural resources. This will be assessed during project preparation, and consulted with government counterparts and communities eligible for FIP funding. In the unlikely event that any possible restriction of access to natural resources is confirmed within and outside of protected areas, a Process Framework (PF) will be prepared to ensure compliance with the OP4.12.
Safety of Dams OP/BP 4.37	No	This policy is not triggered given that the project will not support the construction or rehabilitation of dams, nor will it support other investments which rely on the services of existing dams.
Projects on International Waterways OP/BP 7.50	No	This policy is not triggered because the project will not affect international waterways as defined under the policy.
Projects in Disputed Areas OP/BP 7.60	No	This policy should not be triggered because the proposed project will not affect disputed areas as defined under the policy.



### **E. Safeguard Preparation Plan**

Tentative target date for preparing the Appraisal Stage PID/ISDS

Sep 13, 2019

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

Launch of the studies is expected in December 2018, completion by September 2019.

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**APPROVAL**

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