

ECUADOR

**NATIONAL SYSTEM FOR RURAL LAND INFORMATION AND
MANAGEMENT AND TECHNOLOGY INFRASTRUCTURE**

(EC-L1071)

LOAN PROPOSAL

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ELECTRONIC LINKS	
REQUIRED	
1.	Annual work plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35339516
2.	Monitoring and evaluation arrangements http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35339830
3.	Detailed procurement plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35339227
4.	Environmental and social management report (ESMR) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35341133
5.	Safeguard screening form and safeguard policy filter report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35385938
OPTIONAL	
1.	Institutional capacity assessment of MAGAP - PRAT http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35328036 http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35327982
2.	Fiduciary agreements and requirements http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35339267
3.	Results and cost matrix http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35328008
4.	Itemized budget http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35339510
5.	Environmental and social analysis report and environmental and social management plan (ESMP) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35328104
6.	Consultant's report: Environmental and social analysis and ESMP for the SIGTierras program http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35328058
7.	Final evaluation of the Rural Land Regularization and Administration Program http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35340971
8.	Table of cantons included in the SIGTierras project http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35340967
9.	Loan 1376/OC-EC – project completion report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35340950
10.	Operating Manual http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35348223
11.	Risk assessment http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35354566 http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35364519

ABBREVIATIONS

CELIR	Comisión Especial de Límites Internos de la República [Special Internal Boundaries Commission of the Republic]
CLIRSEN	Centro de Levantamientos Integrados de Recursos Naturales por Sensores Remotos [Center for Integrated Natural Resource Surveying by Remote Sensing]
ESMP	Environmental and social management plan
ESMR	Environmental and social management report
GDP	Gross domestic product
RMG	Project risk management guide
IGM	Instituto Geográfico Militar [Military Geographical Institute]
INDA	Instituto Nacional de Desarrollo Agrario [National Agrarian Development Institute]
LIBOR	London Interbank Offered Rate
MAE	Ministry of the Environment
MAGAP	Ministry of Agriculture, Livestock, Aquaculture, and Fishing
PEU	Project execution unit
PRAT	Rural Land Regularization and Administration Program
SBD	Standard Bidding Documents
SENPLADES	National Planning and Development Department
SIGTierra	Sistema Nacional de Información y Gestión de Tierras Rurales [National Rural Land Information and Management System]
SRFP	Standard Request for Proposals

PROJECT SUMMARY

ECUADOR NATIONAL SYSTEM FOR RURAL LAND INFORMATION AND MANAGEMENT AND TECHNOLOGY INFRASTRUCTURE (EC-L1071)

Financial Terms and Conditions				
Borrower: Republic of Ecuador Executing agency: Republic of Ecuador, via the Ministry of Agriculture, Livestock, Aquaculture, and Fishing (MAGAP)			Financing source:	Ordinary Capital
			Amortization period:	25 years
			Grace period:	4 years
			Disbursement period:	4 years
Source	Amount (US\$)	%	Interest rate:	LIBOR-based
IDB	90 million	70.3	Inspection and supervision fee:	*
Local	38 million	29.7	Credit fee:	*
Total	128 million	100.0	Currency:	U.S. dollars from the Single Currency Facility
Project at a Glance				
Project objective: This project will continue to implement an efficient cadastral management and rural property registry system throughout the country, with a view to providing legal certainty with regard to property rights, supporting the application of canton tax policies, and providing information for land management and land use planning in rural areas.				
As special conditions precedent to the first disbursement, (a) the executing agency will issue a Ministerial Agreement outlining the internal structure of the project execution unit (PEU) responsible for project implementation and its placement within the current operational structure of MAGAP, in addition to describing its objectives, responsibilities, and powers and the internal controls and supervision levels that will be implemented for the unit to operate, especially with regard to management of the proceeds of the Bank loan and the local counterpart funds (paragraph 3.2).; (b) the PEU's seven main officers will be hired: Executive Director, Technical Director, and coordinators for the following areas: administration, finance, cartography and geomatics, assessment, and information systems research and development (paragraph 3.2), and (c) the Operating Manual will enter into force (paragraph 3.5).				
As additional special conditions for execution, (a) prior to the disbursement of resources for component 2, the executing agency will demonstrate that agreements have been signed with the Ministry of the Environment, the Special Internal Boundaries Commission of the Republic (CELIR), and the Center for Integrated Natural Resource Surveying by Remote Sensing (CLIRSEN) in terms agreed in advance with the Bank, and will demonstrate that CLIRSEN has the budget resources to carry out the agreed activities (paragraph 3.3); (b) prior to the first disbursement of loan proceeds for component 2, the PEU will hire two specialists to perform social diagnostic assessments in the highland and coastal cantons involved in the project, and design and oversee implementation of the participation program to be carried out by the companies hired for the cadastral sweeps (paragraph 2.7); (c) prior to the signature of each cadastral sweep contract under component 2, the PEU will have signed agreements with all the municipios that will benefit from the contract, spelling out the responsibilities of each of the parties (paragraph 3.4).				
Exceptions to Bank policies: None				
Project consistent with country strategy: Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>]				
Project qualifies as: SEQ [<input checked="" type="checkbox"/>] PTI [<input checked="" type="checkbox"/>] Sector [<input type="checkbox"/>] Geographic [<input checked="" type="checkbox"/>] Headcount [<input type="checkbox"/>]				
Procurement: With the exception of the contracts for aerial photography and orthophoto mapping, project procurements will be carried out in accordance with the Bank's policies and procedures as given in documents GN-2349-7 and GN-2350-7 (Annex III).				

* The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provisions of the Bank's policy on lending rate methodology for Ordinary Capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problems to be addressed, and rationale

1. The agricultural sector and land tenure in Ecuador

- 1.1 Agriculture is a strategic, priority sector for Ecuadorian development, accounting for approximately 9% of the gross domestic product and providing jobs for 26% of the economically active population. The annual growth rate for the sector has been significant—4.9% from 1995 to 2008—outpacing the economy as a whole (3.4%), and agricultural exports have grown at an annual rate of nearly 15% for the last five years, reaching some US\$3.000 billion in 2009, equivalent to half the value of oil exports. Nevertheless, the sector is heterogeneous, and growth has been led by the small percentage of commercial producers who are able to make investments and have access to technology. The country's many traditional farmers have limited access to technology and face serious hurdles to making the investments that would raise their productive capacity, enhance their contribution to sector development, and improve the well-being of rural Ecuadorians. The difference can be seen clearly in the trends in yields in the 2002-2008 period: for the crops most representative of commercial agriculture (banana, palm, cocoa, coffee, sugar cane, flint corn), yields grew at an average annual rate of 6%, while for traditional crops (beans, flour corn, broad beans, potatoes), yields were stable or declined. Similarly, agricultural credit, which is scarce in Ecuador, representing only 8.8% of sector GDP, went mainly to commercial agriculture.
- 1.2 A key factor that helps to explain the differences in productivity between commercial and traditional agriculture in Ecuador is irregular land tenure. The Ministry of Agriculture, Livestock, Aquaculture, and Fishing (MAGAP) estimates that 58% of rural properties in Ecuador have no updated property records, and that no title was issued for 12%, with traditional farmers being affected the most. The irregular status of land ownership rights limits rural productive investments, access to credit, and the full operation of land and rental markets, which adversely impacts farm productivity growth rates, particularly for traditional agriculture.
- #### **2. Progress toward regularization of land tenure**
- 1.3 The Ecuadorian government has been making efforts to address irregular land tenure in the country. With US\$15.2 million in Bank financing (loan 1376/OC-EC) approved in 2002, the government launched a Rural Land Regularization and Administration Program. With the Ministry of Agriculture as the executing agency, this operation had two main objectives: (i) to establish a modern, reliable, continuously updated system for land ownership rights; and (ii) to improve the transfer of public lands to producers.
- 1.4 Completed in 2009,¹ the operation developed and implemented an effective methodology for the physical and legal regularization of property rights in the

¹ See project completion report.

country, through comprehensive campaigns to establish cadastres, regularize land tenure, and register property. This “sweep” methodology was tested in eight of the country’s cantons, clearing rights to 103,144 rural properties, resolving the lack of formal status for 34,568 titles, and issuing titles for 5,338 properties, in line with the operation’s original targets. The methodology proved to be cost-effective and nimble, allowing for broad coverage among farmers in addition to being participatory, as it provided a central role for subnational governments and beneficiaries in the process of formalizing ownership.

- 1.5 The operation also modernized the property information system with the creation of the Rural Land Information and Management System (SIGTierra), which electronically links the files of the cadastre and register offices, uses georeferenced information based on registers keyed to the property (*folio real*), and allows for easy updates of property information. SIGTierras has become a repository for the information gathered through the regularization campaigns in the eight cantons covered by the operation, ensuring that the data can be exchanged and used transparently and fluidly between the municipal cadastre office and the canton register, through the use of a unique code for each property. The system will make it possible to keep files of georeferenced information on the physical and legal status of immovable property in future regularization interventions at the canton level, in addition to facilitating the assessment of land for tax purposes. During preparation of the proposed project it was determined that: (i) the expected increase in the number of rural properties in the cantons’ cadastres is more than 100%, which should serve to increase municipal tax receipts; (ii) the link between the cadastre offices and the registers works properly in the eight cantons; and (iii) the cadastre and register databases are kept up to date and include all transactions. These factors help to make the investments in that system sustainable.
- 1.6 The operation also included a monitoring and evaluation system, making it possible to conduct a baseline survey in the eight participating cantons, as well as in four “control” cantons, so that the project’s economic impacts could be quantified (paragraph 2.3). Additionally, a system was designed for monitoring and quality control of the integrated property sweeps, with the aim of standardizing and supervising the property regularization work done by contractors. That system incorporated statistical sampling as well as inspection plans and processes in keeping with international standard ISO 2859-1:1999.
- 1.7 The operation yielded a number of lessons learned that were similar to lessons drawn from other projects financed by the Bank in the region: (i) in addition to technical and administrative activities, projects require close, effective institutional coordination with other government agencies (municipios, environmental authorities, etc.), dissemination campaigns, and clear participatory processes to ensure acceptance among communities and the collaboration of local leaders, so executing units’ experience in building these relationships is essential if projects are to be implemented on schedule; (ii) the operation of property management systems, particularly when they have a decentralized structure, requires support, especially at

first, so such support should be included as part of the implementation plan; and (iii) the economies of scale achieved with mass property regularization projects help to lower unit costs and to build the institutional structure required at the central and subnational levels.

- 1.8 The current administration has continued to support the efforts begun under that operation, relaunching the SIGTierras initiative, which is building upon the work done to regularize land tenure. One of the initial tasks was to overhaul the existing legal framework for property registration. In March 2010, the National Public Data Registration System Act was passed; Article 13 established the Property Register, modernizing the system by requiring chronological, person-based, and property-based information management. With this new framework, Ecuador's decentralized registry system, thus far administered individually by a property registrar in each canton, will be administered jointly by the municipalities and the central government through the National Public Data Registry Office based on standardized rules for registry operation nationwide. This will help prevent ad hoc registry procedures in different cantons, lowering transaction costs and enhancing the legal guarantees regarding properties. Other recent reforms in the sector include (i) passage in 2007 of the Tax Equity Reform Act, which mandated that the municipios carry out mapping and build the rural cadastre using the methodology developed under the program financed by loan 1376/OC-EC; and (ii) breakup of the National Agrarian Development Institute (INDA), the agency tasked with issuing title to government land, and transfer of this responsibility to the new Office of the Deputy Secretary for Land and Agrarian Reform under MAGAP, to optimize the titling process based on cadastral and land tenure information generated by the proposed program.

3. Pending challenges

- 1.9 The operation financed by loan 1376/OC-EC provided the government with a viable methodology for carrying out large-scale physical and legal property regularization in Ecuador. To tackle this challenge, the government has established a medium-range plan for extending the "sweep" carried out in the eight pilot cantons under that operation to 50 more cantons, initially. The remaining 163 cantons will be included at a later date.
- 1.10 A second challenge is updating the cadastre and registry systems countrywide through the consolidation of SIGTierras. To do this, the government will have to expand the technological infrastructure—which is currently limited to the eight cantons involved in the previous operation (loan 1376/OC-EC)—to the 50 cantons that will be beneficiaries of the proposed operation, so they can manage their cadastre and registry systems according to uniform standards consistent with the new Public Data Act. This expansion will necessitate training for staff of the canton offices responsible for managing those systems, as well as interconnection with a national hub for the establishment of a master database.

- 1.11 A third challenge is the generation of relevant thematic and assessment information on land parcels and the infrastructure on them, to update the values in the cadastres. Only if those values are updated will local governments be able to increase tax receipts and create incentives for the efficient use of land resources.

4. Conceptual overview and intervention strategy

- 1.12 The proposed project was designed to address the three challenges described above. Taking into account the lessons learned from the previous operation (loan 1376/OC-EC) and based on the techniques and methodologies for land tenure regularization established under that operation, the project will initially target 50 of the country's 221 cantons, selected based on expressed interest, ability to contribute counterpart funds, and expected impact.² For these cantons, the project will set up the SIGTierra system, to increase the reliability and efficiency of the cadastre and property registry systems through efficient management of georeferenced databases based on the *folio real* and constructed using updated, field-verified cartographic information for all properties in those cantons. Based on this design, the system will electronically link the cadastre and registry offices in these cantons in real time. At the same time, by taking a universal coverage approach, strengthening the cadastre and registry offices, and connecting them with a national hub that provides support, the project will lower transaction costs and make the system sustainable. Additionally, the project will compile the information needed to start the process of issuing title to government land not located in protected natural areas, and deliver it to the Office of the Deputy Secretary for Land and Agrarian Reform, which will use the improved procedures developed with loan 1376/OC-EC. This will effectively help to accelerate the titling process.
- 1.13 The implementation of this project is a pillar of Ecuador's land policy that is essential to the development of rural areas. By the end of this operation, the cadastre will be updated for some 800,000 rural properties of the 2.7 million estimated to exist in the country, and the legal status of tenure will be enhanced for approximately 314,000 properties. The information produced in the thematic maps required for property assessments will be fed into the National Land Information System of the National Planning and Development Department (SENPLADES) and will inform the planning process at the canton level.
- 1.14 **Tie-in with the country strategy.** The Bank's current strategy with Ecuador for the 2008-2011 period (document GN-2490) proposes support for the country in the areas of: (i) development of productive infrastructure; (ii) productive development and access to financing; and (iii) economic and social inclusion. The project is consistent with areas ii and iii, which, respectively, seek to help strengthen institutions and foster productivity and competitiveness at the local level, and to

² These cantons are located in the south (1), central coast (12), northern coast (7), northern highlands (7), central highlands (10), and southern highlands (13). The complete list of cantons, along with their characteristics and thematic maps, can be found in the project cantons and thematic maps annex.

help expand access to basic services, strengthen strategic territorial planning, and improve economic, physical, and environmental conditions. One outcome indicator to be measured during execution will be the number of properties legalized.

- 1.15 **Relationship with the Bank's new sector priorities.** The project is consistent with the requirements of the Report on the Ninth General Increase in the Resources of the Inter-American Development Bank (document AB-2764). The project contributes to the sector priority "Protect the environment, respond to climate change, promote renewable energy, and ensure food security" by encouraging rural investment and access to rural credit with a view to increasing the country's agricultural output. The project also supports the IDB Results Framework 2012-2015 in that report, by helping to achieve the target "Farmers given access to agricultural services and investments" (Annex II). The operation will contribute to the poverty reduction and social equity target, as it helps small farmers.

B. Objectives and components

- 1.16 The project will continue to implement an efficient cadastral management and rural property registry system throughout the country, with a view to providing legal certainty with regard to property rights, supporting the application of canton tax policies, and providing information for land management and land use planning in rural areas. The project has four components.
- 1.17 **Component 1. Cartographic information (US\$29.6 million).** This component includes the procurement of 1:25,000-scale digital aerial photographs of the entire national territory (approximately 210,300 square kilometers) and 1:5,000-scale orthophoto maps, technical information management, and inspection of these outputs by the Military Geographical Institute (IGM). The component will also establish a computerized quality control system and an accessible, secure storage system for the approximately 100,000 photographs and 75,000 digital orthophoto maps. Cartographic information is an essential input for carrying out integrated campaigns to establish cadastres and regularize land tenure, as well as for developing the thematic maps included in component 2.
- 1.18 **Component 2. Cadastre and regularization of holdings in the cantons (US\$62.8 million).** Specialized services will be contracted under this component to obtain the following outputs for the 50 cantons: (i) updating of the rural property cadastre, with cadastral sweeps and investigation of legal ownership status for the purpose of building the rural cadastre and identifying occupancy of government land, which will begin after sociocultural diagnostic assessments have been conducted in the coastal and highland cantons selected for the project (paragraph 2.7); (ii) property regularization, which involves providing legal and technical assistance on demand to the owners of private and communal land (indigenous and Afro-Ecuadorian communities), to formalize property rights that are legally informal, and preparing cadastral and property records, property maps, and a database of informal occupancy of government land for the Office of the Deputy Secretary for Land and Agrarian Reform to use in titling land after a cross-

check against the areas protected by the Ministry of the Environment; (iii) implementation of SIGTierras, which links cadastre and property register processes by computer at the canton level and provides a link with the system's national hub, and training of municipio staff in its use; (iv) preparation of 22 types of thematic maps of each canton, which will be used for land assessment and will provide information for development and land-use planning; and (v) updating of rural land assessments, by applying the assessment methodology developed with loan 1376/OC-EC and improved by the program. This component includes financing for a study for modernizing the cadastre and property registry regulations.

- 1.19 **Component 3. National SIGTierras hub (US\$21.4 million).** This component involves the procurement of systems and implementation of the information infrastructure for the national SIGTierras hub, which will serve the additional purpose of feeding data into the SENPLADES National Land Information System. The component also includes thematic mapping for the remaining 150 cantons not under component 2.
- 1.20 **Component 4. Monitoring and evaluation and support for institutions in the use and management of information (US\$3.4 million).** This component calls for: (i) a project impact assessment, including development of a baseline that factors in social and environmental considerations and analysis of impacts on vulnerable groups (i.e. the tenant farmers known as *arrimados*³), and a midterm evaluation to be performed when 50% of the resources have been disbursed; (ii) design and implementation of an improved project monitoring and evaluation system; (iii) technical and legal assistance, software license updates, and operating expenses for municipios, to ensure the sustainability of SIGTierras in its early stages of operation; and (iv) contracting of specialized technical teams (geomatics, cartography, information systems, assessments) to help other public agencies to access, use, manage, and update the information produced.
- 1.21 **Project management (US\$6.1 million).** This component covers project execution unit (PEU) personnel costs (management staff, technical specialists, and support staff), procurement, and operating expenses (travel and per diem) as well as design and execution of the communications strategy.

C. Results framework and matrix of key indicators

- 1.22 The project will have a positive impact on the operation of land and credit markets, rural productivity, and the finances of the 50 beneficiary cantons, to be evaluated based on studies described later. The main outputs expected from the project are: (i) updated 1:5,000-scale aerial photography and orthophoto maps in 100% of the country; (ii) updated cadastres in 50 cantons, with the current number of properties (approximately 400,000) expected to double; (iii) regularization of private ownership of approximately 170,000 properties and information to begin the titling

³ See the Environmental and Social Management Report for more details.

process for some 144,000 additional properties; (iv) thematic maps that provide input for cadastre updates and for the SENPLADES National Land Information System for 204 cantons; and (v) establishment of the national SIGTierras hub. Annex II contains the results framework.

II. FINANCING STRUCTURE AND KEY RISKS

A. Cost and financing

- 2.1 The total estimated cost is US\$128 million, of which the Bank will finance US\$90 million (70.3%) with Ordinary Capital resources. Of the local contribution of US\$38 million (29.7%), US\$25.4 million (19.9%) will come from the borrower and US\$12.6 million (9.8%) will come from the governments of the participating cantons (see Table II.1).
- 2.2 The project will be implemented over four years, with four annual disbursements of US\$31.1 million; US\$45 million; US\$12.4 million; and US\$1.5 million.

Table II.1 – Cost Table (US\$ millions)⁴

Category of Investment	IDB	Gov. of Ecuador	Municipios	Total	%
I Project management	1.6	4.5	0.0	6.1	4.8%
II Direct costs	85.4	19.2	12.6	117.2	91.5%
2.1 Cartographic information	23.1	6.5	0	29.6	23.1%
2.2 Cadastre and regularization of holdings in cantons	40.1	10.1	12.6	62.8	49%
2.3 National SIGTierras hub	21.4	0.0	0.0	21.4	16.7%
2.4 Monitoring, evaluation, and support in the use and management of information	0.8	2.6	0	3.4	2.6%
III External financial audit	0	0.2	0	0.2	0.2%
IV Contingencies related to direct costs	3	1.5	0	4.5	3.5%
Total	90.0	25.4	12.6	128.0	100%
Percentage	70.3%	19.9%	9.8%	100.0%	

B. Viability

- 2.3 The economic viability analysis for the proposed project was based on the findings of the impact assessment for loan 1376/OC-EC, which was commissioned under that project. The evaluation included a baseline survey (2003) and a final project survey (2008), both administered to a sample of approximately 4,300 families, including beneficiaries and nonbeneficiaries, in the eight participating cantons and

⁴ See Cost Table for a more detailed version.

four other cantons used as a control group. The outcomes were analyzed using a matching methodology as well as econometric methods. The former involved estimating the difference in several key indicators (total family income, farm and nonfarm income, credit obtained, among others) for beneficiary households between the first year and the last year and subtracting the same differential for comparable families that did not benefit from the project. The econometric methods involved a direct calculation of the impact of titling on a similar set of indicators, making the necessary adjustments to eliminate possible biases. The results indicate that beneficiary families that legalized their ownership of their land increased their farm income by US\$305 and the likelihood of access to credit by 35%. Factoring in the cost of the project, the estimated internal rate of return is 23.7%.

C. Main design risks

- 2.4 Project risks were analyzed using the project risk management guide (RMG)⁵, looking at sustainability, governance, development, fiduciary, environmental, and social issues. The electronic links include the risk management plan and a risk assessment summary, which describes the residual risks after factoring in the identified mitigation measures.
- 2.5 The main risks involve sustainability and development issues: (i) absence of a public institution, other than the municipios, to take charge of ensuring the sustainability of the systems implemented; (ii) possibility that the municipios will not allocate sufficient resources to ensure sustainability; and (iii) weaknesses in institutional coordination. To mitigate the first two risks, the program is using the existing directives under the policy framework as a guide, will reach agreements with the municipios that make support activities permanent and that ensure institutional stability, will establish a comprehensive project communication strategy, and will produce proposed standards for national cadastre and registry management. To mitigate the risks associated with institutional coordination, agreements and coordination procedures will be established with all the entities involved, based on the experience with loan 1376/OC-EC.

D. Main environmental and social risks

- 2.6 The project is mainly expected to generate significant positive environmental, social, and economic impacts. Nevertheless, several risks of varying magnitude and complexity have been identified that could lead to significant impacts if not effectively managed. The impacts and key risks identified during the environmental and social analysis are related to: (i) indigenous and Afro-Ecuadorian communities; (ii) critical natural habitats; and (iii) the lack of coordination and buy-in among key stakeholders. For additional information on risks and mitigation measures, see the environmental and social management report (ESMR) annexed to this document.

⁵ The IDB, MAGAP, SIGTierras, SENPLADES, Banco del Estado, CLIRSEN, Canton of Mejía, and other agencies took part in the risk workshop on 23 July 2010.

- 2.7 To mitigate the risks associated with indigenous and Afro-Ecuadorian communities, the PEU will carry out sociocultural diagnostic assessments of the cantons, before the sweep begins, to inform the companies conducting them of the best strategies for getting these communities more involved in the process. Prior to the first disbursement of the loan proceeds for component 2, the PEU will hire two specialists to conduct the social diagnostic assessments in the participating coastal and highland cantons and to design and oversee implementation of the participation project to be completed by the companies hired for the cadastral sweeps. Also, the project's Operating Manual will include requirements for compliance with the Operational Policy on Indigenous Peoples (document OP-765) during implementation and the recommendations in the ESMR.

E. Main fiduciary risks

- 2.8 In the operation's design stage, a project risk analysis (using the RMG) and an institutional capacity assessment of the execution unit for the government's SIGTierras program were performed. Both assessments found the level of risk to be medium. Fiduciary risks identified involved weaknesses in: (i) the relationship between this unit and the current structure of MAGAP; (ii) the institutional ability to execute an operation of this size; (iii) the project planning and monitoring systems; and (iv) MAGAP oversight and lack of internal controls in the unit. Given these weaknesses, the studies recommended creating an ad hoc unit for execution and management of this project within the executing agency. The analysis and the measures to mitigate the identified fiduciary risks are reflected in the fiduciary agreements and requirements annex (see electronic links).

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Implementation and management arrangements

- 3.1 The project will be executed by the Ministry of Agriculture, Livestock, Aquaculture, and Fishing (MAGAP) through a project execution unit (PEU) to be created for that purpose. The PEU's responsibilities will include technical, administrative, financial, and project management and control functions, which will be delegated by MAGAP under the direction of the Vice Ministry for Agriculture, Livestock, Aquaculture, and Fishing. Within MAGAP, the PEU will: (i) have the financial and administrative autonomy for flexible and transparent budget execution and contracting; (ii) use a satisfactory financial management system for the needs of the project; and (iii) implement a personnel-contracting mechanism based on individual skills and training, responsibilities, and timely completion of targets.
- 3.2 The PEU will: (i) ensure compliance with the project's contractual conditions; (ii) submit disbursement requests to the Bank and coordinate, implement, and monitor project activities; (iii) plan, prepare, and organize project work plans and activities; and (iv) prepare the required reports. For performance of its functions, the PEU will have an executive director and a process-based organizational structure. **As conditions precedent to the first disbursement, the executing**

agency will issue a Ministerial Agreement outlining the internal structure of the project execution unit (PEU) and its placement within the current operational structure of MAGAP, in terms agreed with the Bank, in addition to describing its objectives, responsibilities, and powers and the internal controls and supervision levels that will be implemented for the unit to operate, especially with regard to management of the proceeds of the Bank loan and the local counterpart funds. Also prior to the first disbursement, the executing agency will hire the following specialists for the PEU: Executive Director, Technical Director, and coordinators for the following areas: administration, finance, cartography and geomatics, assessment, and information systems research and development.

- 3.3 The executing agency will be assisted by the following public agencies, which were also involved in the program financed by loan 1376/OC-EC: (i) the Center for Integrated Natural Resource Mapping by Remote Sensing (CLIRSEN), which will, with its own resources, help the executing agency with technical supervision of the thematic mapping included under components 2 and 3, which is needed for the property assessments that will be fed into SIGTierras; (ii) the Military Geographical Institute (IGM), which will take photographs in one zone of the country, as well as supervise and inspect the aerial photography and orthophoto mapping under component 1 pursuant to an agreement already signed for US\$1.89 million (paragraph 3.6); (iii) the Ministry of the Environment (MAE), which will be involved in overseeing completion of all project environmental measures, including those in the ESMR (paragraph 2.6), supplying information on protected areas, and receiving information generated by the project; (iv) the Special Internal Boundaries Commission of the Republic (CELIR), which will help define the boundaries between cantons and parishes, as required under component 2. As a condition precedent to the disbursement of resources for component 2, the executing agency will provide evidence that the agreements with the MAE, CELIR, and CLIRSEN have been signed, in terms agreed in advance with the Bank, and will demonstrate that CLIRSEN has the budget resources to carry out the agreed activities.
- 3.4 **Role of the municipios.** The municipios will have the following main project execution responsibilities: (i) contribution of up to 20% of the cost of activities under their responsibility under components 1 and 2, in accordance with the terms of the agreements signed or to be signed with the executing agency; (ii) naming of property registry and cadastre office staff who will participate in the tasks under their responsibility, and facilitation of training; and (iii) operation and maintenance of the equipment and systems to be installed in the property registry and cadastre offices under the project. These responsibilities will be spelled out in agreements effective for no less than 24 months for implementation of SIGTierras and a period of one additional year during which support will be provided to ensure maintenance of the goods and services. Prior to the signature of each cadastral sweep contract under component 2, the PEU will have signed agreements with all the municipios that will benefit from the contract, spelling out the responsibilities of each of the parties.

1. Operating Manual

- 3.5 Project management will be governed by an Operating Manual that describes the execution responsibilities of each of the agencies and units involved, as well as the execution processes for each component. **The entry into force of the Operating Manual will be a special condition precedent to the first disbursement.**

2. Special aspects of component execution

- 3.6 **Component 1:** In the four sections into which the country is divided, aerial photography is being taken and orthophoto maps are being produced by the consortium Stereocarto–Aeromapa (zones 1 and 3), TECSUL (zone 2), and the IGM (zone 4). If the IGM is unable to produce photographs in zone 4, the option of using a competitive procurement process or extending the work orders of the consortium conducting the work in zones 1 and 3 will be considered. The activities conducted by these firms will be overseen by the IGM pursuant to an agreement with the PEU.
- 3.7 **Component 2:** This component will be executed through service contracts with companies assigned to each of the five sets of cantons. The comprehensive cadastral sweep methodology developed with loan 1376/OC-EC involves a technical and legal examination of each of the rural properties in the canton.
- 3.8 The cadastral sweep consists of three main stages: (i) preliminary and pre-field activities; (ii) field activities; and (iii) post-field activities. These will be carried out by office and field teams consisting of specialists in geomatics, topography, land tenure and property rights, geographic information management, communication and dissemination, conflict resolution, and environmental and social issues. Once the preliminary tasks of planning, team training, and dissemination visits to the communities are completed, the physical and property ownership information will be gathered in the field and a public presentation thereof to the community will be prepared so that owners/occupants can review and accept or modify the information. During the post-field stage, the private properties needing to be regularized in the canton's property register are identified, as are informally occupied government lands needing to be transferred by the competent authority, and the final cadastral database for the canton is constructed for delivery to the PEU.
- 3.9 In addition to performing the cadastral sweep, the contracted companies will be responsible for: (i) researching real estate and building prices for assessment of the canton's rural properties; and (ii) implementing SIGTierras in the canton, which involves training technical staff on how to use the system. These companies may also prepare the thematic maps of the cantons.
- 3.10 The contractors hired for the sweep will be supervised and their outputs technically inspected by a consulting firm, which will set up a technical group in each of the cantons. Each Canton Technical Group will serve as the PEU's supervision and coordination arm in the field and will be responsible for ensuring that the

companies meet all the technical, social, and operational requirements of the established methodology. Each group will also provide appropriate legal assistance as requested by private property owners to facilitate the formalization of their rights in the property register.

- 3.11 **Procurement.** Project procurements financed in whole or in part with Bank resources will be subject to the policies for the procurement of works and goods financed by the IDB (document GN-2349-7) and the policies for selection and contracting of consultants (document GN-2350-7). For procurements whose budgets exceed the thresholds set for the country, the Standard Bidding Documents (SBDs) and Standard Requests for Proposals (SRFPs) will be used. For amounts below the thresholds, the Bank and the executing agency will agree on SBDs and SRFPs that are compatible with the aforementioned procurement policies. The procurement thresholds, procurement review procedures, and fiduciary agreements for procurement management are described in detail in the Fiduciary Agreements and Requirements (see electronic links).
- 3.12 A procurement plan for the project disbursement period has been agreed upon with the executing agency. It contains: (i) the contracts, by procurement type; (ii) the proposed procurement methods; and (iii) the procedures applied by the Bank to review those procurement methods. The executing agency will update the procurement plan annually—together with the annual work plan, when the annual evaluations are performed and before the end of each calendar year—or when substantial changes occur, covering the next 12 months of the project's execution period. Any proposed change or revision to the procurement plan must be submitted to the Bank for its approval.
- 3.13 **Fiduciary agreements and requirements.** The fiduciary agreements and requirements reflect the financial management and procurement guidelines that will apply to project execution. These agreements were drafted based on an analysis of the country's fiduciary environment, the institutional capacity assessment performed during project preparation, the GRP analysis, and meetings with staff from the executing agency and participating entities. Also taken into account was the Bank's experience working with the project execution unit for loan 1376/OC-EC. The detailed fiduciary agreements and requirements can be found in one of the electronic links.
- 3.14 **Disbursements.** Resources will be disbursed through advances paid into a "separate special account" exclusive to the project, based on the project's actual cash flow needs. MAGAP will submit the disbursement request to the Bank together with an expenditure plan for the next 180 days. At least 80% of the amount disbursed will be justified in the following request. The supporting documentation for expenditures will be subject to ex post review by Bank staff and/or consultants and by the external auditors. Expenditures that are not eligible for Bank financing will be reimbursed from local counterpart or other resources, depending on the reason for ineligibility.

- 3.15 **External audits.** During project execution, the executing agency will submit yearly audited project financial statements in accordance with Bank policy OP-273-1. The external audit will be performed by level-one independent auditors (international audit firms) acceptable to the Bank based on terms of reference approved in advance by the Bank. The audits will be financed with local counterpart resources.

B. Recognition of expenditures

- 3.16 The project provides for the retroactive recognition against the loan of expenditures of up to approximately US\$6.75 million for payments under the zone 1 and 3 aerial photography and orthophoto mapping contracts signed between the executing agency and the consortium Stereocarto–Aeromapa under component 1, and payment of the advance to IGM for oversight of those contracts—payments that were made after approval of the project profile (9 April 2010) and are consistent with operational policy OP-504. The selection, award, and contracting of the aerial photography and orthophoto mapping involved a competitive bidding process consistent with Ecuador’s regulations. An analysis of the process from a sector and procurement perspective found that for the sections corresponding to zones 1 and 3, the contract was awarded to the bidder that met the requirements set out in the bidding document (and submitted the lowest bid). The award procedure is therefore considered to be consistent with policy GN-2349-7. Additional details on the process and on the analysis are included in the fiduciary agreements and requirements (see electronic links).

C. Monitoring arrangements and evaluation plan

- 3.17 The current monitoring system consists of two subsystems: (a) the monitoring subsystem; and (b) the internal evaluation subsystem. The first continuously reviews and records progress and developments with regard to: (i) programmed activities, (ii) investments and budget execution; and (iii) achievement of outputs and targets based on monitoring of the indicators for each component. This information goes into the reports required by the different government agencies (MAGAP, SENPLADES). The internal evaluation subsystem measures the operation’s progress toward outcomes and gives a performance rating. The current system will be strengthened through the purchase of a new, more integrated system that will operate online using web technology, enabling activities to be monitored by canton, by component, and for the project as a whole.
- 3.18 A detailed impact assessment has been designed. It will involve approximately 3,000 surveys of households in 16 coastal and highland cantons (eight of them as counterfactuals) in 2011 and 2014, using the difference-in-difference methodology. The assessment will measure impacts on households in terms of final indicators (total income, value of per capita consumption, value of agricultural output, net farm income, value of assets) and intermediate indicators (agricultural productivity; spending per hectare on key inputs, investment in fixed and movable farm assets, participation in land rental and sale markets; rationing and/or participation in the formal and informal credit market, household perceptions regarding the certainty of

land tenure, the frequency and intensity of conflicts over land, and household participation in government programs). It will also measure the impact on municipal finances in terms of: number of parcels recorded in the cadastre, total value of the tax base and taxes receivable; actual tax receipts, and amounts collected from fees associated with land transactions. The estimated assessment cost of US\$600,000 is in the budget and will be covered by the Bank loan.

**Development Effectiveness Matrix
Summary**

Indicator	Score	Maximum Score
I. Strategic Relevance	Low-High	
1. IDB Strategic Development Objectives	4.0	10
Country Diversification	2.0	2
Corporate Initiatives	0.0	2.5
Harmonization and Alignment	0.0	3.5
Beneficiary Target Population	2.0	2
2. Country Strategy Development Objectives	5.2	10
Country Strategy Sector Diagnosis	2.4	6
Country Strategy sector objective & indicator	2.8	4
II. Development Outcomes - Evaluability	Highly Satisfactory	
3. Evidence-based Assessment & Solution	10.0	10
4. Evaluation & Monitoring Plan	9.3	10
5. Cost-Benefit or Cost-Effectiveness	10.0	10
6. Risks & Mitigation Monitoring Matrix	10.0	10
III. IDB's Role - Additionality		
7. Additionality	10.0	10
Technical Assistance provided prior the project	3.0	3
Improvements in management of financial, procurement, monitoring or statistics internal controls	4.0	4
Improvements in environmental, health and labor performance	3.0	3

I. Strategic Relevance: This operation is implemented in Ecuador, a country group C/D, in South America. The program focuses on developing a land registry/cadastre. Its objective is poverty targeting and social equity since it supports smallholder agriculture. The program is not directly referenced in the Country Strategy but is linked to sector objectives and indicators related to increased financial access and productive investment.

II. Evaluability: A pilot program was carried out prior to this loan which allowed for a careful diagnosis of the program. The program includes a monitoring and evaluation plan that has a sufficient budget, a carefully defined timeline and employs a quasiexperimental approach. An economic assessment using cost-benefit analysis is carried out using information from the pilot program. The risk matrix identifies all risks and rates them for magnitude, and indicators to monitor mitigation measure implementation are presented.

III. Additionality: The program benefited from a pilot phase as well as from Technical Cooperation funds previously provided by the IDB. This should improve the performance of the government in managing the program.

RESULTS FRAMEWORK¹

Objective: The project will continue to implement an efficient cadastral management and rural property registration system throughout the country, with a view to providing legal certainty with regard to property rights, supporting the application of canton tax policies, and providing information for land management and land use planning in rural areas.

Goal indicators	Baseline	End-of-project total	Comments
<p>Increase in access to credit for rural households</p> <p>Indicator: Difference in access to credit (% of households with access to credit) between project beneficiaries and nonbeneficiaries</p> $\frac{(PC_{B2014} - PC_{B2010})}{PC_{B2010}} - \frac{(PC_{NB2014} - PC_{NB2010})}{PC_{NB2010}}$	0	35%	Access to credit is considered a “lead indicator” of investment and productivity improvements. The impact assessment will also measure the effect on production and household income.
<p>Increase in the value of the municipios’ taxable rural property base</p> <p>Indicator: Increase in the value of the taxable property base as a result of the project, as compared to cantons not included in the project</p> $\left[\frac{BG_{B2014} - BG_{B2010}}{BG_{B2010}} \right] - \left[\frac{BG_{NB2014} - BG_{NB2010}}{BG_{NB2010}} \right]$	0	100%	The “difference in difference” methodology should eliminate the effect of factors exogenous to the project, such as inflation, intermittent update campaigns, etc.

¹ The targets are for each year of project execution. Data are not incremental; the total is the sum of the expected targets for each year.

Matrix of Indicators								
Results framework for the project “National System for Rural Land Information and Management and Technology Infrastructure”								
Component/Final outcomes expected for each activity	Baseline	End of 2010	End of 2011	End of 2012	End of 2013	End of 2014	End-of-project total	Comments
C1. CARTOGRAPHIC INFORMATION								
OUTPUTS								
1. Square kilometers of orthophoto maps approved	0	10,515	225,607	-			236,122	
OUTCOMES								
1. Percentage of the country (in surface area) with 1:5,000-scale orthophoto maps	2.5%	4.5%	93%				100%	<i>The baseline equals what was covered under the Rural Land Regularization and Administration Program (PRAT).</i>
C2. CADASTRE AND REGULARIZATION								
OUTPUTS								
1. Number of properties in the cadastres	400,000	11,700				800,000		<i>Beneficiaries will be identified—by gender and ethnicity—based on the cadastral sweeps and the sociocultural diagnostic assessments.</i>
2. Number of cantons with thematic maps completed	0	2	2	20	26		50	
3. Number of cantons with assessment maps completed			2	17	23	8	50	
4. Number of cantons with local system (software, hardware, and communications) installed		2	2	46			50	
5. Geomatics Center up and running	0		1				1	
6. Study of legal reforms for sustainability of regularization	0		1	0			1	

Matrix of Indicators								
Results framework for the project “National System for Rural Land Information and Management and Technology Infrastructure”								
Component/Final outcomes expected for each activity	Baseline	End of 2010	End of 2011	End of 2012	End of 2013	End of 2014	End-of-project total	Comments
7. Incremental percentage of the 50 cantons with a project dissemination strategy in place	0	5%	30%	30%	30%	5%	100%	<i>Communication strategy in place</i>
8. Properties with legal ownership status regularized	0				70,000	100,000	170,000	
OUTCOMES								
1. Cantons with cadastres and assessments completed according to the MAGAP/PRAT methodology	8		2	17	23	8	50	<i>There were eight cantons under PRAT, and four have already begun as part of the SIGTierras program.</i>
C3. NATIONAL LAND INFORMATION SYSTEM								
OUTPUTS								
1. Data Center for the National Land Information and Management System implemented	0		1				1	
2. Design and creation of the national database completed	0		1				1	
3. Aerial photograph and orthophoto map storage system implemented	0		1				1	
4. The web-based SIGTierras system reprogrammed for open-source and/or hybrid systems	0				1		1	
5. Study for rapid updating of thematic maps completed	0		1				1	

Matrix of Indicators								
Results framework for the project “National System for Rural Land Information and Management and Technology Infrastructure”								
Component/Final outcomes expected for each activity	Baseline	End of 2010	End of 2011	End of 2012	End of 2013	End of 2014	End-of-project total	Comments
6. Number of cantons with completed thematic maps	0	0	0	70	84		154	
OUTCOMES								
1. Cantons integrated into the National Land Information System	8		4	4	17	25	50	
C4. MONITORING, EVALUATION, AND AUDITS								
OUTPUTS								
1. Monitoring and control system in place	0		1				1	
2. Project impact assessments carried out – baseline, midterm, and final evaluation	0		1		1	1	3	
3. Financial audits performed and approved	0		1	1	1	1	4	
OUTCOMES								
1. Project (in %) monitored and evaluated as implementation progresses	0		100				100	

Project: National System for Rural Land Information and Management and Technology Infrastructure

Project number _____ and loan contract number _____

Period covered by this procurement plan: October 2010 to April 2014

Ref.No.	Category and description of procurement contract	Estimated cost (US\$000)	Procurement method ¹	Review (ex ante or ex post)	Financing source and percentage			Prequalification (Yes/No)	Estimated dates		Status (pending, in process, awarded, canceled)	Comments
					IDB %	Gov. %	Municipio %		Publication Specific Procurement Notice	Contract completion		
1	GOODS AND SERVICES											
	Good 1											
	Aerial photography - Zone 1	7,782.00	ICB	Ex post	100			No	Oct-09	Oct-11	Awarded	
	Good 2											
	Aerial photography - Zone 2	9,350.00				100			Oct-09	Oct-11	Awarded	
	Good 3											
	Aerial photography - Zone 3	7,173.00	ICB	Ex post	100			No	Oct-09	Oct-11	Awarded	
	Good 4											

¹ **Goods and Works:** **ICB:** International competitive bidding; **LIB:** Limited international bidding; **NCB:** National competitive bidding; **S:** Shopping; **DC:** Direct contracting; **FA:** Force account; **PSA:** Procurement through specialized agencies; **PA:** Procurement agents; **IA:** Inspection agents; **PLFI:** Procurement in loans to financial intermediaries; **BOO/BOT/BOOT:** Build, own, operate/Build, operate, transfer/Build, own, operate, transfer; **PBP:** Performance-based procurement; **PLGB:** Procurement under loans guaranteed by the Bank; **PCP:** Community participation procurement. **Consulting Firms:** **QCBS:** Quality- and cost-based selection **QBS:** Quality-based selection **FBS:** Selection under a fixed budget; **LCS:** Least-cost selection; **CQS:** Selection based on the consultants' qualifications; **SSS:** Single-source selection. **Individual Consultants:** **NICQ:** National individual consultant selection based on qualifications; **IICQ:** International individual consultant selection based on qualifications.

Ref.No.	Category and description of procurement contract	Estimated cost (US\$000)	Procurement method ¹	Review (ex ante or ex post)	Financing source and percentage			Prequalification (Yes/No)	Estimated dates		Status (pending, in process, awarded, canceled)	Comments
					IDB %	Gov. %	Municipio %		Publication Specific Procurement Notice	Contract completion		
	Aerial photography - Zone 4	5,234.00	ICB	Ex post	100				Jan-11	Dec-11	Pending	
	Good 5											
	Vehicles	240.00	NCB	Ex ante	100			No	Jan-11	May-11	Pending	
	Good 6											
	Equipment for implementing SIGTIERRAS in the cantons	5,464.00	ICB	Ex ante	73	23	4	No	Jan-11	May-12	Pending	Consultant is exploring use of free software. Based on the results the process will move forward.
	Good 7											
	Infrastructure equipment for the SIGTIERRAS Data Center	1,200.00	ICB	Ex ante	100			No	Jan-11	Dec-11	Pending	
	Good 8											
Lot 1	Sweep, thematic maps of cantons, and implementation of SIGTIERRAS – North coast	4,500.00	ICB	Ex ante	51	49		No	Nov-11	Mar-13	Pending	Contingent on having the terms of reference for thematic maps and assessment by November 2010

Ref.No.	Category and description of procurement contract	Estimated cost (US\$000)	Procurement method ¹	Review (ex ante or ex post)	Financing source and percentage			Prequalification (Yes/No)	Estimated dates		Status (pending, in process, awarded, canceled)	Comments
					IDB %	Gov. %	Municipio %		Publication Specific Procurement Notice	Contract completion		
	Good 9											
Lot 2	Sweep, thematic maps of cantons, and implementation of SIGTIERRAS – Central coast	7,225.00	ICB	Ex ante	19	47	34	No	Nov-10	Mar-13	Pending	Contingent on having the terms of reference for thematic maps and assessment by November 2010
	Good 10											
Lot 3	Sweep, thematic maps of cantons, and implementation of SIGTIERRAS – Northern highlands	4,044.00	ICB	Ex ante	67		33	No	Nov-10	Mar-13	Pending	Contingent on having the terms of reference for thematic maps and assessment by November 2010
	Good 11											
Lot 4	Sweep, thematic maps of cantons, and implementation of SIGTIERRAS – Central highlands	9,806.00	ICB	Ex ante	61	17	22	No	Nov-10	Mar-13	Pending	Contingent on having the terms of reference for thematic maps and assessment by November 2010

Ref.No.	Category and description of procurement contract	Estimated cost (US\$000)	Procurement method ¹	Review (ex ante or ex post)	Financing source and percentage			Prequalification (Yes/No)	Estimated dates		Status (pending, in process, awarded, canceled)	Comments
					IDB %	Gov. %	Municipio %		Publication Specific Procurement Notice	Contract completion		
	Good 12											
Lot 5	Sweep, thematic maps of cantons, and implementation of SIGTIERRAS – Southern highlands	7,091.00	ICB	Ex ante	66		34	No	Nov-10	Mar-13	Pending	Contingent on having the terms of reference for thematic maps and assessment by November 2010
	Good 13											
Lot 6	Sweep, thematic maps of cantons, and implementation of SIGTIERRAS – Cuenca	5,050.00	ICB	Ex ante	81		19	No	Nov-10	Mar-13	Pending	Contingent on having the terms of reference for thematic maps and assessment by November 2010
	Good 14											
Lot 1	Thematic mapping in cantons not targeted Zone 1	3,537.00	ICB	Ex ante	100			No	Jan-11	Sept-13	Pending	
	Good 15											
Lot 2	Thematic mapping in cantons not targeted Zone 2	3,537.00	ICB	Ex ante	100			No	Jan-11	Sept-13	Pending	

[illegible]

Ref.No.	Category and description of procurement contract	Estimated cost (US\$000)	Procurement method ¹	Review (ex ante or ex post)	Financing source and percentage			Prequalification (Yes/No)	Estimated dates		Status (pending, in process, awarded, canceled)	Comments
					IDB %	Gov. %	Municipio %		Publication Specific Procurement Notice	Contract completion		
	Vehicle rental	432.00	QCBS	Ex ante	100			No	Jan-11	Sept-13	Pending	
	Service 2											
	Insurance	93.00	QCBS	Ex ante	100			No	Jan-11	Apr-14	Pending	
2	CONSULTING SERVICES											
	Consulting service 1											
	Design and implementation of the communication strategy	690.00	QCBS	Ex ante	100			No	Nov-10	Nov-13	Pending	
	Consulting service 2											
	Project impact assessment (baseline and final evaluation) and midterm evaluation	600.00	QCBS	Ex ante	100			No	Nov-10	Apr-14	Pending	
	Consulting service 3											
	System for the management of aerial photographs and orthophotos	80.00	QCBS	Ex post	100			No	Jan-11	Jul-11	Pending	Research the availability of a system on the market
	Consulting service 4											
	Oversight of the sweep, research on land/building prices, and SIGTIERRAS (2 contracts)	8,927.00	QCBS	Ex ante	100			No	Nov-10	Mar-13	Pending	

Ref.No.	Category and description of procurement contract	Estimated cost (US\$000)	Procurement method ¹	Review (ex ante or ex post)	Financing source and percentage			Prequalification (Yes/No)	Estimated dates		Status (pending, in process, awarded, canceled)	Comments
					IDB %	Gov. %	Municipio %		Publication Specific Procurement Notice	Contract completion		
	Consulting service 5											
	Study on legal reforms for sustainability of regularization	15.00	IICQ	Ex post	100			No	Mar-11	Aug-11	Pending	
	Consulting service 6											
	Studies and inputs for rapid updating of thematic maps	30.00	IICQ	Ex post	100			No	Jan-12	Sept-12	Pending	
	Consulting service 7											
	Development of web-based SIGTIERRAS; open-source software and/or hybrid systems	1,950.00	QCBS	Ex ante	100			No	Feb-11	Aug-13	Pending	
	Consulting service 8											
	Sweep—Cantons: Milagro, Caluma, Riobamba, and Loja	4,055.00				75	25		Aug-10	Dec-11	Awarded	
	Consulting service 9											
	Design and implementation of project monitoring and control system	150.00	QCBS	Ex post	100			No	Nov-10	Jul-11	Pending	
	Consulting service 10											
	Design and creation of the National Database	50.00	IICQ	Ex post	100			No	Feb-11	Oct-11	Pending	

Ref.No.	Category and description of procurement contract	Estimated cost (US\$000)	Procurement method ¹	Review (ex ante or ex post)	Financing source and percentage			Prequalification (Yes/No)	Estimated dates		Status (pending, in process, awarded, canceled)	Comments
					IDB %	Gov. %	Municipio %		Publication Specific Procurement Notice	Contract completion		
	Consulting service 11											
	Development and implementation of the training plan for the Geomatics Training Center	50.00	IICQ	Ex post	100			No	Mar-11	Aug-13	Pending	
	Consulting service 12											
	Consultants for technical management of the components	4,198.00	IICQ	Ex post	100			No	Nov-2010	Apr-2014	Pending	The financing of these contracts with Bank funds is subject to approval from the government.
	Management team; project administration and supervision	4,044.00	IICQ			100		No	Nov-10	Apr-14	Pending	Contracting of staff will be governed by national regulations.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/10

Ecuador. Loan ___/OC-EC to the Republic of Ecuador
National Rural Land Information and Management
System and Technology Infrastructure

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Ecuador, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a national rural land information and management system and technology infrastructure. Such financing will be for an amount of up to US\$90,000,000 from the Single Currency Facility of the Ordinary Capital resources of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on __ _____ 2010)

LEG/SGO/IDBDOCS#35392775-10
EC-L1071