



# National Programme Document - Bolivia

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UN-REDD PROGRAMME

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17-19 March 2010





**UNITED NATIONS COLLABORATIVE PROGRAMME ON REDUCING EMISSIONS  
FROM DEFORESTATION AND FOREST DEGRADATION IN DEVELOPING COUNTRIES  
BOLIVIA NATIONAL PROGRAMME DOCUMENT**

**1. Cover page**

Country: Bolivia

Programme: UN-REDD Bolivia Programme

Programme Outcome: Strengthening the institutional and organizational capacity for productive development and job creation through the sustainable management of natural resources and the environment.

Programme Duration: 36 months  
Start/End Dates: May 2010 – April 2013  
Fund Management Option: TBD  
(Parallel, pooled, pass-through, combination)  
Managing agency: UNDP  
MDTF Office

Total estimate budget:	USD 4,400,000
Details:	
1. Available budget:	USD 4,400,000
2. Unfunded budget:	0

Financing bodies:	
Government:	
UN-REDD MDTF	USD 4,400,000
Other:	

Names and signatures of (sub) national counterparts and participating UN organizations

<b>UN Organizations</b>	<b>National counterparts</b>
Yoriko Yasukawa Resident Representative UNDP Signature Date	René Orellana Halkyer Ministro de Medio Ambiente y Agua Minister of Environment and Water Signature Date
Elisa Panadés FAO Representative in Bolivia Signature Date	Juan Pablo Ramos Morales Vice-Minister of Environment, Biodiversity and Climate Change Signature Date
Cielo Morales UNDP Deputy Resident Representative Signature Date	Jaime Villanueva Cardozo VMABCC – National Climate Change Programme Coordinator Signature Date
Angela Cropper UNEP Deputy Executive Director Signature Date	

<b>Civil Society Organizations</b>	<b>Civil Society Organizations</b>
Representative CONAMAQ Signature Date	Representative CSCIB Signature Date
Representative CSUTCB Signature Date	Representative CNMCIQB-BS Signature Date
Representative CIDOB Signature Date	Representative Signature Date

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## 2. Accronyms

ABT	<i>Autoridad Bosques y Tierras</i> (Forestry and Land Authority) (formerly <i>Superintendencia Forestal</i> , Forest Superintendence)
CI	Conservation International
CIDOB	<i>Confederación Indígena del Oriente Boliviano</i> (Confederation of the Indigenous Peoples of Eastern Bolivia)
CIM	<i>Centro para la Migración Internacional y el Desarrollo</i> (International Migration and Development Center)
CNMCIQB-BS	<i>Confederación Nacional de Mujeres Campesinas Indígenas Originarias de Bolivia "Bartolina Sisa"</i> (National Confederation of Peasant Native Women of Bolivia "Bartolina Sisa")
CONAMAQ	<i>Consejo Nacional de Ayllus y Markas del Qullasuyu</i> (National Council of Ayllus and Markas del Qullasuyu)
CSO	Civil Society Organization
CSUTCB	<i>Confederación Sindical Única de Trabajadores Campesinos de Bolivia</i> (Sole Union Confederation of Campesino Workers of Bolivia)
DD	Deforestation and Forest Degradation
DGF	<i>Dirección General Forestal</i> (Directorate-General for Forestry)
DGMACC	<i>Dirección General del Medio Ambiente y Cambio Climático</i> (Directorate-General for Environment and Climate Change)
FAO	Food and Agriculture Organization of the United Nations
FAM	<i>Federación de Asociaciones de Municipios</i> (Federation of Municipal Association)
FAN	Fundación Amigos de la Naturaleza
FCPF	Forest Carbon Partnership Facility
ESF	Economic and Social Function
GPFM	General Plans for Forest Management
GTZ	German Technical Cooperation Agency
HACT	Harmonized Approach Cash Transfers
IBIF	<i>Instituto Boliviano de Investigación Forestal</i> (Bolivian Institute of Forest Research)

INE	<i>Instituto Nacional de Estadísticas</i> (National Institute of Statistics)
INRA	<i>Instituto Nacional de Reforma Agraria</i> (National Institute for Agrarian Reform)
IPCC	Inter-Governmental Panel on Climate Change
KfW	German Bank for Development
LA	Local associations
MDP	Municipal Development Plans
MDRyT-DGF	<i>Ministerio de Desarrollo Rural y Tierra - Dirección General Forestal</i> (Ministry of Rural Development and Land - Directorate-General for Forestry)
MDTF	Multi Donor Trust Fund
MRV	Monitoring, Reporting and Verification
NF	Natural Forests
NGO	Non-Governmental Organization
NJP	UN-REDD National Joint Programme
PDES	Departmental Economic and Social Development Plans
PENSAT	<i>Plan Estratégico Nacional de Saneamiento y Titulación de Tierras 2007 - 2013</i> (National Strategic Plan for Sanitation and Land Titling 2007-2013)
PLOT	<i>Plan de Ordenamiento Territorial</i> (Territorial Planning Program)
PLUS	<i>Plan de Uso del Suelo</i> (Land-Use Plan)
PNCC	<i>Programa Nacional Cambio Climático</i> (National Climate Change Programme)
POT	<i>Plan de Ocupación del Territorio</i> (Territorial Planning and Zoning Program)
REDD	Mechanism for Reducing Emissions from Deforestation and Degradation of Forests
REDD+	REDD+ Mechanisms including issues regarding conservation, forest management and the increase of carbon stock
R-PIN	Readiness Plan Idea Note
R-PP	Readiness Preparation Proposal
SAA	Standard Administrative Arrangement
SF	<i>Superintendencia Forestal</i> (Forest Superintendence, see ABT)
(S) FM	(Sustainable) Forest Management
SERNAP	<i>Servicio Nacional de Áreas Protegidas</i> (National Service for Protected Areas)
TCO	Tierras comunitarias de origen (Indigenous territories)
TIPNIS	<i>Territorio Indígena y Parque Nacional Isiboro Secure</i> (Isiboro Secure Indigenous Territory and National Park)
TNC	The Nature Conservancy
UNDAF	United Nations Development Assistance Framework
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UN-REDD	United Nations Collaborative Programme on Reducing Emissions from

Deforestation and Forest Degradation in Developing Countries

### 3. Executive Summary

Bolivia is a country with an important extension of forest land, as approximately 50% of its territory is covered by forests. Bolivia is also vulnerable to climate change. Such vulnerability becomes evident in the increase of droughts threatening food security in the highlands, as well as in the rise of floods in the lowlands. For decades, the country has experienced important changes in its forest land – mainly due to changes in land use. Nowadays, it is estimated that 330.000<sup>1</sup> ha of forests are lost every year.

There are several causes for deforestation and forest degradation in the country, which vary according to region. The most important are agricultural expansion for the supply agro-industries and an increase in the number of small farmers who migrate to the lowlands due to droughts and lack of opportunities in the highlands. Unsustainable logging, as well as wood trade has a crucial role in forest degradation and – even more – in deforestation.

The Bolivian Government has been carrying out efforts to improve its policies in different sectors (such as Environment and Forestry); it has also sought to improve development strategies and plans, and regulations within the Forestry Sector. Several barriers hindering the implementation of REDD mechanisms in Bolivia have been identified. The UN-REDD National Joint Programme will support Bolivia in its efforts to overcome such obstacles and will ensure national REDD+ readiness+. In order to achieve this goal, the Programme will support capacity building at a national and local level with the purpose of achieving the following outcomes and outputs:

Outcome 1: “Improving capacity among national government institutions for implementing REDD+ activities, and monitoring and assessing carbon stock in forests”.

Output 1.1: Forest and Land Use Monitoring System

Output 1.2: Emission Benchmarks

Output 1.3: Proposal of Adjustments to the Legal and Normative Framework related to REDD+ issues

Output 1.4: System for transferring and distributing REDD+ resources

Output 1.5: A stronger Climate Change National Programme with enough resources

Output 1.6: Action Plan for Reducing Emissions from DD (REDD+ Plan)

Outcome 2: “Improving civil society’s capacity for implementing REDD+ activities”

Output 2.1: Training Programme and dissemination of REDD+ activities

Output 2.2: Programme for Social Participation in REDD+

Output 2.3: Strengthening Programme for REDD+ Management and Applied Research

Outcome 3. “Generating REDD+-related experience at a local level, with the participation of territorial bodies and the civil society”

Output 3.1: Standard Methodological Framework for implementing pilot projects.

Output 3.2: Pilot REDD+ programmes and projects

These activities will allow integrating and deploying REDD+ components in plans, programmes and budgets of the involved institutions. In parallel, relevant actors will be trained to ensure that Bolivia achieves REDD+ readiness within the established deadlines and in a sustainable manner. The future contribution of the NJP, through its components for implementing policies to fight poverty and promote human rights, is considered of particular importance. The REDD+ Programme will be included in the policies that are relevant to forest degradation and deforestation. Through all its phases, the NJP will emphasize the involvement and participation of all actors – especially forest-dependent indigenous peoples – with the aim of ensuring an

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<sup>1</sup> Former *Super Intendencia Forestal*, 2008.

adequate assimilation and sustainability of REDD+ topics and the instruments to be developed within the Programme's framework.

Furthermore, the UN-REDD NJP includes important coordination efforts and cooperation actions for Bolivia. Such efforts for reducing emissions from deforestation and forest degradation were carried out with the assistance of the World Bank and the German Cooperation.

#### 4. Situation Analysis

##### General Context

1. The Bolivian territory shares borders with Brazil in the north and east, Paraguay and Argentina in the south and Chile and Peru in the west. It has a total area of 1,098,581 km<sup>2</sup> and, according to the last census in 2001<sup>2</sup>, an estimated population of 8,274,325 people with a growth rate of 2.74%; at that moment, the population estimate for year 2010 was 10,426,154 people. Thirty nine per cent of the population is under the age of 15 and 60% under 25; 70% of the population is concentrated in the departments of La Paz, Santa Cruz and Cochabamba; 62.42% lives in urban areas; 49.9% is classified as indigenous<sup>3</sup> and there are 36 officially recognized indigenous groups.
2. Bolivia has a varied topography which includes areas above 3,000 m. in the Andean region (28% of the national territory), as well as lowlands in the northern and eastern plains (59% of the national territory). This diverse topography results in extreme temperature variations and precipitations, from low temperatures in the highlands to warm temperatures in the lowlands with higher precipitations. This results, in turn, in a diversity of forest ecosystems. Natural ecosystems include mainly humid tropical forests, dry and humid valleys, deciduous forests, savannahs, lakes and rivers (see map on page 58 in the Annex). Therefore the country has great biodiversity: Bolivia is one of the 17 Megadiverse Countries in the world and possesses 35 to 45% of the world biodiversity. Bolivia has more than 60 protected areas and 22 national parks that cover 20% of the national territory.
3. Approximately half of the country area is covered by forests<sup>4</sup> (see map on page 58 in the Annex). Eighty per cent of forest lands are located in lowlands. Forest biodiversity is particularly high in Bolivia, with more than 4,000 species of trees<sup>5</sup>, a wide variety of mammal species and other animals and a large number of endemic species – mainly located along the Amboró-Madidi Corridor.
4. Bolivia's average Human Development Index is 0.723, placing the country 111th out of 179 countries in 2008<sup>6</sup>. Nevertheless, the country holds the last position in South America. According to the National Institute of Statistics (INE)<sup>7</sup>, poverty affected 5.7 million Bolivians (60% of the total population) in 2007, 47% of whom were located in rural areas of the country. In the last years, the HDI has had a tendency to improve regularly: 0.519 in 1975; 0.580 in 1985; 0.639 in 1995 and 0.695 in 2005.

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<sup>2</sup> <http://www.ine.gov.bo/comunitaria/comunitariaVer.aspx?Depto=00&Prov=00&Seccion=00>

<sup>3</sup> <http://www.ine.gov.bo/indice/visualizador.aspx?ah=PC30804.HTM>

<sup>4</sup> 53.4 million ha (48.6% of the national territory) according to the explanatory memorandum of the Forest Map – created by the Ministry of Sustainable Development and Environment (1995); 58.7 million ha According to FAO Global Forest Resources Assessment Report (FRA 2005).

<sup>5</sup> *Guía de árboles de Bolivia* (Guide to Trees of Bolivia), Edited by Timothy J. Kileen & All. 1993.

<sup>6</sup> <http://hdr.undp.org/en/statistics/>

<sup>7</sup> <http://www.ine.gov.bo/indice/visualizador.aspx?ah=PC3060101.HTM>

5. According to INE<sup>8</sup>, the Bolivian economy is essentially based on three sectors: Agriculture, Forestry, Hunting and Fishing (15% of GDP); Mining and quarrying (14%); and Manufacturing Industries (19%). More specifically, non-industrial agricultural products contribute to 7% of the GDP, as well as crude oil and natural gas, metallic and non-metallic minerals and food products. The contribution of the Forestry Sector to the Bolivian economy has remained at a relatively modest level between 2001 and 2008. In 2008, according to INE, forestry represented 7% of the "Agriculture, Forestry, Hunting and Fishing" Sector (BOB 271,373,000, approximately USD 38.7 million) representing 15% of the total GDP (BOB 27,273,724,817, approximately USD 3.9 billion); likewise, "Wood and wood products" represented 6% of the "Manufacturing Industries" Sector which in turn corresponds to 19% of the total GDP. Bolivia exports nearly 70% of its wood and wood-derived products to markets in Europe and the United States. The diversification of species in forest activities went from 218 species in 1998 to 389 species in 2007. Trading of non-timber products has also an important role, e.g. Bolivia is a world-leading exporter of processed chestnuts; this sector, despite its modest contribution to the GDP, is very important and creates 90,000 direct and 150,000 indirect jobs<sup>9</sup>.

#### Institutional, Political and Sectoral Context

6. The new Political Constitution of the State approved in 2009 provides in Article 342 that "the State and the population shall be bound to conserve, protect and sustainably use natural resources and biodiversity and to maintain the balance of the natural environment". Furthermore, it defines in Articles 386-389 that "the natural forests and forest lands are of strategic importance for the development of the Bolivian people. The State shall promote conservation activities, sustainable use, the generation of profits from their products and the recovery and reforestation of degraded areas". On the other hand, the Eighth Chapter on the Amazonia provides that "the State shall prioritize an integral, sustainable development of the Bolivian Amazonia by means of integrated, participative, shared and equal management of the Amazon Forest. Such management shall be oriented to create jobs and to increase the income of its inhabitants in a context of protection of the environment and sustainability".
7. The National Development Plan for 2006-2011<sup>10</sup>, although created before the new Constitution, provides strategic guidelines for implementing the articles contained within the latter. The role of forests in climate change mitigation is mentioned in one chapter about reducing greenhouse gases and carbon sequestration.
8. Since August 2009, the current Environment Policy is being designed and adapted to the social, economic and political situation of the country, as well as to the new Political Constitution. The new Environment policy is expected to be ready in 2010.
9. The creation of the Forest - Climate Change National Strategy and its REDD+ component started in July 2009 and its guidelines were presented at COP-15 in Copenhagen.
10. The National Forest Management Plan was approved in 2008. This plan, which has become a guideline for forest policies, "acknowledges the multiple functions of forests, and its goal is to improve its contribution to the welfare of forest users – especially the poorest –, to improve the contribution of forests to the economic development and achieve a more equal distribution of the economic benefits obtained, and to guarantee the conservation of forests in order to ensure obtaining environmental goods and services for reducing the risks deriving from climate change"<sup>11</sup>. The latter is supported by the following specific objectives of this

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<sup>8</sup> <http://www.ine.gov.bo/indice/visualizador.aspx?ah=PC01010301.HTM>

<sup>9</sup> Ayuda memoria, Forum "Certificación forestal en Bolivia: beneficios para las comunidades, Empresas y Bosques", 8 October 2009, La Paz.

<sup>10</sup> La Paz, November 2007

<sup>11</sup> *Plan nacional de Manejo Integral del Bosque*, Vice Ministerio de Biodiversidad, Recursos Forestales y Medio Ambiente, 2008, p.12.

plan: i) Improving the regulation, monitoring and evaluation systems at different levels (national, departmental, regional, municipal and local) in order to advance to plural forest-management systems where local civil society organizations are empowered to greater decision making with regard to managing their own forest resources; ii) Promoting a system of incentives with the purpose of fostering initiatives on the integral management of forest which leads to improving the contribution of forest resources to the welfare of people – especially the poorest – and to consolidate more sharing of forest economy which supports a greater economic development.; iii) Encouraging actions for the conservation, restoration and recovery of forests, not only with the aim of obtaining the goods they provide, but also towards their environmental function at a local and global level for reducing the risks deriving from climate change.; and iv) Moving forward in the development and institutional strengthening of public entities – as well as of CSOs – and consolidating a set of innovations which enables the on-the-ground implementation of a new approach of forest management guaranteeing sustainability over time.

11. The creation of a new Vice-Ministry of Environment, Biodiversity and Climate Change on 7 February 2009 shows the importance granted by the Government to the threat of climate change. It is also a beneficial step for addressing topics such as land tenure and forest management under one single institution – the Ministry of Rural Development and Land. This could ease communication and coordination between Forestry and Agricultural Sectors, considering that the Agricultural Sector is responsible for most of the deforested area in the country. A direct coordination among the Vice-Ministry of Environment, Biodiversity and Climate Change, the Vice-Ministry of Forest Management and Development and the Vice-Ministry of Land will be crucial to ensure the reduction of deforestation, forest degradation and – consequently – mitigate greenhouse gas emissions.
12. The Forest Superintendence (SF) had an important role in monitoring and supervising deforestation and fires. The new Authority for Social Control of Forests and Land (ABT), created on 7 May 2009, integrates features both from the former SF and the former Agricultural Superintendence. The ABT controls the integrated and sustainable use of forest resources and lands. One of its responsibilities is monitoring and controlling deforestation and forest degradation in the country. This Authority is important for following up on potential REDD+ instruments.

Land Use, Forest Policy and a Governance Mechanism (component 2a of R-PP)

13. The main involved sectors, policies and ministries, and the impacts on forests are shown in the following chart:

<b>Sector</b>	<b>Regulating Law or Policy</b>	<b>Ministry or Regulating Body</b>	<b>Impact on Forests</b>
Agriculture	<ul style="list-style-type: none"> <li>• Law on Communal Renewal of the Agrarian Reform (no. 3545, dated 28 November 2007)</li> <li>• Implementation Plan for Law 3545</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Rural Development and Land – Vice-Ministry of Land and Vice-Ministry of Rural Development</li> <li>• National Institute for Agrarian Reform</li> <li>• Authority for Social Control of Forests and Land</li> </ul>	See next box.
Forestry	<ul style="list-style-type: none"> <li>• Forest Law (no. 1700, dated 12 July 1996)</li> <li>• Technical Rules for Inventory Design and Forest Management</li> <li>• Technical Rules for Use and Management of Non-Timber Products (still under discussion)</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Rural Development and Land – Vice-Ministry of Land and Vice-Ministry of Rural Development</li> <li>• National Institute for Agrarian Reform</li> <li>• Authority for Social Control of Forests and Land</li> </ul>	Degradation of forests due to a deficient management planning. In some cases, management and the number of usable species are determined according to the market demand and not necessarily according to the natural supply capacity of the forest.
Livestock	<ul style="list-style-type: none"> <li>• Law on Communal Renewal of the Agrarian Reform (no. 3545, dated 28 November 2007)</li> <li>• Forest Law (no. 1700, dated 12 July 1996)</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Rural Development and Land – Vice-Ministry of Land and Vice-Ministry of Rural Development</li> <li>• National Service for Agricultural and Livestock Sanitation</li> <li>• Authority for Social Control of Forests and Land</li> </ul>	This is the sector which causes the greatest damage, such as forest fragmentation and the increase of secondary forests.
Oil	<ul style="list-style-type: none"> <li>• Hydrocarbons Law (no. 3058 of 17 May 2005)</li> <li>• Environment Act (no. 1333 of 27 April 1997)</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Hydrocarbons and Energy</li> <li>• Hydrocarbons Superintendence</li> </ul>	To a certain extent, the exploration and extraction of oil causes forest degradation due to the opening of seismic lines and pipeline-laying breaches, besides the road system created for such purposes
Mining	<ul style="list-style-type: none"> <li>• Mining Code (Law no. 1777, dated 17 March 1997)</li> <li>• Mining Bill in process</li> <li>• Mining Sector Plan</li> <li>• Environment Act (no. 1333, dated 27 April 1997)</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Mines and Metallurgy – Vice-Ministry of Mining Policy and Control</li> <li>• Authority for Social Control of Forests and Land</li> </ul>	It increases the demand for hardwood for infrastructure and as fuel for smelting processes
Energy	<ul style="list-style-type: none"> <li>• Supreme Decree 29221 (dated 8 August 2007) through which the Vice-Ministry of Electricity and Alternative Energy adopts the hierarchical structure of the Ministry of Hydrocarbons and Energy</li> </ul>	<ul style="list-style-type: none"> <li>• Ministry of Hydrocarbons and Energy - Vice-Ministry of Electricity and Alternative Energy</li> </ul>	Potential impact due to the construction of hydroelectric plants in protected areas

14. The types of soil according to their features are shown on page 57 in the Annex.

Cultivation System	1991	2001	2005	2006	Increase %
Agribusiness	314,518	864,815	1,159,792	1,184,784	276.70
Subsistence	938,438	1,029,916	1,197,738	1,231,263	31.20
Total	1,252,956	1,894,731	2,357,530	2,416,047	92.83

Source: INE 2008. In CAMPERO José, 2008. Estado Ambiental de Bolivia 2007-2008, El estado actual del sector agrícola p. 238.

15. Forest Law 1700, passed in 1996, contemplates a complete set of elements which favor the sustainable management of forests, defining areas for usage as well as protected and conservation areas. It also specifies forest users, administrative arrangements and management techniques. The types of granting and control of Forest Rights are defined in a) Forest Concessions in fiscal lands, b) usage authorization in privately-owned lands and, c) land clearing permits. At a department level, Law 1700 also establishes the rights and functions of prefectures and municipalities regarding forest resources. On the other hand, the Forest Law details the procedures and authorizations that need to be issued for the use of forests in indigenous territories (TCO), local associations (LA) and forest concessions. LAs – created by Law 1700 – are registered at the Directorate-General for Forestry, which depends on the Vice-Ministry of Forest Management and Development. The LAs operate as forest concessions and carry out partial forest inventories and General Plans for Forest Management (GPFMs). Nowadays, out of 41 million ha classified as “permanent forest production areas”, 8 million are operated under management plans. In August 2009, a revision process of Law 1700 started in order to adapt it to the new Political Constitution and to update several of its elements. A new Forest Law is expected in 2010.

16. Nationally protected areas, municipally protected areas and private reserves are defined in the Environment Act no. 1333, the Law of Municipalities no. 2028 and the Forest Law no. 1700, respectively. The National Service for Protected Areas is in charge of managing such areas subject to the responsibility of the State and coordinates with those operated by municipalities. It is through the application of the above-mentioned regulations and through the definition of these areas that territorial planning activities are defined, as well as the activities of several actors who seek an efficient use and management of forest resources and who consider deforestation and forest degradation not a fundamental topic, but do deem such issues part of an efficient use of natural resources.

17. Law 1715 and Law 3545 of Communal Reorganization – which reform Law 1715 and its corresponding regulations – establish procedures for Land Sanitation<sup>12</sup> in the country including the importance of forest activity as a way of carrying out the Social and Economic Function<sup>13</sup>. It also includes the distribution of fiscal lands, showing preference for peasant and indigenous communities who do not own their lands or at least not to a sufficient extent. Between 1996 and 2009, the National Institute for Agrarian Reform (INRA) sanitized more than 37.7 million ha among 106,751,723 ha considered for sanitation. Currently there are 13.3 million ha in process of being sanitized and approximately 50% of indigenous lands are already sanitized. The Strategic Plan for National Sanitation and Land Titling 2007-2013

<sup>12</sup> “Sanitized lands” are those which are titled, as well as fiscal lands identified by the State.

<sup>13</sup> The Economic and Social Function stands for a sustainable use of land carried out by indigenous peoples and/or peasant communities, as well as the use of small property, and it represents the source of livelihoods, welfare, and social and cultural development of such groups. Through the accomplishment of the social function, communities’ own rules are acknowledged. ESF should be understood as the sustainable use of land for productive activities in accordance with the maximum capacity of land for the benefit of society, and for the interests of collectivities and owners.

(PENSAT) seeks to distribute and title 20 million ha among indigenous and peasant communities without land and to complete sanitation in the national territory by 2013<sup>14</sup>. From 1996 to 2005, 38,814 ha were distributed and from 2006 to 2009, 1,009,626 ha were delivered in the Departments of La Paz, Beni, Santa Cruz and Tarija. The latter shows that the current government distributed 96% of the identified fiscal lands.

18. Territorial planning<sup>15</sup> is a fundamental component of an integrated planning process, of land use and of territorial occupation. Its normative instruments are described on page 55 in the Annex.

#### Status of Forests

19. Natural forests in Bolivia cover half of the country's total area, of which nearly 80% is concentrated in lowlands. Worldwide, the country holds the 6<sup>th</sup> place in terms of tropical forest areas and the 15<sup>th</sup> regarding forest lands<sup>16</sup>. The remaining 20% are forest lands distributed along the highlands – especially in the Inter-Andean valleys, where remainders of original vegetation known as “Andean forests” can be identified. Nearly 41 million ha of natural forests were established as forest productive lands according to the Forest Law; out of these 41 million ha, only 8 million ha operate under a forest management plan and can be legally used for trading, whereas the remaining 33 million ha are not included in any management plan yet. Therefore these are not under the control of ABT, as actors managing these forest lands are not identified and are not legally authorized to use them.

**Table 1: Total Surface under Forest Management**

Period	Total Area (ha)
2000	6,659,804
2001	6,559,738
2002	7,420,305
2003	7,992,046
2004	8,595,456
2005	8,989,294
2006	9,103,883
2007	9,336,094
2008	9,478,197

Source: Forest Superintendence Annual Reports (1997-2008)

20. Estimates on the evolution of deforestation in the past vary considerably. Thus, they should be taken only as a reference. Nonetheless, deforestation has grown in time. Conversion of forests for other uses was low until the mid-1980s and increased rapidly towards the beginning of the 1990s – 150,600 ha/year between 1992 and 2001. A considerable increase has took place between 2001 and 2004, with a total of 224,700 km<sup>2</sup>/year<sup>17</sup>. In 2007, 330,000 ha were deforested<sup>18</sup> (considering only deforested areas of more than 5 ha). In the last 30 years, Bolivia has lost more than 6 million ha of forest land. Deforestation rate per capita in Bolivia ( $\approx 320 \text{ m}^2/\text{person}/\text{year}$ ) is 20 times higher than the global average ( $\approx 16 \text{ m}^2/\text{person}/\text{year}$ ), and one of the highest rates in the world – comparable to deforestation levels in other large countries such as Brazil ( $\approx 137 \text{ m}^2/\text{person}/\text{year}$ ), Indonesia ( $\approx 63$

<sup>14</sup> INRA Publishing “Somos Tierra” No. 10, October 2009

<sup>15</sup> Territorial planning is “the process of land-use planning and territorial occupation according to its biophysical, socioeconomic, cultural, political and institutional features with the purpose of promoting a sustainable national development”.

<sup>16</sup> *Plan Nacional para el Manejo Integral del Bosque*, MDRAyMA 2008, p.10-11.

<sup>17</sup> Killeen, T., V. Calderon, L. Soria, B. Quezada, M. K. Steininger, G. Harper, R. Solórzano, and C. J. Tucker. 2007. Fifty years of land-use change in Bolivia: Exponential Growth and No Change in Sight. *AMBIO: A Journal of the Human Environment* 7:600-606.

<sup>18</sup> Forest Superintendence, 2008.

m<sup>2</sup>/person/year), Malaysia ( $\approx 109$  m<sup>2</sup>/person/year) and China ( $\approx 14$  m<sup>2</sup>/person/year)<sup>19</sup>. Such deforestation activity increasingly takes place in areas that have been classified as "forest vocation lands" and has a direct impact on biodiversity levels and value. Deforestation and forest degradation occur in all forest ecosystems of Bolivia – mainly in the Amazonian forest, forest transition areas, Chiquitano dry forests, Sub-Andean forests and in the Chaco Region (see map on page 58 in the Annex). Seventy-five percent of this deforestation activity happens in the Department of Santa Cruz. Data available for estimating DD is also shown in the Annex (page 68).

**Table 2: Deforestation by forest type (in hectares) between 1993 and 2000**

<b>Table 2</b>				
<b>The Five Most-Widely-Affected Types of Forest due to Deforestation</b>				
<b>Code</b>	<b>Description</b>	<b>Type</b>	<b>Region</b>	<b>Area (ha)</b>
31	Low mesophytic or tropophyte, dense or sparse forest	Non Floodable	Chiquitania	438,221
51	Low xerophytic dense or sparse forest	Non Floodable	Chaco	436,115
12	Low, mostly deciduous ombrophilous dense forest	Floodable	Amazonia	222,984
33	Low mesophytic/tropophyte dense/sparse forest	Savannah	Chiquitania	167,431
52	Low xerophytic dense/sparse forest	Floodable	Floodable	119,694
				Subtotal
				1,384,445

Source: BOLFOR Project, Forestry Superintendence

<sup>19</sup> These are figures issued by FAO (2003) and refer to the period between 1990 and 2000 – except from the Bolivian figure, which has been updated up to 2002-2007. The rate in Bolivia for the period between 1990 and 2000 was 198 m<sup>2</sup>/person/year, but it has considerably increased in the last decade – which is not the case of global rates.

**Table 3: Deforested areas by department (Period 2006-2008)**

Department	Area (ha)	Percentage
Beni	58,742	6.91
Chuquisaca	3,655	0.43
Cochabamba	9,691	1.14
La Paz	5,780	0.68
Pando	53,981	6.35
Santa Cruz	700,059	82.35
Tarija	18,192	2.14
Total	850,103	100

Source: SF 2008

21. Despite the existence of fire and deforestation monitoring data from past years, identifying the actors which cause such situations is not possible at present. There is no official report – consolidated or validated by the Government and involved stakeholders – defining the accountability of the parties and economic sectors related to DD in Bolivia. Nevertheless, there is data on deforestation of Community Lands of Origin (TCO) and national protected areas (NPA). Until 2004, 123,000 ha of forest had been deforested within NPAs and 457,000 ha within TCOs; this represents 2.3% of forest lands in NPAs and 4.3% in TCOs – compared to 9.4% of the high forests<sup>20</sup> outside NPAs or TCOs deforested until 2004<sup>21</sup>. However, NPAs and TCOs will experience higher pressure in the future due to the growing demand of agriculture. The map shown in the Annex (page 62) shows deforestation probabilities in remaining high forests in Bolivia in 2004 (approximately 40 million ha), on the assumption that deforestation probabilities are inversely related to the distance to deforested areas. The Amboró National Park and the El Choré Reserve are especially under pressure. The same happens with TIPNIS in Cochabamba, where the “red line” (border of protected area against deforestation activity coming from the south) has needed to be moved northwards several times due to the growing agricultural demand of the local population. On the other hand, pressure on Noel Kempff National Park is relatively low due to its inaccessibility.
22. Carbon liberation, CO<sub>2</sub> emissions, the loss of biodiversity and ecosystem functions and services are among the main environmental impacts caused by DD. According to the Greenhouse Gas Inventories in 1990, 1994, 1998, 2000<sup>22</sup>, 2002 and 2004<sup>23</sup>, emissions from LULUCF were, respectively, 40,301 Gg, 31,508 Gg, 43,591 Gg, 44,756 Gg, 31,950 Gg y 38,203 Gg. Besides, as most of the country’s diversity is located in forests (see map on page 61 in the Annex), DD contributes to the erosion of biodiversity. Some figures on endangered species in Bolivia are shown in the following table.

**Table 4: Endangered Species in Bolivia (by taxonomic group)<sup>24</sup>**

Mammals	Birds	Reptiles	Amphibians	Fish	Molluscs	Other Vertebrates	Plants	Total
19	29	2	39	0	0	1	71	161

<sup>20</sup> “High forests” stands for 20% of forests which are not located in lowlands but in several forest lands along the highlands and in the Inter-Andean valleys where remainders of original vegetation known as “Andean forests” can be identified.

<sup>21</sup> According to data provided by *Conservation International* in Bolivia and the Noel Kempff Mercado Museum.

<sup>22</sup> Greenhouse Gas Emissions Inventory for the decade 1990-2000 in Bolivia

<sup>23</sup> Greenhouse Gas Emissions Inventory for the period 2002-2004 in Bolivia

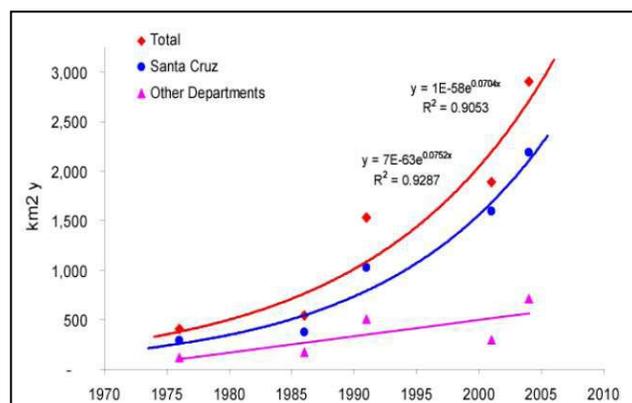
<sup>24</sup> IUCN RED list, 2008.

**Table 5: IUCN Red List - Bolivia**

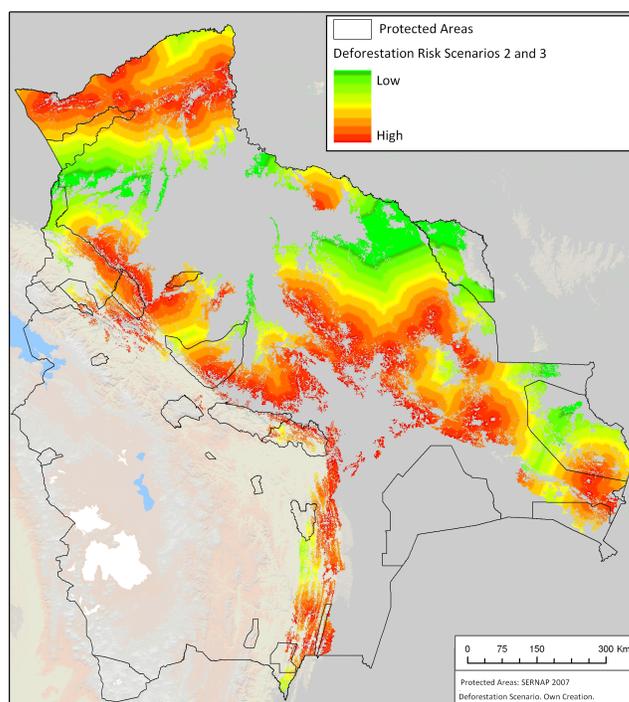
	EX	EW	Subtotal	CR	EN	VU	Subtotal	LR/cd	NT	DD	LC	Total
Animals	0	0	0	9	24	57	90	2	72	51	1.823	2.038
Plants	1	0	1	4	10	57	71	2	10	9	17	110

IUCN Red List categories: EX - Extinct, EW - Extinct in the Wild, CR - Critically Endangered, EN - Endangered, VU - Vulnerable, LR/cd - Lower Risk/conservation dependent, NT - Near Threatened (includes LR/nt - Lower Risk/near threatened), DD - Data Deficient, LC - Least Concern (includes LR/lc - Lower Risk, least concern)

23. There are several prospective analysis of deforestation in Bolivia showing different scenarios and results. Killeen et. al. (2007) have analyzed deforestation rates in Bolivia during the last 30 years and suggested that the current deforested area is exponentially growing without an apparent limit (See graph). However, this tendency can not be applied for the next 100 years because of underlying restrictions regarding forest and labor availability (Ozorio de Almeida & Campari 1996; Campari, 2005). These two factors would prevent such an exponential growth for extended periods.



24. Another current prospective work<sup>25</sup> took into account rural population growth, the evolution of per capita deforestation rates and natural hindrances to deforestation. According to this analysis, the total deforestation prognosis would be 37 million ha by 2100. At the end of the century, 6 million ha of forest would remain in relatively low areas and almost 7 million ha in areas with a slope of more than 25%. The average deforestation per year would be the same rate experienced in 2007 (approximately 345,000 ha)



<sup>25</sup> *Cambio Climático en Bolivia: Impactos sobre Bosques y Biodiversidad* within the regional project "Economía del Cambio Climático en Sudamérica" coordinated by ECLAC and financed by IADB, the British Cooperation and Danish Cooperation.

Causes, Control and Reduction of Deforestation and Forest Degradation for Implementing a REDD Mechanism

25. There are several direct causes for the DD phenomenon in Bolivia which vary according to ecosystems and regions. In general, the main causes of deforestation are the expansion of agricultural lands, illegal forest activities, the development of infrastructure (roads, pipelines, etc.) and forest fires, whereas the main causes of forest degradation are domestic logging as well as legal and illegal forest activities. Direct and indirect causes are detailed on page 55 in the Annex)

26. In order to address the direct and indirect causes of DD in Bolivia and to achieve readiness for the implementation of a REDD mechanism in Bolivia by 2012, a set of institutional, legal, policy and capacity barriers will need to be removed:

**Institutional Barriers**

- a) Fifty-five million ha still to be sanitized and 13 million ha still in sanitation process. In the future, it will be necessary to complete a rural-land registration system.
- b) Insufficient early-alert and fire-control systems due to lack of funds and unclear designation of responsibilities (absence of institutional commitment)
- c) Absence of institutional coordination, e.g. between ABT and INRA. ABT has the forest management plans and INRA does not make use of this information for the ESF.
- d) Institutional weakness for enforcing current regulations due to the following situations:
  - Limited institutional capacity regarding territory issues and needs
  - Personnel rotation
  - Absence of economic resources
  - As an example: the former Forest Superintendence was never able to carry out five-year audits, control smuggling or verify the correct implementation of forest management plans.
- e) Absence of systematization, updating and flow of information on forests at a national, departmental and local level
- f) Lack of organization and/or enforcing of territorial planning. Municipalities do not include planning criteria in their Municipal Development Plans (MDPs) due to institutional weakness, and absence of capacity or implementation. Yearly planning at municipalities is complicated due to the fact that demands are received disorderly, which does not allow an efficient planning. MDPs should be developed through a better-planned system.
- g) Absence of a state-regulated body with full capacities and enough resources (human, financial, technical) for managing REDD+
- h) Absence of a standard methodological framework for implementing REDD+ pilot projects
- i) Absence of a forest and carbon MRV system
- j) Absence of a reference scenario

**Barriers related to laws and policies:**

- a) The law acknowledges the sustainable management of forests as part of the ESF for land titling, but this is not yet included in the forms used by INRA. Such forms are currently in process of revision.
- b) Non-fulfilment of the current regulations related to burning, land clearing, the Land-Use Plan (PLUS), permanent forest production lands, etc. Most logging activities are illegal.
- c) Law 1700 does not promote forest management for minor forest users. Its procedures are bureaucratic, complex, expensive and not necessarily adequate for creating and approving forest management plans in reduced areas. However, Law 1700 is currently being revised.
- d) A Legal and normative framework which is not geared to the implementation of REDD+

- e) Lack of a REDD+ benefit transfer and distribution system
- f) Unclear idea of which actors should participate and how they can become involved

Barriers related to capacity:

- a) Most communities lack the capacity to manage forests – especially in terms of processing and trading of forest products.
- b) In the specific case of intercultural communities<sup>26</sup>, a lack of knowledge on the potential of forests and on the adequate management of lowlands and forest lands (ecosystem-management customs in highlands)
- c) Forest users experiencing difficulties to access information, training and knowledge on regulations
- d) A forest-use planning which is not geared to minimize impacts and optimize benefits
- e) Absence of an action plan for reducing emissions from DD (REDD+ Plan)
- f) Absence of capacity and knowledge – both at a governmental and local level – on the requirements and conditions for implementing a REDD+ mechanism
- g) Absence of scientific data related to REDD+ and weak scientific research
- h) Absence of concrete experiences on the implementation of REDD+ in the country

Stakeholder Analysis (component 1b of R-PP)

27. Relevant stakeholders for REDD in Bolivia include government institutions (national, departmental and municipal), NGOs, private sector and grass-roots organizations – including indigenous and peasant organizations. All the stakeholders related to the implementation of a REDD+ mechanism in Bolivia are shown on page 63 in the Annex. The following is a brief description of the most important ones.

28. The Vice-Ministry of Environment, Biodiversity and Climate Change/Ministry of Environment and Water supervises the National Climate Change Programme (PNCC), an internationally renowned organ identified as the focal point for managing programmes and projects related to climate change.

29. The Vice-Ministry of Forest Management and Development (operating under the Ministry of Rural Development and Land) defines policies for conservation and the sustainable use of forest resources. The Vice-Ministry of Environment, Biodiversity and Climate Change and the Vice-Ministry of Forest Management and Development have jointly established an inter-ministerial organ for carrying out the National Forest and Climate Change Strategy and its REDD+ component. Likewise, these Agencies are supervising the creation of the NJP, R-PP and all other documents and activities linked to REDD+ in Bolivia.

30. The Authority for Social Control of Forests and Land (ABT) has been appointed – among other tasks – to regulate and facilitate an integral and sustainable management of forest resources and lands and to prevent, control and report on the inadequate use of forest resources and lands, forest burning and fires.

31. The National Institute for Agrarian Reform (INRA) has been commissioned to guide, coordinate and execute policies, plans and programmes aimed to distribute, reorganize and redistribute lands, giving priority to indigenous, peasant and native communities and peoples who do not possess them – or not to a sufficient extent.

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<sup>26</sup> The concept of “intercultural communities” is included in the New Political Constitution of the State. Article 3 provides that “The Bolivian Nation is formed by all Bolivian women and men, all nations, and indigenous and peasant peoples, as well as intercultural and Afro-Bolivian communities which all together constitute the Bolivian people”, and in Article 395 it states that “Fiscal lands will be granted to indigenous peoples, peasants, intercultural and native communities, Afro-Bolivians and communities which do not possess such lands – or at least not to a sufficient extent – in compliance with a State policy geared to address the ecologic and geographic reality, as well as demographic, social, cultural and economic needs”.

32. Prefectures and municipalities are in charge of controlling and reporting on the use of forest resources, as well as enforcing a sustainable use of the latter and avoiding depredation.

33. Bolivia has a large number of NGOs, associations and research institutes dealing with environmental issues, many of whom have concrete experiences with REDD topics, payments for environmental services, forest activities and climate change-related actions. The most active ones are Fundación Amigos de la Naturaleza (FAN), Noel Kempff Mercado Natural History Museum (MHNNKM), The Nature Conservancy (TNC), the Bolivian Institute of Forest Research (IBIF) and the Federation of Municipal Association (FAM).

34. These five main organizations are highly active and have an important role in the process of institutional transformation taking place in Bolivia, as well as in elaborating and validating programmes and projects. These organizations will be highly relevant for REDD+ because the implementation of future REDD+ pilot projects will be carried out in territories where they operate. Therefore, their active participation is expected in REDD+ mechanisms in Bolivia, following the example of CIDOB.

35. The private sector linked to the REDD Programme is mainly represented in the Bolivian Forest Chamber and the Chamber of Agricultural Producers. These two bodies bring together most of the entrepreneurs in the country who focus their activities on the use of forest resources, as well as on large-scale livestock and agriculture. Interaction before and after the implementation of NJP with these chambers will be crucial, since they represent the link to private sector parties relevant to deforestation at a national level.

36. International cooperation is highly involved in environmental, watershed management, climate change and forests issues in Bolivia. The UN-REDD Programme, the World Bank's FCPF, as well as the German, Danish, Swedish and Norwegian Cooperation Agencies figure prominently when it comes to the creation and implementation of a REDD+ Programme in the country.

#### Management of REDD readiness (component 1a of R-PP)

37. The creation of the National Forest and Climate Change Strategy and the NJP and R-PP documents was directly coordinated by the Ministry of Environment and Water through the Vice-Ministry of Environment, Biodiversity and Climate Change, together with the Ministry of Rural Development and Land through its Vice-Ministry of Forest Management and Development. The representatives of both ministries constitute a bi-ministerial Committee. A National REDD Team was established in July 2009 and works under the supervision of the National Climate Change Programme. Its duty is to create the National Forest and Climate Change Strategy, NJP and R-PP documents and to ensure the coordination of national REDD+ initiatives. This National Team includes government officials, national consultants hired by the Ministry of Environment and Water, international consultants from a company hired by the Danish Embassy in order to facilitate the creation of the FCPF document, one UN-REDD consultant and one GTZ consultant.

**38. Table 6: Government bodies involved in managing the REDD+ process**

Government body <sup>27</sup>	Involved Parties	Roles
Policy Committee	Ministries, Vice-Ministries (according to relevance) and social organizations	Consultation and proposal for creating strategic links
Technical Committee Permanent	Technical Teams of Vice-Ministries, prefectures, municipalities, public universities, research institutes, technical teams of social organizations	Specific consultation and elaboration of proposals forwarded to the Policy Committee
Temporary	NGOs, private universities, institutes and research centres.	
Bi-Ministerial Committee	Vice-Ministry of Forest Management and Development and Vice-Ministry of Environment, Biodiversity and Climate Change	Coordination
National Team	Experts working on REDD issues from 12 participating ministries.	Operational level

39. During the readiness phase, a consulting mechanism was defined and implemented in compliance with the government bodies (Bi-Ministerial Committee) and indigenous, peasant and intercultural parent organizations. The guidelines of such process are shown on page 66 in the Annex. This includes existing consultation mechanisms within social organizations at a national level and is linked to agreements established with the Steering Committee designing the National Environmental Policy. Such Committee consists of a group of representatives of relevant social organizations, ministries and vice-ministries; its creation and membership operates in accordance with the new Constitution of the Plurinational State of Bolivia

## 5. Strategies including lessons learned and the proposed Joint Programme

### Context

40. Bolivia has actively participated in the international process of REDD negotiations and is one of the nine pilot countries selected by the UN-REDD Programme to design and implement a Programme that contributes to reducing emissions from deforestation and forest degradation. Additionally, the Bolivian Government presented the R-PIN to the World Bank's FCPF, which was approved, and a group of consultants is currently collaborating with the REDD National Team for developing the R-PP. This commitment to REDD undertaken by the Bolivian Government was very clear during the declaration of the Bolivian president at UNFCCC COP14 in Poznan, entitled "Climate Change: Save the Planet from Capitalism".

41. The Bolivian Government is implementing a set of initiatives for including environmental issues in its development policies and for reducing deforestation and forest degradation. The Constitution itself – with its focus on "living well" – promotes development in harmony with nature. The creation of a new Environmental Policy, a new Forest Law and new strategies such

<sup>27</sup> Note: The Institutional Framework will be subject to possible modifications deriving from the new structure of the Plurinational State of Bolivia as of 2010.

as the National Forest and Climate Change Strategy and its REDD+ component demonstrate the importance that the Government grants to environmental issues – more specifically to forests.

42. In recent years, the Environment Sector showed significant growth among private and public conservation initiatives, stimulated both by the Government and NGOs. Such initiatives include strengthening governance and promoting forest enterprise and a comprehensive forest management. Donors have had a crucial role and have contributed to the development of the Environment, Forestry and Rural sectors. FAO, GTZ, USAID, UNDP-GEF and the EU are among the main cooperation organs for the Forestry Sector and for the preservation of biodiversity. Furthermore, the country receives specific assistance for REDD through the UN-REDD Programme, the FCPF and the German and Danish Cooperation Agencies.

#### Relation between NJP and other REDD+-related Initiatives

43. At present, Bolivia benefits from the contributions of the UN-REDD Programme, the FCPF and the German and Danish cooperation for addressing the reduction of emissions from deforestation and forest degradation. Coordination and cooperation among these parties is managed by the REDD National Team. The design of the National Forest and Climate Change Strategy, the new Environmental Policy and the new Forest Law will serve as benchmarks for the NJP and R-PP documents, and will also channel contributions provided by the German Cooperation. In practice, the creation of the National Forest and Climate Change Strategy and the NJP and R-PP documents has been carried out openly and in coordination with all the initiatives supporting REDD+ readiness. One single framework of results was made for such readiness phase at a national level which considers national needs. The existence of the single results framework made by the government with the support of several initiatives guarantees and ensures perfect coordination both at a programme and budget level.

44. The focus of the UN-REDD Programme is to promote REDD+ readiness by supporting each one of the structural components at a central and local level, as well as by implementing pilot projects.

45. The economic contribution of the German Cooperation (EUR 10 million, of which 2 million will be used for technical cooperation and 8 million for financial cooperation) is allocated to i) the development and implementation of a REDD+ strategy; ii) strengthening ABT and DGF for implementing the elements of such strategy; iii) implementing REDD+ pilot projects at a municipal level – including funding to give an incentive for deforestation reduction. These pilot projects can prove the feasibility of implementing REDD+ mechanisms at a local level by 2012 and can contribute to political and strategic discussions with real experiences, lessons learned and recommendations. Therefore, these contributions are in synergy with the three outcomes specified in the logical framework.

46. Contributions from FCPF (USD 5 million requested through the R-PIN) mainly focuses on Outcome 1 (Improving the capacity of national, government) and 2 (Improving local civil society's capacity ) of the logical framework.

#### Lessons Learned

47. Recently, significant efforts have been made for reducing DD in Bolivia. Forest Law no. 1700 was enacted with the aim of promoting the sustainable management of forests – and resulted in a reduction of forest degradation and a solid control over deforestation in the country. However, this legal framework has shown some limitations (only 30% of 41 million ha of forest production areas operate through management plans) and it has not allowed reducing DD in Bolivia. This Law is currently under revision.

48. On the other hand, several projects that include the development of methodologies and logical frameworks for a sustainable use of forests have been implemented. Such initiatives have supported a range of goals that include the protection, economic valuation and promotion of agro-forestry activities. In general, projects that failed either i) did not comply with the

logical framework of beneficiaries, e.g. the Lomerio case; ii) did not strengthen governance and organization at a local level for achieving sustainable results, e.g. Los Yuquis case; or iii) did not have an integral overview of an intervention scenario. For instance, whereas some projects worked towards strengthening communities so that they become raw-material producers, other projects worked with communities to turn them into small exporters.

49. The REDD Programme will consider the experiences resulting from the consultation processes carried out for the creation of the new Constitution, departmental autonomies<sup>28</sup> and the management of financial resources deriving from national gas reserves. Due to the diversity of stakeholders and interests, the complexity of topics, management of benefits and arrangements to implementation, several problems came up during the above-mentioned processes, and these could also emerge during REDD+ activities; these are mainly consultation issues and conflicts among parties on how to manage and allocate resources. The risks of implementing the NJP are presented on page 47. Proposed mitigation measures consider lessons learned from previous processes as follows:

50. Foreseeing integrated consultation and participation processes to ensure adequate information, as well as an effective involvement and participation of relevant stakeholders, and to prevent conflicts;

51. Reaching a high-level agreement to ensure coordination among institutions and complementation among development initiatives in order to ensure an efficient use of human, technical and financial resources and;

52. Guaranteeing political support of a REDD+ mechanism at the highest levels.

53. Some of these lessons were already taken into consideration during the proposal of risk-mitigation measures and were already implemented, e.g. during the design of the consultation process (see 66 in the Annex). Further lessons learned will be included along the implementation process.

#### REDD+ National Strategy (component 2b of R-PP)

54. Aiming to achieve REDD readiness, the Bolivian Government – supported by the NJP and other initiatives – will address the previously-mentioned barriers which hinder the implementation of a REDD+ Programme in the country. Thus, the Government has created a single results framework for facilitating the management of contributions. Such framework focuses on three actions:

55. Capacity building within the Government;

56. Capacity building at a local level; and

57. A set contributions deriving from REDD+ experiences

58. At a national/governmental level, it is necessary to develop national capacities for designing and implementing the measures necessary to establish a REDD+ National Programme which is integrated within national development strategies. Therefore, the creation of an MRV system for forest carbon is expected, as well as the establishment of a reference scenario, adjusting the legal and normative framework to the requirements of REDD+, defining a transfer and distribution system of REDD+-derived benefits, establishing and implementing an action plan for reducing emissions from DD and – finally – strengthening a Government institution so that it manages REDD+. At a local level, the NJP will contribute to local capacity building, training local stakeholders and disseminating REDD+ activities. It will also promote social involvement in REDD+ and strengthen its management and research activities. Finally, the NJP

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<sup>28</sup> Constitutional and legal mechanism (Political Constitution and Framework Law for Autonomies) by means of which the central power of the State will delegate authority to departmental, municipal, indigenous, peasant and native governments.

will help generate on-the-ground experiences at a local level through the creation of a standardized methodological framework geared to implement REDD+ projects and programmes.

59. It is expected to wait until after the presidential elections of December 2009 to carry out HACT and assess the Government's implementation capacity for the NJP – as there could still be structural and institutional changes for adapting to the new Political Constitution of Bolivia. Such changes are expected to become evident during the first quarter of 2010 before the NJP Workshop starts. The UN-REDD Programme will contribute to strengthen institutions by training the PNCC (appointed to manage the UN-REDD Programme, FCPF and German Cooperation projects, among others). The PNCC will have to guarantee coordination and collaboration among all the actors involved in REDD issues.

#### UN-REDD NJP Proposal

60. The Bolivian Government – supported by the UN-REDD Programme, FCPF and the German Cooperation – proposes the development of a REDD National Programme focusing on the achievement of three outcomes which will encourage REDD readiness in Bolivia by 2012.

61. Outcome 1: "Improving capacity among national government institutions for implementing REDD+ activities, and monitoring and assessing carbon stock in forests". Such an outcome will facilitate capacity building at a national level for carrying out REDD actions.

62. Output 1.1: Forest and Land-Use Monitoring System. The unavailability of precise and reliable information is an important limitation in Bolivia. There is no national system for measuring or monitoring forest cover and conditions, or carbon stocks. The available information is incomplete and systems are often not compatible with those of governmental institutions and NGOs (i.e., ABT, IBIF, FAN, PNNK, among others). This output will allow filling information and knowledge gaps and will encourage the design of policies, a sustainable forest planning and – eventually – REDD readiness. The creation of a cost-effective monitoring scheme – to be improved through several phases – has been planned.

63. The Government will implement a National Forest Inventory (INF) responding to the concrete needs of a REDD+ Programme. For this purpose, it will make use of a methodology defined by FAO and other actors who have a broader knowledge of the forest sector in Bolivia. Such an inventory will combine field sample data with information obtained from satellite images. The aim is to generate information on the extension of forests, forest plantations and other forest lands, as well as designated functions and features; carbon reserves, forest lands lost to fires and other problems affecting forest health and vitality.

64. A new methodology will be developed for the inventory of carbon contents according to the IPCC and/or FAO guidelines within a forest inventory context. Such an effort will take into account works carried out by IBIF, FAN and PNNK in sampling fields in several areas of the country. The number of fields will increase according to information needs. This methodology will include sampling and carbon-measurement protocols that will be adopted by ABT. Strategic alliances with forest careers (?) will be established and these will operate in coordination with key stakeholders such as cooperatives, grass-roots organizations, indigenous organizations, FAM and SERNAP.

65. The information obtained will help, in turn, to develop technical capacity for benchmarking emissions (output 1.2). This is necessary for measuring and demonstrating the advance of national efforts geared to reduce DD in the future. Likewise, a forest and carbon monitoring system will be developed based on GIS applications/remote sensing and field work, and will be linked to the National Forest Information System. The forest and carbon monitoring system will operate both at a national and local level.

66. The National Forest Information System will be implemented with the purpose of providing information and precise data that can contribute to the execution of relevant sectoral policies and REDD+. The system will include information produced by ABT, forest control

systems, fire prevention and control, watershed management, environmental and forestry projects, cadastre of native forests and plantations, legal framework, statistics, forestry and reforestation data, exports and imports of forest products. The National Forest Information System will be linked to the REDD+ Monitoring System and to pertinent databases, in order to create synergy among REDD+ activities, poverty-reduction policies, and social and rural development initiatives.

67. The activities that will contribute to this process will be implemented between 2010 and 2012:

- Conducting an National Forest Inventory that provides biomass and carbon estimates in different types of forests
- Monitoring changes in land use by means of remote sensing
- Performing biomass analyses which generate estimates on specific emission factors in the country
- Qualifying government institutions and other relevant stakeholders to work with methodologies, and forest and land-use assessment tools.

68. Output 1.2: Emission Benchmarks. The definition of a reference scenario will serve as a benchmark to calculate reductions of carbon emissions in Bolivian forests. Therefore, such a scenario has a crucial role in calculating the income that could derive from REDD+ processes. Several projects are geared to estimate deforestation in Bolivia – mainly led by Ministries in charge of forestry issues, the former SF and IBIF. Likewise, other actions have been carried out to assess deforestation according to different scenarios, aiming to make use of the existing knowledge and information. The actions identified were the following:

- Establishing record emission levels
- Defining national circumstances to be considered when establishing benchmarks
- Defining the criteria for choosing the benchmarking year
- Generating a deforestation and emission prognoses and scenarios
- Establishing emission benchmarks and alternative scenarios in the event of implementing REDD+ activities as planned

69. Output 1.3: Proposal of Adjustments to the Legal and Normative Framework related to REDD+ issues. In November 2009, an analysis of the current legislation on forestry, land and environmental issues took place in Bolivia and is expected to be completed by January 2010. Its main purposes are to assess the impact of the legal framework on DD in Bolivia; to identify the most adequate incentive or punitive mechanisms for stakeholders; to identify contradictions among current laws; and to identify the changes necessary to adjust to new laws and policies. This output should also prevent that laws be compartmentalized and ensure that the REDD+ mechanism have a legal and normative framework that is adapted to the Bolivian context. The government plans to implement Output 1.3 by the end of 2011. The steps are the following:

- Analyzing incentives and penalties that can be standardized and regulated for promoting REDD+
- Analyzing the impact of the Autonomy Process on REDD+
- Including forest-management criteria in the SEF evaluation forms
- Organizing consultation workshops and public sessions for adapting the legal framework
- Adapting the normative framework for a) establishing and regulating a resource transfer system for REDD; and b) including incentives for REDD+ and penalties for actions promoting DD
- Proposing a control and supervision mechanism for REDD+ resources
- Proposing a set of rules for registering and regulating REDD+ projects in the country

70. Output 1.4: System for transferring and distributing REDD+ resources. The Bolivian forestry and environmental legal framework does not include an adequate payment or distribution mechanism for REDD+. The issue of resource distribution was a central topic during the discussions on autonomy and the management of gas resources in Bolivia. Therefore, there is broad experience in terms of consultation – in addition to the new Constitution which specifies the authority and responsibility of the central and decentralized governments. This Output will consider lessons learned during such consultation processes and will develop a transfer and resource-distribution system for REDD+ by general consent. It will be particularly important to involve all stakeholders and to guarantee their participation in order to ensure an equitable distribution of benefits from REDD+. Not only is it crucial to involve indigenous peoples and social organizations, but also the Agriculture Sector – as it is held highly accountable for DD processes in Bolivia. Decentralized entities will also have an important role in the process of controlling and monitoring benefits from REDD. This will only start once the involved stakeholders are duly informed and trained, and will have to be completed by 2012. Pilot projects (Outcome 3) will allow for the verification of the feasibility of various alternatives and will contribute to the definition of a national system to be implemented as of 2010. With the purpose of creating such a system for transferring and distributing REDD+-derived benefits, the following activities will be carried out:

- Collaboratively analyzing and adjusting legal, political and institutional issues regarding REDD+, as well as monitoring and carbon ownership
- Analyzing proposals of resource transfer and distribution systems for REDD+
- Jointly designing a resource-transfer system
- Registering and regulating REDD programmes and projects in Bolivia
- Implementing the proposals of benefit transfer and distribution systems for REDD+ in pilot projects
- Qualifying relevant stakeholders for operating the REDD+ transfer and distribution system

71. Output 1.5: A stronger Climate Change National Programme with enough resources. The implementation of a REDD+ mechanism requires developing the capacity of a government institution and providing it with human, financial and technical resources for carrying out the NJP and supervising other REDD+ activities in the country. The PNCC will also coordinate efforts to design a monitoring system of the possible impacts of REDD+ activities. This system will include indicators for each one of the previously-mentioned areas, as well as an information collection protocol. The following activities are geared to strengthen the PNCC:

- Defining a public-management scheme for Bolivia (related to REDD+)
- Establishing the costs and financing mechanisms of public management (rates for rendered services, etc.)
- Preparing a capacity-strengthening plan
- Designing a monitoring and assessment system on the impacts of REDD+
- Training relevant personnel

72. Output 1.6: Action Plan for Reducing Emissions from DD (REDD+ Plan). The PNCC will guide the readiness process for REDD+ taking into account the national commitments undertaken at international conventions on environmental, human-rights and indigenous issues, as well as the Millennium Development Goals. The key components in the process of creating the Action Plan are the generation of basic information, the consultation and participation process, building up consensus, qualification of stakeholders at all levels and the expansion of the plan to all national development policies. The creation and implementation of this Output will consider the results of previously-described Outputs – especially information resulting from Outputs 1.1 and 1.2. The creation of the REDD+ Action Plan is expected to be completed

by 2010. With the purpose of creating and implementing such Plan, the following actions need to be carried out:

- Analyzing:
  - Causes of DD and involved stakeholders
  - Socioeconomic factors that cause DD considering regionalized opportunity costs and strategy costs for controlling deforestation
  - Macroeconomic and social impacts of reducing deforestation and a prognosis of such impacts
  - Criteria for intervention priorities
  - Political and institutional factors for integrating REDD+ into relevant laws and policies
  - Opportunities, plantations and forest management relevant to reduce deforestation
  - Possibilities to combine REDD+ resources with those deriving from other ecosystem services
- Establishing an adequate legal, institutional and political scenario, and identifying stakeholders and their responsibilities
- Identifying priorities and emergent actions in a collaborative way
- Supporting the execution of priority actions and following up/monitoring the implementation of REDD+ and its impacts at a local level
- Establishing links to current programmes and projects
- Consulting and actively validating the REDD+ Action Plan
- Training all stakeholders involved in the implementation of the Action Plan

73. Outcome 2: "Improving civil society's capacity for implementing REDD+ activities". This Outcome will contribute to local capacity building for designing and implementing REDD+ activities and seeks to strengthen management capacity among local authorities, as well as empowering local stakeholders along the development process.

74. Output 2.1: Training Programme and dissemination of REDD+ activities. It is important that this Output be implemented immediately, as the Political Constitution of the Plurinational State of Bolivia provides that consultation processes and participation of the involved stakeholders are indispensable for the approval and execution of any kind of programme or project. This Training Programme will be crucial for involving all stakeholders, clarifying substantial and technical aspects of REDD+ that will be implemented through the National Forest and Climate Change Strategy, promoting future consensus and preventing conflicts deriving from the lack of information or transparency. The following activities are geared to obtain this Output:

- Systematizing and disseminating lessons learned at a REDD+ level (including pilot projects)
- Designing a communication and training strategy (analysis for reaching consensus and training according to the type of stakeholder)
- Developing a participation plan for stakeholders to design REDD+ activities
- Preparing communication material and training for different types of stakeholders
- Implementing a national REDD+ communication and training campaign addressed to decision makers, local stakeholders and general public (organization of dissemination events, raising awareness and information at national and local levels)
- Monitoring and assessing the effectiveness of the campaign itself

75. Output 2.2: Programme for Social Participation in REDD+. The Programme for Social Participation is geared to inform and involve decision makers, government institutions, NGOs and Grass-roots organizations, as well as local stakeholders and general public along the REDD+ process. Considering the multilingual nature of the country, this Programme will

implement activities and develop information and training material in local languages as deemed necessary. This Programme will evaluate the consultation process carried out during the creation of the NJP and R-PP. The following activities are needed to obtain Output 2.2:

- Identifying and detailing the participation level of each actor
- Identifying and implementing a mechanism that allows promoting an effective and equal participation during implementation processes (design, control, development, etc.)
- Monitoring and evaluating effectiveness in the social-participation mechanism

76. Output 2.3: Strengthening Programme for REDD+ Management and Applied Research. This Output derives from the need to strengthen research capacities in Bolivia and the aim to generate scientific knowledge and foster training of future REDD+ stakeholders. Among others, new methodologies for measuring and estimating biomass and carbon in trees and soil will be developed through this Programme. The following activities will support the development of this Output:

- Identifying needs and strengthening the university system for fostering research on REDD+ (updating curricula, granting financial support for research, etc.)
- Promoting the creation of an accessible data and results bank from research on REDD+
- Establishing a REDD+ research programme
- Systematizing traditional know-how and knowledge related to REDD+

77. Outcome 3. "Generating REDD+-related experience at a local level, with the participation of territorial bodies and the civil society". The implementation of several demonstrative REDD+ projects in Bolivia is expected. The conceptual, methodological and legal framework for implementing REDD+ in the country will be promoted with support of the NJP resources. The immediate establishment of a monitoring system will allow gathering information until the mechanism comes into effect worldwide. Other projects will operate until 2010 with support of the German Cooperation, and other donors and stakeholders, aiming to accumulate experience at a local level, contribute during strategic discussions and support political decisions.

78. Output 3.1: Standard Methodological Framework for implementing pilot projects. It is necessary to identify a standard methodological framework that defines selection criteria for pilot projects, methodologies for carbon monitoring/verification and REDD+ impact analyses at a local level. The purpose of such actions is to guide the implementation of pilot projects (Output 3.2). The Government plans to have implemented the following activities by the end of 2010:

- Identifying selection criteria for pilot projects (analysis of current and future deforestation trends and identification of projects potentially linked to REDD+; list of owners, land tenure, governance, among other aspects)
- Analyzing and defining REDD+ standards for pilot projects
- Analyzing social, economic, cultural and environmental aspects related to the design and implementation of REDD+ projects
- Designing a monitoring and assessment system on the impacts of pilot projects
- Defining the steps to include pilot projects into the national scheme (accounting of emissions, etc.)

79. Output 3.2: Pilot REDD+ programmes and projects. The selection of pilot projects is carried out through a consultation process and taking the following minimum criteria into consideration: a) initiatives which need to adapt to the conceptual, methodological and legal national framework for implementing REDD+ in the country; b) the type of land use and land tenure in the area of the project; c) area extension and forest cover/potential carbon stock; d) the existence of risks due to DD; e) level of local support; f) population dynamics and

socioeconomic situation (poverty levels and vulnerable groups); and g) potential for preserving biodiversity in the area, the existence of several types of land use and various stakeholders (indigenous peoples, intercultural communities, stockbreeders and farmers). The final selection of pilot projects is subject to consultation with the pertinent stakeholders and should be approved by general consent by the end of 2010, in order to implement other pilot projects at the beginning of 2011. The following activities are geared to obtain this Output:

- Training stakeholders from selected projects on REDD+ methodologies
- Qualifying local stakeholders for planning, implementing, monitoring and assessment of REDD+ pilot projects
- Influencing the design of a local sustainable-development plan

#### Sustainability of Outcomes

80. The NJP does not establish the creation of new structures which require additional resources. It focuses on strengthening institutions and stakeholders already involved in the topic – both at a central and decentralized level – including the civil society, indigenous groups, the private sector and other relevant stakeholders. It will include REDD+ components in the action plans, programmes and budgets of the involved institutions, whilst strengthening their capacities and ensuring that Bolivia achieves REDD+ readiness+ within the fixed deadlines and maintain such levels in time. REDD+ will be included in the policies and regulations of the relevant sectors – including the Social and Rural Development Sector – as a means of supporting the implementation of poverty-reduction and human-rights policies. The NJP and the FCPF will emphasize the involvement and participation of all stakeholders relevant to ensure an adequate assimilation and permanence of REDD+ topics, as well as the instruments to be developed within the Programme. Furthermore, the NJP is designed to operate jointly with other REDD- initiatives in the country, such as the FCPF and GTZ-supported activities. This guarantees synergy, diversifies stakeholders and funds, whilst it works under the same intervention methodology and improves sustainability in all activities.

## 6. Results Framework

UNDAF (or other relevant framework) Outcome: Strengthening of institutional and organizational capacity for productive development and job creation through a sustainable management of natural resources and the environment.									
Joint Programme Outcome (if different from UNDAF Outcome), including corresponding indicators and baselines: Bolivia's readiness for implementing a REDD+ National Programme for reducing emissions from deforestation and forest degradation within the framework of the National Forest and Climate Change Strategy by 2013.									
JP Outputs (Give corresponding indicators and baselines)	Participating UN organization-	Participating UN organization corporate priority	Implementing Partner	Indicative activities for each Output	Resource allocation and indicative time frame*				
					Y1	Y2	Y3	Y4	Total
<b>Outcome 1: Improving capacity among national government institutions for implementing REDD+ activities, and monitoring and assessing carbon stock in forests</b>									
1.1. Forest and Land-Use Monitoring System	FAO	<ul style="list-style-type: none"> <li>Promoting a sustainable use of natural resources.</li> <li>Encouraging a sustainable forest management</li> <li>Developing participative national plans for managing natural resources</li> <li>Strengthening policies that support poverty reduction for rural development and fostering capacity building at a provincial and local level</li> </ul>	PNCC	<ul style="list-style-type: none"> <li>Developing a National Forest Inventory for estimating biomass and carbon in different types of forests</li> <li>Monitoring changes in land use through remote sensing</li> <li>Developing biomass analyses that provide estimates on specific emission factors in the country</li> <li>Qualifying government institutions and other relevant stakeholders on the use of methodologies and tools for forest and land-use assessment</li> </ul>	150,000	200,000	300,000	100,000	750,000

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1.2. Emission Benchmarks	FAO/UN EP	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>• Establishing record emission levels</li> <li>• Defining national circumstances to be considered when establishing benchmarks</li> <li>• Defining the criteria for choosing the benchmarking year</li> <li>• Generating a deforestation and emission prognoses and scenarios</li> <li>• Establishing emission benchmarks and alternative scenarios in the event of implementing REDD+ activities as planned</li> </ul>	60,000	100,000	100,000	40,000	300,000
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1.3. Proposal of Adjustments to the Legal and Normative Framework related to REDD+ issues	UNDP- UNEP/FA O	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>• Analyzing incentives and penalties that can be standardized and regulated for promoting REDD+</li> <li>• Analyzing the impact of the Autonomy Process on REDD+</li> <li>• Including forest-management criteria in the SEF evaluation forms</li> <li>• Organizing consultation workshops and public sessions for adapting the legal framework.</li> <li>• Adapting the normative framework for a) establishing and regulating a resource transfer system for REDD; and b) including incentives for REDD+ and penalties for actions promoting DD</li> <li>• Proposing a control and supervision mechanism for REDD+ resources</li> <li>• Proposing a set of rules for registering and regulating REDD+ projects in the country</li> </ul>	50,000	50,000	25,000	25,000	150,000
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1.4. System for transferring and distributing REDD+ resources	UNDP/UNEP	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>• Collaboratively analyzing and adjusting legal, political and institutional issues regarding REDD+, as well as monitoring and carbon ownership</li> <li>• Analyzing proposals of resource transfer and distribution systems for REDD+</li> <li>• Jointly designing a resource-transfer system</li> <li>• Registering and regulating REDD programmes and projects in Bolivia</li> <li>• Implementing the proposals of benefit transfer and distribution systems for REDD+ in pilot projects</li> <li>• Qualifying relevant stakeholders for operating the REDD+ transfer and distribution system</li> </ul>	30,000	100,000	150,000	150,000	430,000
1.5. A stronger Climate Change National Programme with enough resources	UNDP	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>• Defining a public-management scheme for Bolivia (related to REDD+)</li> <li>• Establishing the costs and financing mechanisms of public management (rates for rendered services, etc.)</li> <li>• Preparing a strengthening plan</li> <li>• Designing a monitoring and assessment system on the impacts of REDD+</li> <li>• Training relevant personnel</li> </ul>	100,000	150,000	150,000	75,000	475,000

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1.6. Action Plan for Reducing Emissions from DD (REDD+ Plan)	FAO-UNDP-UNEP <sup>29</sup>	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>• Analyzing the causes of DD and involved stakeholders</li> <li>• Establishing an adequate legal, institutional and political scenario, and identifying stakeholders and their responsibilities</li> <li>• Identifying priorities and emergent actions in a collaborative way</li> <li>• Supporting the execution of priority actions and following up/monitoring the implementation of REDD+ and its impacts at a local level</li> <li>• Establishing links to current programmes and projects</li> <li>• Consulting and actively validating the REDD+ Action Plan</li> <li>• Training all stakeholders involved in the implementation of the Action Plan</li> </ul>		100,000	200,000	200,000	500,000
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**Outcome 2: Improving civil society's capacity for implementing REDD+ activities**

<sup>29</sup> These three Agencies will jointly lead this product; FAO will function as coordinator.

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2.1 Training Programme and dissemination of REDD+ activities	UNDP/ FAO	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>• Systematizing and disseminating lessons learned at a REDD+ level (including pilot projects)</li> <li>• Designing a communication and training strategy (analysis for reaching consensus and training according to the type of stakeholder)</li> <li>• Developing a participation plan for stakeholders to design REDD+ activities</li> <li>• Preparing communication material and training for different types of stakeholders</li> <li>• Implementing a national REDD+ communication and training campaign addressed to decision makers, local stakeholders and general public (organization of dissemination events, raising awareness and information at national and local levels)</li> <li>• Monitoring and assessing the effectiveness of the campaign itself</li> </ul>	50,000	75,000	100,000	50,000	275,000
2.2 Programme for Social Participation in REDD+	UNDP	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>• Identifying and detailing the participation level of each actor</li> <li>• Identifying and implementing a mechanism that allows promoting an effective and equal participation during implementation processes (design, control, development, etc.)</li> <li>• Monitoring and evaluating effectiveness in the social-participation mechanism</li> </ul>	70,000	60,000	50,000	40,000	220,000

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2.3 Strengthening Programme for REDD+ Management and Applied Research	UNDP/ FAO	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>Identifying needs and strengthening the university system for fostering research on REDD+ (updating curricula, granting financial support for research, etc.)</li> <li>Promoting the creation of an accessible data and results bank from research on REDD+</li> <li>Establishing a REDD+ research programme</li> <li>Systematizing traditional know-how and knowledge related to REDD+</li> </ul>	50,000	50,000	50,000	50,000	200,000
<b>Outcome 3. Generating REDD+-related experience at a local level, with the participation of territorial bodies and the civil society</b>									
3.1 Standard Methodological Framework for implementing pilot projects	UNDP/ UNEP/ FAO	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>Identifying selection criteria for pilot projects (analysis of current and future deforestation trends and identification of projects potentially linked to REDD+; list of owners, land tenure, governance, among other aspects)</li> <li>Analyzing and defining REDD+ standards for pilot projects</li> <li>Analyzing social, economic, cultural and environmental aspects related to the design and implementation of REDD+ projects</li> <li>Designing a monitoring and assessment system on the impacts of pilot projects</li> <li>Defining the steps to include pilot projects into the national scheme (accounting of emissions, etc.)</li> </ul>	100,000	150,000	50,000		300,000

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3.2 Demonstrative REDD+ programmes and projects	UNDP/FAO/UNEP	Above-mentioned priorities	PNCC	<ul style="list-style-type: none"> <li>• Training stakeholders from selected projects on REDD+ methodologies</li> <li>• Qualifying local stakeholders for planning, implementing, monitoring and assessment of REDD+ pilot projects</li> <li>• Influencing the design of a local sustainable-development plan</li> </ul>	100,000	200,000	400,000	100,000	800,000
UNEP	Programme Cost **								
	Indirect Support Cost**								
FAO	Programme Cost								
	Indirect Support Cost								
UNDP	Programme Cost								
	Indirect Support Cost								
Total	Programme Cost				760,000	1,235,000	1,575,000	830,000	4,400,000
	Indirect Support Cost								

\*Resource allocation may be agreed at either output or indicative activity level.

\*\* Please read the [Explanatory Note on Harmonized Financial Reporting to Donors](#) and its Annexes for guidance on how these terms should be interpreted

**Table 7: UN-REDD Bolivia Logical-Framework Proposal**

Outcomes	Indicators	Baseline	Goals	Verification Instruments	Possible scenarios/Risks
<b>Goal:</b> Bolivia's readiness for implementing a National REDD+ Programme for reducing emissions from deforestation and forest degradation within the framework of the National Forest and Climate Change Strategy by 2013.					
<b>Target:</b> Assisting the Bolivian government for implementing a National REDD+ Programme	An approved National REDD+ Programme resulting from general consent among stakeholders	VMABCC and VMGDF are jointly working on defining guidelines for the development of a National Forest and Climate Change Strategy	A REDD+ National Programme in Bolivia approved within the framework of the National Forest and Climate Change Strategy by 2010.	Strategy Document  Approval Resolution of the Strategy	A lack of coordination and cooperation among executing institutions, which hinders the achievement of common goals.

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Outcomes	Indicators	Baseline	Goals	Verification Instruments	Possible scenarios/Risks
	The implementation of a National REDD+ Programme	Bolivia does not have a REDD+ National Programme	A REDD+ Programme integrated into national and sectoral policies which allows monitoring carbon emissions in Bolivia by 2013	REDD+ component within the Strategy Document  A REDD+ Programme Document  Sectoral Policies including REDD+ elements	Not considering the issue a high priority
<b>Outcome 1:</b> Improving capacity among national government institutions for implementing REDD+ activities, and monitoring and assessing carbon stock in forests	Models for estimating biomass and carbon	There is no nationally-validated model for estimating biomass and carbon  There are some lessons learned on biomass measurements (IBIF)	The assessment of existing models and the establishment of technical specifications for carrying out research on additional models by the end of 2010  The development of models according to previously-established technical specifications by the end of 2011	Technical documents on research carried out for developing models  Documents on the developed models	The diversity of forests in Bolivia might cause difficulties for creating simple biomass-estimation models
	Forest and Land-Use Monitoring System	Bolivia does not have a Forest and Land-Use Monitoring System. However, previous experiences on forest monitoring could function as a baseline for future monitoring systems  The roles and responsibilities of stakeholders involved in the	A completed Forest and Land-Use Monitoring System in process of being implemented by the end of 2010. Institutional responsibilities have been defined and there is a financing plan for implementing the system.  Deforestation analysis through history by mid-2011	A document on the design of a Forest and Land-Use Monitoring System defining institutional responsibilities  Maps showing forest biomass and forest	The approval of a cost-efficient methodology  Human and financial resources necessary for implementing and maintaining the monitoring system are

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Outcomes	Indicators	Baseline	Goals	Verification Instruments	Possible scenarios/Risks
		development and implementation of the system are yet to be defined	By mid-2012, the first outcomes of the national forest inventory are available.	carbon in Bolivia  Technical reports on inventories  A databank accessible to everyone	secured  Rules for measuring emissions under a REDD+ mechanism are established worldwide
	Emission Benchmarks	Bolivia does not have emission benchmarks yet. There are analyses on deforestation through history and prognosis attempts but these do not take forest degradation into consideration and they still require validation and approval from the National Competent Authority.	Development and validation of emission benchmarks by the end of 2011	A published document on emission benchmarks	Technical errors might significantly affect emission-reduction estimates and, therefore, resources originating from REDD+
	National monitoring and assessment system on REDD+ impacts	There is currently no national monitoring and assessment system on REDD+ impacts	A national impact monitoring and assessment system including indicators and protocols for collecting information	Protocols for collecting and assessing information	Disagreements on indicators Lack of methodological clearness when assessing impacts
	A legal and normative framework to ensure the success of the REDD Programme	The current legal and normative framework is not adapted for implementing REDD+	Identifying the main reforms for adapting the legal and normative framework to REDD+  By the end of 2012, adjustments should be defined and agreed	A document on the legal analysis and proposed reforms  Proposal of adjustments to the legal and normative framework regulating the	The Bolivian government ratifies the priority of actions for controlling DD and promotes an adequate legal framework and consistence among its policies

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Outcomes	Indicators	Baseline	Goals	Verification Instruments	Possible scenarios/Risks
				implementation of REDD+	
	Mechanism(s) for transferring and distributing REDD+ benefits among stakeholders	<p>Bolivia is currently analyzing alternatives for transferring and distributing REDD+ benefits</p> <p>Pilot projects will help to prove the feasibility of such mechanisms</p>	<p>Defining and designing a mechanism for transferring and distributing REDD+ benefits</p> <p>Such mechanism should be ready to be implemented as of 2011</p>	Document containing mechanism design (legal and human aspects, benefit transfer and distribution systems, economic and institutional analyses, etc.)	<p>The involved stakeholders reach an agreement on the mechanism and allow its implementation</p> <p>Institutional instability and capacity loss</p> <p>Corruption</p>
<p>Outputs</p> <p>Output 1.1: Forest and Land-Use Monitoring System</p> <p>Output 1.2.: Emission Benchmarks</p> <p>Output 1.3.: Proposal of Adjustments to the Legal and Normative Framework related to REDD+ issues</p> <p>Output 1.4.: System for transferring and distributing REDD+ resources</p> <p>Output 1.5.: A stronger Climate Change National Programme with enough resources</p> <p>Output 1.6.: Action Plan for Reducing Emissions from DD (REDD+ Plan)</p>					
Outcome 2: Improving civil society's capacity for implementing REDD+ activities	<p>Number of local stakeholders that are aware of and qualified for REDD</p> <p>Number of officials who are qualified for REDD+ at a local/departmental level</p>	<p>Stakeholders in general are not sufficiently aware or empowered to implement and monitor REDD+</p> <p>Wrong REDD-related concepts are being disseminated in the country</p>	<p>A number of well-informed and qualified stakeholders – to be defined during the initial phase of the project – by the end of 2010</p> <p>A number of qualified officials – to be defined during the initial phase of the project – at a local/departmental level by the end of 2011</p>	<p>An available communication and training strategy</p> <p>Register of training and information dissemination actions</p> <p>Assessing available training</p>	<p>Local stakeholders and their representatives show interest in obtaining information on and becoming qualified for REDD+</p> <p>Conflicts among stakeholders and potential beneficiaries</p>
	Number of social organizations	Some leaders of indigenous communities are aware of	By the end of 2010, the five most important social	Register of meetings on	Indigenous communities

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Outcomes	Indicators	Baseline	Goals	Verification Instruments	Possible scenarios/Risks
	participating in the REDD dialogue	REDD+ and participate in dialogues with the Government. However, they do not have a sufficiently qualified team to work with	organizations in Bolivia should be participating in the REDD+ dialogue and should become part of the REDD+ Technical Committee	REDD+ with the participation of representatives of indigenous communities  REDD+ Technical Committee Records	remain interested in maintaining a dialogue on REDD+ issues with the national government and implementing the National Forest and Climate Change Strategy
	Number of universities and institutes that include REDD in their curricula	REDD is not a topic included in academic curricula yet	By the end of 2012, a number of universities and institutes will have included REDD in their curricula (number to be defined during the initial phase of the Project)	Curriculum  Reports, publications and other documents deriving from scientific research on REDD+ and its impacts in Bolivia  A databank accessible to everyone	The government deems forestry issues a priority for development and fighting climate change – which encourages universities to work on REDD+ topics
<p>Outputs:                      Output 2.1: Training Programme and dissemination of REDD+ activities                      Output 2.2: Programme for Social Participation in REDD+                      Output 2.3: Strengthening Programme for REDD+ Management and Applied Research</p>					
Outcome 3: Generating REDD+-related experience at a local level, with the participation of territorial bodies and the civil society	A standard methodological framework for implementing pilot projects	Currently, there are several isolated REDD pilot initiatives but Bolivia lacks an approved, standard methodological framework for implementing pilot project	A standard methodological framework for implementing pilot projects, approved by all stakeholders by the end of 2010  Pilot projects (3.2) will allow enhancing this methodological framework	Methodological Framework Document	Topic complexity and uncertainty regarding reference scenarios, mechanisms for transferring resources and MRV issues

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Outcomes	Indicators	Baseline	Goals	Verification Instruments	Possible scenarios/Risks
					hinder the development of such a framework
	Number of REDD+ pilot projects in process of being implemented	So far, REDD+ pilot experiences in Bolivia have taken place in indigenous communities or community lands. It is important to carry out new projects in different contexts as well as operating under a standard methodological framework in order to compare and assess pilot projects	REDD+ pilot projects being implemented by the beginning of 2012	Reports on the development of REDD+ projects  Assessment Reports	The methodological framework is ready and ratified on time
<p>Outputs:                      Output 3.1: Standard Methodological Framework for implementing pilot projects                      Output 3.2: Pilot REDD+ programmes and projects</p>					

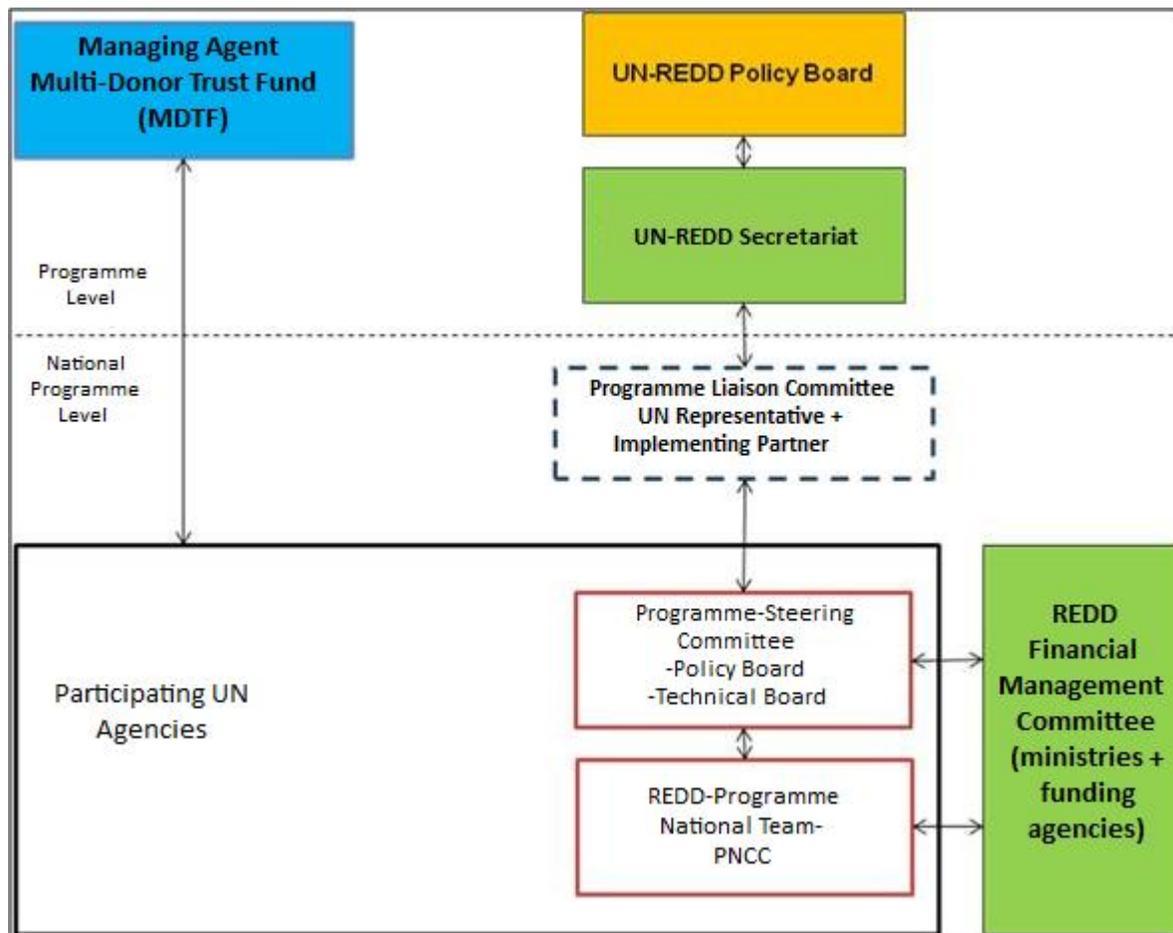
## **7. Management and Coordination Arrangements**

81. The agency appointed to implement the NJP is the Ministry of Environment and Water through the Vice-Ministry of Environment, Biodiversity and Climate Change (VMABCC) – which represents the Bolivian government. The NJP will be implemented by the PNCC in coordination with other government institutions, including ABT and the Vice-Ministry of Forest Management and Development (VMGDF)
82. UNDP, UNEP and FAO – as donors of UN-REDD activities – will participate during the planning and implementation of the Programme according to well-defined capacities and responsibilities. This participation is geared to support the achievement of results and to manage the input of the involved stakeholders.
83. The Implementing Partner is allowed to collaborate with national institutions, local authorities, NGOs, Grass-roots organizations, as well as to hire third parties for carrying out NJP-related activities, based on agreements established with the national government. This agency will be responsible for managing inputs from stakeholders and achieving results. Agreements and contracts will be elaborated in compliance with government regulations and procedures.

### Organizational Structure of the NJP

84. The VMABCC – through the PNCC – will be responsible for the implementation of the NJP, as well as for the daily management of the Programme. This includes – among other responsibilities – ensuring that activities be carried out correctly and results be achieved; promoting coordination among government institutions, NGOs and other organizations participating in the Programme; preparing annual operational plans and their corresponding budgets; and following up and assessing internal aspects of the Programme.
85. The Resident Coordinator (or his representative), as well as FAO, UNDP and UNEP representatives (when possible), will participate in the National Team meetings. The Resident Coordinator will be in charge of supporting the design of this government-led Programme by continuously providing a global overview of REDD activities and coordinating cooperation between the United Nations System and relevant national institutions.
86. The Resident Coordinator will also facilitate the continuous monitoring and assessment of REDD activities in compliance with UN standards. Upon reception of consolidated reports, the Resident Coordinator will provide a global assessment of progress and results. Likewise, he/she will facilitate the continuous monitoring and assessment of fund-supported activities according to UN standards and guidelines provided by the UN-REDD Technical Secretariat or Policy Board.

**Diagram 1: REDD-Programme Management Arrangements**



**8. Fund Management Arrangements**

87. Fund management arrangements will be defined once the HACT micro-assessment has been carried out. This is expected to take place before the start of the NJP (May 2010) and once all institutional arrangements for implementing the NJP are defined.

**9. Monitoring, Reporting and Verification (component 6 of R-PP)**

Monitoring

88. The Matrix of the Logical Framework (Page 35) comprehends the intervention logic (Goal, Outcomes and Outputs) of the NJP and describes the verification instruments, risks and possible scenarios related to each effect. The Results Framework (Page 28) identifies the UN agency that will provide specific technical assistance for achieving each outcome. The following table describes the NJP Monitoring Framework and represents the monitoring and assessment plan of the Programme. Operational annual plans will be obtained from the Results Framework and the Matrix of the Logical Framework and will specify the effects, outcomes and activities to be carried out by each UN agency within the Programme framework and deadlines. This Monitoring Framework will also become an assessment tool.

**Table 8: NJP Monitoring Framework**

Outcomes & outputs	Indicators (baselines and timing)	Verification Instruments	Collection Methods (with timing and frequency)	Responsibilities	Risks and possible scenarios
<p><b>Goal:</b> To assist the Bolivian government for implementing a REDD+ Programme at a national level</p>	<p>A REDD+ National Programme designed, agreed and approved by stakeholders</p> <p>An operating REDD+ National Programme</p> <p>VMABCC and VMGDF are jointly working on the definition of political guidelines for creating the National Forest and Climate Change Strategy</p> <p>Bolivia does not have a REDD+ National Programme</p>	<p>Strategy Document</p> <p>Approval Resolution of the Strategy</p> <p>A REDD+ component within the Strategy Document</p> <p>REDD+ Programme Document</p> <p>Sectoral policies which include REDD+ elements</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNDP/UNEP/FAO</p>	<p>A lack of coordination and cooperation among executing institutions, which hinders the achievement of common goals.</p> <p>Not considering the issue a high priority</p>
<p><b>Outcome 1:</b> Improving capacity among national government institutions for implementing REDD+ activities, and monitoring and assessing carbon stock in forests</p>	<p>Models for estimating biomass and carbon</p> <p>There is no nationally-validated model for estimating biomass and carbon</p> <p>There are some lessons learned on biomass measurements (IBIF)</p>	<p>Technical documents on research carried out for developing models</p> <p>Documents on the developed models</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>FAO</p>	<p>The diversity of forests in Bolivia might cause difficulties for creating simple biomass-estimation models</p>
	<p>Forest and Land-Use Monitoring System</p> <p>Bolivia does not have a Forest and Land-Use Monitoring System. However, previous experiences</p>	<p>A document on the design of a Forest and Land-Use Monitoring System defining institutional responsibilities</p>	<p>Annual monitoring of results during all meetings; assessments during and at</p>	<p>FAO</p>	<p>The approval of a cost-efficient methodology</p> <p>Human and</p>

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<p>on forest monitoring could function as a baseline for future monitoring systems</p> <p>The roles and responsibilities of stakeholders involved in the development and implementation of the system are yet to be defined</p>	<p>Maps showing forest biomass and forest carbon in Bolivia</p> <p>Technical reports on inventories</p> <p>A databank accessible to everyone</p>	<p>the end of the implementation</p>		<p>financial resources necessary for implementing and maintaining the monitoring system are secured</p> <p>Rules for measuring emissions under a REDD+ mechanism are established worldwide</p>
<p>Emission Benchmarks</p> <p>Bolivia does not have emission benchmarks yet. There are analyses on deforestation through history and prognosis attempts but these do not take forest degradation into consideration and they still require validation and approval from the national Competent Authority.</p>	<p>A published document on emission benchmarks</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>FAO</p>	<p>Technical errors might significantly affect emission-reduction estimates and, therefore, resources originating from REDD+</p>
<p>National monitoring and assessment system on REDD+ impacts</p> <p>There is currently no national monitoring and assessment system on REDD+ impacts</p>	<p>Indicators Sheets</p> <p>Protocols for collecting and assessing information</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNDP</p>	<p>Disagreements on indicators</p> <p>Lack of methodological clearness when assessing impacts</p>
<p>A legal and normative framework to ensure the success of the REDD Programme</p> <p>The current legal and normative framework is not adapted for implementing REDD+</p>	<p>A document on the legal analysis and proposed reforms</p> <p>Proposal of adjustments to the legal and normative framework regulating the implementation of</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNEP</p>	<p>The Bolivian government ratifies the priority of actions for controlling DD and promotes an adequate legal framework and consistence</p>

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		REDD+			among its policies
	<p>Mechanism(s) for transferring and distributing REDD+ benefits among stakeholders</p> <p>Bolivia is currently analyzing alternatives for transferring and distributing REDD+ benefits</p> <p>Pilot projects will help to prove the feasibility of such mechanisms</p>	<p>Document containing the mechanism design (legal and human aspects, benefit transfer and distribution systems, economic and institutional analyses, etc.)</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNDP</p>	<p>The involved stakeholders reach an agreement on the mechanism and allow its implementation</p> <p>Institutional instability and capacity loss</p> <p>Corruption</p>
<p>Outcome 2: Improving civil society's capacity for implementing REDD+ activities</p>	<p>Number of local stakeholders that are aware of and qualified for REDD</p> <p>Number of officials who are qualified for REDD+ at a local/departmental level</p> <p>Stakeholders in general are not sufficiently aware or empowered to implement and monitor REDD+</p> <p>Wrong REDD-related concepts are being disseminated in the country</p>	<p>An available communication and training strategy</p> <p>Register of training and information dissemination actions</p> <p>Assessing available training</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNDP</p>	<p>Local stakeholders and their representatives show interest in obtaining information on and becoming qualified for REDD+</p> <p>Conflicts among stakeholders and potential beneficiaries</p>
	<p>Number of social organizations participating in the REDD dialogue</p> <p>Some leaders of indigenous communities are aware of REDD+ and participate in dialogues with the Government. However, they do not have a sufficiently qualified team to work with</p>	<p>Register of meetings on REDD+ with the participation of representatives of indigenous communities</p> <p>REDD+ Technical Committee Records</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNDP</p>	<p>Indigenous communities remain interested in maintaining a dialogue on REDD+ issues with the national government and implementing the National Forest and</p>

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					Climate Change Strategy
	<p>Number of universities and institutes that include REDD in their curricula</p> <p>REDD is not a topic included in academic curricula yet</p>	<p>Curriculum</p> <p>Reports, publications and other documents deriving from scientific research on REDD+ and its impacts in Bolivia</p> <p>A databank accessible to everyone</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNDP</p>	<p>The government deems forestry issues a priority for development and fighting climate change – which encourages universities to work on REDD+ topics</p>
<p>Outcome 3: Generating REDD+-related experience at a local level, with the participation of territorial bodies and the civil society</p>	<p>A standard methodological framework for implementing pilot projects</p> <p>Currently, there are several isolated REDD pilot initiatives but Bolivia lacks an approved, standard methodological framework for implementing pilot project</p>	<p>Methodological Framework Document</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNDP</p>	<p>Topic complexity and uncertainty regarding reference scenarios, mechanisms for transferring resources and MRV issues hinder the development of such a framework</p>
	<p>Number of REDD+ pilot projects in process of being implemented</p> <p>So far, REDD+ pilot experiences in Bolivia have taken place in indigenous communities or community lands. It is important to carry out new projects in different contexts as well as operating under a standard methodological framework in order to compare and assess pilot projects</p>	<p>Reports on the development of REDD+ projects</p> <p>Assessment Reports</p>	<p>Annual monitoring of results during all meetings; assessments during and at the end of the implementation</p>	<p>UNDP</p>	<p>The methodological framework is ready and ratified on time</p>

Annual/Periodical Revisions

89. The Government – represented by the Implementing Partner – and the participating UN Agencies will hold periodical and annual planning and assessment meetings on all the activities contained in the Results Framework, the Monitoring and Assessment Plan and NJP Annual Operational Plans, with the purpose of assessing risks and possible scenarios.

90. Activities carried out by the participating UN Agencies will be subject to internal and external audits – as stated in their financial regulations. Likewise, the UN-REDD Technical Secretariat will hold discussions with other UN Agencies on specific audits which might be necessary according to their own financial regulations. UN Agencies will present a summary of main results and recommendations deriving from internal audits and – if deemed relevant – present them to the Policy Board.

Risk Management

91. The following chart includes the main risks that might hinder an adequate implementation of the NJP and the corresponding mitigation measures.

**92. Table 9: Identification of Risks<sup>30</sup>**

Risk Type	Identified Risks	L *	I *	Proposed Mitigation Actions	Responsible Institutions
Environmental	<u>Natural disasters</u> cause human pressure on forest areas	2	2	Mitigation and contingency measures: <ul style="list-style-type: none"> <li>Implementing an early-alert and prevention system; developing contingency plans</li> </ul>	Central, municipal and departmental governments
Financial	<u>Extremely high opportunity cost</u> : Agricultural activity becomes even more attractive: global demand and prices of raw materials for general use, as well as for producing bio-fuels increase – especially if REDD+ is successful	4	4	Mitigation and contingency measures: <ul style="list-style-type: none"> <li>Promoting sustainable and economically-competitive forest activities (incentives, infrastructure, access to markets) in order to offer a feasible alternative to agriculture</li> <li>Implementing a solid incentive system for avoiding forest-land conversions (e.g. fiscal, economic and criminal penalties)</li> </ul>	Ministry of Rural Development; Ministry of Environment and Water; Ministry of Sustainable Development and Planning; ABT, prefectures, municipalities, social organizations
Operational	<u>Technical errors during the creation of a reference scenario</u> and during the opportunity-cost analysis could cause serious consequences.	3	4	Preventive and mitigation measures: <ul style="list-style-type: none"> <li>Considering adjustment periods to a reference scenario regarding international prices of agricultural products</li> <li>Having a data verification and quality-control mechanism agreed among stakeholders for developing a reference scenario</li> <li>Ensuring a regular training of stakeholders, making sure that professional standards are met</li> </ul>	Ministry of Environment and Water and Ministry of Rural Development.
Organizational	<u>Non-Functional institutional and implementation arrangements</u> hindering adequate coordination and	3	5	Prevention, mitigation and contingency measures: <ul style="list-style-type: none"> <li>Clearly defining the roles and responsibilities of all the involved stakeholders, as well as coordination and</li> </ul>	Ministry of Rural Development; Ministry of Environment and Water;

<sup>30</sup> Based on the Document: "Tips and Guidelines on Conducting the Five Steps of the Enterprise Risk Management (ERM) Cycle"

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	cooperation among stakeholders			collaboration mechanisms. It is also necessary to validate such mechanisms at the highest level in order to ensure an adequate assimilation and implementation <ul style="list-style-type: none"> <li>Supporting these arrangement through formal operational agreements</li> <li>Considering the creation of a conflict and controversy-resolution system</li> </ul>	Ministry of Justice; Ministry of Sustainable Development and Planning; and Ministry of Foreign Affairs
Political	The risk of <u>corruption</u> exists, e.g. misuse of REDD+ funds	5	1	Preventive and mitigation measures: <ul style="list-style-type: none"> <li>Designing a participation and information mechanism that includes several stakeholders with clearly defined implementation and control responsibilities. Such responsibilities should be held by actors who do not share common interests</li> <li>Implementing a consultation plan to ensure the participation of all sectors during the design of the implementation and distribution mechanism for REDD+ resources, thus minimizing corruption risks</li> </ul>	Ministry of Rural Development and Land; Ministry of Environment and Water
Political	<u>Lack of political support</u> at higher levels and underestimation of policies and regulations for reducing DD	2	4	Preventive and mitigation measures: <ul style="list-style-type: none"> <li>Expanding REDD+ discussions to other Ministries, e.g. Planning, Treasury/Public Investment, Foreign Affairs, Production and Microenterprise, Rural Development and Land, etc., in order to include REDD+ in development policies</li> <li>Including REDD+ in national development plans</li> <li>Implementing the consultation plan and ensuring that relevant political stakeholders be properly qualified</li> <li>Implementing a REDD+ communication and information strategy available to all stakeholders</li> </ul>	Ministry of Rural Development and Land; Ministry of Environment and Water; Ministry of Foreign Affairs; Ministry of Sustainable Development and Planning
Political	<u>Institutional instability</u> in terms of human resources, as well as structural changes which might hinder the implementation of REDD+	4	3	Preventive measures: <ul style="list-style-type: none"> <li>Institutionalizing a REDD+ Programme</li> <li>Involving relevant stakeholders – such as universities or research institutes – in order to compensate the impact of institutional instability</li> </ul>	Ministry of Rural Development and Land; Ministry of Environment and Water
Normative	<u>Incompatibility</u> with the funding mechanism agreed at COP15	1	5	Mitigation and acceptance measures: <ul style="list-style-type: none"> <li>Presenting the country's position at COP15 for influencing negotiations</li> <li>Irrespective of REDD+, reaffirming the importance of forests for development by implementing the National Forest and Climate Change Strategy</li> </ul>	Ministry of Environment and Water; Ministry of Foreign Affairs
Strategic	<u>Disputes among stakeholders</u> if there is no previous consensus on a resource distribution mechanism for REDD+	5	5	Preventive, mitigation and contingency measures: <ul style="list-style-type: none"> <li>Implementing the consultation plan in order to ensure the participation of all sectors in the design of a REDD+ implementation and resource-distribution mechanism</li> <li>Implementing a REDD+ communication and information strategy available to all stakeholders</li> <li>Considering lessons learned from other experiences related to benefit/resource</li> </ul>	Ministry of Rural Development and Land; Ministry of Environment and Water; Ministry of Justice; Ministry of Sustainable Development and Planning

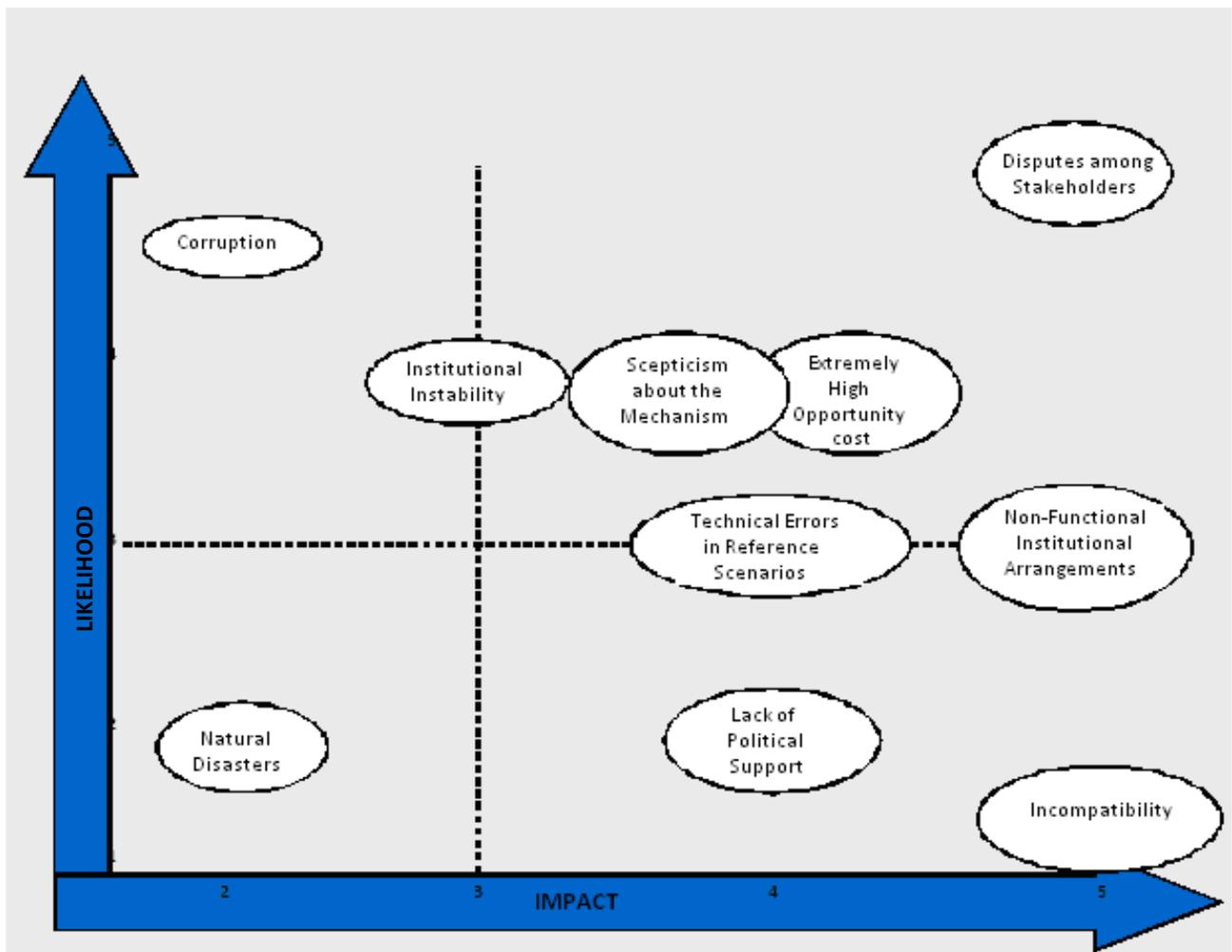
				<p>distribution in Bolivia in order to avoid mistakes and reach consensus</p> <ul style="list-style-type: none"> <li>• Ensuring public access to all REDD+-related data for the sake of transparency</li> <li>• Including a conflict and controversy-resolution mechanism within the legal framework</li> </ul>	
Strategic	Lack of credibility in REDD+ if unrealistic expectations arise	4	4	<p>Preventive and mitigation measures:</p> <ul style="list-style-type: none"> <li>• Implementing the consultation plan in order to ensure the participation of all sectors in the design of a REDD+ implementation and resource-distribution mechanism</li> <li>• Implementing a REDD+ communication and information strategy available to all stakeholders, especially those who are more likely to receive wrong information or unrealistic proposals</li> <li>• Systematizing and disseminating lessons learned from pilot projects</li> </ul>	<p>Ministry of Rural Development and Land; Ministry of Environment and Water; Ministry of Sustainable Development and Planning</p>

\*Likelihood and Impact are measured according to the following scale: 1= unlikely/very low; 5= very likely/very high

**Diagram 2: Risks Associated to the Implementation of REDD+ in Bolivia**

Assessment

93. The REDD+ Technical Secretariat will develop and Assessment Plan in order to ensure that all UN-REDD-supported programmes are subject to analysis for determining their relevance and effectiveness. Such an analysis would also measure the achieved outcomes and their impact compared to the previously established baselines. Likewise, the Technical Secretariat will assess all the programme topics.



### Reports

94. Participating UN Agencies will have to issue reports on the outcomes achieved, lessons learned and contributions to the NJP. The information will be gathered together by the National Coordinator in a six-monthly report to be presented to the Programme Management Committee<sup>31</sup>. Subsequently, the Resident Coordinator will send such reports to the UN-REDD Secretariat, which, in turn, will maintain the Policy Board updated on the progress of the NJP. The Resident Coordinator will ensure that participating UN Agencies provide the information required at a national level and will personally monitor officials and representatives from the involved UN Agencies.
95. The Managing Agent will provide the Policy Board with periodical updates on the Multi-Donor Trust Fund's (MDTF) financial statements for revision and take measures as deemed necessary.
96. Participating UN Agencies will provide the Managing Agent with the following statements and reports upon receipt of financial resources:
- Annual narrative reports on progress made by 31 December (to be delivered within maximum three months after the end of the financial year)
  - Annual financial reports stating funds provided by the NJP's Account by 31 December every year (to be delivered within maximum four months after the end of the financial year)
  - Final narrative and financial reports after the closure of the NJP's activities (funded by the UN-REDD MDTF) (to be delivered by 30 April after the closure of NJP's activities)
  - Final, certified financial statement (to be delivered by 30 June after the closure of NJP's activities)
97. The Managing Agent will gather together narrative and financial reports on the progress of the above-mentioned documents – as well as on the progress of reports provided by each participating UN agency – and will present them to the Resident Coordinator and the UN-REDD Policy Board by means of the Technical Secretariat.
98. Subsequently and according to the Memorandum of Understanding (MOU) and the SAA, the Managing Agent will provide all donors of UN-REDD with consolidated narrative and financial reports based on UNDG standard models. Furthermore, the Managing Agent will submit certified annual financial statements (specifying sources and use of funds) to donors.
99. Information provided to the media and to the UN-REDD Programme beneficiaries, as well as all advertising material, official releases, reports and publications must acknowledge the role of UN-REDD donors, UN Agencies and any other relevant party.
100. UN Agencies will promote that donors be visibly shown on information material and in the areas of implementation whenever it is possible and as long as it does not threaten the privileges and immunity of the Agencies or the security of their personnel.

### **10. Legal context or basis of relationship**

101. Participating UN Agencies (FAO, UNDP and UNEP) have signed a MOU to implement the UN-REDD Programme between May 2010 and April 2013.
102. The NJP Document is consistent with cooperation agreements signed between the UN Agencies participating in this Programme and the Bolivian Government. In the specific case of

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<sup>31</sup> This organ consists of the Implementing Partner and participating UN Agencies

UNDP, the Document is included in the Country Programme Action Plan (CPAP) and in the Standard Basic Assistance Agreement (SBAA) held with the Bolivian government. Thus, all the clauses contained in the SBAA also apply to the NJP Document.

103. The Implementing Partner must have an adequate security plan and apply it according to the security situation of the country during the Programme implementation.

104. Participating UN Agencies agree to ensure – according to their responsibilities and capacities – that none of the resources obtained within the UN-REDD framework be used to support individuals or organizations linked to terrorism and that none of the receptors of financial resources coming from UN Agencies figure on the list of the Security Council Committee pursuant to resolution 1267 (1999). The list can be found in <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision should also be included in all sub-contracts and sub-agreements held within the framework of the Programme Document.

### 11. Work and Budget Plans

105. An initial working and budget plan will be developed immediately after the UN-REDD Policy Board has approved the NJP. Revised operational plans will be prepared once the decisions on annual/periodical assessments are made. Such plans will be approved in written form by the Programme Management Committee.

**Table 10: UN-REDD Bolivia - Working Plan 2010**

<b>JP Outcome:</b> Bolivia's readiness for implementing a REDD+ National Programme for reducing emissions from deforestation and forest degradation within the framework of the National Forest and Climate Change Strategy by 2013.										
UN Agency Specific Outcome	UN Agency	Activities	Timing				Implementing Partner	Planned Budget		
			Q1	Q2	Q3	Q4		Source of Funds	Budget Description	Budget
<b>JP Outcome 1: Improving capacity among national government institutions for implementing REDD+ activities, and monitoring and assessing carbon stock in forests</b>										
(UN Agency 1)							PNCC	UN-REDD		
							PNCC	UN-REDD		
<b>JP Outcome 2: Improving civil society's capacity for implementing REDD+ activities</b>										
(UN Agency 1)							PNCC	UN-REDD		
							PNCC	UN-REDD		
(UN Agency 2)							PNCC	UN-REDD		
							PNCC	UN-REDD		
<b>JP Outcome 3: Generating REDD+-related experience at a local level, with the participation of territorial bodies and the civil society</b>										
(UN Agency 1)							PNCC	UN-REDD		
							PNCC	UN-REDD		
(UN Agency 2)							PNCC	UN-REDD		

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Total Planned Budget		4,400,000
Including *	FAO Total	
	UNDP Total	
	UNEP Total	

\* If the Joint Programme signature of all parties involved or following the Annual/Regular review example in reviews and agreed. The Total Planned Budget should include both programme costs and indirect-support costs.

## 12. Signatures<sup>32</sup>

<b>UN Organizations</b>	<b>National counterparts</b>
Yoriko Yasukawa Resident Representative UNDP Signature Date	René Orellana Halkyer Minister of Environment and Water Signature Date
Elisa Panadés FAO Representative in Bolivia Signature Date	Juan Pablo Ramos Morales Vice-Minister of Environment, Biodiversity and Climate Change Signature Date
Cielo Morales UNDP Deputy Resident Representative Signature Date	Jaime Villanueva Cardozo VMABCC – National Climate Change Programme Coordinator Signature Date
Angela Cropper UNEP Deputy Executive Director Signature Date	

Civil Society Organizations	Civil Society Organizations
Representative CONAMAQ Signature Date	Representative CSCIB Signature Date
Representative CSUTCB Signature Date	Representative CNMCIQB-BS Signature Date
Representative CIDOB Signature Date	Representative Signature Date

<sup>32</sup> When CSOs/NGOs are designated Implementing Partners, they do not sign this Work Plan. Each participating UN Organization will follow its own procedures for signing Work Plans with CSOs/NGOs.

### 13. Annexes

#### Normative Instruments for Territorial Planning

106. The Normative instruments for territorial planning are based on the Territorial Planning Program (PLOT). This Program is geared to include territorial planning in national, departmental and municipal projects. Its main purposes are to regulate land use in order to optimize benefits; to establish guidelines for identifying economic and productive activities; to facilitate basic and social services, and road infrastructure; and to encourage production. The achievement of such purposes must comply with the strategic goals of the General Economic and Social Development Plan, the Departmental Economic and Social Development Plans, Municipal Development Plans and sectoral plans. The structure of PLOT is described as follows:

- a) Land-Use Plan (PLUS): Biophysical component of PLOT. As a technical information instrument, it determines land use in different areas according to their limitations and potential; it includes rules of intervention and use, as well as management recommendations.
- b) Territorial Planning and Zoning (POT): Socioeconomic component of PLOT. As an instrument of technical guidance, it promotes and facilitates territorial planning through zoning, optimizing populated areas, improving networks and communications, fostering productivity and services. Human settlements are classified with the purpose of regionalizing the areas of action.

107. PLOT is the only instrument that regulates territorial management and it is applicable to all three planning levels. Therefore, the development of both PLUS and POT are crucial factors for the approval of PLOT.

#### Direct and Indirect Causes of Deforestation and Forest Degradation

Causes of Deforestation	
Direct	Indirect
Expansion of Agricultural Lands	<ul style="list-style-type: none"> <li>• Inobservance of current legislation (territorial planning, land-use plans, management plans)</li> <li>• Misinterpretation of the Economic and Social Function, overlooking forest management and REDD</li> <li>• Forestry Sector deemed irrelevant to public policies</li> <li>• Lack of perspective on the benefits that the Forestry Sector can bring to the national economy</li> <li>• Incentives for Agriculture and limitations for the development of the Forestry Sector</li> <li>• Insufficient access to funding or technical assistance for small producers</li> <li>• Difficulties to access domestic and international markets, which hinders trade. Increasing value of forest resources encourages deforestation.</li> <li>• International demand for agricultural products and bio-fuels</li> <li>• Demographic growth and increasing demand for food products</li> </ul>

	<p>Large-scale Producers</p> <ul style="list-style-type: none"> <li>• Subsidies on agricultural activities</li> <li>• A price increase on agricultural products (soybean, meat, etc.) which significantly contribute to the GDP</li> <li>• Lower land value in forests, which leads to the expansion of agricultural areas towards forest land (instead of increasing production in existing agricultural areas)</li> </ul> <p>Small-scale producers</p> <ul style="list-style-type: none"> <li>• Migration and urbanization out of the need for food security in intercultural communities and the lack of knowledge on the economic potential of forests hinder the sustainable management of forests and lead to a very limited use of such areas; the spread of agricultural techniques and policies that are inadequate for lowlands; the lack of alternatives; food insecurity; and climate change.</li> </ul>
<p>Illegal forest activity</p>	<ul style="list-style-type: none"> <li>• Technical difficulties and elevated costs for enforcing the regulations established by the Forest Law 1700</li> <li>• Impunity of the actors who do not observe the Forest Law</li> <li>• Lack of resources and underrating regulating, monitoring and evaluation systems</li> <li>• Weakness in governance</li> <li>• Corruption</li> <li>• Legal uncertainty of land tenure has been a main cause of DD but this problem is now restricted to 52.11% of non-sanitized lands.</li> <li>• Pressure from specific wood-related industries carrying out illegal logging – especially in the Departments of Cochabamba, La Paz, Beni, Santa Cruz and Pando, where high-value wood can still be found.</li> <li>• International demand for wood promotes extraction, which is often done illegally to satisfy this demand</li> </ul>
<p>Infrastructure Development (electrification, oil exploring and extraction, road infrastructure, etc.)</p>	<ul style="list-style-type: none"> <li>• National Development Policy</li> <li>• Inobservance of regulations (environmental impact analyses + mitigation commitments; unplanned, local demands which do not allow reducing potential impacts)</li> <li>• International pressure for creating development policies</li> </ul>
<p>Fires</p>	<ul style="list-style-type: none"> <li>• Wrong slash-and-burning techniques</li> <li>• Insufficient early-alert and fire-control systems</li> <li>• Increase of droughts/climate change</li> <li>• Forest degradation increases vulnerability to fires</li> </ul>
<p>Direct and Indirect Causes of Forest Degradation                  Many of the direct causes of deforestation also contribute to forest degradation. However, the causes specified below contribute specifically to degradation and not to deforestation.</p>	
<p>Direct</p>	<p>Indirect</p>

Legal Forestry Activities	<ul style="list-style-type: none"> <li>Unsustainable use of forests</li> <li>Technology used for wood processing is obsolete; therefore, production performance suffers and more wood is needed.</li> </ul>
Domestic Use	<ul style="list-style-type: none"> <li>The use of wood as fuel and for construction in households has an important role in forest degradation in the country</li> </ul>

Classification of Land Use Regarding Potential (sorted by Department) in 2003 (km<sup>2</sup>)

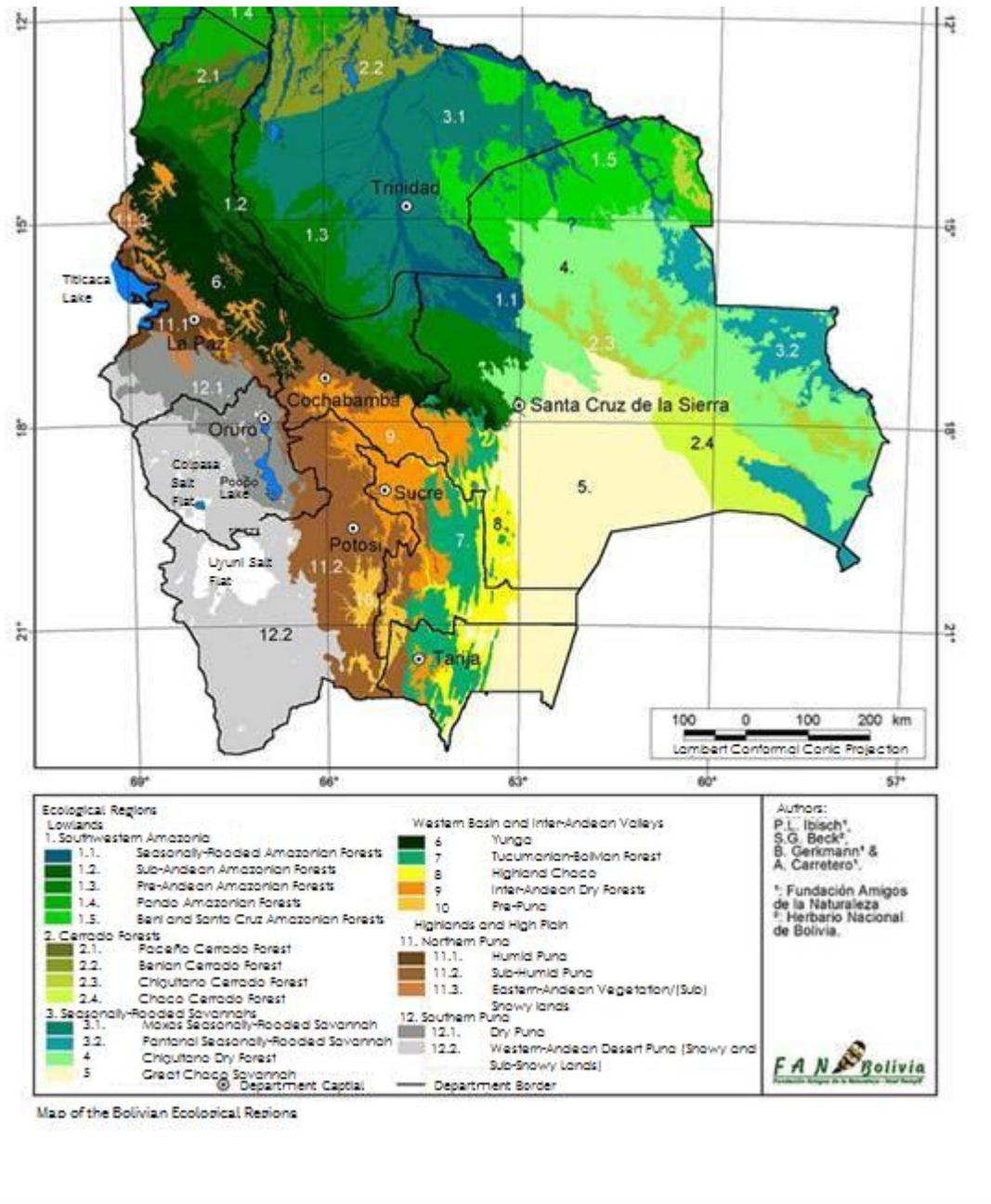
Land Use	Use Potential	Soil Type <sup>33</sup>	Chuquisaca	La Paz	Cochabamba	Oruro	Potosí	Tarija	Santa Cruz	Beni	Pando	Total
Arable Land	Unlimited	I			520		620	1,100	13,610			15,850
		II	90		550				350			990
	Limited	III	5,670	11,770	11,810	3,460	15,930	3,610	33,070	7,520		92,840
		IV	5,720	28,910	5,330		1,110	5,840	105,890	6,020	35,120	193,940
Non-arable Land	Livestock Farming	V	9,360	32,890	7,300	30,370	56,120	8,440	100,000	100,390	250	345,120
	Livestock Farming, Forestry	VI										0
	Forestry	VII	19,500	23,170	12,380	2,670	2,040	10,840	48,530	42,010	4,380	165,520
Non-Agricultural Lands	Conservation	VIII	3,400	10,210	9,320	3,250	17,150	2,400	9,810	10,980	11,940	78,460
Other Categories			7,784	27,035	8,421	13,838	25,248	5,393	59,361	46,644	12,137	205,861
TOTAL			51,524	133,985	55,631	53,588	118,218	37,623	370,621	213,564	63,827	1,098,581

Source: Agrarian Superintendence, INE

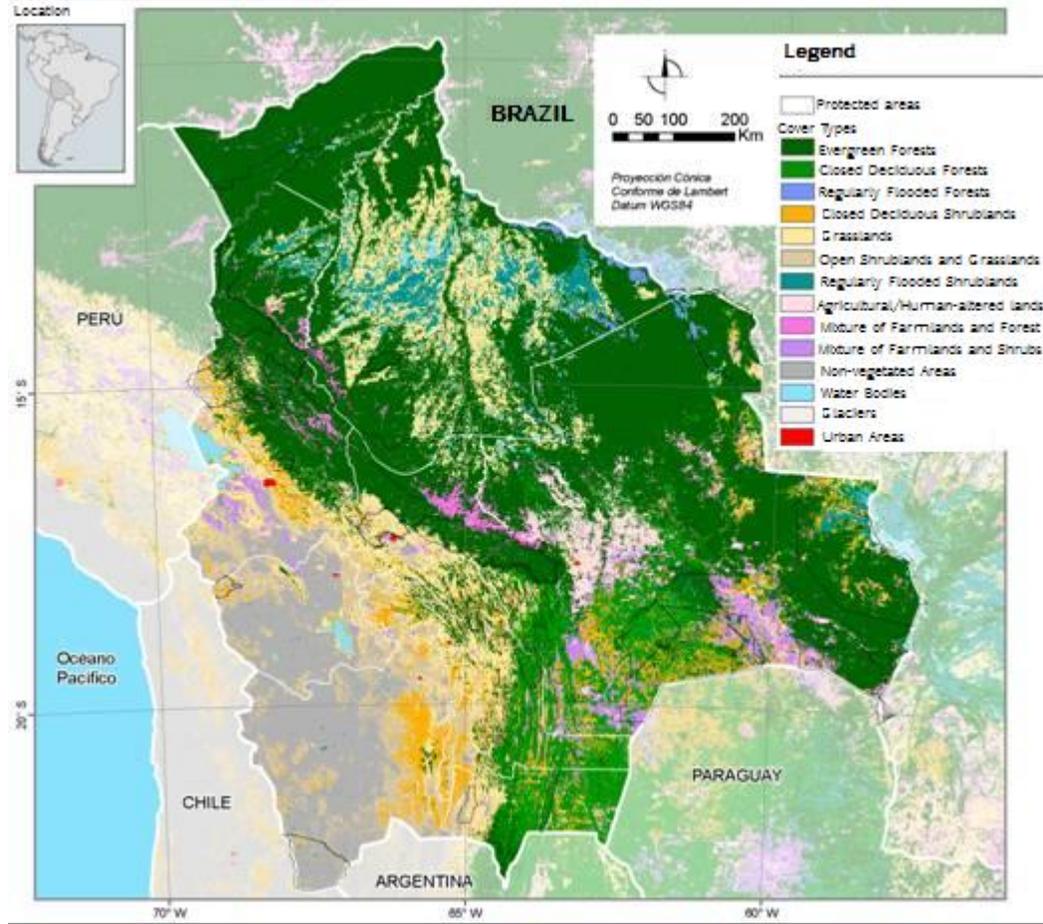
Note: "Other Categories" stands for urban areas, glaciers, salt flats and water bodies.

<sup>33</sup> Soil types are divided into the following groups according to their capacity: I, Excellent, flat, well-drained land (suitable for agriculture); II, Good lands with minor limitations, such as a gentle slope, sandy soil or deficient draining (suitable for agriculture or grazing); III, Moderately good lands with important slope, soil and drainage limitations (suitable for agriculture, grazing or collection basins); IV, Regular lands with severe soil, slope or drainage limitations (limited use for agriculture, grazing, suitable for urban industry); V, Rocky, thin soil with high humidity levels or steep slope making agriculture impossible (suitable for grazing, forestry or collection basins); VI, Moderate limitations for livestock farming and forestry (suitable for grazing, forestry, collection basins and urban industry); VII, Severe limitations for livestock farming and forestry (suitable for grazing, forestry, collection basins, recreation, landscaping, wildlife); VIII, Unsuitable for livestock farming or forestry due to steep slope, thin soil, lack/excess of water (recreation, landscaping, wildlife or urban industry).

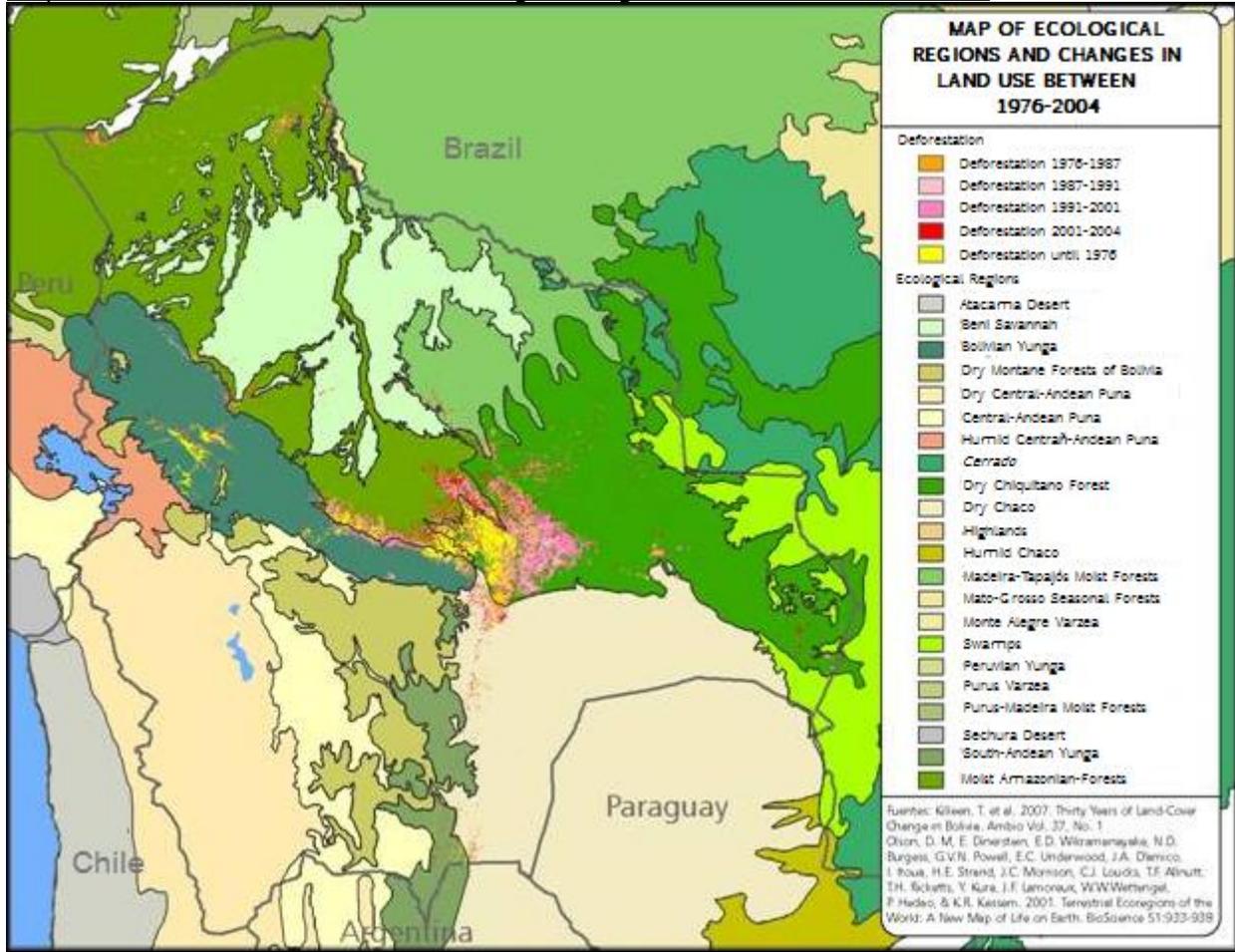
Map 1: Bolivian Ecological Regions



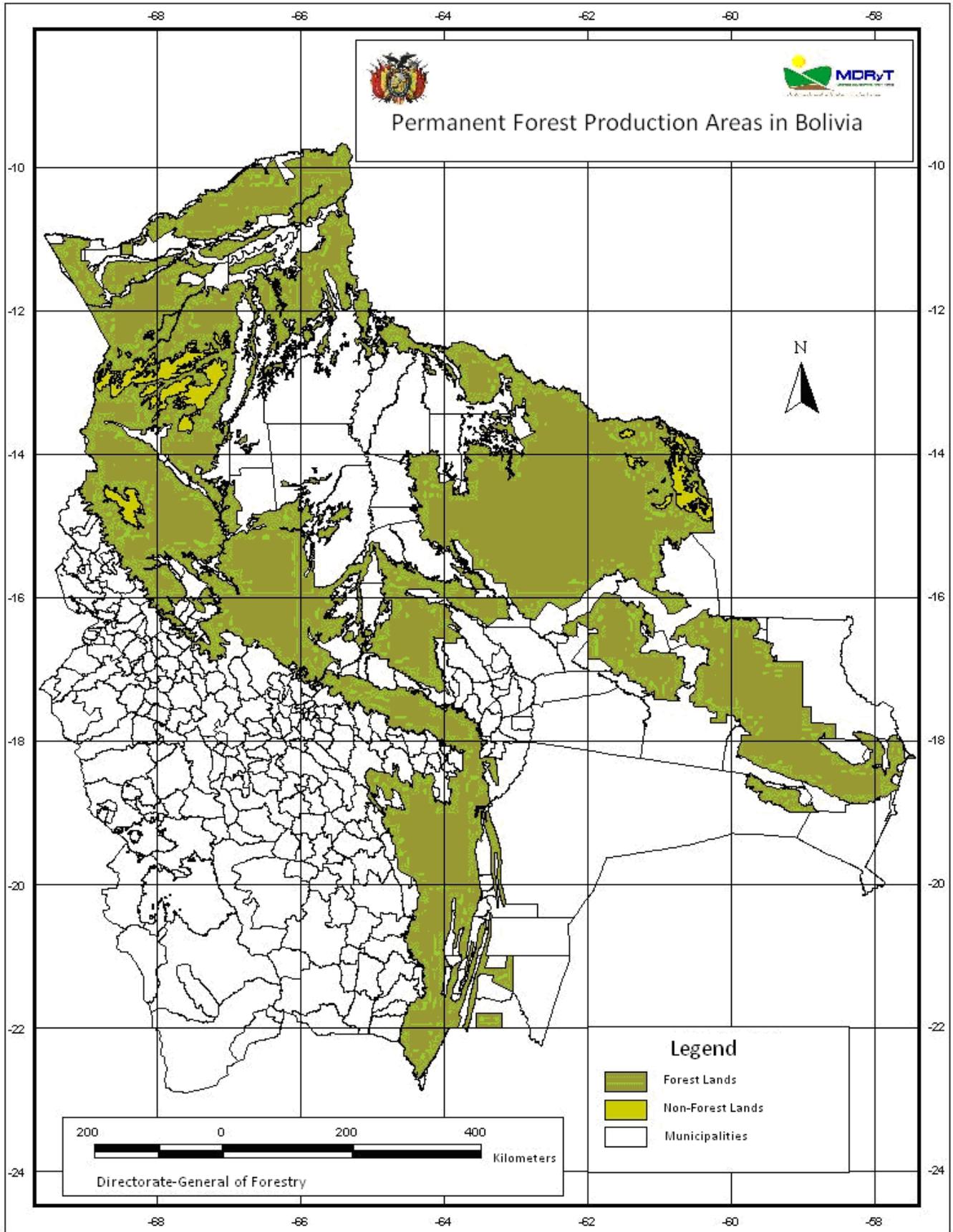
Map 2: Land Use in Bolivia



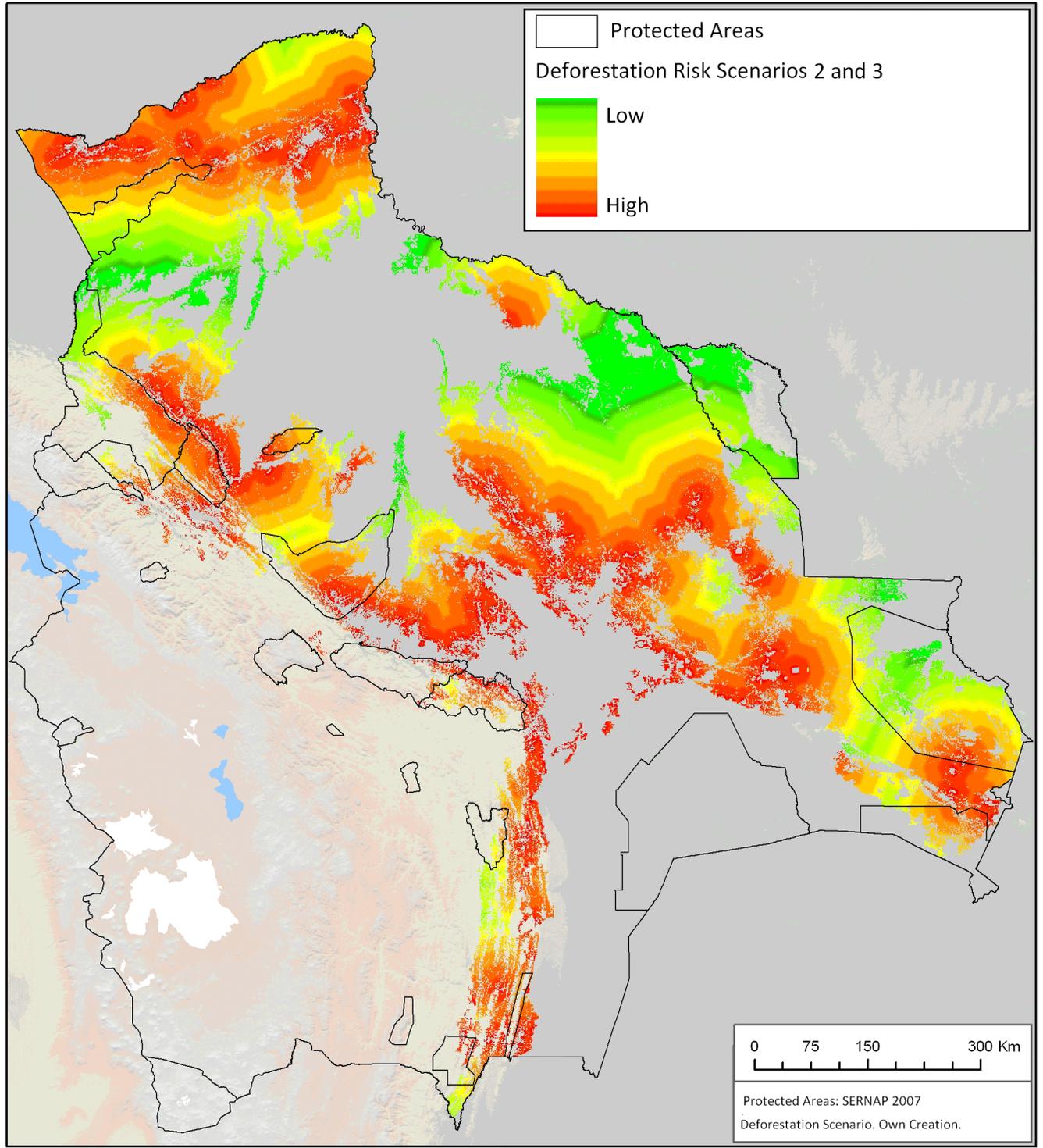
Map 3: Deforestation in Bolivian Ecological Regions between 1976 – 2004



Map 5: Permanent Forest Production Areas



Map 6: Deforestation Risk and Protected Areas



Stakeholder Analysis

Name	Capacity Interests in the REDD+ process and potential contribution to the NJP
National Institutions	
Ministry of Economy and Ministry of Public Finance	<p>The Ministry of Economy and the Ministry of Public Finance are the maximum national authorities appointed to design macroeconomic policies within the framework of the General Economic and Social Development Plan and to allocate resources according to the National Budget regulations and to available National Treasury assets.</p> <p>The participation of these ministries is fundamental, as they are appointed to approve future financial distribution mechanisms related to REDD+.</p>
Ministry of Foreign Affairs	<p>The main responsibilities of this Ministry are to propose, coordinate and execute external policies, to guide bilateral diplomatic relations, consular services and the State's participation in international organizations/forums. It is also in charge of signing treaties, agreements and other legally-binding international instruments within the Constitution's legal framework. Its participation will be crucial, as the REDD+ mechanism is a result of international agreements.</p>
Vice-Ministry of Environment, Biodiversity and Climate Change/Ministry of Environment and Water	<p>The main functions of this Vice-Ministry are to promote and implement regulating policies, plans, programmes and projects related to climate change. Such activities are carried out by General-Directorate for Environment and Climate Change (DGMACC) and the National Climate Change Programme (PNCC). The Vice-Ministry is the National Environment Competent Authority (according to Decree DS29057, dated 14 March 2007) and it is crucial for decision making and policy management.</p> <p>The National Climate Change Programme (PNCC) is an internationally renowned organ identified as focal point for managing programmes and projects related to climate change.</p> <p>After the restructuring of the National Executive Organ, the Vice-Ministry of Environment, Biodiversity and Climate Change and the Vice-Ministry of Forest Management and Development have established an inter-ministerial organ for developing the National Forest and Climate Change Strategy and its REDD+ component. They are also monitoring the creation of the NJP, R-PP and all other REDD-related documents and activities in Bolivia.</p>
Vice-Ministry of Forest Management and Development under the Ministry of Rural Development and Land	<p>The Vice-Ministry of Forest Management and Development issues and defines policies for the preservation and sustainable use of forest resources. It implements its policies through the Directorate-General for Forestry (DGF), in compliance with Forest Law 1700 (1996) and the National Forest Management Plan (2008). Such Plan envisages the reduction of climate-change derived risks and the evaluation of environmental services obtained from forests, in order to facilitate the design of compensation schemes. These activities are provided by the Plan's Third Component on the Preservation of Environmental Goods and Services derived from Forests.</p> <p>After the restructuring of the National Executive Organ, the Vice-Ministry of Environment, Biodiversity and Climate Change and the Vice-Ministry of Forest Management and Development have established an inter-ministerial organ for developing the National Forest and Climate Change Strategy and its REDD+ component. They are also monitoring the creation of the NJP, R-PP and all other REDD-related documents and activities in Bolivia.</p>
Vice-Ministry of Planning and	<p>One of its functions is to coordinate the planning and management of integrated development in the country, collaborating with ministries,</p>

Coordination under the Ministry of Sustainable Development and Planning	autonomous and decentralized territorial institutions, CSOs, GROs and production-oriented organizations, with the purpose of elaborating and proposing land-use and zoning policies.
Vice-Ministry of Land	The functions of the Vice-Ministry of Land are to design and enforce policies and programs regarding land access, delivery, redelivery and reorganization, and to include these issues in productive plans, in accordance with regulations established for the sustainable use of resources. Other important responsibilities are to ensure the observance of land tenure rights and to enforce policies geared to prevent desertification.
Forestry and Land Authority (ABT)	Supreme Decree no.0071, dated 9 April 2009, provides – among others – the extinction of the Forest Superintendence and establishes the Forestry and Land Authority (ABT). The ABT started its activities on 7 May 2009 and its functions are to regulate and promote an integrated and sustainable use of forest resources and land, to carry out prevention activities, monitoring and evaluation of the inadequate use of forests, lands, and to prevent burnings and fires. The ABT is dependant on the Minister of Rural Development and Land and it has a crucial role for preventing, monitoring and controlling deforestation and forest degradation.
National Forest Development Fund (FONABOSQUE)	FONABOSQUE was established by Law 1700 for financing sustainable forest-management activities. However, it remained inoperative for 12 years and was recently reactivated in 2008. This entity has BOB 50 million (USD 350 million) which have not been used for any specific activity, program or project.
National Service for Protected Areas (SERNAP)	SERNAP is currently managing protected areas in Bolivia. Most expenses are financed through a trust fund operated by the Foundation for the Development of the National System of Protected Areas (FUNDESAP) with GEF resources. SERNAP is highly relevant for implementing REDD+ and including protected areas in its mechanisms.
Departmental and Municipal Governments	Articles 24 and 25 contained in Law 1700 establish the functions of both prefectures and municipalities regarding forest management. Such organs are appointed to control and assess the use of forest resources, to ensure their sustainable use, and to avoid overexploitation. Another important function of such organs is to manage territorial planning in compliance with the Land-Use Plan (PLUS) and the Territorial Planning and Zoning Programme (POT).
National Institute for Agrarian Reform (INRA)	INRA is dependent on the Vice-Ministry of Land (Ministry of Rural Development and Land). Its functions are to guide, coordinate and enforce distribution policies, plans and programs. It also reorganizes and redistributes lands giving priority to indigenous peoples, peasant and native communities who do not possess land or not to a sufficient extent – in accordance with the maximum use capacity of such lands.  Regarding REDD+, the role of INRA will be crucial for the fulfillment of the social and economic function, which will in turn prevent the excessive exploitation of forests.

<p>NGOs, associations and research institutes:</p> <p>There are many NGOs, associations and research institutes actively working on environmental issues in Bolivia and some of them have experience in REDD+ topics, payments for environmental services, and forest and climate-change mitigation activities. The most active ones regarding REDD+ topics are Fundación Amigos de la Naturaleza, Noel Kempff Mercado National History Museum (MHNNKM), TNC and IBIF.</p> <p>Research, lessons learned and experiences obtained by such stakeholders should be taken into account for current projects. The initiatives proposed by the above-mentioned NGOs could enhance the implementation of a REDD+ mechanism under the established regulations.</p>	
<p>Grass-Roots Organization:</p> <p>Grass-roots organizations are fundamental in the process of change that the country has been experiencing in the last years. Such organizations must actively participate in the design and validation of the REDD mechanism, which will also include projects implemented in the areas where the organizations are based. The five most important organizations are CIDOB, CSUTCB, CONAMAQ, CSCIB and Bartolinas. It is important to emphasize that CIDOB is already working with REDD issues.</p>	
<p>Private Sector</p>	
<p>Bolivian Forestry Chamber</p>	<p>The Bolivian Forestry Chamber brings together most of private entrepreneurs focusing their activities on the use of natural resources in the country. The Chamber is relevant to the REDD+ process, as it represents a direct contact to all forest-related private stakeholders.</p>
<p>Chamber of Agricultural Producers</p>	<p>The Chamber of Agricultural Producers brings together most private entrepreneurs who develop livestock and agricultural activities to a large scale. The role of the private sector is crucial for preventing the expansion of livestock/agricultural areas towards forest lands. The Chamber itself – as intermediary between REDD+ and private entrepreneurs – is a key factor for reducing DD in the country.</p>
<p>International Cooperation</p>	
<p>The Netherlands (Dutch Cooperation)</p>	<p>Since 2007, the Netherlands have financed REDD+-related analyses and activities, e.g. an analysis to identify degradation patterns and their corresponding emissions in three sites through remote sensing, which cost USD 220,000. Besides, the Netherlands are contributing with USD 4 million for strengthening ABT.</p>
<p>German Cooperation</p>	<p>In the past, the CIM (Human Resources division of the German Cooperation Agency) appointed one expert to support the SF's efforts to monitor deforestation. Nowadays, the CIM is supporting the Indigenous FAN-CIDOB- REDD+ Programme through two new experts who are working on the ground. Both experts have a broad experience in DD reduction issues and in the implementation of REDD+. GTZ and KfW have also placed two experts with the same purposes. Furthermore, a contribution of EUR 10 million has been confirmed for supporting the readiness process, of which EUR 2 million come from the GTZ and EUR 8 million from the KfW.</p>

World Bank's Forest Carbon Partnership Facility (FCPF)	Bolivia has shown interest in the Forest Carbon Partnership Facility (FCPF). Thus, the country's R-PIN was submitted to the World Bank on 8 March 2008. The FCPF is a mechanism that assists developing countries in their efforts to reduce emissions from deforestation and forest degradation. The main goals of the FCPF are the following: a) capacity building for REDD+ in developing countries, and b) trying an incentive mechanism based on emission reductions. The Readiness Mechanism supports 37 countries interested in obtaining reliable estimates of their carbon stocks in forests, finding out the origin of emissions, and defining the reference scenario to estimate future emissions. It also offers technical assistance for designing the REDD+ strategy and estimating the opportunity costs related to the implementation of REDD+. The carbon-finance mechanism is limited to a few countries where it will be implemented and evaluated in parallel with REDD+ incentive pilot projects.
Denmark	Denmark will finance consulting for the Vice-Ministry of Environment, Biodiversity and Climate Change with the purpose of developing the Readiness Preparation Proposal, which is expected to start in August 2009. Besides, Denmark co-funds the Indigenous REDD+ Programme in the Bolivian Amazon Forest
Norway	At UNFCCC COP 13 (Bali, December 2007), the Norwegian Government committed to contribute with approximately USD 500 million per year for REDD+. With such funds, Norway is currently supporting the UN-REDD programme in Bolivia. Beside the above-mentioned contribution, the Norwegian government directly funds national REDD+ activities through bilateral projects around the world. According to information provided by the Norwegian mission during their last visit to the country, contributions to national programmes in Bolivia are not yet contemplated.
Sweden	Sweden is currently negotiating its contribution to the new National Fund for Climate Change, in order to support activities for adapting to climate change. However, there is no such fund and it has no basic structure yet. Sweden will analyze the possibility to provide support to vulnerable communities and to assess their adaptation needs to climate change, as well as to analyze several decentralized implementation methods. Additionally, Sweden is providing the Vice-Ministry of Forest Management and Development with USD 4 million for strengthening purposes.
Finland	Recently, the Finnish Cooperation contacted the Vice-Ministry of Environment, Biodiversity and Climate Change, and expressed its interest in financing pilot projects and other REDD+ activities.

### Consultation Process Guidelines

In Bolivia's changing context of the last years, one of the most demanded issues among people and local organizations has been the decision-making capacity. This element has been promoted by several international treaties<sup>34</sup> acknowledged by the Bolivian legal framework and currently included in the Political Constitution. The latter was approved by the Honorable National Congress in October 2008<sup>35</sup> and supported by the referendum in January 2009. The Constitution considers social consultation, participation and evaluation as people's rights.

<sup>34</sup> The International Covenant on Economic, Social and Cultural Rights (ICESCR), the International Covenant on Civil and Political Rights (ICCPR), the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the Committee on the Elimination of Discrimination against Women (CEDAW) and the ILO Convention 169.

<sup>35</sup> Title II. *Derechos fundamentales y garantías* (Fundamental Rights and Guarantees). Chapter IV: *Derechos de las naciones y pueblos indígenas originarios campesinos* (Rights of indigenous, native and peasant nations and peoples). Article 30. Paragraph II. 15.

Title VI. *Participación y Control Social* (Social Involvement and Empowerment). Article 241. I. "The sovereign people shall participate in the design of public policies through civil society organizations."

The above-mentioned rights are expressly exercised by the five CSOs in charge of land-use and natural resources issues, i.e. CIDOB, CSUTCB, CSCIB, CONAMAQ and CNMCIOB-BS, as specified in the Stakeholder Analysis.

The consultation and information process takes place during meetings and/or assemblies held among community leaders and representatives, and it is facilitated by the REDD National Team (operated by the PNCC). These two institutions are temporarily linked to the Steering Committee with the purpose of monitoring the designing process of the National Forest and Climate Change Strategy, as well as the documents to be presented at the UN-REDD FCPF and the German Cooperation Agency.

The fulfilment of the current Political Constitution favours truthfulness, integrity, prior consent, involvement and transparency along the process. The information and consultation process will continuously and progressively prevent potential disputes and solve the existing ones.

#### Biomass Measurements: The existing Permanent-Plot System prior to REDD+

There is a network of more than 440 permanent plots for measuring biomass, mainly managed by the Bolivian Institute for Forest Research (IBIF) and national herbaria. Furthermore, all forest concessions carry out forest inventories. The permanent-plot network comprehends two types of plots: conventional plots (1 ha; the dimensions and design established according to technical regulations for management plans) and experimental plots with variable dimensions (between 20 and 25 ha) subject to implementation and measurement protocols which are not included in any of the standard regulations for forest management. The IBIF has been monitoring 240 one-hectare plots, and 28 experimental plots (20-27 ha). Likewise, FAN Bolivia monitors 280 plots of 0.25 and 0.5 ha. Experimental plots are organized in blocks of 4 and generate a use-intensity gradient (witness, normal use, enhanced use and intensive use). Altogether, the permanent-plot network has an area of 1,000 ha distributed over the ecological regions of Amazonia, the Pre-Andean Amazonian Forests, and Amazonian Transition Forests (called *Chiquitano* in the Chaco Region and in Chiquitania)

The permanent-plot network operated by the IBIF was established in 1998 – although plots created in 1994 were also included. In 1998, the project started with at least 40 one-hectare plots. Since that year, the number of conventional plots increased gradually until it reached 240. In 2000, the project of experimental plots set off with one four-plot block, 27 ha each. In 2001, eight additional experimental plots were created; four more were added in 2002; eight in 2003; and finally the four last plots were added in 2004. FAN installed 104 pair plots in 1999, in accordance with the Winrock International protocols and re-measured them in 2003 and 2007. Besides, the IBIF and FAN installed 240 permanent plots in three different ecosystems in 2007 and 2008.

The density of the network depends on the variability of biomass in each forest ecosystem and on the plot size. Normally, there is a confidence level of 95% with an average of +/- 10% for each forest type. Regulations provided by the Forest Law 7000 define a 5-year period for updating forest inventories from concessions. However, there is currently no central register of forest inventories.

In such plots, tree diameter, height, coverage, rattan percentage, bole quality, canopy shape and quality, and damages caused to canopies, boles or roots resulting from forest use. Each tree is geo-referenced in plots. In experimental plots, the canopy-opening percentage is categorized according to the type of perturbation.

Experimental plots have a nested design. Trees are measured if larger than 40 cm of diameter, whereas trees located in the middle of the plot are measured if larger than 20 cm of diameter. Each experimental plot consists of four one-hectare plots and – in this case – trees are measured when larger than 10 cm of diameter. There are transects across the plots in order to measure specimens of 0-10 cm of diameter. Such transects also include nested transects according to the size of trees. In conventional plots, trees are monitored starting from 10 cm. Twenty-percent of conventional plots include regeneration transects, where trees with less than 10 cm of diameter are also measured. Plots established in compliance with the protocol of Winrock International measure trees larger than 10 cm of diameter.

Available Data for Estimating Deforestation and Forest Degradation at a National Level

Source	Scope	Sensor	Spatial Resolution	Date	Citation		
<b>Deforestation</b>							
Ministry of Sustainable Development and Environment	National: 60 scenes	Landsat MSS y 5 TM	4 60/30m	1975-93	1		
UMD	National: 44 scenes	Landsat MSS y 5 TM	4 60/30m	1986-92	2		
BOLFOR	National: 39 scenes	Landsat TM, 7 ETM	5 30m	1993-2000	3		
Noel Kempff Mercado Natural History Museum	National: 56 scenes	Landsat TM, 7 ETM	5 30m	1990-2000	4		
Noel Kempff Mercado Natural History Museum	15 scenes	Landsat TM, 7 ETM	5 30m	2000-2004	5		
Forest Superintendence	National: 145 scenes	MODIS	230m	2004-2007	6		
<b>Degradation</b>							
Forest Superintendence, FAN Bolivia	Pando: 002 / 068	Landsat 5 TM	30m	09.07.2005	8		
				13.08.2006			
				31.07.2007			
	Ascención: 231 / 071	Landsat 5 TM	30m	ASTER	15m	08.08.2006	8
				Landsat 5 TM	30m	29.07.2005	8
						01.08.2006	
						20.08.2007	
				ASTER	15m	16.9.2007	8
	SPOT 5 MS 679/381	10m	12.06.2007	8			
	Chiquitania: 229 / 072	Landsat 5 TM	30m	29.07.2005	8		
				01.08.2006			
				20.08.2007			