INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT OF US$100 MILLION

TO THE

REPUBLIC OF COLOMBIA

FOR THE

COLOMBIA MULTIPURPOSE CADASTER PROJECT

February 21, 2019

Social, Urban, Rural and Resilience Global Practice
Latin America and the Caribbean Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective January 31, 2019)

Currency Unit = Colombian Peso

3,163.46 = US$1

US$0.00032 = COP 1

GOVERNMENT FISCAL YEAR
January 1 - December 31

Regional Vice President: Axel van Trotsenburg
Country Director: Ulrich Zachau
Senior Global Practice Director: Ede Jorge Ijjasz-Vásquez
Practice Manager: Jorge A. Muñoz
Task Team Leader(s): Ivonne Moreno; Victoria Stanley
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>ANT</td>
<td>National Land Agency – Agencia Nacional de Tierras</td>
</tr>
<tr>
<td>APC</td>
<td>Presidential Agency for Cooperation – Agencia Presidencial para la Cooperación</td>
</tr>
<tr>
<td>ART</td>
<td>Agency for Territorial Renewal – Agencia de Renovación del Territorio</td>
</tr>
<tr>
<td>CONPES</td>
<td>National Council for Economic and Social Policy – Consejo Nacional de Política Económica y Social</td>
</tr>
<tr>
<td>CPE</td>
<td>Country Partnership Framework</td>
</tr>
<tr>
<td>DANE</td>
<td>National Administrative Department of Statistics – Departamento Administrativo Nacional de Estadística</td>
</tr>
<tr>
<td>DAPRE</td>
<td>Office of the President of the Republic – Departamento Administrativo de la Presidencia de la República</td>
</tr>
<tr>
<td>DNP</td>
<td>National Planning Department – Departamento Nacional de Planeación</td>
</tr>
<tr>
<td>DPL</td>
<td>Development Policy Loan</td>
</tr>
<tr>
<td>ESMF</td>
<td>Environmental and Social Management Framework</td>
</tr>
<tr>
<td>FAO</td>
<td>UN Food and Agriculture Organization</td>
</tr>
<tr>
<td>FCP</td>
<td>Colombia Peace Fund – Fondo Colombia en Paz</td>
</tr>
<tr>
<td>FMA</td>
<td>Financial Management Assessment</td>
</tr>
<tr>
<td>GoC</td>
<td>Government of Colombia</td>
</tr>
<tr>
<td>GRM</td>
<td>Grievance Redress Mechanism</td>
</tr>
<tr>
<td>IDB</td>
<td>Inter-American Development Bank</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>IFRs</td>
<td>Interim Financial Reports</td>
</tr>
<tr>
<td>IGAC</td>
<td>Geographic Institute Agustin Codazzi – Instituto Geográfico Agustín Codazzi</td>
</tr>
<tr>
<td>IPF</td>
<td>Investment Project Financing</td>
</tr>
<tr>
<td>IPP</td>
<td>Indigenous Peoples Plan</td>
</tr>
<tr>
<td>IRR</td>
<td>Internal Rate of Return</td>
</tr>
<tr>
<td>IS</td>
<td>Implementation Support</td>
</tr>
<tr>
<td>ISR</td>
<td>Implementation Status and Results Report</td>
</tr>
<tr>
<td>MADR</td>
<td>Ministry of Agriculture and Rural Development – Ministerio de Agricultura y Desarrollo Rural</td>
</tr>
<tr>
<td>MJ</td>
<td>Ministry of Justice and Law – Ministerio de Justicia y del Derecho</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>NDP</td>
<td>National Development Plan</td>
</tr>
<tr>
<td>NPV</td>
<td>Net Present Value</td>
</tr>
<tr>
<td>NSDI/ICDE</td>
<td>National Spatial Data Infrastructure - Infraestructura Colombiana de Datos Espaciales</td>
</tr>
<tr>
<td>OP/BP</td>
<td>Operational Policy/Bank Procedures</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>POT</td>
<td>Municipal Land Use Plans – Planes de Ordenamiento Territorial</td>
</tr>
<tr>
<td>PCU</td>
<td>Project Coordination Unit</td>
</tr>
<tr>
<td>SIIF</td>
<td>Integrated Financial Information System – SIIF Nación, Sistema Integrado de Información Financiera</td>
</tr>
<tr>
<td>SCD</td>
<td>Systematic Country Diagnostic</td>
</tr>
<tr>
<td>SECO</td>
<td>State Secretariat for Economic Affairs – Switzerland</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>SNC</td>
<td>National Cadastral Information System – <em>Sistema Nacional Catastral</em></td>
</tr>
<tr>
<td>SNR</td>
<td>Superintendent of Notaries and Registries – <em>Superintendencia de Notariado y Registro</em></td>
</tr>
<tr>
<td>TA</td>
<td>Technical Assistance</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Program</td>
</tr>
<tr>
<td>UPRA</td>
<td>Unit of Rural Agricultural Planning – <em>Unidad de Planificación Rural Agropecuaria</em></td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
</tr>
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</table>
BASIC INFORMATION

<table>
<thead>
<tr>
<th>Country(ies)</th>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colombia</td>
<td>Multipurpose Cadaster Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Project ID</th>
<th>Financing Instrument</th>
<th>Environmental Assessment Category</th>
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</thead>
<tbody>
<tr>
<td>P162594</td>
<td>Investment Project Financing</td>
<td>B-Partial Assessment</td>
</tr>
</tbody>
</table>

**Financing & Implementation Modalities**

- [ ] Multiphase Programmatic Approach (MPA)
- [ ] Series of Projects (SOP)
- [ ] Contingent Emergency Response Component (CERC)
- [ ] Disbursement-linked Indicators (DLIs)
- [ ] Financial Intermediaries (FI)
- [ ] Fragile State(s)
- [ ] Small State(s)
- [ ] Series of Projects (SOP)
- [ ] Fragile within a non-fragile Country
- [ ] Financial Intermediaries (FI)
- [ ] Conflict
- [ ] Deferred Drawdown
- [ ] Responding to Natural or Man-made Disaster
- [ ] Alternate Procurement Arrangements (APA)

**Expected Approval Date**

14-Mar-2019

**Expected Closing Date**

31-Jan-2025

Bank/IFC Collaboration

No

**Proposed Development Objective(s)**

The Project Development Objective is to establish the multipurpose cadaster in the selected municipalities to a) strengthen tenure security, and b) provide access to cadaster information.

**Components**
## Component Name

<table>
<thead>
<tr>
<th>Component Name</th>
<th>Cost (US$, millions)</th>
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<tbody>
<tr>
<td>Institutional Strengthening</td>
<td>1.97</td>
</tr>
<tr>
<td>ICT Development and Strengthening of the National Spatial Data Infrastructure</td>
<td>25.06</td>
</tr>
<tr>
<td>Implementation and Maintenance of the Multipurpose Cadastre</td>
<td>65.47</td>
</tr>
<tr>
<td>Project Management</td>
<td>7.50</td>
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## Organizations

**Borrower:** Ministerio de Hacienda y Credit Publico  
**Implementing Agency:**  
- Departamento Nacional de Planeacion  
- Agencia Nacional de Tierras (ANT)  
- Superintendencia de Notariado y Registro (SNR)  
- Instituto Geográfico Agustín Codazzi (IGAC)

## PROJECT FINANCING DATA (US$, Millions)

### SUMMARY

<table>
<thead>
<tr>
<th>Summary</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Total Project Cost</td>
<td>100.00</td>
</tr>
<tr>
<td>Total Financing</td>
<td>100.00</td>
</tr>
<tr>
<td>of which IBRD/IDA</td>
<td>100.00</td>
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<tr>
<td>Financing Gap</td>
<td>0.00</td>
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### DETAILS

#### World Bank Group Financing

| International Bank for Reconstruction and Development (IBRD) | 100.00 |

#### Expected Disbursements (in US$, Millions)

<table>
<thead>
<tr>
<th>WB Fiscal Year</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
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<tbody>
<tr>
<td>Annual</td>
<td>0.55</td>
<td>5.38</td>
<td>7.57</td>
<td>12.55</td>
<td>22.71</td>
<td>29.83</td>
<td>21.41</td>
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<tr>
<td>Cumulative</td>
<td>0.55</td>
<td>5.93</td>
<td>13.50</td>
<td>26.05</td>
<td>48.75</td>
<td>78.59</td>
<td>100.00</td>
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### INSTITUTIONAL DATA

**Practice Area (Lead)**
Social, Urban, Rural and Resilience Global Practice

**Contributing Practice Areas**

<table>
<thead>
<tr>
<th>Practice Area</th>
</tr>
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<tbody>
<tr>
<td>Social, Urban, Rural and Resilience Global Practice</td>
</tr>
</tbody>
</table>

**Climate Change and Disaster Screening**

This operation has been screened for short and long-term climate change and disaster risks

### Gender Tag

**Does the project plan to undertake any of the following?**

- **a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF**
  - Yes

- **b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment**
  - Yes

- **c. Include Indicators in results framework to monitor outcomes from actions identified in (b)**
  - Yes

### SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Rating</th>
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<tbody>
<tr>
<td>1. Political and Governance</td>
<td>Moderate</td>
</tr>
<tr>
<td>2. Macroeconomic</td>
<td>Moderate</td>
</tr>
<tr>
<td>3. Sector Strategies and Policies</td>
<td>Substantial</td>
</tr>
<tr>
<td>4. Technical Design of Project or Program</td>
<td>High</td>
</tr>
<tr>
<td>5. Institutional Capacity for Implementation and Sustainability</td>
<td>High</td>
</tr>
<tr>
<td>6. Fiduciary</td>
<td>Substantial</td>
</tr>
<tr>
<td>7. Environment and Social</td>
<td>High</td>
</tr>
<tr>
<td>8. Stakeholders</td>
<td>Substantial</td>
</tr>
<tr>
<td>9. Other</td>
<td></td>
</tr>
<tr>
<td>10. Overall</td>
<td>High</td>
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</table>
COMPLIANCE

Policy
Does the project depart from the CPF in content or in other significant respects?
[ ] Yes  [✓] No

Does the project require any waivers of Bank policies?
[ ] Yes  [✓] No

Safeguard Policies Triggered by the Project

<table>
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<tr>
<th>Policy</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>✓</td>
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</tr>
<tr>
<td>Performance Standards for Private Sector Activities OP/BP 4.03</td>
<td>✓</td>
<td></td>
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<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>✓</td>
<td></td>
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<tr>
<td>Forests OP/BP 4.36</td>
<td>✓</td>
<td></td>
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<tr>
<td>Pest Management OP 4.09</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>✓</td>
<td></td>
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<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>✓</td>
<td></td>
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<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Safety of Dams OP/BP 4.37</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Legal Covenants

Sections and Description
Schedule 2, Section IV. A. The Borrower through IGAC shall, no later than six (6) months from the Signing Date, approve simplified regulations for cadastral surveying, satisfactory to the Bank.

Sections and Description
Schedule 2, Section IV. B. The Borrower, through ANT, shall, no later than six (6) months from the Signing Date, approve, within its institutional competence, simplified regulations or procedures for land tenure formalization, satisfactory to the Bank.

Sections and Description
Schedule 2, Section I. A. 1 (a) Up to ninety (90) days after Effective Date, create and maintain, throughout Project
implementation, a Project Director and Project Coordination Unit (PCU) with staffing and functions set forth in the Operational Manual

Sections and Description
Schedule 2, Section I. D. 3. Not later than thirty (30) days after Effective Date, the Borrower shall adopt the Operational Manual in a manner and with contents acceptable to the Bank.

Sections and Description
Schedule 2, Section I. A. 1 (b) Create and maintain, throughout Project implementation: (i) Management Units (MU) within IGAC, ANT and SNR, with staffing and functions set forth in the Operational Manual;

Sections and Description
Schedule 2, Section I. A. 1 (c) Create and maintain, throughout Project implementation the Project Steering Committee, with composition and functions set forth in the Operational Manual.

Sections and Description
Schedule 2, Section I. A. 1 (d) Create and maintain, throughout Project implementation the Project Technical Committee, with composition and functions set forth in the Operational Manual.

**Conditions**

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
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<tbody>
<tr>
<td>Effectiveness</td>
<td>Article IV. 4.01 The Inter-Institutional Agreement has been duly executed by the Project Implementing Entities</td>
</tr>
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I. STRATEGIC CONTEXT

A. Country Context

1. Colombia’s economy grew at an annual rate of 4.8 percent between 2002 and 2014, making it one of the best economic performers in Latin America. Sound macroeconomic policies and structural reforms contributed to sustained growth and investment inflows. Growth decelerated to an average of 2.3 percent between 2015 and 2017 but picked up in the second half of 2017. Growth is expected to strengthen gradually over 2018 to 2020, supported by higher oil prices, stronger private sector demand, and increased investment in infrastructure. Ongoing structural reforms will enhance competitiveness, foster diversification, and spur economic growth over the medium-term. Colombia’s sustained economic performance coupled with ongoing governance-related reforms led to an invitation by the Organization for Economic Cooperation and Development (OECD) in May of 2018 to become its 37th member.

2. Despite the country’s strong economic performance over the past decade, benefits have not been equally distributed and regional development gaps still pose a considerable challenge. Poverty rates in Colombia vary widely across regions from as high as 59.3 percent in the Department of Chocó and 50.7 percent in the Department of Cauca, to as low as 8 percent in the Department of Santander and 7.3 percent in the Department of Cundinamarca. Extreme poverty in rural areas is over three times as high as in urban areas, and moderate poverty in rural areas is 50 percent higher than in urban areas. Significant differences persist in access to essential services between rural and urban areas. According to the Gran Encuesta Integrada de Hogares (Integrated Household Survey) of 2015, the percentage of households in which at least one member is illiterate is more than three times higher in rural areas than in urban areas and only 21 percent of people living in rural areas have finished middle school. In urban areas, 97 out of 100 people have access to drinking water while in rural areas only 74 out of 100 people have access. Similar patterns exist concerning sanitation services: in urban areas, 85.2 percent of households have access while in rural areas the figure is only 67.9 percent.

3. The country’s rugged topography has also contributed to regional imbalances, all of which are reflected in poor transport and communication infrastructure. Finally, the five-decade armed conflict exacerbated regional imbalances and limited the effectiveness of government institutions to deliver multiple public services and support for rural development.

4. Climate change represents an additional hurdle towards regional equality. The majority of the population resides in two areas: the elevated Andes where water shortages and land degradation already pose a threat, and in the coastal areas where the expected increase in sea level and floods will affect human settlements and economic activities. In addition, the country has a high incidence of extreme weather and disasters associated with climate conditions and vulnerability1, compared with its peers. It has the world’s 10th highest economic risk of two or more hazards, including both low-frequency/high-impact events, such as earthquakes, Pacific tsunamis, volcanic eruptions, and occasional Atlantic hurricanes, and high-frequency but lower impact events, such as floods and landslides. Colombia also has Latin America’s highest rate of recurrent events, with an average of more than 600 reported disasters.

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each year. For example, the 2010-11 La Niña phenomenon that is recurring with increasing frequency affected 3.2 million people and two-thirds of the nation’s farmers. Economic losses were up to US$1.1 billion (0.4 percent PIB-2010) and the total damage was estimated at US$6.1 billion. Among the most affected areas were housing (44 percent), infrastructure (38 percent), social services (11 percent), and productive sectors (7 percent). Total losses over the past ten years were the fourth highest in Latin America, after Haiti, Cuba, and Brazil. The natural disaster risks of flooding, drought, storms and sea level rise are likely to worsen with climate change. Between 1998 and 2011, 90 percent of natural disasters in Colombia were related to climate.\(^2\)

B. Sectoral and Institutional Context

5. Regional imbalances also impact land rights and tenure security, as only 36 percent of rural households have formal titles. Today, there is no cadastral record for 28 percent of the Colombian territory, and where information is available, it is usually outdated. Information is not thoroughly systematized, common technical standards for cadastral surveying are non-existent, and cartography lacks the required scale for parcel identification, planning, and prioritization of investments for 59 percent of the Colombian territory. Also, since cadastral data has traditionally been used for tax collection purposes, relevant information that could be useful for enhancing tenure security and improving land use planning (e.g., ownership, land use) is limited. In small and medium-sized municipalities, land values are substantially out of date, contributing to a lack of revenue from property tax collection.

6. In addition, it is estimated that approximately 60 percent of rural land is held informally.\(^3\) Land tenure informality (lack of titles) and the lack of up-to-date cadastral information pose a significant obstacle to economic activity, limit access to credit, curb productive investment, and limit tax revenue. Land tenure informality also impacts agricultural growth and productivity. The OECD’s Agricultural Review highlighted the agricultural sector’s considerable contribution to economic growth and poverty reduction, and the critical role an up-to-date cadaster can play for the sector. Considering this, Colombia has decided to implement the following OECD recommendations: accelerating the registration of land rights; adjusting the sequencing of land market transactions between registration and cadaster; simplifying the land tenure system, and clearly defining the mandates of the different land management government entities; and strengthening and improving the land tax system.

7. The Government of Colombia (GoC) National Council of Economic Policy (Consejo Nacional de Política Económica y Social - CONPES) approved CONPES Document No. 3859 on June 13, 2016, which mandates the creation of the multipurpose cadaster. Two aspects of this policy are of particular relevance: (i) the process for the creation of the cadaster will be scaled up from several regions to the whole country and, (ii) the data collected through this Project will provide the necessary information on parcels, rights and land values that will be critical for future planning. A fully functional, updated multi-purpose cadaster will generate significant benefits, particularly during the years following the signing of the Peace Accord.\(^4\)

\(^2\) World Bank, Colombia Systematic Country Diagnostic  
\(^3\) CONPES 3951, 26 November 2018.  
\(^4\) In December 2016, the Colombian Congress ratified a historic peace agreement between the Colombian State and the
The multi-purpose cadaster is also a critical element for territorial and land use planning, formalization of land tenure, municipal property taxation, sustainable land management for climate change mitigation and adaptation, and for directing public investments. In particular, the multipurpose cadaster will support adapting to climate change and its impacts on land degradation, water quality and agricultural production.5

8. Between 2017 and 2018 the National Planning Department (DNP) carried out seven cadaster pilots in an equal number of municipalities. The objective of these pilots was to provide information and lessons learned for the subsequent national level implementation of the multipurpose cadaster between 2019 and 2025. These pilots provided the opportunity to test and evaluate a number of key elements including: (i) surveying methodology and standards; (ii) implementation mechanisms (including private sector participation and outsourcing possibilities); (iii) availability of information and variables to be included; and (iv) identification of the costs and measures to improve efficiency during a subsequent scaling-up phase. The lessons learned from these pilots are reflected in the Project’s design described in Annex 1.

C. Higher Level Objectives to which the Project Contributes

9. The World Bank Group’s Systematic Country Diagnostic (SCD) of 20156 for Colombia identified uneven territorial development as a key constraint, characterized by unfinished economic integration, including climate change, and persistent disparities in standards of living. These constraints have resulted in poor physical and social connectivity, weak local governance, vulnerability to natural disasters, and inequitable land ownership. All these factors are obstacles to economic growth, social inclusion, and sustainable development.

10. The World Bank Group’s Colombia Country Partnership Framework (No. 101552) (CPF) for 2016-21 consists of three pillars of engagement: (i) Fostering Balanced Territorial Development; (ii) Enhancing Social Inclusion and Mobility through Improved Service Delivery; and (iii) Supporting Fiscal Sustainability and Productivity. Cutting across all three pillars, the CPF aims to “Assist in Constructing the Peace.” Land rights and secure tenure cut across all three pillars and a proper functioning land administration system has the potential to contribute to balanced territorial development, social inclusion and fiscal sustainability (through a more complete tax base).

11. As reflected in the National Development Plan (NDP) and CONPES 3859, the GoC’s objective is to design and implement a complete, up-to-date, accurate, multi-purpose cadastral system to support land tenure formalization and property registration. Formal and secure land rights allow property holders to invest in their property, use it as collateral, and guarantee legal security.

12. Strengthening land tenure security through the implementation of the multipurpose cadaster and subsequent formalization and registration of the property title is directly in line with the World Bank

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Group’s twin goals of eliminating extreme poverty and boosting shared prosperity. Implementing the multipurpose cadaster and building a sustainable cadaster-registry, or land administration system, contributes to the CPF, the NDP and achieving the Bank’s overall development goals.

II. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

13. The Project Development Objective is to establish the multipurpose cadaster in the selected municipalities to a) strengthen tenure security, and b) provide access to cadaster information.

14. The PDO will be achieved by i) strengthening national and local level capacities for implementing the multipurpose cadaster at a national level; ii) creating a parcel-based land information system that allows interoperability under the ISO international standard - Land Administration Domain Model (LADM); iii) ensuring that cadastral processes are integrated with land tenure formalization services; iv) modernizing cadastral processes through decentralization, outsourcing, Unique Cadaster – Registry identification, and standardized procedures; v) ensuring an approach to implementation and community participation that is sensitive to women and indigenous and ethnic communities; and vi) guaranteeing sustainability by creating systems and capacity to maintain a record of market-based property transactions.

15. The Project will support local governments to access and use cadastral information for fiscal and land use planning purposes. The Project will also contribute to enhancing the capacity of cadaster, registration, and land rights institutions to provide services throughout the country and to make land property information available to all stakeholders.

B. Project Beneficiaries

16. The Project includes direct and indirect beneficiaries. Direct beneficiaries are individuals whose property rights are inventoried, formalized, and registered, including women, Afro-colombians and indigenous communities. The communities in which direct beneficiaries reside are also regarded as project beneficiaries. These communities will benefit from formalized property rights, accurate property valuation, increased tax revenue, and information for better land use planning. Indirect beneficiaries include government institutions, the private sector, and the public. These indirect beneficiaries will benefit from: improved access to a complete property information database; improved land tenure security for better land use and territorial planning; increased land property tax revenue; improved conditions for agricultural investment; and overall economic growth.

17. Specific institutional level beneficiaries include the National Planning Department (DNP) (which acts as the Project Coordinator), the Geographical Institute Agustin Codazzi (IGAC), the Superintendent of Notaries and Registries (SNR), the National Land Agency (ANT), and municipalities. These beneficiaries will benefit from being able to access the multi-purpose cadaster’s key data attributes and interoperability for uses related to land use planning, agriculture, soil protection, landslide prevention, restoration of

7 “Land Tenure Formalization” means Ordenamiento Social de la Propiedad Rural, to be understood as defined and regulated under the Borrower’s Decree 2363 of 2015, Decrease Law 902 of 2017 and ANT’s Resolution 740 of 2017.
degraded lands, and disaster risk management. Additionally, other institutions like the Ministry of Environment and Ministry of Agriculture will also benefit from access to this data.

18. The GoC has pre-selected a universe of 72 municipalities for the initial implementation. In turn, approximately 50 municipalities within this universe will be selected by the Project Steering Committee, according to the following factors: adequate security conditions, municipal administration’s readiness and willingness to participate, and the need to maintain territorial cohesion to allow for economies of scale.

C. PDO-Level Results Indicators

19. PDO Indicators
   a) to strengthen tenure security
      • Area in selected municipalities with up to date cadastral and registry data.
      • Number of persons with legal security of tenure (registered title), gender disaggregated with a target of approximately 40 percent titled in the name of women (joint or individual).
   b) to provide access to cadaster information
      • Number of municipalities with access to, and capacity to use, the multipurpose cadaster data for planning and other purposes.

III. PROJECT DESCRIPTION

A. Project Components

20. The Project will support GoC’s goal of implementing the multi-purpose cadaster. The Project has three technical components and a fourth directed at enhancing project management capabilities. Further details on the components can be found in Annex 1.

Component 1 – Institutional Strengthening (US$1.97 million)

21. The institutional framework in which the Project will be implemented is complex. Institutional mandates are distributed among various government agencies posing an important coordination challenge. This situation can affect leadership and the requisite inter-agency field level coordination. Component 1 will create the foundations for a functioning land administration system for maintaining cadaster information and the proper management of land as a productive asset. The capacity building activities in this component will contribute to climate adaptation efforts through strengthening national capacity for better land management.

22. The objectives of this component are (i) to strengthen the capacity of national land administration

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8 Selected municipalities meet the following criteria: exhibit low levels of institutional capacity, have outdated cadastral data, exhibit high levels of informal property rights, have outdated municipal land use plans (POTs), lack basic cartography, exhibit low levels of local land tax revenue, have low capacity for Disaster Risk Management and are often located within sub regions that were affected by the internal armed conflict.

9 Approximately 50 municipalities will be financed by the WB financing; another 22 will be financed by IDB. This number is based on detailed costing prepared for the project preparation, however the Project will hope to finance more municipalities within the available financial envelope as procedures are streamlined and capacity is built.
institutions involved in the implementation of the multipurpose cadaster and land tenure formalization, and (ii) to enable institutions to create a land administration system able to provide nationwide land administration services in a permanent and effective manner. The subcomponents under Component 1 focus on strengthening institutional capacities at the national level (DNP, ANT, SNR, and IGAC).

Subcomponent 1.1. Institutional strengthening for National Level entities including the development of the value chain for systematic cadaster, land titling and registration.
Subcomponent 1.2. Institutional strengthening for improving cartographic and cadastral capabilities (including quality assurance) in IGAC.
Subcomponent 1.3. Institutional Strengthening for SNR in terms of property registry data management.
Subcomponent 1.4 Institutional strengthening for ANT to deliver rural land tenure formalization services.

Component 2 - ICT Development and Strengthening of the National Spatial Data Infrastructure (US$25.06 million)

23. Colombia has several parcel-based land information systems with duplicated, redundant, and fragmented data. For the new systematic multipurpose cadaster, the GoC intends to create a Cadaster-Registry Master Data Repository under the existing Colombian profile of the Land Administration Domain Model LADM-COL (ISO 19152: 2012) and strengthen the ICT capabilities of ANT, SNR, and IGAC.

24. The objectives of this component are to (i) support the development of the necessary ICT infrastructure of IGAC, SNR and ANT for the implementation of the multipurpose cadaster and the integration of the parcel-based cadaster and registry core datasets and (ii) strengthen the existing Colombian National Spatial Data Infrastructure (NSDI, Infraestructura Colombiana de Datos Espaciales - ICDE). The latter objective will be achieved by developing a governance structure for ICDE in areas like identification, storage, use, and exchange of geospatial and non-geospatial land data and services. The parcel-based data and services would be interoperable with climate-related information systems (Sistema Nacional de Gestión del Riesgo and Sistema Información Ambiental de Colombia), enabling adaptation and climate-smart territorial planning.

25. The subcomponents under Component 2 include:

Subcomponent 2.1. Strengthening IGAC’s ICT infrastructure and development of the Cadaster-Registry Master Data Repository.
Subcomponent 2.2. Strengthening SNR’s ICT infrastructure and testing of the Cadaster-Registry Master Data Repository.
Subcomponent 2.3. Strengthening ANT’s ICT infrastructure.
Subcomponent 2.4. Strengthening the Colombian Spatial Data Infrastructure (ICDE).

Component 3 – Implementation and Maintenance of the Multipurpose Cadaster (US$65.47 million)

26. The objective of this Component is to implement a multipurpose cadaster system that strengthens land tenure security, increases tax and fee revenue, and serves as an information resource for municipal and land use planning. This Component includes the following activities: i) carrying out a diagnosis of local
conditions and awareness-raising activities; ii) systematic recording of physical, legal, and economic information of each parcel through the implementation of a systematic cadaster survey (*barrido predial*); iii) uploading relevant data into a geo-referenced land information system; iv) establishing technical capacity in the selected municipalities to enable the use of cadastral information; and v) carrying out measures to promote the continued maintenance of this information and contribute to the formalization of the land market.

27. The systematic cadaster includes identifying informal land tenure rights on both private and public lands and the preparation of parcel files (*expedientes*) to be classified according to pre-established land tenure typologies. The competent GoC authorities will subsequently use parcel files to carry out the corresponding formalization and registration of informal land tenure rights. The systematic cadaster will focus on women’s land rights and include special procedures for indigenous and other ethnic communities in line with the existing legal framework. In addition to adaptation, cadastral services will provide mitigation benefits by contributing to better land management and tenure security is associated with higher investments and lower degradation of land in the agriculture sector. Land tenure will also enhance access to finance in case of climate related disasters.

28. The subcomponents under Component 3 include:

- Subcomponent 3.1. Land registry services and inputs.
- Subcomponent 3.2. Cadastral survey, including geodetic and cartographic requirements.
- Subcomponent 3.3. Land tenure formalization services.
- Subcomponent 3.4. Strengthening institutional capacities at local level.

**Component 4 – Project Management (US$7.50 million)**

29. The objective of this component is to support the implementing entities with coordination and management activities. This includes support for administrative procedures, financial management, procurement, monitoring and evaluation, safeguards supervision, and annual audits. This Component will also support building capacity of the entities to contract, manage and administer such a project. Each entity will be responsible for managing contracts and funding. However, a Project Coordination Unit (PCU) located at the DNP will be responsible for the overall supervision and coordination of project procurement, financial management, and safeguard activities, and for consolidated financial reporting, annual audits and monitoring and evaluation (including baseline survey and end of project evaluation). Subcomponents under Component 4 include:

- Subcomponent 4.1. DNP Project Coordination and Management
- Subcomponent 4.1. IGAC Project Management
- Subcomponent 4.1. SNR Project Management
- Subcomponent 4.1. ANT Project Management

**Crosscutting Activities**

30. **Gender.** Given the high level of informality in land ownership in Colombia, data is limited on gender patterns of ownership, however according to a recent evaluation of formalization programs in
Colombia, only 31 percent of beneficiaries of rural land titling were women.\textsuperscript{10} Based on the project preparation assessments, rural women face particular challenges in accessing land and are more vulnerable in general than men and women living in urban areas. This leads to the situation where a very small percentage of rural women formally own land and property. In many cases, rural women do not have the necessary documents or evidence to prove their rights as landholders nor are they aware of their land rights. Rural women are often in informal marriages, a status which may affect their right to property as a spouse. To close this gap, the Project includes the following activities that will be implemented in rural and urban areas:

a. As part of the planned dissemination and sensitization activities at the community level, there will be specific activities to inform women of their land and property related rights. The planned diagnostic stage will provide insights into the specific issues affecting women in each municipality and consider appropriate strategies to mitigate gender imbalances related to land and property rights.

b. The public awareness campaign will target men and women with a view to increase women’s participation in the land tenure formalization process and increase the recognition of their land rights.

c. Whenever possible, the Project will facilitate joint titling and registration of property rights for both members of a couple. Both members of the couple (regardless of marital status) are legally recognized as land rights holders (woman’s land and property rights are not derived from her husband’s rights). Specific guidance has been prepared to facilitate this process.

31. The effectiveness of these interventions will be monitored. An indicator on the number of women with title issued, either individually or jointly (to both the man and woman in the household, regardless of marital status) has been included in the project’s results framework to monitor progress in closing this gap. The baseline, mid-term, and final project evaluation will also track the level of women and men’s awareness of their land rights and their understanding of joint titling activities.

32. \textbf{Citizen engagement.} Based on lessons learned from the cadaster pilots and earlier land tenure formalization exercises, the Project will include a communications strategy and specific assessments at the community level to raise awareness and promote the active participation of beneficiaries. This strategy takes into consideration gender, ethnic, and cultural considerations. Past experience from peace stabilization situations indicate that securing land rights and land tenure formalization should have strong community involvement. In addition, lessons learned from the cadaster pilots implemented by the GoC showed that active local community understanding of, and involvement in, the cadaster and land tenure formalization processes are necessary to ensure success. Community engagement will continue under implementation with the diagnostic process and definition of the strategy for local community participation and communication all under Component 3. An indicator on client satisfaction with the multipurpose cadaster process is included in the results framework.

33. \textbf{Climate Co-Benefits.} As mentioned in the SCD and CPF, Colombia is highly vulnerable to natural hazards. This condition poses significant challenges for social and economic development. Eighty-six percent of the country’s population live in areas of high and medium seismic activity, 28 percent are in

\textsuperscript{10} Evaluación del Instrumento de Titulación de Baldíos a Familias Campesinas, DNP, 2016
areas exposed to flooding, and 31 percent are in high and medium landslide risks. In the past decades, Colombia suffered extreme natural disasters that resulted in considerable human and economic losses. The country’s vulnerability to natural disasters is related to insufficient land use planning and management and inadequately planned urban growth. Climate models predict that climate change will increase the number of floods, droughts, storms, rise in sea levels, and extreme weather-related events. The recently launched “National Climate Change Policy,”11 created an inter-sectoral committee for climate change, which groups national level entities to oversee the implementation of long-term public policies to mitigate climate change. DNP along with key ministries are members of this Committee. Of relevance to the Project is the policy’s recognition of the social and economic implications of climate change. Furthermore, this Policy mandates incorporating climate change consideration into land planning exercises at the territorial level.

34. Intense deforestation is mostly present in municipalities that were affected by the armed conflict or where unregulated agricultural activity and livestock grazing still take place. Estimates show that environmental degradation in Colombia (including deforestation and forest degradation) represent losses equivalent to 3.7 percent of GDP.12 Agricultural activities (including illicit crop cultivation) and cattle grazing are the leading causes of deforestation. Conflict and deforestation are closely linked to the access and control of land. Secure tenure and secure access to natural resources are essential elements for decreasing deforestation and achieving sustainable environmental management and economic development goals. Increased tenure security can reduce illegal deforestation, degradation of rural landscapes, greenhouse emissions, and improve agricultural productivity. Increased tenure security generates many benefits including incentives for landholders to adopt long-term land use practices that lead to sustainable land management.

35. The Subcomponents that contribute to climate change mitigation and adaptation are:
   a. Component 1: The capacity building activities in this component will contribute to climate adaptation efforts through strengthening national capacities for better land management.
   b. Subcomponent 2.4. - Strengthening of the Colombian National Spatial Data Infrastructure (ICDE) that is essential for the distribution of all spatial data (land cadaster, land use, land use regulations, national protected areas, disaster analysis, etc.) across government. Parcel-based data and services would be interoperable with climate-related information systems (Sistema Nacional de Gestión del Riesgo and Sistema Información Ambiental de Colombia), enabling adaptation and climate-smart territorial planning.
   c. Component 3 - In addition to adaptation, cadastral services will provide mitigation benefits by contributing to better land management and tenure security is associated with higher investments and lower degradation of land in the agriculture sector. Land tenure will also enhance access to finance in case of climate related disasters. More specifically,
      i. Subcomponent 3.2 - Establishing the systematic multipurpose cadaster will enable the creation of a geographically referenced land information system that

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is needed for resilient land use and disaster risk planning. Cadastral surveying activities will also provide the necessary inputs for the implementation of other policies including soil protection, landslide prevention, and restoration of degraded lands at the national and municipal levels.

ii. Subcomponent 3.3. - Land tenure formalization services. Under the current Colombian legal framework (Decreto Ley 902/2017), land tenure formalization initiatives must incorporate environmental considerations to avoid deforestation or any other natural ecosystem transformation; and,

iii. Subcomponent 3.4. - Providing technical assistance to municipalities in the use of land and cadastral information for fiscal purposes, resilient land use planning, disaster risk management, and investment management.

B. Project Cost and Financing

36. The lending instrument for the proposed loan is an Investment Project Financing (IPF) in the amount of US$100 million. The overall project cost is estimated at US$150 million. The budget breakdown is: US$100 million from IBRD and US$50 million from the Inter-American Development Bank (IDB) through a parallel financing operation. IDB financing will be destined to interventions in different municipalities than those intervened under WB financing.

<table>
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<tr>
<th>Project Components</th>
<th>Project cost (US$ million)</th>
<th>IBRD or IDA Financing (US$ million)</th>
<th>Trust Funds (US$ million)</th>
<th>Parallel Financing IDB (US$ million)</th>
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</table>
C. Lessons Learned

37. The Bank has several years of experience working on land issues in Colombia. Past experience includes the Protection of Patrimony of IDPs Project in 2002, the Bank’s support to the Land Restitution Unit from 2012 to 2014 (P115630), and the Technical Assistance Project (P160524) that supported the land tenure pilots for the Multipurpose Cadaster. While technical capacity in Colombia is high, institutional fragmentation and lack of inter-agency coordination are pervasive throughout the country’s public administration apparatus. There will be a need for strong coordination and a focused technical coordination for fieldwork under Component 3. Cadaster and formalization activities involve multiple agencies. The Project will require clear leadership but also effective collaboration and coordination among implementing entities. Clear inter-agency protocols have been designed, along with appropriate processes for supervision and quality control. DNP will sign an inter-institutional agreement with the key participating agencies (IGAC, SRN, ANT) to further define roles and responsibilities. DNP will also sign similar agreements with municipalities included in the Project, to ensure their full collaboration.

38. Other similar projects in the region have demonstrated the importance of ensuring broad community support through awareness-raising campaigns and involving the community in land tenure formalization processes. Consultations and participation with the community should rely on already existing structures and organizations. For this, clear methodologies should be used to ensure that consultations adequately consider sociocultural values and the views of beneficiary communities. Additionally, differentiated approaches for women and ethnic communities should be incorporated throughout project implementation. A conflict resolution team is planned for fieldwork phase in Component 3 and will be informed by additional assessments under the Cadaster TA Project. Key activities to support community participation will be implemented under Component 3, including community need’s diagnosis and community awareness raising and outreach.

39. Another lesson learned from international experience is the importance of creating a land administration system to maintain the information from systematic campaigns and its role in developing a formal land market. Without a functioning land administration system that is accessible, affordable, and efficient, many landowners will continue to buy and sell through informal channels. This leads to a situation where property data becomes outdated and is of limited use to government, public, and private entities. The creation of a land administration system requires proper information systems and an enabling environment with adequately designed policies and procedures, and institutions. This involves a system that can adequately maintain and process data on properties, owners, and property value among others. Component 3 includes activities to facilitate the maintenance of data.

40. The multipurpose cadaster pilots were implemented between 2017 and 2018. The main lessons learned have been incorporated into the Project’s rollout phase design:

a. Simplify procedures and focus on achieving results rather than on processes. No cadastral standards or tenure formalization methodologies should be overly complex.

b. IGAC’s information system should be updated to be consistent with the LADM-COL model.

c. Political will and strong leadership are key aspects of effective project management. Setting regular inter-institutional meetings to make decisions regarding strategic, technical and operational aspects among participating entities is essential but insufficient, to guarantee
common objectives. Strong leadership will be required and should be accountable for achieving time bound targets.

d. Part of the operational capacity needed for field level interventions can be outsourced. It is important to clearly define what is to be outsourced, the level of quality expected (verification parameters) and who has responsibility for quality assurance and quality control. Equally important is to set clear terms of reference that divide activities into phases like geodetic network implementation, mapping, and massive land field work for cadastral purposes.

e. Data maintenance should reflect market transactions and the GOC should set-up the institutional and ICT infrastructure. There should be incentives to promote the continued maintenance of the information ultimately contributing to the formalization of the land market and securing land tenure rights.

f. Active local community understanding of and involvement in the land tenure formalization process and the Multipurpose Cadaster is necessary to ensure success. A coherent targeting of interventions at the municipal or regional level will have to include considerations of cost, access, physical security, and infrastructure, and other logistics and operational requirements for large-scale cadaster survey, such as setting up offices, availability of qualified personnel, access to communications, and transportation costs.

IV. IMPLEMENTATION

A. Institutional and Implementation Arrangements

41. **Steering Committee (Comité Directivo)** is comprised of representatives from the Office of the President of the Republic (Departamento Administrativo de la Presidencia de la República - DAPRE), Fondo Colombiana en Paz, the National Department of Statistics (Departamento Administrativo Nacional de Estadística - DANE), the Ministry of Justice (Ministerio de Justicia, MJ), Ministry of Agriculture and Rural Development (Ministerio de Agricultura y Desarrollo Rural - MADR), and DNP, which acts as chair. DANE, MADR, and MJ are the institutions under which IGAC, ANT, and SNR, respectively, are located within Colombia’s government structure. The Steering Committee provides guidance, oversight, and is responsible for deciding the municipalities in which the Project will be implemented, based on the agreed criteria.\(^{13}\)

42. **Project Director.** DNP’s Territorial Development Sub-Director will chair the Steering Committee and act as the Project Director. He/she will lead the inter-institutional coordination, act as the GoC representative to the Bank and other stakeholders and ensure that instructions from the Steering Committee are implemented. The PCU will be under the direction of DNP’s General Territorial Development Department.

43. **Technical Committee (Mesa Técnica de Coordinación)** is under the Steering Committee and is comprised of representatives of DNP, ANT, IGAC, and SNR.\(^{14}\) The Technical Committee will be chaired by the PCU Coordinator. Per the guidelines of the Annual Operational Plan (AOP), the Committee will be responsible for inter institutional technical planning and for technical and operational monitoring.

\(^{13}\) Adequate security conditions, municipal administration’s readiness and willingness to participate, and the need to maintain territorial cohesion to allow for economies of scale.

\(^{14}\) The Agency for Territorial Renewal (Agencia de Renovación del Territorio, ART) is a permanent invitee of the Committee with voice but not vote.
44. **Project Coordination Unit (PCU) at DNP.** The PCU will be led by a Project Coordinator and is comprised of the following members: i) Deputy Director of the Decentralization and Fiscal Revenue Department (a staff member of DNP), ii) technical coordinator, iii) administrative coordinator, iv) ICT coordinator, and v) safeguards coordinator (all hired as consultants under the Project). The PCU will coordinate inter-institutional project implementation, ensure compliance of safeguards, carry out overall monitoring and evaluation, and oversee fieldwork activities. The PCU will also coordinate overall technical, administrative, safeguards and M&E aspects with each of the implementing entities (IGAC, ANT, SNR). The principles of this inter-institutional coordination are contained in an Inter-Institutional Agreement to be signed by all four entities (ANT, DNP, IGAC and SNR) by effectiveness. The Inter-Institutional Agreement describes the implementation arrangements, flow of funds, fiduciary aspects, safeguard compliance, and monitoring and evaluation. These aspects are further detailed in the Project Operational Manual. Both documents have been prepared and reviewed by the Bank and are substantially complete.

45. **Entity Management Units.** The Project will be implemented by the four entities under the overall coordination of DNP. Each entity (IGAC, SNR, ANT) will have a Management Unit comprised of, at a minimum, the following participants: technical, administrative and M&E specialists. Additionally, IGAC and ANT will have safeguards specialists who will be coordinated by DNP’s safeguard specialist. These Management Units will be responsible for budget execution, preparation of TORs and specifications, evaluation of bids, managing contracts, and evaluating third party deliverables.

46. **Flow and control of funds, and financial management.** DNP, IGAC, SNR and ANT are responsible for managing the project funds transferred to them. DNP will be responsible for consolidating financial information from all the implementing entities for project reporting. The implementing entities will create a budget sub-unit within the Integrated Financial Information System – SIIF Nación Sistema Integrado de Información Financiera - and carry out a budget breakdown by component. Based on the Procurement Plan each entity will: i) agree on a schedule of payments with the WB; ii) project a cash flow; and iii) submit disbursement requests.

47. **Operation in the field.** The Project will have significant activities and operations at the territorial level – municipalities, regions, etc. – in particular under Component 3. This territorial or field level operation has also been addressed in the Inter-Institutional Agreement and further detailed in the Operational Manual. In addition, all municipalities that participate in the Project will sign a Memorandum of Understanding (MOU) with DNP that will clarify roles and responsibilities of the entities and the municipality. For further information please see Annex 2.

**B. Results Monitoring and Evaluation**

48. A robust monitoring and evaluation (M&E) system will be needed for the Project to manage both outputs and outcomes. CONPES 3859 establishes the need for a monitoring system for the multipurpose cadaster led by DNP. The Project will have M&E specialists at DNP’s PCU responsible for overall reporting, and M&E specialists at ANT, IGAC, and SNR for self-monitoring at each institution. IGAC’S, SNR’S and ANT’S management systems may require some upgrades to produce information on the efficiency and effectiveness of the processes on a regular basis. The need for evaluating the results and impacts of the Multipurpose Cadaster will require a well-identified baseline. Within year one of implementation, the
Project will finance a study to establish the baseline for key performance indicators included in the results framework. This study will include quantitative and qualitative data collection. Data will be collected from future beneficiaries, territorial entities, and implementing institutions. Follow-up quantitative and qualitative surveys will be carried out during the mid-term and final project evaluation. The results of the midterm survey will be incorporated into the project activities in order to continuously improve processes. The PCU will be required to provide the Bank with quarterly progress reports. The Project will finance a final evaluation to assess project performance and to provide recommendations and actions for further improvement to the multipurpose cadaster process and the expansion of registration services.

C. Sustainability

49. The GoC has the necessary policies, institutions, and laws for implementing the multipurpose cadaster. Component 1 is designed to increase the capacity of land institutions so that citizens have permanent access to affordable and accessible land administration services. Component 2 will build the necessary ICT systems and Component 3 will develop processes, procedures, manuals, and systems for the continued rollout of the multipurpose cadaster.

50. Components 1 and 3 will also begin the process of building a land administration system in Colombia. The maintenance of property data (location, rights, and values) is done successfully around the world through the market (information is recorded as property transactions take place). Market transactions can also provide data on sales prices that can be used as part of a property valuation model. For market transactions to support the updating of the multipurpose cadaster, the necessary institutional arrangements must be in place. Additionally, clear, affordable and efficient standardized processes and procedures, and a system that is physically accessible to citizens are needed.

51. Under Component 1 several strategies will be developed to support further decentralization of the cadaster in municipalities with sufficient management capacity. Under Component 3, the municipalities targeted for the multipurpose cadaster will be given training and other support to be able to use the data from the multipurpose cadaster for land use planning and property taxation. Memoranda of Understanding (MOU) or another type of agreement will be signed between the national government and the municipalities involved in the Project to ensure municipal buy-in, promote participation, and foster sustainability (particularly between alternating administrations.).

D. Role of Partners

52. The Bank has a broad portfolio in Colombia, and there are a number of projects under preparation or implementation that are relevant to the multipurpose cadaster including, but not limited to, the Subnational Institutional Strengthening Project (under implementation) and the Orinoquia Sustainable Landscapes Project. To the extent possible, the Subnational Project and the Multipurpose Cadaster Project will overlap in a select number of municipalities to build upon the capacity and systems implemented in those municipalities with cadaster information and capacity development. The Project is also coordinating with the International Finance Corporation (IFC) which has interests in agribusiness investments and where the Project will try to ensure some overlap of municipalities with interest for potential investment.
53. The Inter-American Development Bank (IDB) is providing US$50 million in parallel financing for the Multi-Purpose Cadaster Program. The Bank is working closely with the IDB to ensure proper coordination. However, the Project can be implemented independently of the IDB financing. The IDB and the Bank will finance interventions using the same methodologies in different geographic areas for the implementation of Component 3. Both Banks have also coordinated safeguard and fiduciary assessments to reduce the burden on the GoC and ensure a consistent approach.

54. The GoC’s Presidential International Cooperation Agency (Agencia Presidencial para la Cooperación - APC) is responsible for coordinating, strengthening, and aligning the different donors’ initiatives. There are several interested donors already involved including USAID, Switzerland (Swiss Economic Cooperation – SECO), Sweden, the Netherlands, Spain, and France, and others may become involved. USAID financed a systematic cadaster and registration pilot in the municipality of Ovejas, which focused on land tenure formalization (the lessons learned from this pilot will be important for the Project and are being incorporated under Component 3). Sweden is financing the TA for the multipurpose cadaster pilots with additional human resources support from the Netherlands, Spain, and France. Sweden has agreed to finance a second phase TA to support the final preparation phase of the Project and the first year of implementation. Finally, SECO has been supporting the enhancement of Colombia’s spatial data infrastructure, the design of technical standards for the cadaster and the data model for cadaster-registry. Other donors are also interested in supporting the Multipurpose Cadaster in Colombia, therefore ongoing donor coordination will be essential for project implementation and this will be jointly managed by APC and DNP. The first donor coordination meetings took place in December 2016 and meetings continue bi-annually.

V. KEY RISKS

A. Overall Risk Rating and Explanation of Key Risks

55. Overall Risk rating is High. The “high” risk rating is necessary given the state of institutional fragmentation of land administration related entities and the level of land tenure informality. The Project design mitigates these risks where possible, but a systematic cadaster and land rights project will be complex to implement within the current operational context.

56. Sector Strategies and Policies Risk is Substantial. Historically, the focus of the cadaster has been on fiscal related aspects (i.e., property valuation). While property valuation is important for municipal finances, this has been done at the expense of maintaining a record of property rights, which is an essential element of a properly functioning market economy. The new sector policy for the multipurpose cadaster prioritizes a complete property cadaster (with information on parcels and rights) and mandates the collection of information on property values and the fiscal cadaster, where relevant (urban areas). However, this is a new policy and the pilots have demonstrated it is complex and difficult to implement. The lessons learned from the pilots are incorporated into the overall Project design, and in particular, the need to reduce the number of data sets to the minimum: physical, legal rights, value, and land use data.

57. Technical Design Risk is High. The proposed Project design not only focuses on the multipurpose cadaster but also on addressing rights and security of land tenure. The goal is to formalize as many parcels as possible under the existing legal framework. The current procedures for both cadaster and
formalization are complex, also impacting the speed of the pilots. The Project’s design builds on the experience of the pilots and global experience with cadaster land tenure formalization. The systematic work will start in a few municipalities and continue to expand. However, the Project’s design is flexible to allow for subsequent modifications as the systematic work progresses. Also, coordination in the field of this systematic work presents high risk as demonstrated by the slow implementation of the pilots.

58. As Mitigation Measures the Bank has developed the Colombia Technical Assistance for the Implementation of the Multipurpose Cadaster (Phase 2) (P168865). Activities under this TA include: i) preparation and readiness of the proposed Multipurpose Cadaster Project, ii) development of inter-institutional coordination mechanisms, and iii) streamlining of cadastral and land formalization standards, processes, procedures and instruments. The GoC has committed to streamlining the processes and procedures and this work is currently underway. The simplified regulations for cadastral surveying and for land tenure formalization have been included as dated legal covenants in the Project’s financing agreement.

59. Institutional Capacity Risk is High. There is a complex institutional arrangement for land issues that includes various entities (IGAC, ANT, and SNR) and sectors. Also, several cadasters are decentralized to large municipalities (e.g., Bogota, Cali, Medellin) and the Department of Antioquia. Implementation capacity is weak across all entities, but particularly in ANT and IGAC. Despite having few local offices, these two entities will be responsible for most of the fieldwork. Sustainability and data maintenance will be difficult to achieve without strategies to reduce transaction costs and bring services to rural areas (some of which are to be implemented during the life of the Project). Component 1 activities will focus on developing a strategy for maintenance across the country, including in under-served rural areas. Ideally, a reform of the institutional set-up would reduce institutional fragmentation and improve coordination. If that is not possible, Project coordination will rely on the Inter-Institutional Agreement.

60. Fiduciary Risk is Substantial. The capacity assessments of the implementing agencies indicate that the fiduciary risk is substantial due to the following: i) IGAC, ANT, and SNR do not have previous experience implementing Bank-financed projects; ii) complex institutional arrangements that demand that the national level entities coordinate with subnational level ones; iii) Internal Control Offices (ICO) need to improve technical capabilities; iv) insufficient personnel with little or no experience managing investment projects. The risk mitigation measures that have been considered as part of each entity's action plan include:

- Strengthening the (ICOs) and fiduciary teams in each executing agency.
- Improving SNR’s administrative and operational capabilities related to the handling of procurement documentation.
- Implementing a training plan on financial management, disbursement, and procurement by both the World Bank, and by the DNP fiduciary team and formulating a Fiduciary Section of the Operational Manual with a clear definition of roles and responsibilities for financial management, procurement, and disbursement processes.

61. Social Risk is High. The Project has triggered the Bank’s Operational Policies (OP/BP) 4.10 on Indigenous Peoples and OP/BP 4.12 on Involuntary Resettlement. An Indigenous People’s Plan (IPP) has been prepared, consulted, and disclosed; and a Resettlement Process Framework (RPF) has been prepared, consulted and disclosed. The Project will identify land tenure rights, restrictions and responsibilities in collective territories with the presence of Indigenous or Afro-Colombian Communities.
This intervention is highly sensitive for different stakeholders, especially national and regional level ethnic organizations and environmental NGOs. Although community engagement activities will precede Project interventions, these may not fully mitigate concerns or ease tensions during project Implementation. Mitigating these risks by applying the methodological guide for ethnic groups and coordination with the environmental authorities will be essential throughout implementation and the responsible groups in ANT and IGAC will require additional training.

62. **Stakeholders Risk is Substantial.** Implementing the multipurpose cadaster will involve working closely with municipalities and communities. This will be sensitive work as many citizens have not seen their land rights recognized and land can often be a source of conflict. Working in the field will require an adequate understanding of the social topography and active communication with the local community. Alternative dispute resolution tools are being developed under the Cadaster TA and Component 3 includes a social diagnosis and on-going communication activities.

**VI. APPRAISAL SUMMARY**

**A. Economic and Financial Analysis**

63. The economic analysis considers two scenarios. The first scenario reflects the Bank’s contribution of (US$100,000,000) for interventions in approximately 50 municipalities. The second scenario additionally includes the IDB’s contribution of US$50,000,000 for a Project total of US$ 150,000,000 in 72 municipalities. In both scenarios, the Project is expected to formalize 75 percent of a universe of 75,000 parcels in scenario 1 (and 113,000 parcels with the full US$150 million). For these regularized parcels, it is estimated that 80 percent of the landholders will obtain a progressive increase in US$ 60/ha of annual rural income. With a discount rate of 10 percent, the first scenario will generate an Internal Rate of Return (IRR) of 14 percent and a Net Present Value (NPV) of US$ 29 million. In the second scenario, the IRR increases to 15 percent and generates a NPV of US$ 51 million. Other possible economic benefits include lower costs for users of the land administration system due to improved efficiency of land administration services. However, for the purpose of this economic and financial analysis, these benefits are not quantified due to lack of information.

64. Economic benefits are highly sensitive to the number of titles issued and the support for investment in the formalized parcels. It is also essential to ensure that most of the farmers located in the selected municipalities will have access to rural development programs and financial services, so that they are able to invest in their parcels and earn additional income.

**B. Technical**

65. The Project builds directly on the GoC’s public policy, plans, and strategies as well as international good practice and standards (such as the Land Administration Domain Model -LADM) for systematic cadaster. While GoC capacity will require further strengthening, the basic policies, laws and procedures are already in place for project implementation. The cadaster pilots have tested the methodologies and lessons learned are being used to improve the procedures and standards.

66. Land administration is a key public infrastructure supporting property rights around the world.
While the private sector has an important role to play in supporting land administration, the core business remains a public service for which public financing is appropriate. Systematic cadaster and formalization of property rights while benefiting the individuals targeted are also essential for private investment as property rights are foundational to any market economy. Without a systematic process, the collection of this valuable data on an individual or demand driven level could take generations. In addition, the data sets generated by systematic cadaster and formalization of activities has significant value to the GoC for planning, taxation and other purposes.

67. The Bank brings a wide range of experience from around the world on systematic cadaster and land administration activities, and builds on pilots, TA and other activities specific to Colombia. No other entity offers the breadth and depth of experience in this sector as the Bank.

C. Financial Management

68. **Financial Management Assessments.** The Financial Management Assessments of DNP, ANT, IGAC, and SNR, were carried out according to the World Bank’s OP/BP 10.00. DNP will act as overall project coordinator. DNP has previous experience executing Bank projects and can manage FM aspects, including managing the flow of funds, budgeting, accounting, and reporting, using the financial and administrative system - SIIF (the financial management information system in place for the central government institutions). DNP also has sound internal controls (including fiduciary risk procedures), financial policies and procedures, and is subject to external audit by the Office of the Comptroller General of Colombia.

69. The ANT, IGAC, and SNR assessments highlighted a need to strengthen their fiduciary processes. FM issues that need to be addressed include: i) insufficient staffing to support the financial management processes (the Bank should approve the terms of reference of staff to be recruited); ii) the budget for the first and following years of implementation has not yet been approved; iii) clear roles and responsibilities of each implementing agency with regards to fiduciary aspects (individual and consolidated) have been included in the FM section of the Operational Manual; and iv) the need to further determine FM implications due to project engagement with different government institutions at local, regional and national levels. The overall FM risk for the Project is rated as **Substantial.**

D. Procurement

70. **Procurement will be conducted according to the World Bank’s Procurement Regulations for IPF Borrowers** for the supply of works, goods, non-consulting and consulting services. The World Bank’s Standard Procurement Documents will govern the procurement of World Bank-financed Open International Competitive Procurement. For procurement involving National Open Competitive Procurement, and other methods, the documents will be agreed with the Bank.

71. **Procurement capacity assessment.** Procurement capacity assessments of DNP, IGAC, SNR and ANT were carried out. These concluded that the four entities, at different levels, have the capacity to implement procurement related activities. However, it is necessary to complete the procurement team for each of the entities per the structure proposed in the project implementation arrangements. The Operational Manual includes clear roles and responsibilities for each of the various actors and entities.

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15 July 2016, reviewed November 2017
participating in this project (see Annex 2 for more details).

72. **Procurement Arrangements.** DNP, IGAC, SNR and ANT with World Bank support have prepared a Project Procurement Strategy for Development (PPSD) and identified the appropriate selection methods, market approach, and type of review by the World Bank (see Annex 2 for more details).

**E. Social (including Safeguards)**

73. The Project recognizes the challenges of implementing the Multipurpose Cadaster given information gaps, complexity, and the history of land conflict in Colombia. In this context, the main risks and potential negative impacts on communities were identified, especially in cases involving i) lands of ethnic groups, ii) women and their rights to property, and iii) informality of land tenure. To assess and analyze implications, a social assessment was prepared as part of the Environmental and Social Management Framework (ESMF).

74. Informality of land tenure in Colombia is a historic, legal, and sociological phenomenon\(^{16}\) that has its origins in diverse factors and continues to today. Although previous governments have made important efforts to reduce informality, more than 40 percent of the country's rural properties continue to be affected. The Project will include specific activities to reduce informality with the participation of ANT to formalize rights as part of Component 3, and with the Restitution Unit to ensure coordination with restitution processes.

75. In a peace stabilization context, the risk of land-related conflict is significant, and the systematic multi-purpose cadaster process will include several mechanisms to reduce/manage conflict in the field. These mechanisms will include: early identification of potential conflicts at the municipal level during the diagnostic stage, social mapping, raising awareness with participating communities, alternative dispute resolution mechanisms during the process (including a mandatory step for public display of results in each community) and a grievance redress mechanism for parties that are not fully satisfied. While the process cannot respond to 100 percent of conflicts, the Project will seek to minimize the potential risk and respond on the ground. There are groups whose land rights require extra attention: women, orphans, indigenous peoples and Afro-Colombians. During project preparation, the specific issues that affect these groups have been assessed, and specific interventions were incorporated into Project design, particularly Component 3.

76. The World Bank’s Policy on Indigenous Peoples (OP/BP 4.10) is triggered. In Colombia, there are several types of ethnic groups. Indigenous Peoples and Afro-Colombian communities have special constitutional protection (Article 13 of the Constitution). The Constitution mandates that "the State shall promote conditions to ensure equality and adopt measures to protect discriminated or marginalized groups." In light of this, the GoC prepared an Indigenous Peoples Plan (IPP) for Indigenous Peoples and Afro-Colombians. Based on the analysis and findings of the Social Assessment, an IPP with different approaches for each of these communities has been prepared. The IPP develops protocols to ensure an interaction consistent with the communities’ practices, territorial autonomy and governance systems; and the development of a cadaster methodological guide for indigenous and Afro-Colombian territories in consultation with the ethnic communities.

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\(^{16}\) (Restrepo 2014, pg. 123)
77. The GoC consulted the Safeguards documents with key stakeholders between April and May 2017 and carried out a prior consultation on the new multipurpose cadaster policy in line with ILO Convention 169 with ethnic communities. Additionally, the GoC carried out online consultations with community leaders, CSOs, and the public between July 18 and August 15, 2017. DNP invited organizations and individuals interested in the multipurpose cadaster to take part in the online consultation process. No comments were received. The final IPP was disclosed on September 14, 2017 by the GoC and on October 30, 2017 by the WB.

78. The Project does not require any partial or total land purchase or acquisition. However, OP/BP 4.12 on Involuntary Resettlement has also been triggered due to the possibility that the Project could survey and register land that borders legally designated parks or protected areas thereby *de facto* enforcing the compliance of existing laws that restrict the use of natural resources and that were previously not being enforced. The GoC does not have the necessary cadaster standards and procedures for delimitation of parcels bordering protected areas and parks. Therefore, a Resettlement Process Framework (RPF) has been prepared and disclosed to outline the broad process, including consultation. The Project will support the preparation of the necessary standards and procedures for delimitation of parcels in border zones before proceeding into those areas for implementing the multipurpose cadaster. The final RPF (named: *Marco De Procedimiento para el Manejo de Restricciones Relativas al Acceso y Uso de Recursos Naturales*) dated July 16 and was disclosed on October 1, 2018 by the GoC and on November 9, 2018 by the WB.

79. Social issues and social safeguards will be monitored by DNP’s PCU Social Safeguards Specialist with terms of reference satisfactory to the Bank. However, the entities responsible for actual implementation in the field – IGAC and ANT – will also need social specialists in the field to ensure proper compliance not only with Bank policies but also with the socially informed processes and protocols under development.

F. Environment (including Safeguards)

80. Secure tenure and access to natural resources are essential for achieving environmental sustainability and economic development goals. Increased tenure security and secure access of local communities to forest and natural resources can contribute to reduce illegal deforestation and degradation of rural landscapes, maintain vital ecosystems services, reduce greenhouse emissions, and improve agricultural productivity—leading to income benefits—as landholders are incentivized to adopt long-term land use practices that lead to sustainable landscape management. Tenure security and secure access to natural resources are fundamental to sustainable natural resource management. The multipurpose cadaster will also enhance local governments’ ability to generate resources, improve public service delivery, and potentially develop environmental enforcement capacity. Therefore, the Project is expected to have a positive impact on the environment as it seeks to produce comprehensive and spatially referenced information on land ownership and land formalization, as well as support on-going maintenance of the data and land administration.

81. Despite these positive impacts, the Project will be working in sensitive biodiversity areas and potential negative environmental impacts may include: (i) legitimizing claims to property in protected
and/or critical areas for biodiversity; (ii) potential for deforestation and exploitation of natural resources; and/or (iii) land use disturbance.

82. Considering the above, the Project is classified as "Category B" for environmental safeguard purposes. The following environmental safeguard policies are triggered: Environmental Assessment (OP/BP 4.01); Natural Habitats (OP/BP 4.04); and Physical Cultural Resources (OP/BP 4.11). These policies are triggered as a preventative approach to prevent or mitigate any possible negative impacts, as Project activities include cadaster in natural habitats, including forested areas, as well as in areas that could contain sites deemed physical cultural resources by communities living there.

83. An Environmental and Social Management Framework (ESMF) has been prepared by the Government and consultations have been held and the document disclosed as follows:
   - Environmental and Social Analysis, and ESMF on September 14, 2017 by the GoC and on October 30, 2017 by the WB.
   - Annex 1 and 2 of the Environmental and Social Analysis, and ESMF on May 28, 2018, by the GoC and the WB.

84. In addition, as the Bank is jointly financing the Multipurpose Cadaster Program with the IDB, a common approach for the assessment and management of environmental risks and impacts of the Project was agreed. The measures and actions that have been agreed under the common approach are included in the ESMF.

85. Specific recommendations and procedures stated in the ESMF, include: screening process to identify and avoid overlaps between protected areas and private landholdings and implementation of mechanisms for voicing and responding to grievances regarding environmental impacts. A Safeguards Specialist (with TORs acceptable to the Bank) in DNP’s PCU will be responsible for environmental safeguards supervision and monitoring. However, the entities responsible for actual implementation in the field – IGAC and ANT – will also need environmental specialists in the field to ensure proper compliance.

G. Other Safeguard Policies (if applicable)

86. No other policies triggered.

H. World Bank Grievance Redress

87. Communities and individuals who believe that they are adversely affected by a Bank supported project may submit complaints to existing project-level grievance redress mechanisms or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank’s attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank’s corporate Grievance Redress Service (GRS), please visit:

88. For information on how to submit complaints to the World Bank Inspection Panel, please visit: www.inspectionpanel.org.
VII. RESULTS FRAMEWORK AND MONITORING

Results Framework
COUNTRY: Colombia
Multipurpose Cadaster Project

Project Development Objective(s)
The Project Development Objective is to establish the multipurpose cadaster in the selected municipalities to a) strengthen tenure security, and b) provide access to cadaster information.

Project Development Objective Indicators

<table>
<thead>
<tr>
<th>Indicator Name</th>
<th>DLI</th>
<th>Baseline</th>
<th>Intermediate Targets</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Strengthen tenure security</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area within project municipalities with cadastral and property information updated (Text)</td>
<td>0.00</td>
<td>0.00</td>
<td>180,000</td>
<td>630,000</td>
</tr>
<tr>
<td>Number of persons with titles issued (individual or collective) (Text)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>15,462</td>
</tr>
<tr>
<td>Number of women with titles issued (individual or joint property titles) (Text)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>5,060</td>
</tr>
</tbody>
</table>

provide access to cadaster information
### Indicator Name | DLI | Baseline | Intermediate Targets | End Target
---|---|---|---|---
Number of municipalities with access to, and capacity to use, the cadaster data for planning and other purposes (Text) | 0.00 | 0.00 | 5.00 | 14.00 | 25.00 | 37.00

#### Intermediate Results Indicators by Components

### Indicator Name | DLI | Baseline | Intermediate Targets | End Target
---|---|---|---|---
1. Institutional Strengthening
Number of streamlined processes in operation (Text) | 0.00 | 0.00 | 1.00 | 1.00 | 2.00 | 3.00
Number of methodological guidelines designed for ethnic territories (Text) | 0.00 | 0.00 | 1.00 | 2.00 | 2.00 | 2.00

2. ICT Development and Strengthening of the National Spatial Data Infrastructure
National Cadaster System (Sistema Nacional Catastral) redesigned and in operation (Text) | 0.00 | 0% | 0% | 20% | 80% | 90%
Processes and operations supported by the Cadaster-Registry Master Data Repository (Text) | 0.00 | 0% | 0% | 15% | 60% | 70%
Number of new web services available under NSDI (Text) | 0.00 | 0.00 | 1.00 | 3.00 | 5.00 | 5.00

3. Implementation and Maintenance of the Multipurpose Cadastre
<table>
<thead>
<tr>
<th>Indicator Name</th>
<th>DLI</th>
<th>Baseline</th>
<th>Intermediate Targets</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of registry offices with information in digital format (Text)</td>
<td>0.00</td>
<td>0.00</td>
<td>2.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Number of parcels with updated data in the National Cadaster System (Text)</td>
<td>0.00</td>
<td>0.00</td>
<td>40.00</td>
<td>77.00</td>
</tr>
<tr>
<td>Number of parcels titled and registered (Text)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>12,900</td>
</tr>
<tr>
<td>Satisfaction of beneficiaries with the cadaster process (Text)</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>75% satisfied</td>
</tr>
</tbody>
</table>

### 4. Project Management

| Percentage of grievances/complaints resolved in 10 working days (Text)          | 0.00| 20%      | 60%                  | 60%        | 80%      | 80%      |
| No of evaluations completed (Text)                                            | 0.00| 1.00     | 1.00                 | 2.00       | 2.00     | 3.00     |

### Monitoring & Evaluation Plan: PDO Indicators

<table>
<thead>
<tr>
<th>Indicator Name</th>
<th>Definition/Description</th>
<th>Frequency</th>
<th>Datasource</th>
<th>Methodology for Data Collection</th>
<th>Responsibility for Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area within project municipalities with cadastral and property information</td>
<td>Number of hectares</td>
<td>Biannual</td>
<td>National Cadastre System &amp; IGAC's cadastral survey</td>
<td>IGAC</td>
<td>updated updated</td>
</tr>
</tbody>
</table>

...
<table>
<thead>
<tr>
<th><strong>Number of municipalities with access to, and capacity to use, the cadaster data for planning and other purposes</strong></th>
<th>Number of municipalities with access and capacity to use the cadaster data for planning and other purposes, for example property tax.</th>
<th>Semi-Annual</th>
<th>IGAC's cadastre database evaluations performed by DNP or third party (TBD)</th>
<th>Entities will be evaluated on their capacity to use and maintain the cadaster data. Evaluation of entities capacity will be evaluated according to a process to be designed under Comp. 1</th>
<th>DNP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of persons with titles issued (individual or collective)</strong></td>
<td>Number of beneficiaries with titles issued and registered - the most secure form of tenure. Will include both individual and collective titles</td>
<td>Biannual</td>
<td>Registry Information System &amp; ANT Information System</td>
<td>Registered title should be available from the SNR Registry Information System</td>
<td>ANT - SNR</td>
</tr>
<tr>
<td><strong>Number of women with titles issued (individual or joint property titles)</strong></td>
<td>Number of women owned parcels, both joint with a partner and individual</td>
<td>Biannual</td>
<td>Registry Information System, Superintendency of Notary and Registry System and ANT Information System</td>
<td>Based on the SNR Registry Information System and the information compiled by ANT on titles issued to women. Will be monitored closely to ensure women are receiving titles throughout the project.</td>
<td>ANT - SNR</td>
</tr>
</tbody>
</table>
### Monitoring & Evaluation Plan: Intermediate Results Indicators

<table>
<thead>
<tr>
<th>Indicator Name</th>
<th>Definition/Description</th>
<th>Frequency</th>
<th>Datasource</th>
<th>Methodology for Data Collection</th>
<th>Responsibility for Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of streamlined processes in operation</td>
<td>Number of updated/streamlined processes for modern land administration, including cadaster data standards, processes for formalization, other</td>
<td>Semi-annual</td>
<td>Number of reformed processes issued by IGAC &amp; ANT</td>
<td>Administrative decisions adopting simplified processes and procedures</td>
<td>ANT/IGAC - reported to DNP</td>
</tr>
<tr>
<td>Number of methodological guidelines designed for ethnic territories</td>
<td>Specialized guidelines are needed for implementing the cadaster in ethnic territories (indigenous, Afro-Colombian). This work has begun with the IPP, and will be further detailed for implementation. Will be done in consultation with the ethnic communities themselves</td>
<td>Semi-annual</td>
<td>DNP, ANT</td>
<td>ANT and DNP will take the lead in preparation; but will be done in consultation with the ethnic communities themselves</td>
<td>ANT and DNP</td>
</tr>
<tr>
<td>National Cadaster System (Sistema Nacional Catastral) redesigned and in operation</td>
<td>Percentage of redesigned cadaster system in operation - percentage will be based on external audits and key milestones, phases, modules to be achieved.</td>
<td>Semi-annual</td>
<td>Quality control tests and audits</td>
<td>Quality control tests show proper functioning in terms of functionality, data and security</td>
<td>IGAC - reported to DNP</td>
</tr>
<tr>
<td>Processes and operations supported by the Cadaster-Registry Master Data Repository</td>
<td>Cadaster-Registry Master Data Repository is a standardized and integrated data platform, modeled under the standard ISO 19152 - Land Administration Domain Model. The repository consolidates core cadastral and registry datasets, and its main objective is to constitute a single point of access and truth regarding the data handled by the implementing entities.</td>
<td>Semi-Annual</td>
<td>Quality control tests</td>
<td>Quality control tests show proper functioning in terms of interoperability, data and security</td>
<td>IGAC - SNR - reported to DNP</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Number of new web services available under NSDI</td>
<td>Number of web services that are newly available on the NSDI platform to be used by municipalities and others.</td>
<td>Semi-annual</td>
<td>IGAC manages the NSDI platform and will provide the data to DNP.</td>
<td>Web services are finalized, tested and published for public use - according to standard NSDI methodologies.</td>
<td>IGAC - reported to DNP</td>
</tr>
<tr>
<td>Number of registry offices with information in digital format</td>
<td>Number of public registry offices with information readily available in digital form</td>
<td>Semi-annual</td>
<td>M&amp;E system report</td>
<td>The M&amp;E System monitors the field operation and verifies the information</td>
<td>SNR - reported to DNP</td>
</tr>
<tr>
<td>Number of parcels with updated data in the National Cadaster System (Sistema Nacional Catastral)</td>
<td>Number of parcels with up to date information - gender disaggregated</td>
<td>Semi-annual</td>
<td>National Cadastre System</td>
<td>The M&amp;E System monitors the field operation and verifies de information</td>
<td>IGAC - reported to DNP</td>
</tr>
<tr>
<td>Indicator</td>
<td>Description</td>
<td>Frequency</td>
<td>Monitoring/reporting system</td>
<td>Data source</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Number of parcels titled and registered</td>
<td>Number of parcels titled and registered in the cadaster and property registry - this is linked to the indicator on beneficiaries with title.</td>
<td>Semi-annual</td>
<td>To be measured with the midterm and final beneficiary survey</td>
<td>ANT/SNR - reported to DNP</td>
<td></td>
</tr>
<tr>
<td>Satisfaction of beneficiaries with the cadaster process</td>
<td>Percentage of beneficiaries of the cadaster process who are satisfied with the process.</td>
<td>Midterm and final</td>
<td>Midterm and final beneficiary survey</td>
<td>M&amp;E specialist in PCU/DNP</td>
<td></td>
</tr>
<tr>
<td>Percentage of grievances/complaints resolved in 10 working days</td>
<td>Complaints/grievances recorded in the GRM dealt with within 10 working days - target is that 80% achieve this goal.</td>
<td>Semi-annual</td>
<td>GRM system managed by DNP</td>
<td>DNP</td>
<td></td>
</tr>
<tr>
<td>No of evaluations completed</td>
<td>Baseline, mid-term evaluation and final evaluation.</td>
<td>Semi-annual</td>
<td>Evaluations for baseline, midterm and final</td>
<td>DNP</td>
<td></td>
</tr>
</tbody>
</table>
**ACTIVITIES**

**Component 1**
- Institutional strengthening and capacity development for MPC
- Design of models for cadaster decentralization and service

**Component 2**
- Strengthening of the and information systems
- Development of cadaster-registry master data repository
- Further development of the NSDI (CDE)

**Component 3**
- Communication and sensitization for MPC in the selected municipalities
- Systematic recording of physical, legal and economic data per parcel
- Basic cartography and geodetic network

**RESULTS CHAIN for the Multi-Purpose Cadaster in Colombia (MPC)**

**The Project Development Objective** is to establish the multipurpose cadaster to strengthen tenure security and provide access to cadastral information in selected municipalities.

**OUTPUTS**
- Regulatory and procedural reforms are consulted and approved
- Increased capacities to develop and manage MPC activities
- Increased capacity and systems to manage land information data
- Local Communities and ethnic groups are sensitized
- Local capacity strengthened to accompany the systematic cadastre-registration process
- Mediation conflict system and GRM are available

**OUTCOMES**

- **At national level:**
  - Institutional capacity and regulatory reform provide an enabling environment to the land information systems enhance and interoperable
  - The land information systems enhanced and interoperable

- **In the selected municipalities:**
  - Physical, legal and economic information on parcels updated and recorded in ICT systems
  - Legal assessment is carried out for a systematic land tenure formalization
  - Capacity and mechanisms to maintain the cadastral information

**Assumptions:**

- Increase in the number of municipalities with access to, and capacity to use, the multipurpose cadaster data for planning and other purposes
- Increase in the number of properties/joices with up to date cadastral registry and value data.
- Increase in the number of properties with legal security of tenure (registered title, gender disaggregated)

- There is smooth interinstitutional coordination among agencies competent for land administration

**Access to cadaster information in the selected municipalities**
- Strengthened tenure security
ANNEX 1: DETAILED PROJECT DESCRIPTION

COUNTRY: Colombia
Colombia Multipurpose Cadaster Project

1. The Project will support the Government of Colombia’s (GoC) goal of developing a multipurpose cadaster through three components. The first component will support strengthening the national and institutions to be able to implement the multipurpose cadaster program and to maintain the data and systems necessary. Component 2 will support enhancing the ICT infrastructure and systems for capturing and sharing the multipurpose cadaster data. Component 3 will support the direct implementation of the multipurpose cadaster through mapping, field surveys, data collection and public display all with sustained local and community participation. Additionally, this Component will also support the municipalities to develop the capacities and systems to maintain and use the multipurpose cadaster data for improved property taxation and land use planning.

Component 1 – Institutional Strengthening

2. The institutional framework for the implementation of the Project is complex. Mandates are distributed among many participating agencies creating a significant coordination challenge both in terms of general institutional leadership for the Project as well as in terms of technical inter-agency coordination in the field. This Component aims to lay the foundations for a functioning land administration system to maintain the cadaster information and contribute to the management of land as a productive asset.

3. The objectives of this component are twofold: (i) to strengthen the capacity of national and land administration institutions involved in the implementation of the multipurpose cadaster, and (ii) to enable institutions to create a land administration system able to provide land administration services throughout the country in a permanent and effective manner. The subcomponents focus on strengthening institutional capacities at the national level (DNP, ANT, SNR, and IGAC); while the strengthening of institutional capacities at the regional and municipal level is under Component 3.

Subcomponent 1.1. Institutional strengthening for National Level Entities.

4. This Subcomponent will develop strategies for Project sustainability and will be executed by DNP. These strategies include guaranteeing permanent access to cadastral and registry services at the municipal level and ensuring DNP’s role as the entity responsible for general planning and coordination of the participating entities. The objective is to develop the value chain for systematic cadaster, land titling and registration, which involves standardizing process and procedures among IGAC, ANT, and SNR. The planned activities include, but are not limited to, the following:

a. Designing the public value chain, the institutional agreements, and knowledge management for the articulation of systematic cadaster, land titling, and registration.

b. Design of the strategy, plan, and programs for the generation of technical knowledge and expert human resources required to develop the expansion phase of the Multipurpose Cadaster throughout the country.
c. Defining strategies that guarantee the sustainability of the multipurpose cadaster system and the property registry, including access to services, streamlined procedures, and costs.

d. Proof of concept of the Cadaster-Registry Master Data Repository, which is a central repository using the Master Data Management method, under the LADM-COL model for the establishment and maintenance of the Cadaster-Registry core datasets.

e. Formulating strategies that guarantee that citizens have permanent access to affordable and accessible land administration services (cadaster and registry), which in turn will strengthen data maintenance and a functional land market.

f. Assessing and classifying municipalities for cadastral delegation and/or decentralization.

g. Defining strategies to support the delegation and decentralization of the cadastral function to municipalities that have the potential to manage and maintain their systems and data. This is intended not just for individual municipalities, but also for associations of several regional and/or local level administrations. In areas where cadastral competencies are not decentralized or delegated, different modalities for maintaining the data and delivering services will be explored, particularly for under-served rural areas.

h. Carrying out public awareness campaigns and other related general activities to inform the public, territorial entities, the private sector, and others about the multipurpose cadaster.

i. Developing a cadaster methodological guide for indigenous and Afro-Colombian territories in consensus with the ethnic communities. In this regard, it is essential to consider the territorial rights of ethnic communities, which under the Colombian Constitution have special protection, and are covered by other provisions including the ILO Indigenous and Tribal Peoples Convention, 1989 (No. 169), the jurisprudence of the Inter-American Commission of Human Rights (IACHR) and the Colombian Constitutional Court.

Subcomponent 1.2. Institutional strengthening for improving cartographic and cadastral capabilities (including quality assurance) in IGAC.

5. This Subcomponent will finance the design of IGAC’s new operating model. Planned activities include, but are not limited to:

a. Definition of the regulatory framework and operational model for the outsourcing, delegation and decentralization of cadastral services.

b. Design and implementation of quality control mechanisms for the cadaster.

Subcomponent 1.3. Institutional Strengthening for SNR in terms of property registry data management.

6. This Subcomponent will finance a diagnostic of paper-based property registry archives in SNR (Diagnóstico integral de archivos de la SNR) to establish the required actions needed to upload historical property records into the SNR property registry information system (BACHUE).

Subcomponent 1.4 Institutional strengthening for ANT to deliver rural land tenure formalization services.

7. ANT has the governmental responsibility for implementing the overarching land policy of “Ordenamiento Social de la Propiedad Rural”, which includes the formalization of private property,
regularization, titling and administration of public land, and identification and registration of land in the name of the State. Activities under this subcomponent include, but are not limited to:

a. Carrying out a technical review and redesign of ANT’s operational model (at the national and territorial levels).

b. Designing the procedures for systematic land tenure formalization “Ordenamiento Social de la Propiedad Rural”, and devising community participation strategies and campaigns.

c. Establishing alternative dispute resolution mechanisms for property related issues.

Component 2 - ICT Development and Strengthening of the National Spatial Data Infrastructure

8. Colombia has several parcel-based land information systems with data duplication, redundancy, and fragmentation. The GoC has agreed to develop a Cadaster-Registry Master Data Repository (under the Land Administration Domain Model LADM-COL (ISO 19152: 2012)) and strengthen the ICT environment and systems of ANT, SNR, and IGAC. The objectives of this component are to (i) support the development of the necessary ICT infrastructure of IGAC, SNR and ANT for the implementation of the multipurpose cadaster and the integration of the parcel-based cadaster and registry core datasets; and (ii) strengthen the existing Colombian National Spatial Data Infrastructure (NSDI, *Infraestructura Colombiana de Datos Espaciales* - ICDE). The second objective will be achieved by developing the governance for ICDE, and in the identification, storage, use, and exchange of geospatial and non-geospatial land data and services.

9. Component 2 will support climate change adaptation and development of climate-smart territorial planning (i) by strengthening ICT infrastructures required to maintain and share land cadaster and registry data (Subcomponent 2.1, 2.2, 2.3) and (ii) by strengthening national spatial data infrastructure (Subcomponent 2.4) that is essential for the distribution of all spatial data (land cadaster, land use, land use regulations, national protected areas, disaster analysis, etc.) across government. Steady flow of these spatial datasets is essential for climate-smart territorial planning, compensation and insurance schemes related to natural disasters and planning and targeting climate adaptation activities.

Subcomponent 2.1. Strengthening IGAC’s ICT infrastructure and development of the Cadaster-Registry Master Data Repository.

10. This Subcomponent will finance: i) the strengthening of the Sistema Nacional de Catastral (SNC), under the LADM-COL; ii) the development of the Cadaster-Registry Master Data Repository to improve cadaster-registry data interoperability; and iii) the purchase of hardware to strengthen IGAC’s ICT. The planned activities include, but are not limited to, the following:

   a. Strengthening the SNC to operate under the LADM-COL model and to interact with the Cadaster-Registry Master Data Repository. This includes the development of a strategy for the provision of standardized cadastral information services for IGAC and for the decentralized/delegated cadasters; and the development of the cadastral data maintenance module.

   b. Strengthening the ICT infrastructure (i.e. new required hardware) to adequately operate the SNC.

   c. Design and develop the Cadaster-Registry Master Data Repository for the establishment and maintenance of the Cadaster-Registry core datasets. The repository will provide interfaces to allow IGAC’s, SNR’s and ANT’s ICT systems to perform data queries, transnational blocks, and parcel-based data inputs and outputs, facilitating data maintenance, under predefined business
rules to ensure that all data entered is correct and validated. The Cadaster-Registry Master Data Repository will support interfaces in accordance with geographic standards for geospatial data.

Subcomponent 2.2. Strengthening SNR’s ICT infrastructure and testing of the Cadaster-Registry Master Data Repository.

11. This Subcomponent will finance the strengthening of SNR’s ITC infrastructure for implementing the multipurpose cadaster. Planned activities include, but are not limited to:
   a) Strengthening of the Land Registry information system (BACHUE) to operate under the LADM-COL model and to interact with the Cadaster-Registry Master Data Repository.
   b) System testing of the Cadaster-Registry Master Data Repository through functional requirement specifications.
   c) Developing the Datacenter to host the Cadaster-Registry Master Data Repository.

Subcomponent 2.3. ANT strengthening of the ICT infrastructure.

12. This Subcomponent will finance the strengthening of ANT’s ICT infrastructure for the implementation of the multipurpose cadaster and to provide land tenure formalization services. The planned activities include, but are not limited to, the following:
   a. Adjustments to ANT’s ICT infrastructure to support the land tenure formalization services in compliance with policies and standards of LADM-COL, and to support the development of the Cadaster-Registry Master Data Repository.
   b. Hardware purchase to support ANT’s interoperability with the Cadaster-Registry Master Data Repository.

Subcomponent 2.4. Strengthening of Colombian Spatial Data Infrastructure (Infraestructura Colombiana de Datos Espaciales ICDE).

13. This subcomponent will strengthen governance within the sector as well as access to geospatial services and data, and their interoperability. It will also strengthen various components of the ICDE to ensure compliance with standards for quality and up-to-datedness of the information, and to develop strategies that allow for the generation of new knowledge and the sharing of existing geospatial information.

14. ICDE policies are stated in CONPES 3585 “Consolidation of the National Geographic Information Policy and the Colombian Spatial Data Infrastructure” (February 16, 2009). This CONPES includes the policy framework for coordination, standards, and guidelines focused on regulating the production, acquisition, access, and use of the geographic information developed by the GoC entities. While IGAC has taken a leading role in the implementation of geospatial and NSDI policies, other relevant government entities will be involved to specify the data sets and technological standards. If these standards are adopted they will strengthen the national capacity for data sharing and use of services in support of systematic cadaster, titling and registration. This subcomponent includes the following activities, which will be executed by IGAC:
   a. Develop technical capacity of participating agencies to manage parcel-based geospatial data.
   b. Design and implement a plan to standardize parcel-based data for cadaster and property registration.
c. Development and implementation of the action plan for ICDE’s incorporation into the Colombian e-Government system.

d. Generation of geospatial competencies and technical adjustments at DNP, IGAC, SNR, and ANT for the production and use of standardized and interoperable geospatial information.

Component 3 – Implementation and Maintenance of the Multipurpose Cadaster

15. The objective of this Component is to implement a multipurpose cadaster system to strengthen land tenure security, contribute to fiscal sustainability, and serve as an information resource for municipal level land use planning. This Component includes the following activities: i) carry out a diagnosis of local conditions and awareness raising activities; ii) systematic recording of physical, legal, and economic information for each parcel through a systematic cadaster survey (barrido predial); iii) uploading relevant data into a geo-referenced land information system; iv) improving technical capacity of municipalities/territorial administrations to use cadastral information; and v) maintenance of cadastral information and carrying out activities that contribute to formalization of the land market.

16. The systematic cadaster includes investigating informal land tenure rights on both private and public lands and the preparation of parcel files (expedientes) to be classified according to pre-established land tenure typologies. Competent GoC authorities will then use these parcel files to carry out the corresponding formalization and registration of informal land tenure rights. The systematic cadaster process will pay close attention to women’s land rights and consider special procedures for indigenous and ethnic communities according to the Colombian legal framework.

17. Component 3 will enhance climate change adaptation (i) by conducting cadastral surveys (Subcomponent 3.2.) and (ii) land tenure formalization (Subcomponent 3.3.) that are essential for ensuring people’s property rights during and after natural disasters, ensuring property owners have legal evidence for disaster-related insurance and compensation claims, analyzing and targeting climate adaptation activities at property level and providing spatial land-related data for higher level adaptation and disaster risk management planning. Subcomponents 3.1 and 3.4 will support these activities by ensuring that all people have access to surveying and formalization services, all collected data is maintained, and municipalities are able to use the data in their planning activities. Therefore, these activities will also indirectly support climate change adaptation. Land tenure formalization (Subcomponent 3.3) will also contribute to climate change mitigation as under the current Colombian legal framework (Decreto Ley 902/2017), land tenure formalization initiatives must incorporate environmental considerations to avoid deforestation or any other natural ecosystem transformation.

Subcomponent 3.1. Land registry services and inputs

18. The objective of this Subcomponent is to ensure that SNR can provide the needed information and services during implementation and maintenance of the multipurpose cadaster in the Project areas of intervention. The planned activities include, but are not limited to, the following:

a. Digitalization and systematization of paper-based property registry information (folio antiguo).

b. Technical support during the systematic cadastral survey to identify land tenure typologies.

c. Uploading of the systematic cadastral survey data unto BACHUE (SNR property registry land information system).
Subcomponent 3.2. Cadastral survey, including geodetic and cartographic requirements.

19. The objectives of this Subcomponent are to i) ensure that IGAC’s geodetic, cartographic, and cadastral inputs for the cadastral survey are available in the preparatory stages of the field operation; and ii) conduct the systematic cadastral survey. The second objective involves data gathering about physical, legal and economic characteristics of all parcels located within the selected municipalities, followed by the incorporation of this information into a geographically referenced land information system. The resulting data will be stored into the National Cadastral System – SNC that will feed into the Cadaster-Registry Master Data Repository to be developed under Component 2.

20. Contracted firms will have the task of gathering physical, legal, and economic information and the systematic cadastral survey. However, in some cases where security conditions do not allow for private sector intervention IGAC and ANT will gather the data directly. The systematic cadaster requires actions by ANT to identify informal land tenure of public lands. When informal land tenure situations cannot be solved during the systematic process, parcel files will be produced and classified according to pre-established land tenure typologies. ANT and other competent authorities will use these files to carry out the corresponding definition of land rights, including the formal registration of these rights with SNR.

21. This Subcomponent will finance the contracting of private firms to implement the systematic cadaster, hiring of contract staff needed for coordination and fieldwork, consultancy services, and public awareness and public participation campaigns. Activities included under this Subcomponent are:
   a. Densification of the geodetic network according to international best practices.
   b. Generation of basic cartography.
   c. Digitalization of the paper based cadastral information into the National Cadastral Information System – Sistema Nacional Catastral.
   d. Preparation of a diagnostic and characterization of each area of intervention of the Project (individual municipalities or groups of municipalities when required). The results of this diagnostic will serve as an input for the implementation of the systematic cadaster by contractors and government authorities. The diagnostic will include, among other activities, the following:
      i. compilation of available information, including public registry records, cadastral records, ongoing adjudication procedures, etc.;
      ii. completion of a desk review of the land tenure situation and existing rights of ethnic territories, women and vulnerable groups, land use restrictions (national parks, easements, etc.);
      iii. identification of areas affected by land conflict; and,
      iv. identification of land market dynamics.
   e. Define and implement, with the active involvement of local authorities, a strategy for local community participation and communication.
   f. Implementation at the local level of a systematic cadaster for the formation of the multipurpose cadaster including: production of geo-referenced parcel survey plans of each parcel; collection and processing of legal ownership, land tenure and economic information for each parcel; reception and quality control by the supervisory entity; public display of the data (maps and associated textual information) and response to comments from the public; evaluation and approval of the resulting parcel information database by the relevant government authorities; and incorporation of this data into the official land information system (ie. registration).
g. Data maintenance.

22. The Project will incorporate a gender-differentiated approach through: community participation campaigns that actively involve the participation of local and national women's organizations, the inclusion of women at the socialization stage, the participation of women in fieldwork, and awareness raising with judges, notaries, and other key stakeholders. This is important because despite the existing legal and institutional procedures for gender equitable access to land and housing (including joint titling), women in rural areas often do not see themselves as ‘owners’ of land and housing. There is also a lack of understanding and enforcement of women’s property rights by authorities and practitioners. Finally, the parcel information database will provide gender-disaggregated data which is key for the recognition and protection of women’s property rights.

23. The stakeholder analysis will include the presence of Indigenous or Afro-Colombian communities, the status of their collective land tenure rights, and traditional authority structure. Where applicable, community engagement campaigns will be in local indigenous languages and be designed to protect and respect ethnic territorial rights. The cadastral survey will be carried out under the methodological guide for indigenous and Afro-Colombian territories that will be developed in close collaboration with the ethnic communities prior to the start of the field level work (under Component 1).

24. Establishing the systematic multipurpose cadaster will enable the creation of a geographically referenced land information system that is needed for resilient land use and disaster risk planning. Cadastral surveying activities will also provide the necessary inputs for the implementation of other policies including soil protection, landslide prevention, and restoration of degraded lands at the national and municipal levels.

Subcomponent 3.3. Land tenure formalization services

25. The objectives of this Subcomponent are: i) to ensure that ANT's historical rural land titling records are available and that they contribute to the identification of land rights and restrictions; and ii) the formulation and implementation of Municipal Property Formalization Plans (Planes de Ordenamiento Social de la Propiedad). The latter involves resolving informal land tenure situations identified during the systematic cadaster survey through the registration of the resulting titles in SNR land registry. During the systematic cadaster process information for every parcel will be gathered within the area of intervention (municipality). For those parcels that cannot be formalized during the systematic cadastral survey, the files of information to document the case will be produced and the appropriate processes will be initiated, according to the applicable law.

26. This Subcomponent will finance consulting services, media and awareness campaigns, and all fieldwork related to the cadaster and formalization activities. The planned activities include, but are not limited to, the following:
   a. Systematization of historical agrarian processes information.
   b. Dissemination and awareness campaigns and community outreach.
   c. Investigation and definition of land tenure typologies in project intervention areas (municipalities).

17 The Colombian legal framework formally recognizes traditional ethnic authorities.
d. Definition of applicable legal routes for formalization and regularization of land.
e. Process of land tenure formalization through the production of registered titles such as: administrative acts (on public land), and preparation of land title (either notary deeds or judicial rulings) on private land; public display; and the registration of these property documents in the public registry in SNR. Following the Colombian legislation such titles will include both partners regardless of the formality/informality of the marital status, and specific measures will be taken for female headed households.

Subcomponent 3.4. Strengthening institutional capacities at local level

27. The objectives of this Subcomponent are to: i) facilitate access to cadaster and registry services for all citizens in the territory, with a focus on data maintenance; and ii) strengthen the capacities of municipal entities to use the multipurpose cadaster information for tax purposes and land use planning. Activities include strengthening capacities in territorial planning.

28. The Subcomponent will finance consulting and training services, media and public awareness campaigns, and land information management technology including equipment and software. Activities under this Subcomponent include:
   a. Implementation of policy and administrative mechanisms to reduce transaction costs at the local level and provide access to affordable cadaster and registry information and services to all citizens.
   b. Building the technical and technology capacity (training and equipment, software) at the local level to enable municipal governments to access, use and maintain land information resulting from the systematic cadaster.
   c. Providing technical assistance to municipalities in the use of land and cadastral information for fiscal purposes, resilient land use planning, disaster risk management, and investment management.

Component 4 – Project Management

29. The objective of this component is to support the implementing entities of the GoC to carry out the coordination activities and management of the Project including, administrative activities, financial management, procurement, monitoring and evaluation, safeguards supervision, and annual audits required for effective execution. As such, this Component will also build capacity in each of the entities to contract, manage and administer complex activities.

30. Each entity will be responsible for its own contract execution and funding; however, a Project Coordination Unit (PCU) at DNP will be responsible for the overall project procurement, financial management, safeguard supervision, consolidated reporting, annual audits, and monitoring and evaluation (including baseline survey and end of project evaluation).

Subcomponent 4.1. DNP Project Coordination Unit

31. The Subcomponent includes the following activities:
   a. Strengthening human resources and capacities for the coordination of the Project; technical capacities for monitoring and supervision in compliance with the Bank’s safeguards policies (social
and environmental); and capacity to provide quarterly monitoring and evaluation reports in accordance with the rules established in the Loan Agreement, and the Inter-institutional agreement.

b. Funds for the baseline survey, regular project monitoring reporting, and the evaluations at midterm and end of Project.

c. Operational and Logistical Expenses.

d. Annual Audits.

Subcomponent 4.2. IGAC Project Management Unit

32. The Subcomponent includes the following activities:

a. Strengthening human resources and capacities to ensure compliance with procurement, FM, and monitoring protocols, procedures and reporting in accordance with the rules established in the Loan Agreement, and the Inter-institutional agreement.

b. Strengthening human resource and capacities for preparing terms of reference (TORs) and technical specifications for procurement, monitoring compliance with technical requirements and approving services and products for payment, monitoring and supervision of compliance with Bank’s safeguard policies (social and environmental), technical supervision and monitoring in the field.

c. Operational and Logistical Expenses.

Subcomponent 4.3. SNR Project Management Unit

33. The Subcomponent includes the following activities:

a. Strengthening human resources and capacities to ensure compliance with procurement, FM, and monitoring protocols, procedures and reporting in accordance with the rules established in the Loan Agreement, and the Inter-institutional agreement.

b. Strengthening human resource and capacities for preparing terms of reference (TORs) and technical specifications for procurement, monitoring compliance with technical requirements and approving services and products for payment, monitoring and supervision of compliance with Bank’s safeguard policies (social and environmental), technical supervision and monitoring in the field.

c. Operational and Logistical Expenses.

Subcomponent 4.4. ANT Project Management Unit

34. The Subcomponent includes the following activities:

a. Strengthening human resources and capacities to ensure compliance with procurement, FM, and monitoring protocols, procedures and reporting in accordance with the rules established in the Loan Agreement, and the Inter-institutional agreement.

b. Strengthening human resource and capacities for preparing terms of reference (TORs) and technical specifications for procurement, monitoring compliance with technical requirements and approving services and products for payment, monitoring and supervision of compliance with Bank’s safeguard policies (social and environmental), technical supervision and monitoring in the field.

c. Operational and Logistical Expenses.
ANNEX 2: IMPLEMENTATION ARRANGEMENTS

COUNTRY: Colombia
Colombia Multipurpose Cadaster Project

Project Institutional and Implementation Arrangements

Project Governance

1. **Steering Committee** (*Comité Directivo*) is comprised of representatives from DAPRE, *Fondo Colombia en Paz*, DANE, the Ministry of Justice and Law, MADR, and DNP, which acts as chair. DANE, MADR, and MJ are the institutions under which IGAC, ANT, and SNR, respectively, are located within Colombia’s government structure. The Steering Committee provides guidance, oversight, and is responsible for deciding the municipalities in which the Project will be implemented.

2. **Project Director.** DNP’s Territorial Development Sub-Director will chair the Steering Committee and act as the Project Director. He/she will lead the inter-institutional coordination, act as the GoC representative to the Bank and other stakeholders and ensure that instructions from the Steering Committee are implemented. The PCU will be under the direction of DNP’s General Territorial Development Department.

3. **Technical Committee** (*Mesa Técnica de Coordinación*) is under the Steering Committee and is comprised of representatives of DNP, ANT, IGAC, and SNR. The Technical Committee will be chaired by the PCU Coordinator. Per the guidelines of the Annual Operational Plan (AOP), the Committee will be responsible for inter institutional technical planning and for technical and operational monitoring.

Implementation Arrangements

4. **Project Coordination Unit (PCU) at DNP.** The PCU will be led by a Project Coordinator and is comprised of the following members: i) Deputy Director of the Decentralization and Fiscal Revenue Department (government staff), ii) technical Coordinator, iii) administrative coordinator, iv) ICT coordinator, v) safeguards coordinator, and vi) planning, monitoring and evaluation coordinator (to be hired as consultants under the Project). The PCU will coordinate inter-institutional project implementation, ensure compliance with safeguards, carry out overall planning, monitoring and evaluation, and oversee fieldwork activities with each of the implementing entities (IGAC, ANT, SNR).

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18 The Agency for Territorial Renewal (*Agencia de Renovación del Territorio*, ART) is a permanent invitee of the Committee with voice but not vote.
5. **Management Units.** The Project will be implemented by the three entities under the overall coordination of DNP. Each entity (IGAC, SNR, ANT) will have a Management Unit comprised of, at a minimum, the following participants: technical, FM, procurement, and M&E specialists. Additionally, IGAC and ANT will have safeguards specialists that will be coordinated by DNP’s safeguard specialist. The coordinators of these Management Units will be appointed at a high level within each entity. These Management Units will be responsible for budget execution, preparation of TORs and specifications, evaluation of bids, managing contracts, and evaluating third party deliverables.

6. **Inter-institutional Agreement.** The four implementing entities will sign an Inter-Institutional Agreement describing implementation arrangements, flow of funds, fiduciary aspects, safeguard compliance, and monitoring and evaluation. DNP, through the PCU, and in coordination with the Technical Committee will coordinate project activities. The Inter-Institutional Agreement is substantially completed and will be signed by the four entities as a condition of effectiveness. In addition, a Project Operational Manual has been prepared and further details the processes and procedures for the four entities, how they will work together and all details on financial management, procurement, disbursement, safeguards, monitoring, supervision, quality control, etc. The Operational Manual has been reviewed by the Bank and is substantially complete and will be adopted formally as a condition of effectiveness.

7. **Fiduciary Agent.** If agreed as necessary to facilitate the carrying out the Project, the implementing entities may hire a Fiduciary Agent under an agreement between the relevant Implementing Entity(s) and
the Fiduciary Agent (Fiduciary Agent Agreement), under terms and conditions approved by the Bank, which shall include:

(a) the Fiduciary Agent’s obligation to maintain records and accounts adequate to reflect the operations, resources and expenditures of the Project;

(b) the roles and responsibilities of the Fiduciary Agent about the implementation of the Project, including compliance with the pertinent provisions of the loan agreement, Intergovernmental agreement, and Operational Manual.

8. Municipalities. Once the Steering Committee defines the selected municipalities per sub-region, the PCU will appoint a liaison officer for each sub region who will facilitate coordination between national and subnational entities. A kick off meeting between the implementing agencies and the municipalities will be held prior to the start of operations in the field. At this meeting, the municipal ANT and IGAC liaison officers will be appointed. The SNR will be represented by the local office of the Oficina de Registro de Instrumentos Públicos.

9. A Field Operating Committee will be created for each selected sub-region to initiate the fieldwork, comprised of representatives from each of the implementing entities (DNP, IGAC, SNR and ANT) and from the relevant municipalities. The Committee’s main function is to facilitate interinstitutional coordination during the field operation, including finding solutions to operational bottlenecks, permanent liaising with local authorities, and facilitating supervision. The Fieldwork Operating Committee will report issues that cannot be resolved to upper hierarchy levels (Technical Committee, Steering Committee). The operations in the field and their implementation arrangements are further detailed in the Operational Manual.

10. Memoranda of Understanding (MOUs) will be signed between DNP and municipalities to ensure buy-in and sustainability (from the different municipal administrations). The MOU will describe the roles and responsibilities of municipal administrations and national entities (IGAC, SNR, ANT and DNP). These include, designating liaison staff, providing office space in municipal offices, and participating in awareness raising activities with local communities. The workflow at the municipal level in each sub region will be as follows:
   a) Technical Committee recommends municipalities to Steering Committee.
   b) Steering Committee selects/approves municipalities.
   c) PCU requests the participation of municipal administrations in each sub-region.
   d) DNP signs MOU with selected municipalities.
   e) IGAC or ANT will be leading field operations.
   f) IGAC, ANT, SNR and DNP will upload the gathered data into their information systems.
   g) PCU delivers final cadastral and registry datasets to municipal administrations.

Financial Management

11. The Financial Management Assessments of DNP, ANT, IGAC, and SNR, were carried out, according to World Bank’s policy OP/BP 10.00. DNP will act as overall project coordinator. DNP has previous experience executing bank projects and has the capacity to manage FM aspects, including managing of
flow of funds, budgeting, accounting and reporting, through the use of the financial and administrative system SIIF (the financial management information system in place for the central government institutions). DNP also has sound internal controls (including fiduciary risk procedures), financial policies and procedures, and is subject to external audit by the Office of the Comptroller General of Colombia. The assessments for ANT, IGAC and SNR demonstrated that the entities need strengthening of their fiduciary processes. Some of the FM issues that need to be addressed include: i) There is a staff shortage support the financial management processes for the project in each implementing agency; (the Bank should approve the terms of reference); ii) The budget for following years of implementation has not yet been approved; iii) Clear roles and responsibilities of each implementing agency with regards to fiduciary aspects (individual and consolidated) should be included in the FM section of the Operational Manual; including FM implications due to project engagement with different government institutions at local, regional and national levels, and iv) determine FM implications due to project engagement with different government institutions at local, regional and national levels.

12. The overall FM-assessed risks for the project are rated as Substantial. This rating can be updated after mitigation measures are implemented. The assessment concluded that to ensure acceptable financial management arrangements the following mitigation measures must be implemented (i) FM team is qualified and sufficient to attend project needs, (ii) implementing agencies shall ensure budget allocations during the duration of the project, (iii) approved and adopted financial section of operational manual with clear roles and responsibilities of participant entities in the program; including FM implications due to project engagement with different government institutions at local, regional and national levels, (iv) Unaudited semiannual interim financial reports are developed according Bank guidelines, and are incorporated in the project FM section of the operational manual. During implementation, FM supervision will be carried out as part of Bank’s project supervision and FM risks considerations. FM action plan is described in Table 1.

Table 1. FM action plan

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<th>Description of Action/Condition</th>
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</tr>
</thead>
<tbody>
<tr>
<td>i) FM team has been appointed in each implementing agency.</td>
<td>A core team has been appointed. No later than 30 days after the effectiveness date, the DNP, ANT, IGAC and SNR shall ensure that fiduciary professionals set forth in the project operational manual. No legal requirement is necessary. The Bank will grant NOB to the terms of reference.</td>
</tr>
<tr>
<td>ii) Semiannual unaudited interim financial reports harmonized with the IDB are developed under the country systems agreements and incorporated in the project financial section of the Operational Manual.</td>
<td>By project effectiveness.</td>
</tr>
<tr>
<td>iii) Budget allocation for the first year.</td>
<td>Completed.</td>
</tr>
<tr>
<td>iv) Financial section of the Project Operational Manual has been prepared; including FM implications due to project engagement with different government institutions at local, regional and national levels and adopted by DNP, ANT, IGAC and SNR in a manner satisfactory to the World Bank.</td>
<td>By project effectiveness.</td>
</tr>
</tbody>
</table>
13. **Planning and Budgeting.** Tentative budget allocation is required; as well as the final institutional arrangements to implement a new multi-purpose cadaster for Colombia. Implementing agencies shall ensure budget allocation during the project. Funds for the project will be part of implementing agencies’ own budget, which is approved in accordance with the local regulations for public entities. DNP, ANT, IGAC and SNR, as executing agencies, will be responsible for preparing and monitoring the annual operating plan and budget. The budget, and any modifications made to it, will be recorded and monitored through the SIIF information system.

14. **Accounting and financial reporting.** Financial statements are prepared in compliance with the Government Accounting Standards issued by the General Accounting Office. Budgeting, accounting and treasury functions are integrated within the SIIF Information system. The project information will be recorded through a specific cost center; interim financial reports (IFRs) will be harmonized with IDB, and prepared using the country systems guidelines, and will be submitted on a semiannual basis to the Bank.

15. **Internal controls.** DNP has in place a set of internal administrative manuals that regulate the administrative process of the entity and cover, among others, accounting, budgeting, financial reporting, and internal control matters, with the objective of ensuring the safeguard of assets, the accuracy of the financial information and compliance with all financial and operational requirements. DNP shall provide adequate segregation of duties during the whole administrative and financial cycle; and periodically, on a risk-based, shall include the project processes as part of the internal audit annual plan. DNP is under the control and monitoring of the Administrative Department of Public Function that ruled and oversights on the implementation of MECI (Standard Model of Internal Control per the acronyms in Spanish).

16. **Project operating costs.** The Project will finance reasonable incremental operating costs incurred by DNP, ANT, IGAC and SNR related to technical and administrative management, monitoring and supervision, including inter alia: office supplies, vehicles operation and maintenance cost, vehicle rental and fuel costs, maintenance of equipment, communication costs, office rental and moving expenses, utilities expenses, consumables, printing and publication costs, transport and accommodation, per diem and salaries of support staff working for the Project, and other miscellaneous costs directly associated with the Project as shall be agreed with the Bank.

17. **Retroactive financing.** No retroactive financing will be available for this project.

18. The DNP, ANT, IGAC and SNR shall retain all records (contracts, orders, invoices, bills, receipts, and other documents), evidencing expenditures under their respective parts of the project until at least the later of: (i) one year after the WB has received the audited financial statements covering the period during which the last withdrawal from the loan account was made; and (ii) two years after the closing date. The DNP, ANT, IGAC and SNR shall enable the WB’s representatives and the external auditors to examine such records.

19. **Access to information.** The access to information policy for the WB-financed operations, states that the borrower will disclose the audited project financial statements on its website. Following the WB’s formal receipt of these statements from the borrower, the WB will make them available to the public.
20. **Implementation support and supervision strategy.** The WB FM team will monitor all the FM action plans to ensure successful implementation and that the deadlines are met; and update the FM-assessed risk for the Project. During project implementation FM supervisions will be conducted as part of Bank’s general supervision taking in consideration FM risk ratings, and the review of IFRs and audited financial reports for the project.

**Disbursements**

21. **The interim financial reports (IFRs)** prepared by the DNP, under formats agreed with the WB/IDB and documented in the project financial section of the Operational Manual. DNP, as project general coordinator, will submit a semiannual basis within 45 days after the end of each period. The IFRs will serve as a basis for the audited financial statements.

22. **External audit arrangements.** The project’s annual financial statements will be audited by a private firm under terms of reference acceptable to the WB/IDB. Each audit of the Financial Statements shall cover the period of one fiscal year of the Recipient or other period agreed with the Bank and included in the Disbursement and Financial Information Letter (DFIL). The audited financial statements will be submitted to the WB no later than six months after the end of each audited period.

23. **Disbursement arrangements.** The proposed disbursement arrangements are summarized in Tables 2 and 3 below. These will be incorporated in the Disbursement and Financial Information Letter (DFIL); including, as well, additional information related to others disbursement procedures.

**Table 2. Disbursement arrangements**

The following are the general disbursement arrangements for each implementing agency:

<table>
<thead>
<tr>
<th>Disbursement method</th>
<th>Advance and reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Designated Account and frequency of documentation</td>
<td>Segregated and quarterly</td>
</tr>
<tr>
<td>Currency of Designated Account</td>
<td>USD</td>
</tr>
<tr>
<td>Supporting documentation</td>
<td>Statement of Expenditures – SOEs</td>
</tr>
</tbody>
</table>

Designated account ceilings will be variable.
Budget allocations from agency 2019-2024

Millions of USD 2018

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,19</td>
<td>34,61</td>
<td>35,66</td>
<td>37,46</td>
<td>28,08</td>
<td>12,00</td>
<td>150,00</td>
</tr>
<tr>
<td>FCP19</td>
<td>0,00</td>
<td>26,01</td>
<td>26,95</td>
<td>29,21</td>
<td>20,51</td>
<td>7,84</td>
<td>110,52</td>
</tr>
<tr>
<td>Implementing agencies</td>
<td>2,19</td>
<td>8,60</td>
<td>8,71</td>
<td>8,25</td>
<td>7,57</td>
<td>4,16</td>
<td>39,48</td>
</tr>
</tbody>
</table>

Financial Institutions at which DA will be opened:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DNP</td>
<td>Banco de la Republica (Central Bank)</td>
</tr>
<tr>
<td>ANT</td>
<td>Banco de la Republica (Central Bank)</td>
</tr>
<tr>
<td>IGAC</td>
<td>Banco de la Republica (Central Bank)</td>
</tr>
<tr>
<td>SNR</td>
<td>Banco de la Republica (Central Bank)</td>
</tr>
</tbody>
</table>

Table 3. Disbursement categories

<table>
<thead>
<tr>
<th>Component Name</th>
<th>Cost (US$)</th>
<th>Percentage of Expenditures to be Financed (inclusive of Taxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Goods, works, non-consulting services, consulting services, Training and Operating Costs</td>
<td>100,000,000</td>
<td>100%</td>
</tr>
<tr>
<td>TOTAL AMOUNT</td>
<td>100,000,000</td>
<td></td>
</tr>
</tbody>
</table>

19 FCP: Fondo Colombia en Paz
Procurement

24. **Procurement will be conducted according to the World Bank’s Procurement Regulations for IPF Borrowers** for the supply of civil works, goods, consultants and non-consulting services.

25. **A full assessment of the DNP, IGAC, SNR and ANT’s capacity to implement procurement activities was conducted** in between June and July 2018. The analysis concluded that in different levels the four entities have the capacity to implement the procurement activities, however, the following recommendations apply to all entities:
   a. **Staff**: The Executing Unit in each entity is solely dedicated to the coordination, execution, and monitoring of the project. These Units must hire procurement professionals with experience in the execution of processes financed with WB resources. Likewise, technical teams need to be reinforced with the required experts as they will be responsible for providing the necessary inputs for the different procurement processes
   b. **Roles and responsibilities**: There is a need to establish the roles, management of inter-institutional relations, and the responsibilities of the four implementing entities in the Operational Manual's procurement chapter. This manual is necessary so that the required inputs for the procurement processes are guaranteed, including the selection, execution, and proper contract administration.
   c. There is also a need to identify a strategy for operating in the field that involves Territorial Entities in contract administration.
   d. **Training**: Identify specific training needs in procurement for the executing teams and/or project actors that require it.
   e. **Complaints**: Guarantee that there is a mechanism for receiving, responding to, and monitoring complaints that arise during the procurement selection and contracting processes.
   f. **Files and documentation management**: Guarantee the proper management of files of contractual processes and contract administration. This includes keeping the information properly and timely filed to facilitate monitoring and audits.
   g. **Procurement Plan**: Maintain the project's procurement plan up-to-date and carry out the corresponding management through STEP. Keep the Procurement Strategy updated.

26. **Procurement arrangements.** DNP, IGAC, SNR and ANT, with World Bank support, has completed the Project Procurement Strategy for Development (PPSD) identifying the appropriate selection methods, market approach, and type of review by the World Bank, as follows:
   a. **Goods and non-consulting services** (may include the selection of a Fiduciary Agent) will be procured following Request for Bids, Request for Quotations, and Direct Selection methods. Under the open international competitive procurement approach, the World Bank Procurement Standard Documents will apply. When approaching the national market, the procurement documents will be agreed with the World Bank.
   b. **Consulting services** (may include the selection of a Fiduciary Agent) will be procured following Quality and Cost-Based Selection, Fixed-Budget-Based Selection, Least-Cost-Based Selection, Quality-Based Selection, Consultant’s-Qualification-Based Selection, Direct Selection, and Individual Consultants methods. Under the International Market Approach, the World Bank Request for Proposals standard document will apply. When approaching the national market, the

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21 July 2016, reviewed November 2017
procurement documents will be agreed with the World Bank.

27. **Risk mitigation plan.** The following table summarizes the mitigation actions proposed for the procurement-related risks identified above.

Table 4. Procurement improvement action plan

<table>
<thead>
<tr>
<th>Risks - Areas for Improvement</th>
<th>Mitigation Actions</th>
<th>Responsible</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procurement planning</strong></td>
<td>The implementing entities, with Bank support, have completed the final versions of the PPSD and the procurement plan.</td>
<td>DNP, IGAC, SNR and ANT</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td>Include the Procurement Plan in the procurement plan administration system - STEP.</td>
<td></td>
<td>During Project implementation.</td>
</tr>
<tr>
<td></td>
<td>Keep the Procurement Plan updated in STEP to reflect the actual execution of the project.</td>
<td></td>
<td>During Project implementation.</td>
</tr>
<tr>
<td></td>
<td>Keep the procurement strategy updated.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td>Prepare terms of reference for the selection / hiring of procurement personnel required and perform procurement personnel selection and hiring processes.</td>
<td>DNP, IGAC, SNR and ANT</td>
<td>Up to ninety (90) days after Effective Date,</td>
</tr>
<tr>
<td><strong>Roles and responsibilities</strong></td>
<td>Prepare Operative Manual's procurement chapter: A clear definition of the processes, roles and responsibilities of the entities and staff related to the implementation of the procurement activities.</td>
<td>DNP, IGAC, SNR and ANT</td>
<td>Not later than thirty (30) days after Effective Date.</td>
</tr>
<tr>
<td></td>
<td>Identify a strategy for operating in the field that involves Territorial Entities in contract administration and including it in the PPSD.</td>
<td></td>
<td>During Project implementation.</td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td>Once the personnel required by the executing agencies is hired, a workshop will be held on general aspects of the WB Procurement Regulations.</td>
<td>DNP, IGAC, SNR and ANT</td>
<td>Before starting the first procurement process.</td>
</tr>
<tr>
<td></td>
<td>A detailed workshop on Procurement Regulations will be held with those responsible for the procurement processes of the executing entities.</td>
<td></td>
<td>Before starting the first procurement process.</td>
</tr>
<tr>
<td><strong>Complaints</strong></td>
<td>Include the complaints' mechanism of reception, response and monitoring in the Operating Manual's procurement chapter.</td>
<td>DNP, IGAC, SNR and ANT</td>
<td>Not later than thirty (30) days after Effective Date.</td>
</tr>
<tr>
<td></td>
<td>Maintain updated complaints' database including the reception and response during the development of the procurement</td>
<td></td>
<td>During project implementation</td>
</tr>
</tbody>
</table>
The overall project risk for procurement is substantial. This rating is due to the complexity of implementation arrangements and the location of the municipalities where the Project will be implemented.

Environmental and Social (including safeguards)

29. Environmental and social safeguards will be monitored by the safeguards specialist in DNP (terms of reference must be satisfactory to the Bank). However, the entities responsible for actual implementation in the field – IGAC and ANT – will also need social and environmental specialists in the field to ensure proper compliance not only with Bank policies but also with the socially informed processes and protocols under development.

30. Grievance Redress Mechanism (GRM): The PCU will be responsible for setting up the Project GRM. Communities and individuals who believe that they are adversely affected by the Project may submit complaints at any time throughout project implementation.

31. These complaints may be submitted in writing to DNP via the Project/ARC website (when operational). A standard form will be developed but complaints may also be submitted as a letter or any other written form. Each complaint will be logged into the complaint log (either a physical log or excel sheet) with key information – who, what, when, where. If the specialist can respond to the complaint, he/she will do so, logging in the date and basic response. If the specialist cannot respond, he/she will contact the relevant department or office for a response. All complaints will receive a written response.

32. A log will be kept of all complaints and responses and a copy of the full response will be kept on file until the end of the project. This process will be further detailed in the Project Operations Manual.

33. Additionally, by law, the cadaster and formalization processes include standard complaint and appeals processes. At the end of the fieldwork, all data will be presented to the community for validation. This involves publicly displaying the information for a set period (15 working days) of the maps and related textual data on ownership/possession and a procedure for citizens, residents, and others to present complaints, requests for correction of data, among others. There is a standard process to resolve these complaints and requests for correction. Once this process is completed the data will be officially incorporated into the official database, among others. There is then an administrative appeal process for any unresolved issues. The final step would be to go to court.
Monitoring and Evaluation

34. Robust monitoring and evaluation (M&E) will be needed for the Project to manage both outputs and outcomes. CONPES 3859 establishes the need for a monitoring system operated by DNP for the multipurpose cadaster. The Project will have M&E specialists at DNP’s PCU, for overall reporting, and M&E specialists at ANT, IGAC, and SNR for self-monitoring at each institution. This includes modules in IGAC’S, SNR’S and ANT’S management systems, to generate information on the efficiency and effectiveness of the processes on a regular basis. The establishment of the M&E system, as well as the needs for evaluating the results and impacts of the Multipurpose Cadaster will also require the establishment of a solid baseline. The Project will finance a study in year one to establish the baseline for key performance indicators in the results framework. This study will include both quantitative and qualitative data collection. Data will be collected at the level of future beneficiaries, territorial entities and implementing institutions. The quantitative and qualitative survey will be repeated at mid-term and for the final project evaluation. The results of the midterm survey will be incorporated into the project activities to improve processes continuously. The PCU will be required to provide quarterly progress reports to the Bank. The Project will finance a final evaluation to assess project performance and to provide recommendations and actions for further improvement and expansion of cadastral and registration services.

Role of Partners (if applicable)

35. The IDB is providing US$50 million in financing for the multi-purpose cadaster. However, it should be noted that the Project can be implemented independently of IDB financing. The Bank will finance Components 1, 2 and 4. The IDB and the Bank will finance different geographic areas for the implementation of Component 3 according using same methodology. Both Banks have coordinated their efforts on safeguards and fiduciary assessments to reduce the burden on the GoC and ensure a consistent approach.

36. There are a number of donors involved in the land sector in Colombia and the Project will continue to participate in donor coordination events.

   a. The Inter-American Development Bank (IDB) is providing US$50 million in parallel financing for the Multi-Purpose cadaster program. The Bank is working closely with the IDB to ensure proper coordination. However, the Project can be implemented independently of the IDB financing. The IDB and the Bank will finance interventions using the same methodologies in different geographic areas for the implementation of Component 3. Both Banks have also coordinated safeguard and fiduciary assessments to reduce the burden on the GoC and ensure a consistent approach.

   b. USAID financed a systematic cadaster and registration pilot in the municipality of Ovejas, which focused on land tenure formalization (the lessons learned from this pilot have been incorporated under Component 3).

   c. Sweden is financing the TA for the multipurpose cadaster pilots with additional human resources support from the Netherlands, Spain, and France. Sweden has agreed to finance a second phase TA to support the final preparation phase of the Project and the first year of implementation.

   d. SECO has been supporting the enhancement of Colombia’s spatial data infrastructure, the design of technical standards for the cadaster and the data model for cadaster-registry.
ANNEX 3: IMPLEMENTATION SUPPORT PLAN

COUNTRY: Colombia
Colombia Multipurpose Cadaster Project

A. Strategy and approach for Implementation Support

1. **The strategy for Implementation Support (IS)** by the Bank reflects the nature of the Project and its risk profile. The strategy aims at making IS to the client more efficient while remaining focused on implementation of the risk mitigation measures identified in the SORT. The strategy is also an indicative and flexible instrument that will be revisited during Project implementation and as part of the Implementation Status and Results Report (ISR) reviews and adjusted based on emerging project challenges and field conditions.

2. **Overall Project Implementation.** Project supervision will support the following critical areas: (a) fiduciary capacity to promote the establishment of adequate internal control systems and overall governance; (b) technical expertise on surveying, cadaster, registration, formalization, dispute resolution, ICT and other land administration functions to support further adoption of good practices and cost-effectiveness; (c) free, prior, and informed consultations with Indigenous Peoples and Afro-Colombians throughout project implementation to ensure that they receive benefits that are culturally compatible; (d) management of other environmental and social factors in rural areas; and (e) communication campaigns to keep stakeholders informed and engaged.

3. **Fiduciary aspects.** The Bank will: (a) provide implementation support and training as necessary; (b) follow up on the Project's financial management system and ensure adherence to the Operational Manual, including but not limited to accounting, flow of funds, reporting and internal controls; (c) provide guidance on Procurement Guidelines to the PCU; (d) review procurement documents and provide timely feedback to the PCU; and (e) help monitor procurement progress against the Procurement Plan. The Bank’s new procurement guidelines provide the possibility for increased procurement support for the supervision of complex procurement or where capacity is a particular issue. The Bank team will ensure proper support is provided for DNP on complex IT procurements, including specialized IT procurement capacity as needed, either from Bank staff or experienced consultants.

4. **Environmental and Social aspects.** The Bank will emphasize opportunities for social development and environmental sustainability provided by the Project, as well as adequate attention to gender equity issues. Within this framework, the Bank will help to monitor the implementation of activities and safeguard instruments. Bank social and environmental specialists will be available to provide timely guidance to DNP and other relevant agencies and will participate in field visits on a regular basis to maintain a good and ongoing understanding of the situation on the ground.

5. **Information and Communication.** A Communication Strategy will support the implementation of the Project in its different areas of intervention. The strategy will also seek to support implementation of consultative and accountability processes, including a grievance redress mechanism.
B. Implementation Support Plan

6. Task team leadership and technical aspects will be managed from the Bank’s office in Washington, in close collaboration with the Country Office in Bogota. Implementation support for Project procurement, financial management, and safeguards aspects will be carried out from the Bogota office. International and national consultants will be hired to provide advisory services in specialized land administration issues. Formal supervision and field visits will be carried out semi-annually or as needed to help promote satisfactory project implementation.

7. The main focus of implementation support is summarized below:

<table>
<thead>
<tr>
<th>Time</th>
<th>Focus</th>
<th>Skill Needed/Resource Estimate</th>
<th>Partner Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 12 months</td>
<td>Technical and procurement review of the bidding</td>
<td>Cadastral Survey Specialists 30 days</td>
<td>NA</td>
</tr>
<tr>
<td>(SWs/year)</td>
<td>documents</td>
<td>Procurement Specialist 4 SWs</td>
<td></td>
</tr>
<tr>
<td>(days/year)</td>
<td></td>
<td>ICT Specialist 3 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FM supervision</td>
<td>FM Specialist 4 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Development and Gender – Supervision and</td>
<td>Social Specialist 5 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>training</td>
<td>Gender Specialist 2 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Sustainability and Safeguards –</td>
<td>Environmental Specialist 5 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supervision and Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project Management and Communication/Information</td>
<td>Task Team Leader 8 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Land Administration Specialist 6 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Operations Specialist 4 SWs</td>
<td></td>
</tr>
<tr>
<td>Months 13-48</td>
<td>Cadastral surveying and land formalization</td>
<td>Cadastral survey Specialists 30 days</td>
<td></td>
</tr>
<tr>
<td>(SWs/year)</td>
<td></td>
<td>Formalization Specialist 30 days</td>
<td></td>
</tr>
<tr>
<td>(days/year)</td>
<td></td>
<td>Procurement Specialist 3 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NSDI and ICT development</td>
<td>NSDI Specialist 4 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ICT Specialist 4 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Sustainability and Safeguards</td>
<td>Social Specialist 4 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gender Specialist 3 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Sustainability and Safeguards</td>
<td>Environment Specialist 4 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial Management, Disbursement and</td>
<td>FM Specialist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Procurement</td>
<td>Procurement Specialist</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project Management and Communication/Information</td>
<td>Task Team Leader 8 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Land Administration Specialist 6 SWs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Operations Specialist 4 SWs</td>
<td></td>
</tr>
</tbody>
</table>
8. Skill mix required is summarized below:

<table>
<thead>
<tr>
<th>Skills Needed</th>
<th>Number of Staff Weeks</th>
<th>Number of Trips</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task Team Leader</td>
<td></td>
<td>2/year</td>
<td></td>
</tr>
<tr>
<td>Land Administration / NSDI</td>
<td></td>
<td>3/year</td>
<td></td>
</tr>
<tr>
<td>Land formalization, dispute resolution</td>
<td></td>
<td>3/year</td>
<td>Should be intense during the first 2 years</td>
</tr>
<tr>
<td>Surveying/mapping</td>
<td>12 – 16/across the Team</td>
<td>3/year</td>
<td>Should be intense during the first 2 years</td>
</tr>
<tr>
<td>IT Expertise</td>
<td></td>
<td>2/year</td>
<td></td>
</tr>
<tr>
<td>ICT Procurement</td>
<td></td>
<td>2/year</td>
<td>For 2 initial years, then 1/year</td>
</tr>
<tr>
<td>Procurement</td>
<td></td>
<td>Min. two field trips</td>
<td>Country Office-based</td>
</tr>
<tr>
<td>Financial Management</td>
<td></td>
<td>Min. two field trips</td>
<td>Country Office-based</td>
</tr>
<tr>
<td>Social Specialist/gender</td>
<td></td>
<td>Field trips as required</td>
<td></td>
</tr>
<tr>
<td>Environmental Specialist</td>
<td></td>
<td>Field trips as required</td>
<td></td>
</tr>
<tr>
<td>Communications Specialist</td>
<td>3-5</td>
<td>2/year</td>
<td></td>
</tr>
</tbody>
</table>
ANNEX 4: ECONOMIC AND FINANCIAL ANALYSIS

COUNTRY: Colombia
Multipurpose Cadaster Project

A. Technical, Economic and Financial Analysis

Technical analysis.

1. The GoC has demonstrated a strong commitment to implementing a large-scale systematic multipurpose cadaster, land tenure formalization, modernization of the land administration sector, and improving the interoperability of information systems between land administration entities. In light of this, the project’s design and budget reflect an even distribution between regulatory and institutional reform, information systems development, systematic formation of the multipurpose cadaster, and land formalization activities.

2. The project will be implemented in a universe of 72 municipalities (7 percent of Colombia’s 1122 municipalities and local governments). Municipalities were selected according to the following criteria: exhibit low levels of institutional capacity, have outdated cadastral data, exhibit high levels of informal property rights, have outdated municipal land use plans (POTs), lack basic cartography, exhibit low levels of local land tax revenue, have low capacity for Disaster Risk Management and are often located within sub regions that were affected by the internal armed conflict.

3. Land tenure formalization can generate substantial economic benefits given that 80 percent of the area of these municipalities is rural and where farming of cash crops like coffee, cacao, sugar cane, fruits, and stem tubers takes place. Under Components 1 and 2, this Project will develop the NSDI/ICDE and the strengthen land administration institutions which are crucial for a national level scaling up of the Multipurpose Cadaster. The Project represents a considerable investment, which can be partially recovered by the economic and fiscal benefits generated at the municipal level (see economic and financial analysis).

4. Taking into consideration the costs of the cadastral survey, the costs of formalization exercises in the cadastral pilots and past experience from similar projects in Central America, it is estimated that the Bank’s contribution will fund interventions in approximately 50 municipalities. This also includes the survey of 200,000 parcels and 75,000 formalization processes. With additional resources from the IDB’s parallel financing operation, the Project may cover up to 72 municipalities. Scaling up the methodological approach will lead to a more effective and efficient operation.

5. The GoC implementing entities have significant technical capacity. However, a systematic cadaster and formalization process of this Project’s scale have not been attempted before in Colombia. The technical capacity of implementing entities will need to be strengthened in the short-term in order to scale up the project and to recruit specialized firms. These firms will be contracted through a competitive process to carry out the cadastral survey in several municipalities grouped according to their geographic location. IGAC and ANT (which have the cadaster and land tenure formalization mandates respectively) will provide services in areas that present the highest social risks due to the presence of long-term conflicts.
or ethnic territories. On the one hand, IGAC does not have past experience in outsourcing services to third party providers nor in decentralization of cadastral services. On the other, ANT is a newly created agency burdened with processing a backlog of land tenure formalization claims (approximately 200,000 cases as of December 2017) and mandated to address land tenure informality (currently at 60 percent). In light of this, both agencies will require technical assistance and capacity building as built into Components 1, 2, and 3.

B. Economic and Financial Analysis

6. The economic and financial analysis was based on the information in a database provided by DNP, IGAC and UPRA (Unidad de Planificación Rural Agropecuaria-Unit for Rural Agricultural Planning). The Project will be implemented in up to 72 municipalities. Under the current budget proposal, the Bank’s contribution (US$ 100 million) will cover approximately 50 municipalities. The Project will generate several economic and financial benefits as a result of institutional strengthening of the main land administration entities, the development of new procedures to rollout the Multipurpose Cadaster, the massive land tenure formalization, and the reduction in land conflicts. The Project will generate several economic and financial benefits, including: i) an improved rural investment environment for individual households, communities, and agribusiness investors in around 65,000 newly titled rural parcels; and, ii) an increase in formal land transactions that will increase SNR’s income through the collection of fees and taxes.²²

7. This economic analysis considers two scenarios. The first scenario reflects the Bank’s contribution of (US$100,000,000) for interventions in approximately 50 municipalities. The second scenario additionally includes the IDB’s contribution of US$ 50,000,000 for a Project total of US$ 150,000,000, in 72 municipalities. In both scenarios, the Project is expected to formalize 75 percent of a universe of 75,000 parcels in scenario 1 (and 113,000 parcels for the total $150 million). For these formalized parcels, it is expected that 80 percent of the landholders obtain a progressive increase in US$ 60/ha²³ of annual rural income. With a discount rate of 10 percent, the first scenario will generate an Internal Rate of Return (IRR) of 14 percent and a Net Present Value (NPV) of US$29 million. In the second scenario, the IRR increases to 15 percent and generates a NPV of US$ 51 million. Other possible economic benefits include lower costs for users of the land administration system due to improved efficiency of services. However, for the purpose of this economic and financial analysis these benefits are not quantified due to lack of information.

8. Economic benefits are highly sensitive to the number of titles issued and the support for investment in the formalized parcels. It is also essential to ensure that farmers located in the selected municipalities will have access to rural development programs and financial services, so that they are able to invest in their parcel and earn additional income.

9. It is also estimated that the collection of real property tax will increase in all municipalities at the end of the Project and will continue the following years. Under Scenario 1, the additional annual fiscal

²² For the economic and fiscal analysis, the recurrent costs related to the update and maintenance of the improved land administration systems and the need to reinforce the staff of the different entities at central, departmental and municipal levels were also included to calculate the incremental net benefits

²³ This is a conservative figure taking into consideration an average 20% increases in the commercial value of titled properties (a proxy of the additional incomes that could generated investments in parcels due to the improved tenure security), obtained in similar projects in Nicaragua and Honduras.
revenue is estimated to be around US$5 million with an IRR of 11 percent. Under scenario 2, the incremental fiscal revenue grows to US$16 million and the expected IRR is 12 percent. Other financial benefits are also expected, such as the increase in fees and national taxes due to the intensification of the formal land transactions.

**Rationale for public sector financing**

10. Land administration is an essential public service that underpins economic growth and poverty reduction. While the private sector has an important role to play, particularly in terms of land surveying, public-sector provisioning and financing is required, because sectoral public policies will require a functioning land administration system that provides up to date reliable cadastral data, promotes legal land tenure security and strengthens the formal land market.

11. In this context the financing of the Multipurpose Cadaster will facilitate: i) territorial planning and landscape management; ii) improve the State's capacity to prioritize and better allocate public investment, such as infrastructure and public goods; and iii) contribute to the stabilization of the conflict affected territories.