

## Template for Summary of Project/Program<sup>1</sup>

FOREST INVESTMENT PROGRAM			
Project/Program Approval Request			
1. <b>Country/Region:</b>	Brazil	2. <b>CIF Project ID#:</b>	(Trustee will assign ID)
3. <b>Project/Program Title:</b>	<i>Development of systems to prevent forest fires and monitor vegetation cover in the Brazilian Cerrado</i>		
4. <b>Type of FIP Investment:</b>	<i>Private: No</i>	<i>Public: Yes</i>	<i>Mixed: No</i>
5. <b>Funding Request (in USD million total) for Project/Program:</b>	<i>Grant: 9.25</i>		<i>Non-Grant: 0</i>
6. <b>Approved Preparation Grant:</b>	<i>Amount (USD): 100,000</i>		<i>Date: Not implemented</i>
7. <b>Implementing MDB:</b>	<i>IBRD</i>		
8. <b>Other MDB Involvement:</b>	<i>MDB: N.A.</i>		<i>Type of Involvement:</i>
9. <b>National Project Focal Point:</b>	<i>Ministry of the Environment (MMA)</i>		
10. <b>National Implementing Agency<sup>2</sup> for project/program:</b>	<i>Fundação de Desenvolvimento da Pesquisa and Ministério da Ciência, Tecnologia e Inovação (FUNDEP)</i>		
11. <b>MDB FIP Focal Point and Project/Program Task Team Leader (TTL):</b>	<i>Headquarters-FIP Focal Point: Gerhard Dieterle</i>		<i>TTL: David Tuchsneider</i>
<b>12. Project/Program Description (including objectives and expected outcomes):</b>			
<p>The project development objective is to enhance Brazil's institutional capacity to monitor deforestation, provide information on fire risks, and estimate related GHG emissions in the Cerrado.</p> <p>Main outcomes are focused on enhancement of Brazil's institutional capacity through:</p> <p>(a) Implementation of a deforestation monitoring system of the Cerrado, including yearly information for public use and real-time information for detection and enforcement;</p> <p>(b) Improving INPE's fire risk information system through the inclusion of additional data, fire-spread forecasts and public information access through interactive devices;</p> <p>(c) Adapting INPE's GHG emissions estimation system to the Cerrado.</p>			
<b>13. Sectors and Themes:</b>			
Sectors: Forestry, Agriculture and Public Administration Production and Management of Forest Information. Themes: Land Administration and Management, Environmental Policies and Institutions and Climate Change.			
<b>14. Consistency with FIP Investment Criteria:</b>			

<sup>1</sup> To be submitted together with the full project document for approval by the FIP Sub-Committee.

<sup>2</sup> Can be Government agency or private sector firm

**Climate change mitigation potential:** The deforestation monitoring system will provide near-real time information as well as more accurate, yearly figures, on land use changes in the *Cerrado*. In the case of the early warning systems for forest fires, the improvements will enhance the existing capacity to predict the risk of forest fires and spread, one of the major threats to the *Cerrado*

**Demonstration potential at scale** The systems supported by the FIP investment will largely represent an adaptation and/or improvement of the existing systems already in use in the Amazon and in the country (PRODES, DETER, INPE's Fire Risk model, and INPE-EM), already tested, validated and cited as best practice internationally. The FIP investment will not only allow their expansion in the *Cerrado*, but will also form the basis for their future expansion in the rest of Brazil's biomes (Caatinga, Pantanal, and Atlantic Forest), based on the experience generated with the application of the systems in the transition zones of such biomes with the *Cerrado*.

**Cost-effectiveness** The provision of more precise, up-to-date, real-time and widespread information on (illegal) deforestation, risk of (wild) fires and GHG emissions have, potentially, have several economic and financial benefits. Implementation costs are reduced by focusing on expanding current capacities rather than setting up new systems.

**Implementation potential** The GoB has set up strong institutional coordination mechanisms to manage the BIP. Since the beginning of the design phase, the successful collaboration between the three key ministries involved in land use regulation (MMA, MAPA and MCTI) has allowed the development of a strategic approach capable to foster synergies not only among the BIP and its projects, but also with ongoing *Cerrado* government plans and policies already in implementation at federal, state and municipal levels (e.g. PPCerrado).

**Integrating sustainable development (co-benefits):** Provision of improved information on land use and land-use change, as well as improved information on fire risk will have positive environmental effects, ranging from better fire prevention and management to enhanced enforcement of land-use regulations.

**Safeguards:** The project will make a key contribution to strengthening forest governance and safeguarding the integrity of natural forests in the *Cerrado* by providing essential, timely and high quality information to policy makers and other stakeholders for monitoring, measuring, and enforcing land use regulations across the biome. It is expected to have an overall positive impact with minimal environmental and social risks as it is essentially an environmental information enhancement project with environmental category C.

**15. Key Results and Indicators for Success (consistent with FIP results framework):**

<b>Result</b>	<b>Indicator</b>
Deforestation monitoring of the Cerrado	Information on deforestation in the <i>Cerrado</i> is regularly made available to the public and relevant institutions
Fire risk information produced	Improved information on forest fire risk is publicly available
Improved forecasting of fire	Near real-time information on potential fire spread in the <i>Cerrado</i> is publicly available
Measurement of GHG emissions for the Cerrado	GHG emissions estimates for the <i>Cerrado</i> are publicly available
Institutional strengthening	Government institutions in charge of policy, deforestation control and fire prevention using the information on deforestation and fire risk in the <i>Cerrado</i>
Expected direct GHG emission reductions from FIP investments (over the lifetime of the project/program):	The project will not result in a direct generation of GHG emissions reductions. Rather, by promoting investments in the establishment and improvement of key forest information systems in the <i>Cerrado</i> it will create the enabling conditions for land use institutions to monitor, measure, and enforce regulations in the future, leading to emissions reductions.

16. Co-Financing <sup>3</sup> :		
	Amount (USD million):	Type of contribution:
• Government	0	
• MDB	0	
• Private Sector	0	
• Others (please specify)	0	
<b>Co-Financing Total</b>		0

**17. Project/Program Timeframe:**

Expected Board/MDB Management<sup>4</sup> approval date: November 19, 2015  
Expected Date of Effectiveness<sup>5</sup>: December 10, 2015  
Expected Mid-Term review date: November 1, 2017  
Expected Project/Program closure<sup>6</sup> date: April 30, 2020

**18. Role of other Partners involved in project/program<sup>7</sup>:**

(a) The **National Institute for Space Research** (*Instituto Nacional de Pesquisas Espaciais - INPE*) will be in charge of PRODES/DETER Cerrado development and implementation (and related sub-products and systems), improvements to the fire risk information system, GHG emissions estimations and related training and dissemination.

(b) The **Federal University of Minas Gerais** (Universidade Federal de Minas Gerais – **UFMG**) will be in charge of further developing the FISC model, its on-line application for the Cerrado and its application in four conservation units. It will also carry out training in the use of the model.

(c) The **Federal University of Goiás** (Universidade Federal de Goiás – **UFG**) will be in charge of the PRODES/DETER data quality control system.

<sup>3</sup> This includes: in-kind contributions (monetary value), MDB loan or grant, parallel financing, etc.

<sup>4</sup> In some cases activities will not require MDB Board approval.

<sup>5</sup> Expected date of signature of grant or loan agreement.

<sup>6</sup> Financial closure date.

<sup>7</sup> Other local, national and international partners to be involved in implementation of the project/program.

19. **Implementation Arrangements** (incl. procurement of goods and services):

(a) The **Research Development Foundation** (*Fundação de Desenvolvimento da Pesquisa - FUNDEP*) will be the grant Recipient and Project implementing agency. FUNDEP will administer the Project and MCTI will be in charge of technical supervision. INPE, UFMG and UFG will be responsible for delivering the Project products and results respectively assigned to each of them.

(b) The **Ministry of Science, Technology and Innovation** (*Ministério da Ciência, Tecnologia e Inovação - MCTI*), through the Secretariat for Policies and Research Programs and Development (SEPED), will approve the Project's Annual Operational Plan (POA), the procurement plan and budget. It will also be responsible for institutional coordination, implementation monitoring, quality assurance and results evaluation.

(c) A **Project Institutional Coordination Committee (PICC)**, will be created through an MCTI Ministerial Ordinance (*portaria*), to ensure coordination between FUNDEP, MCTI and the three participating institutions: the National Institute for Space Research (INPE), the Federal University of Minas Gerais (UFMG) and the Federal University of Goiás (UFG). The PICC will be composed of representatives of all these institutions and also of the Ministry of Environment (MMA), to facilitate coordination at the level of the Brazil FIP Plan and PPCerrado.

(d) The Project will be technically implemented by MCTI, INPE, UFMG and UFG while FUNDEP will be responsible for procuring goods, works and services as well as for selecting consultants, in accordance with the Bank's procurement policies. FUNDEP will also be responsible for contract management