

# INTERNATIONAL TROPICAL TIMBER ORGANIZATION

## ITTO

### PROJECT PROPOSAL

<b>TITLE:</b>	STRENGTHENING OF ANAM'S MANAGEMENT CAPACITY TO REDUCE ILLEGAL LOGGING AND TRADE IN THE EASTERN REGION OF PANAMA (BAYANO AND DARIEN) THROUGH MONITORING AND CONTROL MECHANISMS
<b>SERIAL NUMBER:</b>	TFL-PD 044-13 Rev.2 (M)
<b>COMMITTEE:</b>	THEMATIC PROGRAMME ON FOREST LAW ENFORCEMENT, GOVERNANCE AND TRADE (TFLET)
<b>SUBMITTED BY:</b>	GOVERNMENT OF PANAMA
<b>ORIGINAL LANGUAGE:</b>	SPANISH

#### SUMMARY

**EXECUTING AGENCY:** WWF – PANAMA OFFICE

**COOPERATING GOVERNMENTS:** ---

**DURATION:** 24 MONTHS

**APPROXIMATE STARTING DATE:** UPON APPROVAL

<b>BUDGET AND PROPOSED SOURCES OF FINANCE:</b>	<b>Source</b>	<b>Contribution in US\$</b>
	<b>ITTO</b>	<b>412,556.00</b>
	WWF – Panama	132,403.00
	ANAM	185,350.00
	<b>TOTAL</b>	<b>730,309.00</b>

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## PROJECT BRIEF

The aim of this project proposal is to follow up on one of the outputs of the ITTO-financed project **PD 405/06 Rev.3 (F): “Extending the area under sustainable forest management in the forest lands of the Emberá-Wounaan Comarca, Darien, Panama”**, which conducted an analysis and described the institutional, administrative and socio-economic factors leading to illegal logging in the Eastern Region of Panama (Bayano and Darien) and produced a framework document on guidelines and strategies which require immediate institutional action to arrest incremental forest degradation caused by illegal logging practices and other unsustainable activities.

**Therefore, the main purpose of this proposal is to contribute to the prevention and control of illegal logging and trade in the Eastern Region of Panama (Bayano and Darien)** by strengthening ANAM's capacity to ensure efficient and effective forest sector management and increased community awareness on forest degradation as a result of illegal logging and related illegal trade in forest products.

This proposal is complementary to an ITTO project on “Tropical Forest Governance in the Region of Darien, Panama” [PD 602/11 Rev.3 (F), which was approved during the 49th Session of the International Tropical Timber Council in Gabon and is expected to start in 2014] as it proposes actions to strengthen ANAM's institutional capacity through the implementation of an institutional and governance framework for the prevention and control of illegal logging by developing an efficient timber traceability mechanism and promoting responsible forest management and trade in the natural forests of Panama through an awareness campaign on responsible purchasing practices.

The macro outcomes expected at project completion to strengthen ANAM's management capacities are:

- ✓ Development and implementation of an integrated system for the monitoring and control of timber harvesting and trade in the Eastern Region of Panama (Bayano and Darien) as a pilot system to be replicated throughout the country. The system will include monitoring actions in low-intensity harvesting sites and timber traceability up to the storage and marketing stages. A fundamental component in this strengthening process will be the training of ANAM's personnel in the adequate use of integrated monitoring and control tools for the management, harvesting, production and marketing of timber and timber products.
- ✓ Raising community awareness about forest degradation and illegal logging and trade through the design and implementation of an awareness-raising campaign for consumers regarding the positive impact of responsible purchasing practices on the conservation of forest resources in Panama. This campaign will be supplemented by actions aimed at promoting the conclusion of responsible purchasing agreements between key stakeholders of the production and marketing chain.

The success of this project will depend to a great extent on its implementation strategy, which will be based on the adjustment of policy instruments in the sector so as to ensure rational, transparent, equitable and streamlined but, at the same time, efficient policies. The project strategy will also involve the strengthening of capacities for the monitoring and control of forest harvesting production and marketing through agreement and coordination with key stakeholders along the forest production and marketing chain. This will require a restructuring of the relationships between the sector's regulatory authorities, forest professionals, forest owners, the industry and other key forest sector groups, and to this end, the strengthening of ANAM will be needed as it has the support of consumers and the population in general.

Thanks to its close collaboration with WWF in the implementation of the ITTO-financed project PD 405/06 Rev.3 (F): “*Extending the area under sustainable forest management in the forest lands of the Emberá-Wounaan Comarca, Darien, Panama*”, ANAM has been able to promote a change in the forest harvesting model used in the Embera-Wounaan Comarca, which has now been extended to other areas such as the Kuna Wargandi Comarca. The participation of WWF has been a key factor in the progress that has been achieved, given the experience of this organization in the development of similar processes and its technical capacity.

Given the success of this experience, ANAM believes it should continue its collaboration with WWF-Panama Office as project co-executing agency, to assist in the management of resources requested to the International Tropical Timber Organization (ITTO) and contribute the expertise gained in the implementation of similar initiatives, particularly in neighbouring countries such as Colombia<sup>1</sup>. As an experienced

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<sup>1</sup> WWF has been a key player in the success achieved with the Cross-sectoral Pact for Legal Timber in Colombia ([http://www.wwf.org.co/sala\\_redaccion/publicaciones/?199930/Pacto-intersectorial-por-la-madera-legal-en-Colombia](http://www.wwf.org.co/sala_redaccion/publicaciones/?199930/Pacto-intersectorial-por-la-madera-legal-en-Colombia)).

independent organization, WWF will be able to provide technical assistance and facilitate the necessary consensus-building spaces so that the key stakeholders of the Panamanian forest sector may reach agreements to contribute to the achievement of project objectives. Furthermore, WWF has the expertise required for the design of sustainable forest management instruments that will strengthen ANAM for the improved administration and control of the forest sector.

Executing Agency:	WWF – Panama Office	
Duration:	24 months	
Approximate starting date:	Upon approval	
Budget and financing sources:	<b>Source</b>	<b>Contribution (in US\$)</b>
	ITTO	412,556
	WWF-Panama	132,403
	ANAM	185,350
	<b>TOTAL</b>	<b>730,309</b>

## ACRONYMS

ANAM	Autoridad Nacional del Ambiente ( <i>National Environmental Authority</i> )
ANARAP	Asociación Nacional de Reforestadores de Panamá ( <i>National Reforestation Association of Panama</i> )
APAMEX	Asociación Nacional de Agro-exportadores ( <i>National Association of Agro-Exporters</i> )
CFP	Cámara Forestal de Panamá ( <i>Forestry Chamber of Panama</i> )
CIFP	Colegio de Ingenieros Forestales de Panama ( <i>Panamanian Society of Forest Engineers</i> )
CONAGEFOR	Comisión Nacional de Gestión Forestal ( <i>National Forest Management Commission</i> )
DEMAFOR	Departamento de Manejo Forestal ( <i>Forest Management Department</i> )
DFID	Department for International Development
EC	European Commission
FAO	Food and Agriculture Organization of the United Nations
FMU	Forest Management Unit
ITTO	International Tropical Timber Organization
MEF	Ministerio de Economía y Finanzas ( <i>Ministry of Economics and Finance</i> )
MICI	Ministerio de Industria y Comercio ( <i>Ministry of Industry and Trade</i> )
NGO	Non-government organization
PPP	Plan Puebla Panamá ( <i>Puebla-Panama Plan</i> )
PSC	Project Steering Committee
RFMT	Responsible Forest Management and Trade
SENACYT	Secretaria Nacional de Ciencia, Tecnología e Innovación ( <i>National Secretariat for Science, Technology and Innovation</i> )
SFM	Sustainable Forest Management
USAID	US Agency for International Development
WWF	World Wildlife Fund

## PART 1. PROJECT CONTEXT

### 1.1 Origin

As a result of the declaration of Basic Principles and Guidelines for the Forest Policy of Panama, promulgated through Executive Decree No. 2 of 17 January 2003, ANAM officially presented a National Forest Development Plan in 2008. This Plan, which is aimed at achieving sustainable forest development, was derived from an intensive diagnostic study on the needs of the country and the institution responsible for forest management. It includes various programs such as the Forest Administration Program, which proposes actions to improve monitoring and control and increases the participation of all key stakeholders of the production and marketing chain.

The National Forest Development Plan has led *inter alia* to a program to promote community forest management, which received financial support from ITTO through project PD 405/06 Rev.3 (F): “*Extending the area under sustainable forest management in the forest lands of the Emberá-Wounaan Comarca, Darien, Panama*”, implemented by WWF between 2009 and 2011. This project conducted an analysis and produced a proposal for the development of a strategy to prevent and control illegal logging. This strategy stresses the urgent need to develop actions aimed at strengthening forest governance in the region. This need was assessed during a sectoral survey carried out with various stakeholders, including forest consultants, ANAM officers, DEMAFOR, forest professionals, timber sale outlets, forest industry, timber traders, transport operators, forest workers, community timber producers, timber trade intermediaries, leaders of community forest enterprises, WWF staff, and the Municipal Authorities of Cemaco and the Embera-Wounaan Comarca.

Argüelles (2010) carried out a diagnostic study that was the basis of the above strategy for illegal logging prevention and control in the Province of Darien. This study concluded that the raw material supplies required by the Panamanian forest industry to operate amount to an annual average of 130,000 m<sup>3</sup> of timber from natural forests. Official records show very controversial data regarding the supply of raw materials, which has been decreasing since 2002 (ANAM Records 2002). On the other hand, according to ANAM's statistics for 1982-2002, roundwood (raw material) production peaked in 1990 at an estimated volume of 165,000 m<sup>3</sup>, while by 2002 only 20,000 m<sup>3</sup> was reported in the official records, with a similar trend recorded up until 2006. According to Argüelles (2010), this dismal situation of the forest sector of Panama can be explained by one of the following causes:

- a) Official records do not report total conventional production volumes due to a lack of control and traceability tools and, in particular, a lack of resources to implement an adequate monitoring and control system; or
- b) The raw material supply to the forest industry is increasingly scarce and remaining natural forests are limited to increasingly remote areas, thus leading to a substantial reduction in raw material supply and gradual closure of most local industries whose processing is only focused on a few tropical timber species.

However, for the purposes of this project proposal, only the first of these causes is addressed on the basis of comparative time-series analyses by Del Gatto, F. (2004) and Argüelles, A. (2010), who assessed these trends during two different periods and concluded that illegal logging levels in the country range from 30% to 51% based on conservative estimates. Their analysis showed that there is no effective reporting and control on timber volumes in the country and therefore the authors concluded that there was substantial illegal timber trade and a sharp increase in unsustainable harvesting practices.

This proposal is complementary to an ITTO project on “Tropical Forest Governance in the Region of Darien, Panama” [PD 602/11 Rev.3 (F), which was approved during the 49th Session of the International Tropical Timber Council in Gabon and is expected to start in 2014] as it proposes actions to strengthen ANAM's institutional capacity through the implementation of an institutional and governance framework for the prevention and control of illegal logging by developing an efficient timber traceability mechanism and promoting responsible forest management and trade in the natural forests of Panama through an awareness campaign on responsible purchasing practices.

## 1.2 Relevance

### 1.2.1 Conformity with ITTO's objectives and priorities

This proposal is related to the following objectives set out in the **International Tropical Timber Agreement, 2006**:

*To promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests, and to promote the sustainable management of tropical timber producing forests by:*

- a. *Strengthening the capacity of members for the collection, processing and dissemination of statistics on their trade in timber and information on the sustainable management of their tropical forests;*
- b. *Encouraging members to develop national policies aimed at sustainable utilization and conservation of timber producing forests, and maintaining ecological balance, in the context of the tropical timber trade;*
- c. *Strengthening the capacity of members to improve forest law enforcement and governance, and address illegal logging and related trade in tropical timber;*

The actions to be implemented within the framework of the proposed project on “**Strengthening ANAM's management capacity to reduce illegal logging and trade in the Eastern Region of Panama (Bayano and Darien) through monitoring and control mechanisms**” are consistent with these objectives as they will promote the strengthening of the government agency responsible for forest management and administration so as to ensure the adequate development, implementation and monitoring of policies to combat illegal logging in Panama. To this end, the project will work jointly with public institutions responsible for regulating the harvesting of forest resources and establishing the conditions to improve the monitoring and traceability of harvesting operations, in addition to facilitating access to information on the traceability of products entering the market.

The proposal is related to the following **priority strategies and actions** set out in the **ITTO Strategic Action Plan 2013-2018**:

- **Strategic priority #1:** Promote good governance and enabling policy frameworks for strengthening SFM and related trade, and enhancing SFM financing and investment, through the implementation of adequate policies for timber monitoring and traceability in Panama.
- **Strategic priority #5:** Improve the quality and availability of information on tropical forests, forest product markets and trade through the production of reliable information on timber traceability and legal supply in Panama, as well as the design and implementation of a national campaign on responsible purchasing of legal timber.
- **Strategic priority #6:** Build and develop human resource capacity to implement SFM and increase trade in forest goods and services from sustainably managed forests through capacity building in public institutions and the use of new monitoring and traceability tools.

### Specific contribution to the TFLET thematic programme

a. This proposal complies with the following deliverables stipulated for **ITTO's TFLET thematic programme** (April 2009):

Specific objective	Deliverables	Project contribution
A. Strengthen forest law compliance and governance through improved national policy and legal frameworks, strengthened enforcement and other institutions, improved data and knowledge, strengthened partnerships and improved cooperation among the private sector, civil society organizations and other stakeholders	<ul style="list-style-type: none"> <li>- Evidence on adoption and implementation of national action plans to strengthen governance</li> <li>- Improved forest and trade statistical systems and reporting</li> <li>- Increased production of timber and timber products as verified from legal/sustainable sources</li> <li>- Improved management systems, such as chain of custody, tracking and tracing systems adopted</li> <li>- Compendium of tracking and tracing technologies and evidence</li> </ul>	<ul style="list-style-type: none"> <li>- The implementation of this project will strengthen the institution in charge of forest resources (ANAM) through an efficient traceability system that will lead to improved tracking and monitoring of the chain of custody.</li> <li>- In addition, the forest registry of stakeholders involved in the forest production and value-adding chain will be improved.</li> <li>- ANAM will have trained technical personnel available to implement the traceability system and analyze data from the forest registry database.</li> </ul>

Specific objective	Deliverables	Project contribution
	on dissemination	- The outreach campaign will raise awareness about the problem of illegal forest activities and will establish the conditions to enable the development of partnerships to address this problem by supporting responsible forest management and trade.
B. Improve transparency and effective management of supply chains and increased domestic and international trade in legally produced tropical timber	- Evidence on increased capacity among trade associations and civil society organizations in policy implementation	- The traceability system to be implemented will effectively contribute to improving transparency along the forest sector supply chain.
C. Improve international cooperation in forest law enforcement and governance among ITTO member countries and other related international initiatives.	- Evidence on existence and effective functioning of information sharing mechanisms	- After the implementation of the project, the country will have made progress towards compliance with the International Tropical Timber Agreement. In addition, it will be better positioned to meet existing regulations in the US (Lacey Act) and EU (FLEGT) markets regarding the import of products derived from illegal logging and trade activities by improving the mechanisms to address this problem.

b. The results of this proposal are related to the following output indicators, target values and means of verification of the **ITTO TFLET Monitoring Protocol**:

Output Indicator	Target Value	Means of verification	Related outcome (see 1.4)
Establishment and strengthening of law enforcement units (LEUs)	5 countries	Number of personnel trained in forest law enforcement	The capacities of ANAM's personnel will be strengthened for the adequate enforcement of forest policies and the appropriate application of integrated forest harvesting and management as well as timber traceability tools.
National studies on timber flows carried out		Reports on studies Database(s) on interventions on forest crime, illegal logging and trade	A baseline diagnostic study will be carried out on the status of the forest information system in the Eastern Region of Panama (Bayano, Darien, and Embera-Wounaan, Kuna Wargandi, and Kuna Madungandi Comarcas), including: issuing of harvesting permits and areas with the largest number of permits; traceability system; monitoring and control system; location of sawmills and timber warehouses in the area; and identification of stakeholders involved in the production chain.
Cost-effective and non-paper based timber tracking systems developed and implemented		Reports on the implementation of the systems, certification of verification of legality, and chain of custody certification	There will be an improved timber traceability system with capacity to monitor the production of timber from the harvesting stage to the sales stage.
Compendium on tracking and tracing technologies prepared		Compendium of tracking and tracing technologies and evidence on dissemination	
Increased volumes of traded tropical timber and timber products from legal and sustainable sources	TBD	Number of certificates of COC, legality, etc.	
Development of procurement policies in ITTO producing countries	5 countries	Number of countries with public procurement policies and legislation formulated and/or implemented	Public awareness about responsible purchasing practices will have been raised through a national campaign.



Output Indicator	Target Value	Means of verification	Related outcome (see 1.4)
Public timber procurement policies and legislation formulated and/or under implementation		Dissemination of public timber procurement policies in producer countries	
Value and volume of timber produced and traded by forest dependent and local communities	5 communities	Production and trading records from the communities Certification of community-based SFM	

### 1.2.2 Relevance to Panamanian forest sector policies

This project proposal is directly related to ITTO guidelines and ANAM's administrative provisions, particularly regarding the targets defined in the National Environmental Strategy and Sustainable Forest Model of Panama. In addition, the proposal is administratively and institutionally consistent with the following legal provisions:

#### ❖ National Forest Policy and Legislation

*Article 1 of Act No. 41 of 1 July 1998* states that: "Environmental management is a duty of the State. To this end, basic principles and standards are established for the protection, conservation and restoration of the environment, promoting the sustainable use of natural resources". The National Environment Authority - ANAM was established under this mandate as the agency responsible for the management of natural resources in the country.

Since this project proposal is aimed at controlling the loss of forest resources that is currently taking place as a result of the lack of governance prevailing in the sector and especially in the region of Darien, it is highly relevant to the country's legal framework, including the national forest policy. The proposal is also consistent with other forest development initiatives promoted by ANAM, which, with the support of ITTO, WWF, USAID-FCD and the European Commission, are making progress towards forest management. In this context, ANAM's target is to bring a total of 350,000 ha under sustainable management to comply with the provisions of the *National Environmental Strategy*, which was drafted as a result of the commitments arising from the General Environmental Law No. 41, with a view to formulating clear, consistent policies for the achievement of environmental goals. The National Environmental Strategy has set the target of meeting the local forest industry's demand for raw materials by the year 2020.

Furthermore, Article 49 of the Panamanian Forestry Law supports initiatives aimed at addressing irregularities associated with illegal timber transport by establishing "(...) *forest checkpoints, which will receive the support of the Police Force and will seize all products being transported without a corresponding waybill, pending investigation and eventual decision by ANAM authorities (...)*".

In accordance with the United Nations Framework Convention on Climate Change (UNFCCC), to which Panama is a signatory party, several actions have been launched for the mitigation of climate change, including promoting adjustments to production models in order to arrest deforestation and forest degradation. One of these actions is the Integrated Management Strategy for the Chucunaque River Basin, aimed at reducing the vulnerability of the area and promoting climate change adaptation and mitigation. This Action is being developed under the UN-REDD Programme and has identified as a positive measure the community forest management initiative promoted by ANAM in association with the General Congress of the Comarca, with the technical assistance of WWF and financial support from ITTO. These community forest management experiences help strengthen forest governance as a way of creating favourable conditions for investments in projects related to payment for environmental services schemes, such as REDD+ projects, to support the development of local communities.

#### ❖ Act No. 1 of 3 February 1994

- *Article 8*: Any individual or company that is involved in the harvesting, industrial processing, marketing, reforestation or collection and sale of forest seeds, or any of these activities, or in the implementation of technical studies to be submitted to ANAM, needs to register only once free of charge with the Forest Registry.

- Article 53: Industries and companies involved in the processing and utilization of forest products and by-products should annually submit industrial information and statistics as requested by the relevant institutions, and this information will remain confidential. This information shall be verified by ANAM officers.

- Article 54: ANAM inspectors may at any time inspect forest products and by-products in the custody of processing industries and companies, which should provide all the information requested by such officers on the origin of such materials.

- Article 55: The owners of the establishments referred to in the above article may only acquire and receive forest products and by-products whose harvesting and transport waybills have been duly authorized by ANAM. Failure to do so shall lead to criminal liability notwithstanding the right of ANAM to seize such products.

- Article 56: ANAM and the Ministry of Trade and Industry, by joint agreement and through prior consultation with timber industrialists, and in accordance with the provisions of the forest policy, shall conduct market surveys and other research studies, and shall regulate the import and export of forest products and by-products, with a view to ensuring the protection of natural forests.

❖ **Executive Decree No. 2 of 17 January 2003**, approving the Basic Principles and Guidelines of the Forest Policy of Panama

- Article 1: According to these basic principles and guidelines, it is the duty of the State to introduce instruments and mechanisms to strengthen the technical and administrative capacity of the Forest Administration, and to promote and support forest protection. Furthermore, the strategic objectives include the promotion of sustainable forest management and harvesting through the following strategic actions:

- Design and implement a monitoring and evaluation system for forest management in the country;
- Strengthen the institution responsible for forest administration in order to ensure effective and efficient compliance with the commitment to achieve sustainable forest management through established procedures.

❖ **Executive Board Resolution No. 05-98 of 22 January 1998**, which “regulates Act No. 1 of 3 February 1994 and stipulates other provisions” (G.O. 23,495 of 6 March 1998).

- Article 2: Any individual or company that is involved in the harvesting, industrial processing, marketing, reforestation or collection and sale of forest seeds, or any other activity referred to in Article 8 of Act No. 1 of 3 February 1994 should be registered with the Forest Registry.

- Article 81: Any individual or company that is the holder of a forest permit, forest concession or any other forest authorization, should register a mark with ANAM, and should mark all timber pieces accordingly prior to their transport. All unmarked timber shall be seized and shall be subject to fines according to the provisions of these Regulations. INRENARE’s General Directorate, under recommendation from the relevant technical directorate, shall regulate the codes and procedures related to such marks.

- Article 92: Authorized ANAM officers should carry the Institution’s identification badges at all times during the inspections of processing industries and companies referred to in Article 54 of the Forestry Law. All establishments should keep a record of the origin of forest products and by-products, with a detailed description of permits, contracts, waybills and other relevant documentation applicable to those products. Processed and/or packed volumes per species should match the data specified in those documents.

❖ **Resolution No. AG-0244-2011 of 21 April 2011**, which provides for the registration of a mark with ANAM for the timber extracted for natural forests to be mobilized/transported through the national territory.

In brief, the proposal to “**strengthen ANAM’s management capacity to reduce illegal logging and trade in the Darien Region through monitoring and control mechanisms**” is fully consistent with the objectives of the country’s strategy in this field.

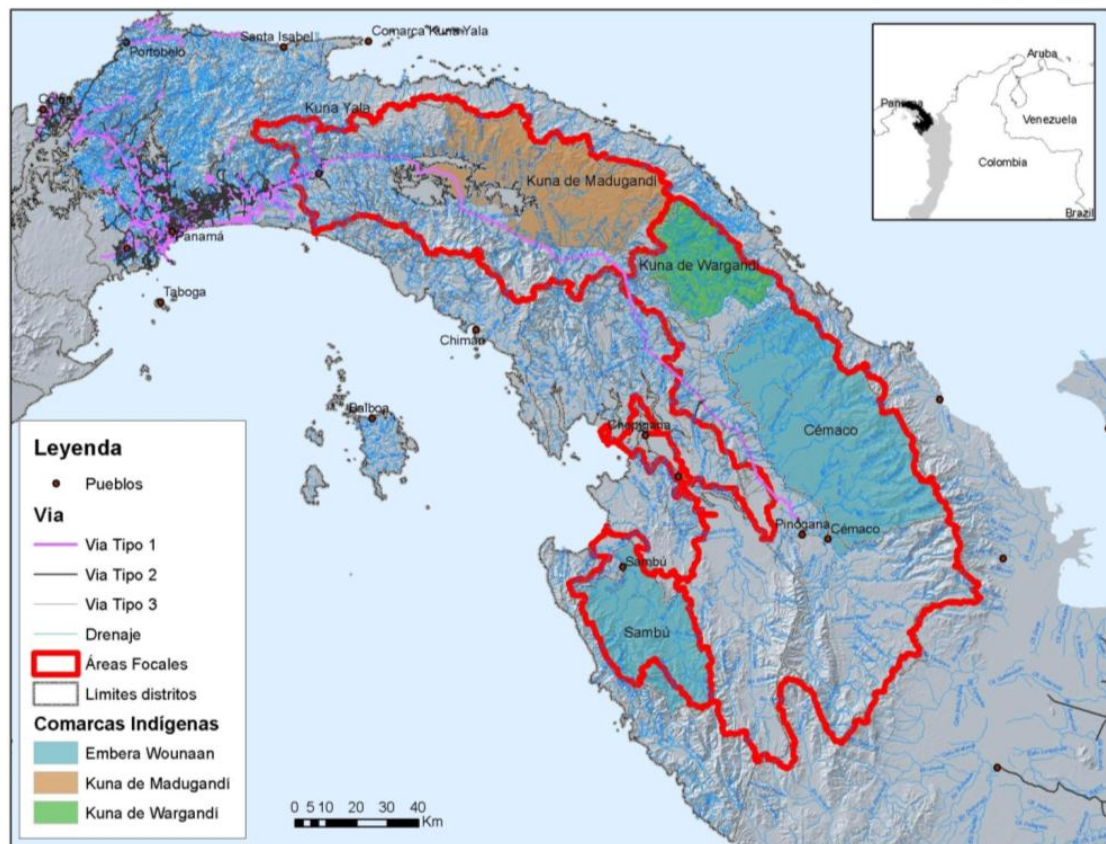
### 1.3 Target area

#### 1.3.1 Geographic location

The project's target area is located in the Eastern Region of Panama (see **Figure 1**), which includes part of the province of Panama (Bayano sector and Kuna de Madugandí Comarca), the province of Darien and the Embera-Wounaan and Kuna Wargandi Comarcas, where most forest activities are concentrated. This region is bounded by the Kuna Yala Comarca to the north, the Kuna Yala Comarca and Colombia to the east, Colombia and the Pacific Ocean to the south, and Panama City to the west. The indirect target areas include the cities of Chepo and Panama, where the country's forest industries are located.

Even though the project's direct target area covers a section of the province of Panama that includes the region of Bayano and the Kuna Madugandí Comarca, the region of Darien should be emphasized as it is the area from which most of the natural forest timber is extracted in Panama and where sustainable forest management plans formulated through the ITTO-supported project on "Extending the area under sustainable forest management in the forest lands of the Embera-Wounaan Comarca" (executed by WWF in 2009-2011) are being implemented. As much as 42.8% of Panama's natural forests are found in the Darien region and more than 80% of these are located in indigenous territories.

Figure 1. Map of project area – Eastern Region of Panama



SOURCE: WWF 2013

### 1.3.2 Social, cultural, economic and environmental aspects

- **Natural and environmental factors**

The expansion of deforestation and forest degradation is seriously threatening the rich biodiversity that characterizes Panamanian forests and jeopardizing the possibility of its sustainable utilization for the benefit of the local communities. According to the GEO, as quoted by Alfaro e Hidalgo (2005), there are about 1,222 endemic and 1,302 threatened plant species in Panama. Because of its biological diversity, Panama is one of the most important tropical areas of the world. Out of the more than 6,000 flora species recorded in Panama, 1,977 have been reported in the target region of this project. Furthermore, Panama constitutes both a land bridge between North and South America and a barrier between the Pacific and Atlantic oceans. In addition, the country is like an atmospheric funnel for the transfer of moisture from one ocean to the other. The land-bridge nature of the Isthmus of Panama makes it rich in plant and animal species from both North and South America, as well as endemic species<sup>2</sup>.

However, the strategies implemented so far have failed to arrest the process of deforestation and forest degradation. The most significant annual deforestation rates in the region are found in the watershed area between the Sambú and Jurado rivers (-123.14 km<sup>2</sup>) in Darien, followed, with a much lower rate, by the Bayano River watershed (-26.92 km<sup>2</sup>) in the province of Panama, the Sana Barbara watershed and the catchment area between the Santa Barbara and Chucunaque Rivers (-17.87 km<sup>2</sup>), also in the province of Darien, and finally the watershed area between the Bayano and Santa Barbara Rivers (-12.00 km<sup>2</sup>) straddling both provinces.

Although in most cases deforestation is caused by factors external to the forest sector, forest degradation in the province of Panama, and particularly in the Darien forests, is a result of the unsustainable exploitation of forest resources, which has concentrated on the irresponsible trade of a limited number of species, taking these species to the brink of extinction in the region. This is the case with species such a mahogany, spiny cedar and, currently, balsamo and cocobolo wood.

The implementation of this project will have a positive impact on the conservation of the integrity of forest ecosystems that are currently threatened by the selective harvesting of a limited number of species. By implementing an integrated system to monitor and control timber harvesting and marketing in the Eastern Region of Panama (Bayano and Darien) as a pilot system to be replicated throughout the country and incorporating monitoring actions in low-intensity harvesting sites, it will address one of the main causes of forest degradation and enhance the conservation of the potential of forests for the provision of (timber and non-timber) products and environmental services. Furthermore, by improving forest harvesting monitoring and control, the project will indirectly contribute to reducing wildlife hunting for direct consumption by informal workers, the capture of wild fauna and disturbance of vital habitats for threatened or vulnerable species, trafficking of species, and reduction of populations of endemic and/or threatened species.

- **Social, economic and cultural aspects**

Traditionally, the economic activities of indigenous communities in the Darien Region (Perafán & Nessin, 2001), as well as the indigenous communities in the target area of the province of Panama, have been based on low impact production systems, especially land conversion for subsistence agriculture, in particular banana, yam, rice, avocado and bean crops, among others. Trade activities under these traditional subsistence production systems rely on the harvesting of natural resources based on the incipient utilization of high commercial value timber species such as mahogany, spiny cedar and cocobolo.

In the indigenous communities, who live in conditions of extreme poverty, the family economies are based on subsistence farming of their lands for self-consumption, supplemented with backyard animal farming and wildlife hunting. Education, among other needs, requires a source of cash money to provide for their children who are studying outside of the community, and the same applies to health care expenses and other products needed from the cities. The only sources of income available to these communities to meet these needs are the sale of bananas, avocados in the near future and timber. Banana harvests are sometimes lost due to flooding and this increasingly frequent situation leads to more pressure on timber resources. Intermediaries take advantage of this situation to pressure the communities, who see an opportunity to meet their immediate needs, and with or without logging permits from ANAM, they harvest timber to obtain financial income.

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<sup>2</sup> Supplement N°5 of a series prepared by the Smithsonian Tropical Research Institute and published in the La Prensa newspaper. August 26, 1994.

At present, and as a result of the legal recognition of indigenous territories, the largest forest reserves are located in the main Comarcas, protected areas and communal lands granted to indigenous groups outside the Comarcas. The main Comarcas found in the project's target area in the Province of Darien are the Embera-Wounaan Comarca, which covers a total area of approximately 430,000 ha and comprises 41 communities, and the Wargandi Comarca, which covers an area of approximately 72,000 ha and is home to three communities. In the sector covered by the project in the province of Panama, there is one Comarca – Kuna Madugandi – with an estimated area of 231,880 ha and 12 communities.

There are groups of settlers who migrated to the region from the provinces of Chiriqui, Los Santos and Veraguas in search of land. The first groups migrated to Darien following the colonization policy promoted by the Government of Panama in the 1960s and the second wave of migrants came in 1978, after the opening of the Bayano-Yaviza highway. In 1970 (Dikison 1984, according to Perafan and Nessim 2001) the Latino population was only 10% of the total population of the province and today it is over 47% of the population of Darien. Although the Latino settlers prefer the river valley areas, they are progressively penetrating rainforest areas, where they continue to practice their farming life styles, including corn production, intensive cattle raising and backyard animal breeding. These groups are the main agents of land-use change in the project's target area. To them, the forest is an obstacle that must be cleared to establish their traditional production systems based on large areas of grazing lands. They further consider that the logging and sale of timber is a means of financing the development of their cattle ranching activities and have therefore become intermediaries in the unsustainable forest exploitation chain.

There are virtually no forest industry enterprises in Darien, although lately there has been a proliferation of timber yards with portable sawmills for primary processing as well as carpentry/cabinet-making workshops. However, the majority of forest industries located in the Provinces of Chepo and Panama get their timber supply from the Darien Region. According to the National Environmental Strategy report (although even ANAM (2002) recognizes that the figures are not up to date) there are 44 old and inefficient sawmills, 3 plywood factories and 354 further processing plants in those provinces. Based on the observations made by WWF during the formulation of this proposal, the project's target area has at least 3 major sawmills, 9 low-capacity sawmills operating with a set of permanently installed portable sawmills, 1 plywood plant and no less than 18 secondary processing facilities along the main road linking the Darien Region with the country's capital.

It is estimated that there is an installed capacity of 200,000 m<sup>3</sup> per year and a used working capacity of 62.5%. It should be stressed that this means that the benefits of potential employment generation provided by the forest industry are therefore transferred from Darien to other provinces (Arguelles, 2010). As a rule, these industries get their supplies from a network of intermediaries, and for their forestry operations they rent machinery and trucks from around the areas where they are established and located. There are a number of transport operators in this region who are also timber buyers. They also operate 40 - 50 mules that are exclusively used for timber transport, including mules from the provinces of Chepo and Panama that work in the industry supply chain in these provinces.

Furthermore, there are two coexisting forest harvesting models currently used in Darien (Arguelles, 2010):  
a) Traditional logging operations, which combine chainsaw logging and animal-based transport, and  
b) Machinery based logging operations used to harvest timber in logs. As a rule, machinery based logging is used in the short summer season or dry season, which lasts from three to four months, while in the rest of the year, which corresponds to the winter season, traditional logging methods are used. However, the softwood logs accumulated in summer can be transported by river in winter, particularly from Cativo and Espavé.

The forest value chain is made up of a complex network of commercial and institutional relations that make it possible for both forest operational models to coexist, but the current forest monitoring and control system should be reviewed and improved.

A number of positive project impacts have been identified as follows. The project will reduce the pressure currently exerted on forests located in indigenous community areas in the region, which is affecting the livelihoods of these communities. It will also contribute to reducing and controlling encroachment on indigenous community territories and will prevent resource access related conflicts between local community members and between the communities and other stakeholders of the forest production and marketing chain.

In the institutional field, the project will help improve ANAM's relationship with forest sector stakeholders and the community in general through agreements to prevent and control illegal activities and address existing

gaps that lead to corruption and infringement of formal procedures. The proposed communication campaign is expected to increase the participation of multiple civil society stakeholders in the establishment of effective governance structures.

This project will have a positive impact on tax evasion, which is currently taking place as a result of illegal activities in the forest sector, in the municipalities, in the indigenous territories (*comarcas*) and throughout the region, thus having a positive impact in the whole country.

#### **1.4 Expected outcomes at project completion**

##### **First year:**

1. A baseline diagnostic study will be carried out on the status of the forest information system in the Eastern Region of Panama (the Darien region including the Embera-Wounaan and Kuna Wargandi Comarcas, and the Bayano region including the Kuna Madungandi Comarca). This diagnosis will include: issuing of harvesting permits and areas with the largest number of permits; effectiveness of the traceability system through the use of a *forest mark*; monitoring and control system; inventory of sawmills and other processing facilities and timber yards for timber storage in the area; and identification of stakeholders most frequently involved in the production chain according to timber volumes.
2. Weaknesses in national forest monitoring and control capacities will have been identified, including in the traceability system (ANAM's *forest mark* system).
3. A strategic capacity-building plan will have been designed including improvement of the integrated monitoring and control system for timber harvesting, transport, storage and processing in the Eastern Region of Panama, and ANAM's personnel will have been trained.
4. A work plan will have been designed for the implementation of remedial actions so as to improve the timber traceability system managed by ANAM.
5. A National Responsible Purchasing Campaign will have been designed for Panama, with the participation of national stakeholders involved in the management of natural forests and plantations.

##### **Second year:**

1. An integrated monitoring and control system will have been implemented and validated for the control of timber harvesting, transport, storage and processing in the Eastern Region of Panama.
2. There will be an improved timber traceability system with capacity to monitor the production of timber from the harvesting stage to the sales stage.
3. The capacities of ANAM's personnel will have been strengthened for the adequate application of integrated monitoring and control tools for timber management, harvesting, transport, storage and processing.
4. Public awareness about responsible purchasing practices will have been raised through a national campaign.

## PART 2. PROJECT RATIONALE AND OBJECTIVES

### 2.1 Rationale

Panama's policy instruments for sustainable development identify the need to achieve sustainable forest management and harvesting. The General Environmental Law and the Forestry Law contain clear elements towards the achievement of this objective and to this end they both refer *inter alia* to the need to strengthen the management capacity of the institution responsible for the administration of the State's Forest Heritage.

Del Gatto, F. (2004) and Argüelles, A. (2010) concluded in several studies that weak institutional capacity is one of the causes contributing to forest degradation in Panama and to the illegality trend in forest harvesting and trade. Within the framework of the Institutional Strategy for Illegal Logging Prevention and Control formulated for the region of Darien by WWF-Panama with the support of ITTO in March 2010, it has been stated that illegal logging is one of the factors that hinders sustainable forest development in the region and threatens the success of forest management plans promoted with ITTO support in the Emberá-Wounaan Comarca.

One of the strategic lines of action outlined in that document stresses the importance and **urgency of developing and implementing a traceability system** in order to operate a forest management certification and chain-of-custody system for the legal trade in forest products. However, in addition to an effective traceability system, it is necessary to implement an integrated forest management and harvesting monitoring and control system as a means to ensure compliance with the requirements established for the issuing of harvesting permits and for forest product transport and trade.

According to the data presented by Del Gatto (2004) in the above strategy document, 75% of the timber marketed at the national level comes from the forests of Darien and the average volume of illegal timber from that region is estimated at 116,000 m<sup>3</sup>/year. These figures point to **the urgent need to address the problem through the implementation of a strict control system with the involvement of multiple stakeholders.**

This project will promote the implementation of an effective traceability system as a forest harvesting monitoring and control mechanism, incorporating a comprehensive information system on managed areas and on harvesting, storage, processing and sale of timber throughout the Eastern Region of Panama. It is expected that the implementation of these activities will improve the current monitoring, control, traceability and forest law enforcement systems, **while strengthening ANAM's management capacity to reduce illegal forest logging and trade in the Eastern Region of Panama (Bayano and Darien) with a view to improving forest governance in Panama.**

It is important to generate change because the situation of illegality currently prevailing among timber harvesting and trade operations in Panama threatens to cause irreversible forest degradation and jeopardizes the sustainable development of the country's forest sector. It should be pointed out that **this project is aimed at implementing best management practices** which is expected to lead to immediate changes in the control systems currently used by ANAM, **based on a transparent information and supply system that may be applied throughout the country.**

The project will be implemented by WWF, which will provide technical assistance to ANAM and will promote the participation of all key stakeholders involved in the sector, thus ensuring the achievement of the objectives established in this proposal and their adequate verification.

#### 2.1.1 Institutional set-up and organizational issues

Even though there are provisions to regulate forest monitoring and control in Panama, ANAM does not have effective tools or sufficient capacity for their adequate implementation. As a result, there is a lack of information on harvesting permits, major (legal and illegal) timber production areas, timber yards and warehouses, and processing and transport of timber by road from and to Panama City, among other data.

Thus, **since the 2011 launch of the "forest mark" system as the official traceability system, ANAM has not been able to assess its effectiveness in monitoring timber production and transport, which would show if the system is having an impact in the reduction of illegal activities in the forest sector. Furthermore, this instrument has a number of critical weaknesses that hinder adequate control,** for example, the *forest mark* system in its current form cannot link the timber transported to an authorized

harvested tree in a specific harvesting area, as it only takes into account the type and number of permit issued in the region. Moreover, the *forest mark* system is not applicable to forest by-products, which opens the door to the “laundering” of illegal timber through its processing in an extensive network of carpentry and cabinet-making workshops located in the project area.

Therefore, it is necessary to improve existing tools and strengthen the capacity of the personnel in charge of their implementation. In addition, the communities of the Emberá-Wounaan Comarca that have obtained FSC certification are required to provide information on forest management and maintain a chain-of-custody system to demonstrate the origin of their raw materials from the stump to the market. However, the government currently does not recognize this internal control system and there is no alignment between this system and the “forest mark” traceability system applied by ANAM.

**Panamanian consumers have so far been passive stakeholders in the face of the problem of illegality in the forest sector and its impact on deforestation and forest degradation in the country.** It is therefore necessary to launch a national outreach campaign to ensure public awareness about the status of the country’s forests and the benefits they provide, as well as on existing legal and sustainable market opportunities (at the national and international levels). Most importantly, the campaign should stress the need to change consumer attitudes to arrest the present trends of unsustainable harvesting and illegal trade.

In March 2013, ANAM, CONAGEFOR and other forest sector stakeholders, under the leadership and with the support of WWF, organized the First International Responsible Forest Business Round in Panama. This first round not only gathered forest chain stakeholders in Panama City to share their experiences but also became a benchmark for a national outreach campaign to promote responsible forest management and trade.

In view of the above, **there is a clear need to implement actions to assess the effectiveness of current instruments, identify the need for improvement, propose changes and implement a pilot system to test the impact of these improvements, which will in turn strengthen ANAM’s management capacity.** Furthermore, **there is an urgent need to attract the interest of Panamanian consumers so that they will become active stakeholders that will have a positive impact on reverting the current forest degradation trend caused by unsustainable harvesting and illegal trade.** Given the intensity of forest harvesting and trade activity and the presence of WWF in the Eastern Region of Panama, this area has ideal conditions to implement this pilot initiative.

Thanks to its close collaboration with WWF in the implementation of the ITTO-financed project PD 405/06 Rev.3 (F): “*Extending the area under sustainable forest management in the forest lands of the Emberá-Wounaan Comarca, Darien, Panama*”, ANAM has been able to promote a change in the forest harvesting model used in the Embera-Wounaan Comarca, which has now been extended to other areas such as the Kuna Wargandi Comarca. The participation of WWF has been a key factor in the progress that has been achieved, given the experience of this organization in the development of similar processes and its technical capacity.

Given the success of this experience, ANAM believes it should continue its collaboration with WWF-Panama Office as project co-executing agency, to assist in the management of the resources requested to the International Tropical Timber Organization (ITTO) and contribute the expertise gained in the implementation of similar initiatives, particularly in neighbouring countries such as Colombia<sup>3</sup>. As an experienced independent organization, WWF will be able to provide technical assistance and facilitate the necessary consensus-building spaces so that key stakeholders of the Panamanian forest sector may reach agreements to contribute to the achievement of project objectives. Furthermore, WWF has the expertise required for the design of sustainable forest management instruments that will strengthen ANAM for the improved administration and control of the forest sector.

ANAM and WWF have signed a collaboration agreement for the implementation of actions aimed at reverting forest ecosystem degradation in the region. Under this agreement, both institutions have been working since 2004 to promote an alternative model for sustainable forest management and responsible trade in support of local communities and the forest industry in the country.

Project success will depend on the participation of key stakeholders involved in the forest production and marketing trade. A review of key stakeholders identified for this project is given below.

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<sup>3</sup> WWF has been a key player in the success achieved with the Cross-sectoral Pact for Legal Timber in Colombia ([http://www.wwf.org.co/sala\\_redaccion/publicaciones/?199930/Pacto-intersectorial-por-la-madera-legal-en-Colombia](http://www.wwf.org.co/sala_redaccion/publicaciones/?199930/Pacto-intersectorial-por-la-madera-legal-en-Colombia)).



### 2.1.2 Stakeholder analysis

The main stakeholders of Panama's forest chain have been identified as key stakeholders in the implementation of this project. A description of their significance is given below:

**ANAM:** Agency responsible for promoting policies and developing policy instruments to encourage sustainable management and responsible forest trade in the country; it is in charge of issuing harvesting permits and processing information to support management actions.

**Small Timber Producers' Association of Eastern Panama and Darien:** This association groups various stakeholders of the production and marketing chain but for the purposes of this project, they are all considered to be part of a single group:

- **Farmers in non-indigenous territories:** Landowners or indigenous communities who have scattered trees on their lands or who simply sell the right to harvest trees growing on their properties so that the rights holder can then obtain the required subsistence permits. In general terms, local timber merchants help them to obtain these forest logging permits. If the farms are located within indigenous territories, they require the approval of the traditional authorities, which they can easily obtain in exchange for the payment of some type of fee for the certification of the required documents.
- **Network of micro or small loggers:** As a rule, these are people from the communities concerned, who are involved in the harvesting and chain-sawing of timber. They are usually family teams who saw the timber, river transport it and sell it at the river ports of the Chucunaque and Tuira rivers, on the banks of the river and in Lake Bayano. The micro-loggers are usually financed by a local timber merchant or by a timber transporter. The capital of micro-loggers is made up of their manpower, a chainsaw and horses for the transport of logs.
- **Local timber merchants:** Merchants who buy timber at the river ports of the Chucunaque and Tuira rivers, on the banks of the river and in Lake Bayano. They usually have teams of micro-loggers who regularly sell them their timber at the river ports. Local timber merchants hire mules and/or trucks to transport the timber to Chepo or Panama. As a rule, local timber merchants are linked to a timber financing agent who provides them with the resources required to buy the timber. It is quite common for local timber merchants to be responsible for securing the timber permits that are required to obtain the necessary timber transport waybills. To this end, they have arrangements with officials who help them with the required procedures to obtain subsistence permits, and these permits are then used to "legalize" the timber regardless of its source of origin.
- **Timber transport agents:** Transport agents who rent their trucks or mules for the transport of timber. They provide services to both local timber merchants and industrial companies in summer, when timber transport operations are land based. Timber transport operators also buy timber at the river ports or have teams of micro-loggers working in the forests of the comarcas or in the national forests.
- **Timber financing agents:** Traders or industrialists who lend capital to local timber merchants and timber transport agents. They accept loan payments in kind with timber, which they then sell to industrial companies or use in their own timber industry.
- **Timber outlets:** Small timber selling outlets in Panama City, Chepo and surrounding cities in central Panama, that generally buy timber from timber transport agents or get their timber supply from a local timber merchant. However, in some cases they have re-sawing equipment and are directly connected with teams of micro-loggers.
- **Carpentry and cabinet-making workshops:** As a rule, they obtain their timber from timber outlets. However, they also buy timber from timber transport agents and sometimes directly from small timber merchants. In those cases where their workshops are located in Darien, they normally buy their timber directly from micro-loggers using the same mechanisms as the local timber merchants.

**CIFP:** The Society of Forest Engineers of Panama (*Colegio de Ingenieros Forestales de Panama* – CIFP) is an umbrella association grouping forest professionals. This association will support the review of forest management instruments and their improvement.

**ANTEFOR:** Forest Technicians Association of Panama. This organization of forest professionals will support the review and implementation of improvements in forest management instruments.

**COMARCAS:** Represented by traditional authorities, the Comarcas are forest owners and producers who will supply products to the local industry under a sustainable forest management and responsible forest trade scheme.

**CONAGEFOR:** Consultative agency comprising government representatives (Ministry of Economics and Finance, Ministry of Industry and Trade, and ANAM), private sector representatives (Forestry Chamber, National Exporters' Association and trade associations) and civil society representatives (indigenous communities and NGOs).

**CONSUMERS:** Consumers are increasingly demanding forest products from responsibly managed forests and industries, which will promote investments in forest management. The communication strategy will serve as an instrument for stakeholder awareness-raising along the production and marketing chain.

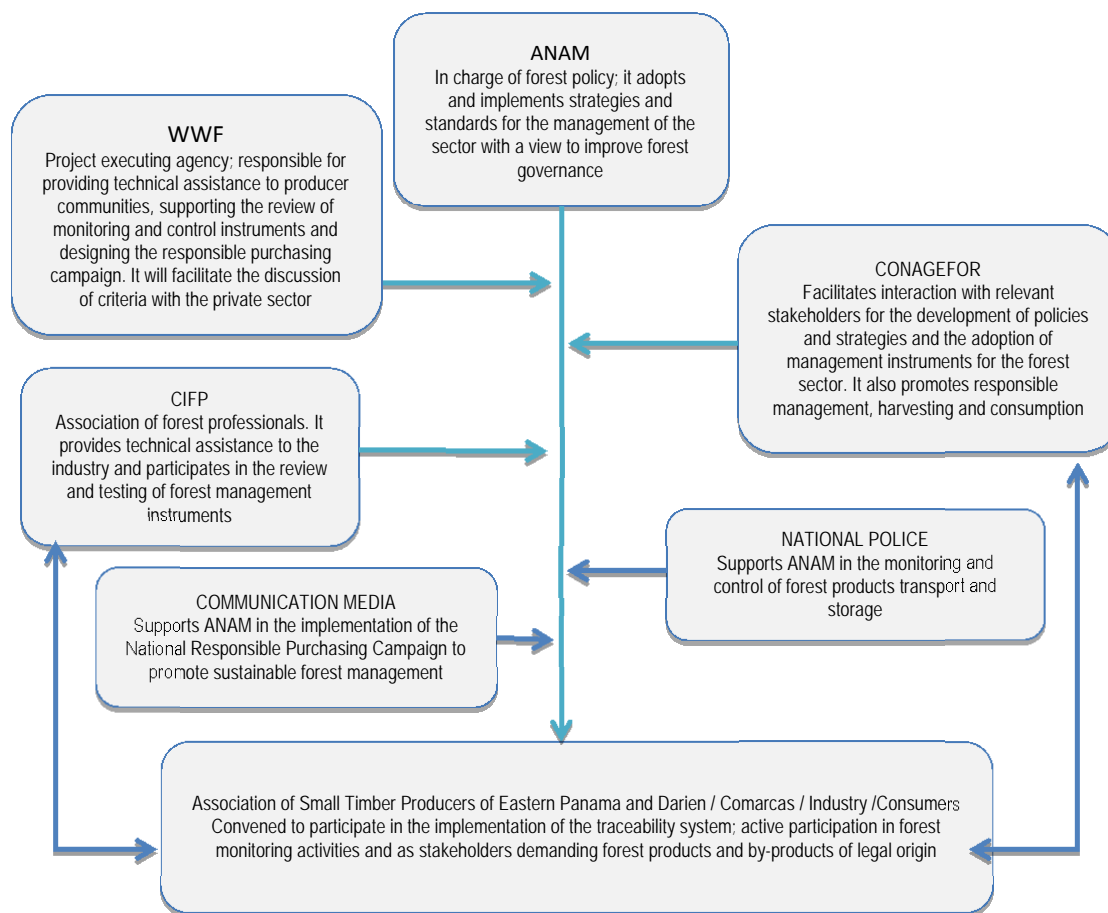
**INDUSTRY:** Represented by the Forestry Chamber and as a member of CONAGEFOR, the industry will be a key source of information for forest policy adjustment and management process streamlining. The continued increase of the demand for forest products and the decrease of resources constitute a strong incentive for the forest industry to actively participate in the implementation of this project. By working in close cooperation with the industry, it will be possible to stimulate responsible forest harvesting and forest trade in the country, considering that the industry is often in charge of financing forest operations.

**COMMUNICATION MEDIA:** The media will support ANAM in the implementation of the National Responsible Purchasing Campaign to promote sustainable forest management.

**POLICE FORCE:** The National Police and other institutions in charge of national security will support ANAM by being involved in forest product transport and storage monitoring and control actions.

**WWF:** This is an independent institution with presence in the project target area. It has already signed cooperation agreements with ANAM and has proven experience in the implementation of an ITTO-supported project. Furthermore, WWF has the technical capacity and expertise required to support the design of sustainable forest management instruments and promote responsible procurement practices in Panama and beyond through the Global Forest Trade Network (GFTN).

Figure 2. Stakeholder interaction model / Roles and responsibilities to strengthen forest governance



**Table 1. Relevant (primary and secondary) stakeholders**

Stakeholder Group	Characteristics	Problems, needs, interests	Potential	Involvement in project
ANAM	Institutional mandate for the conservation and sustainable management of national natural resources	Limited operational and technical capacity  Lack of technical tools for forest monitoring and traceability  Increased illegal logging and low revenue levels from stumpage fees and other taxes	A national forest strategy  Responsible for the implementation of forest rules and regulations  Strategic partnerships with international organizations with technical expertise	<b>Primary institutional beneficiary</b> in accordance with its institutional and legal mandate. The implementation of this project will strengthen its monitoring and control capacity.
Association of Small Timber Producers of Eastern Panama and Darien	It groups various stakeholders involved in the forest production and marketing trade to ensure the flow of forest harvesting permits.	Interested in streamlining the issue of timber harvesting and transport permits  It has no specialized technical assistance  It is seen as the party responsible for unsustainable resource harvesting and illegal trade	Given that it groups a large number of key stakeholders in the production and marketing chain, it has great potential to introduce improvements in support of responsible forest management and trade	<b>Key primary stakeholder</b> in the implementation of forest management instruments
Society of forest engineers (CIFP)	Body responsible for grouping forest sector professionals	A lack of participation in the technical and legal aspects of forest management	Joint responsibility in forest harvesting and management activities	<b>Secondary stakeholder</b> because of its role in the design and adoption of forest management instruments
Indigenous Comarcas	Traditional governments of indigenous territories with the country's largest forest cover	Low contribution of forest activities to the economy of the rural communities  High level of illegal timber trafficking in their territories	A traditional government of chiefs and sahilas with their own legislation  Two comarcas (Embera-Wounaan and Wargandi) making progress with the sustainable management of nearly 150,000 ha of their forests	<b>Key primary stakeholder</b> in the implementation of forest management instruments
CONAGEFOR	Implementation and definition of Panama's forest strategy targets	Representative of Panama's forest sector, interested in achieving the targets of the National Forest Strategy and in actively participating in the forest sector	Political and institutional involvement at the public and private sector levels	<b>Secondary stakeholder</b> with a high level of institutional and private sector influence given its role in increasing forest sector visibility.
Consumers	Increasing interest in products originating from low environmental impact and high social impact	They require information on the origin of products and on the environmental and/or social impact of their production  Limited local supply of products from sustainable	Well-informed consumers have a strong influence on the demand for specific products  This will be used in this project to develop the	<b>Highly significant key secondary stakeholder</b> given their influence on production and demand models

Stakeholder Group	Characteristics	Problems, needs, interests	Potential	Involvement in project
	production systems.	management and responsible forest trade systems	demand for products originating from managed forests and responsible forest trade	
Timber industries	They have sawmilling infrastructure and some harvesting equipment	A lack of awareness and responsibility regarding forest degradation.  A lack of timber obtained from sustainable and secure sources	Experience in timber harvesting and primary and secondary industrialization processes. Can strengthen and encourage sustainable forest management through responsible purchasing policies. Knowledge of market trends.	<b>Key primary project stakeholders.</b> Can help create demand for responsible forest production. At present, many are directly involved in illegal trade and promote illegal logging through their demand for products. They will have to implement new forest production and control tools
Communication media	They have an active network and communication means at the national and regional levels	They continuously voice their concerns about the degradation of natural resources, but they lack additional resources	Timely and effective communication of institutional decisions for the prevention and control of illegal logging	<b>Key secondary project stakeholders</b> in promoting forest management and responsible forest trade.
Police force	Responsible for law and order and the legal transport of natural products	They do not have a direct mandate to verify the origin and legality of forest products being transported	They have the infrastructure and the required elements and mandate for land and sea control activities	<b>Tertiary stakeholder</b> involved in the monitoring of timber product transport control posts
WWF-Panama	Pioneer organization in promoting forest management and responsible forest trade as conservation tools	Interested in supporting the goals of the National Forest Strategy	Experience in community forest management processes, the strengthening of forest governance and public policies.	<b>Primary stakeholder.</b> An independent, internationally recognized organization that provides technical assistance and facilitates dialogue spaces. Furthermore, it will manage project resources.

### 2.1.3 Problem analysis

The problem to be addressed through the implementation of this project is the reduction and/or control of illegal timber logging and trade in the Eastern Region of Panama, which includes part of the province of Panama (Bayano) and Darien.

According to Dames & Moore 1998, Cordova 2002, Del Gatto 2004 and Arguelles 2010, the Darién Region alone contributes around 75-80% of the total national timber supply required by the forest industry in Panama. This contribution increases to 90% when considering the timber flows from Bayano and the Kuna Madugandí Comarca in the province of Panama.

The study carried out by Argüelles (2010) is the latest review of the illegal logging and trade in Panama. Based on a contrastive analysis of ANAM's statistics and information supplied by the local industry, Argüelles found an incremental trend of 33% to 51% in illegal timber volumes being mobilized in Panama (see Table 3) and estimated that a significant supply of up to 67% of the total volume of illegal timber mobilized in 2006 – 2008 came from the Darien Region.

**Table 2 Transported timber volume as reported by ANAM and annual consumption as reported by the local industry**

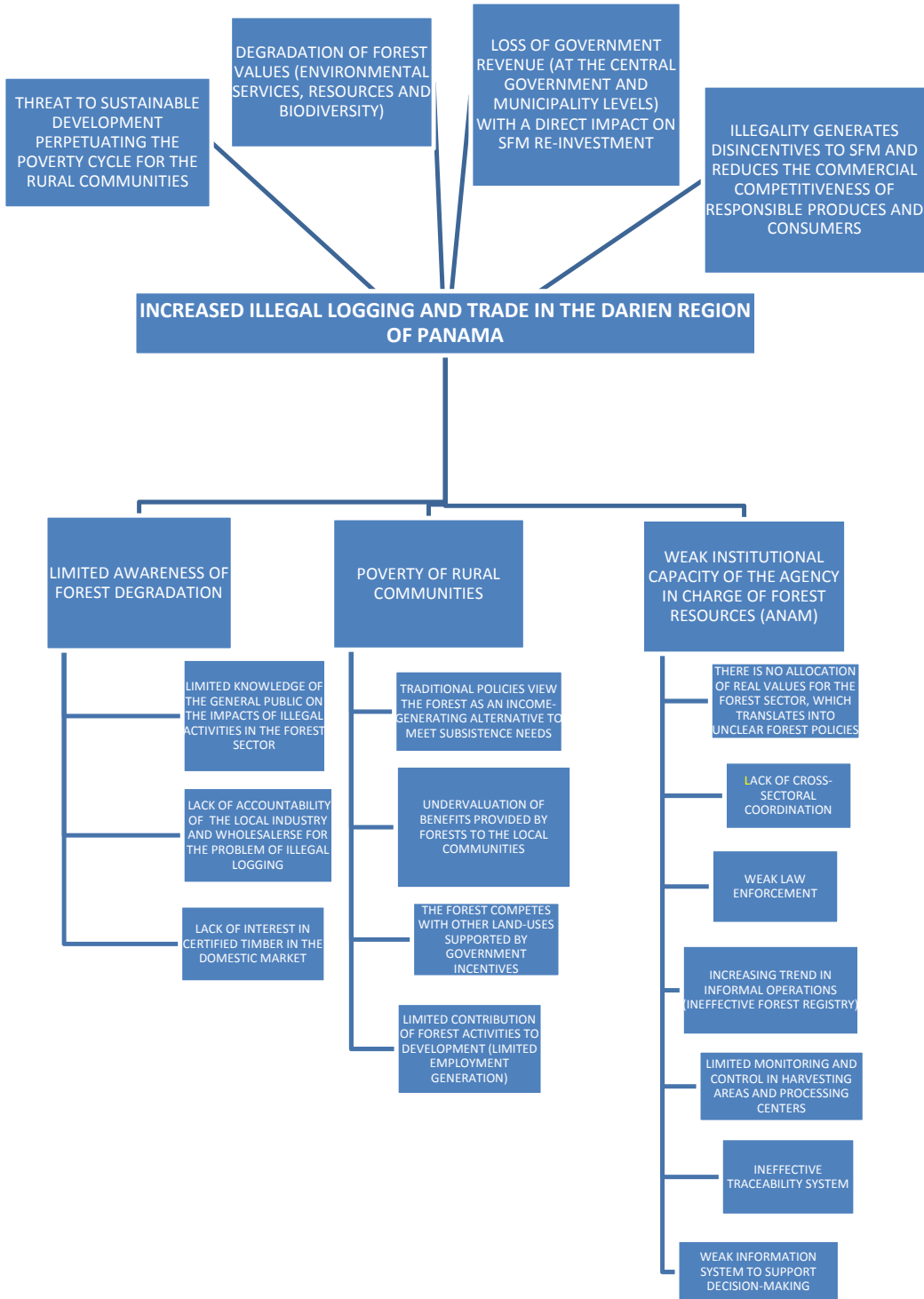
Year	Transported volume m <sup>3</sup>	Local industry consumption 95,000 m <sup>3</sup> /year (PROARCA and IUCN, 2005).		Local industry consumption 130,000 m <sup>3</sup> /year (Del Gatto , 2004).	
		Shortage in m <sup>3</sup>	Shortage %	Shortage in m <sup>3</sup>	Shortage %
2006	50,840	44,160	46.48 %	79,160	60.89%
2007	76,463	18,537	19.51%	53,537	41.18%
2008	61,656	33,344	35.10%	68,344	52.57%
<b>Average</b>	<b>62,986</b>	<b>32,014</b>	<b>33.70%</b>	<b>67,014</b>	<b>51.55%</b>

Source: Arguelles, 2010.

According to Arguelles (2010), the causes of illegality in the forest sector in Panama and Darien in particular are linked to a complex set of factors, including social factors (land tenure and forest ownership), economic factors (poverty, high cost of sustainable forest management) and political-institutional factors (lack of governance in different government structures, which translates into a series of gaps in the implementation of rules, regulations and in the administration of justice, and there is also a lack of technical capacity to control timber transport activities), which all combine to have an incremental effect on this problem. A review of the discussion and information provided by Arguelles (2010) is given in Annex 1.

Figure 4 shows the main causes and consequences of the problem of illegal logging in Darien based on a study carried out by Arguelles (2010), Del Gatto (2004) and the International Tropical Timber Council (2004): "Achieving the ITTO Objective 2000 and sustainable forest management in Panama. Report of the ITTO Diagnostic Mission", Japan, 87pp.

Figure 4: Problem tree related to illegal logging in Darién, Panamá



## 2.1.4 Logical Framework Matrix

STRATEGY OF INTERVENTION	IMPACT INDICATORS	MEANS OF VERIFICATION	KEY ASSUMPTIONS
<p><b>DEVELOPMENT OBJECTIVE:</b> Strengthen ANAM's capacity to ensure effective and efficient forest management in the Eastern Region of Panama (Bayano and Darien).</p>	<p>An effective integrated forest monitoring and control system is operating within ANAM's structure.</p> <p>20 ANAM technicians have been trained and are efficiently and effectively implementing the integrated forest monitoring and control system.</p>	<p>Reports from the Integrated Forest Monitoring and Control System.</p> <p>Reports of training workshops and record of technicians involved in the implementation of the integrated forest monitoring and control system.</p>	<p>There are no technical, social, political or financial barriers hindering the implementation of the integrated forest monitoring and control system.</p>
<p><b>Specific objective 1:</b> Contribute to the prevention and control of illegal forest logging and trade in the Eastern Region of Panama (Bayano and Darien).</p>	<p>By the end of the project, 60% of timber yards and processing centers in the Eastern Region of Panama (Bayano and Darien) (as compared to the year 1 baseline) have been registered in the Forest Registry and are complying with timber origin declaration requirements.</p> <p>At least 4 responsible purchasing policy documents have been signed with key stakeholders in the forest production and marketing chain.</p>	<p>Reports from the Integrated Forest Monitoring and Control System.</p>	<p>Interest and political will at the inter-institutional level and willingness of key stakeholders along the forest production and marketing chain to prevent and control illegal forest logging and trade.</p>
<p><b>Output 1:</b> An integrated timber harvesting and marketing monitoring and control system has been validated and implemented in the Eastern Region of Panama (Bayano and Darien).</p>	<p><b>By the end of year 1</b>, a baseline diagnostic study has been carried out on the status of the forest information system in the Eastern Region of Panama (Bayano and Darien) and an integrated timber harvesting and marketing monitoring and control system has been designed for the Eastern Region of Panama (Bayano and Darien) where most of the country's timber comes from.</p> <p><b>By the end of year 2</b> an integrated timber harvesting, production, storage and marketing system has been implemented and validated in the Eastern Region of Panama (Bayano and Darien).</p>	<p>Document on baseline diagnostic study on the current status of ANAM's forest information system.</p> <p>Design of the integrated timber harvesting, production, storage and marketing monitoring and control system for Panama.</p> <p>Integrated timber harvesting, production, storage and marketing monitoring and control system validated and operational on a pilot scale in the Eastern Region of Panama (Bayano and Darien).</p>	<p>The system can be easily adopted by ANAM's technicians.</p>



STRATEGY OF INTERVENTION	IMPACT INDICATORS	MEANS OF VERIFICATION	KEY ASSUMPTIONS
<p><b>Output 2:</b> An improved timber traceability system with capacity to monitor timber production from the harvesting to the forest product marketing stage.</p>	<p><b>By the end of year 1</b>, a baseline diagnostic study has been carried out on the effectiveness of the “forest mark” traceability system and a work plan has been developed for the implementation of remedial actions to improve the government’s timber traceability system.</p> <p><b>In the second year of the project</b>, ANAM is implementing the action plan to improve its timber traceability system and validates the system in the field with the active participation of key stakeholders along the production and marketing chain.</p> <p><b>By the end of year 2</b>, there is an improved traceability system with capacity to monitor timber production from the harvesting stage to the forest product marketing stage.</p>	<p>Document on diagnostic study on the current traceability system implemented by ANAM in Panama.</p> <p>Action plan to improve the current traceability system of ANAM.</p> <p>Traceability system validated by ANAM, operational and linked to the integrated monitoring system.</p>	<p>ANAM and key stakeholders in the production and marketing chain reach an agreement for the implementation of the timber traceability system.</p>
<p><b>Output 3:</b> The capacities of ANAM's personnel have been developed for the adequate implementation of forest policies and integrated management, harvesting and marketing monitoring tools.</p>	<p><b>By the end of year 1</b>, national weaknesses in the implementation of forest policies and integrated management, harvesting and marketing monitoring tools have been identified and a strategic capacity-building plan has been designed.</p> <p><b>During the second year</b>, a training program has been implemented for the technical personnel of ANAM and other identified institutions, and at least 4 responsible purchasing policies have been signed between key stakeholders in the forest production and marketing chain.</p>	<p>Diagnosis of national capacity weaknesses in the implementation of forest policies and monitoring tools.</p> <p>Training curricula/program for the personnel of ANAM and other selected institutions.</p> <p>Reports and lists of participants of training events.</p>	<p>Active participation of technicians from ANAM and partner institutions in training activities.</p> <p>Interest and political will at the inter-institutional level to improve the integrated management, harvesting and marketing monitoring system.</p>
<p><b>Specific objective 2:</b> Raise general public awareness regarding forest degradation and illegal forest logging and trade.</p>	<p>At least 4 communication media have joined the National Responsible Purchasing Campaign.</p> <p>At least 4 responsible purchasing policy documents have been signed by key stakeholders in the forest production and marketing chain.</p>	<p>Support agreements.</p> <p>Signed responsible purchasing policy documents.</p>	<p>There is a positive response to the National Responsible Purchasing Campaign.</p>

STRATEGY OF INTERVENTION	IMPACT INDICATORS	MEANS OF VERIFICATION	KEY ASSUMPTIONS
<b>Output 4:</b> A National Responsible Purchasing Campaign.	<p><b>By the end of year 1,</b> a National Responsible Purchasing Campaign has been designed for Panama with the participation of national stakeholders linked to natural forest management activities.</p> <p><b>By the end of year 2,</b> at least 4 responsible purchasing policy documents have been signed with key stakeholders in the forest production and marketing chain.</p>	<p>Design of national responsible purchasing campaign approved by institutional partners in Panama.</p> <p>Memoranda of understanding with institutions and companies joining the campaign.</p> <p>Promotional material for the National Responsible Purchasing Campaign.</p> <p>Responsible purchasing policy documents signed.</p>	<p>Consensus agreement reached with relevant national institutions related to the forest sector for their participation in and support to the National Responsible Purchasing Campaign.</p> <p>Positive response of the local industry to responsible purchasing commitments.</p>

## 2.2 Objectives

### 2.2.1 Development objective

Strengthen ANAM's capacity to ensure effective and efficient forest management.

Impact indicators are:

- a) An integrated forest monitoring and control system has been established.
- b) 20 ANAM technicians have been trained and are efficiently and effectively implementing the integrated forest monitoring and control system.

### 2.2.2 Specific objectives

#### 2.2.2.1 Contribute to the prevention and control of illegal forest logging and trade in the Eastern Region of Panama (Bayano and Darien).

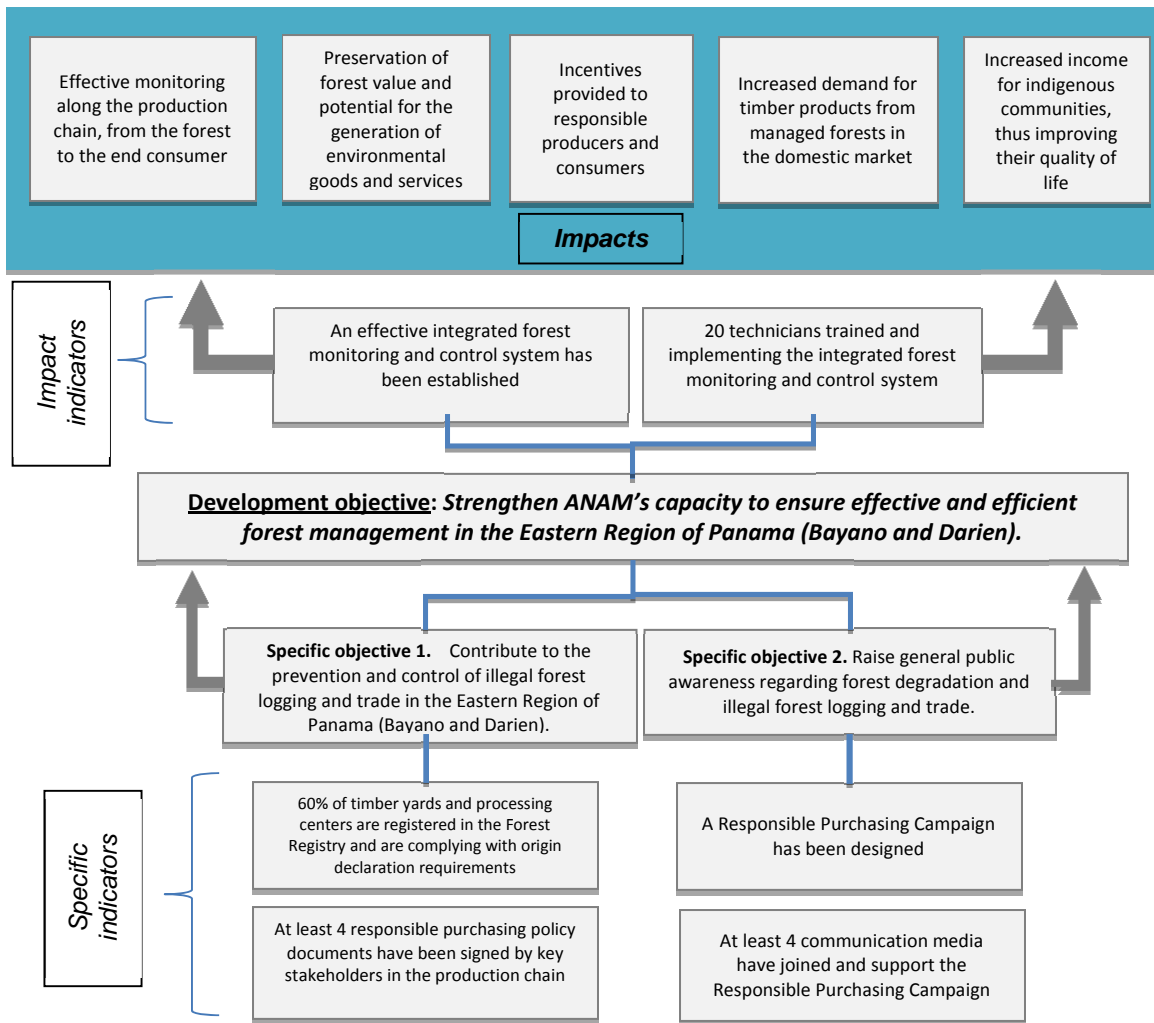
Indicators:

- a) 60% of timber yards and processing centers have been registered in the Forest Registry and are complying with timber origin declaration requirements.
- b) At least 4 responsible purchasing policy documents have been signed with key stakeholders in the forest production and marketing chain.

#### 2.2.2.2 Raise general public awareness regarding forest degradation and illegal forest logging and trade.

- a) A Responsible Purchasing Campaign has been designed and implemented.
- b) At least 4 communication media have joined and support the National Responsible Purchasing Campaign.

Figure 5. Objectives Tree



### **3. DESCRIPTION OF PROJECT INTERVENTIONS**

#### **3.1 Outputs and activities**

Output 1: An integrated timber harvesting and marketing monitoring and control system has been validated and implemented in the Eastern Region of Panama (Bayano and Darien).

Activity 1.1 Implement a study to identify main weaknesses in the current monitoring system used by Panama's forest authorities, including registration systems.

Activity 1.2 Develop and validate an integrated timber harvesting, production, storage and marketing monitoring and control system.

Output 2: An improved timber traceability system with capacity to monitor timber production from the harvesting stage to the forest product marketing stage.

Activity 2.1 Implement a study to identify critical weaknesses in the implementation of the timber traceability system currently used by ANAM in Panama.

Activity 2.2 Develop and implement an action plan to improve the current traceability system used by environmental authorities, including a bar-code based monitoring system.

Activity 2.3 Carry out the field validation of the traceability system including the bar-code system.

Activity 2.4 Train system users on the adequate implementation of the traceability tools developed by the project.

Output 3: A training program for ANAM's personnel in the adequate implementation of forest policies and integrated management, harvesting and marketing monitoring tools.

Activity 3.1 Carry out a diagnosis of national capacity weaknesses in the implementation of forest policies and monitoring tools.

Activity 3.2 Develop a capacity building plan and curricula for training courses to strengthen the skills and knowledge of the personnel to be trained.

Activity 3.3 Implement the capacity-building plan through the provision of training in coordination with the technical personnel of Panama's environmental authorities.

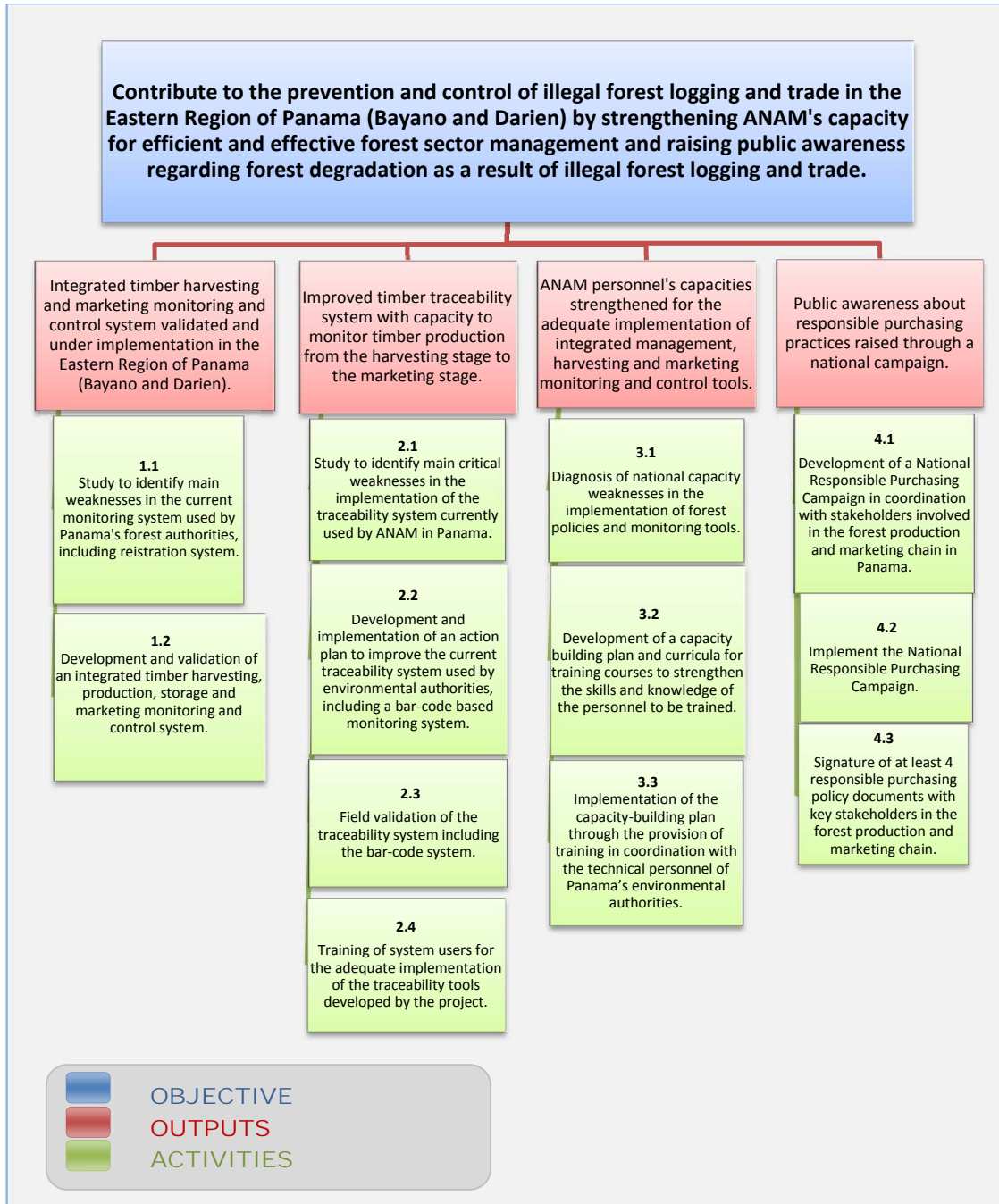
Output 4: Increased public awareness about responsible purchasing through a national campaign.

Activity 4.1 Develop a National Responsible Purchasing Campaign in coordination with stakeholders involved in the forest production and marketing chain in Panama.

Activity 4.2 Implement the National Responsible Purchasing Campaign.

Activity 4.3 Facilitate the signing of at least 4 responsible purchasing policy documents with key stakeholders in the forest production and marketing chain.

**Figure 6. Work Breakdown Structure**



### 3.2 Implementation approaches and methods

The project will seek to integrate forest sector stakeholders with the initiatives and strategies of the Sustainable Forest Management Model of Panama, with special emphasis on the objective of responsible forest management and trade. The project will promote the strengthening of ANAM's capacity for effective and efficient forest sector management as well as raising public awareness about forest degradation as a result of illegal forest logging and trade. The following general actions will ensure the implementation of the strategy:

**Participatory workshops:** Aimed at identifying the main weaknesses in the monitoring system as well as critical weaknesses in the current timber traceability system that facilitate illegal logging and trade in the Eastern Region of Panama (Bayano and Darien) and at identifying improvements to be made. These workshops will establish consensus-based solution strategies and agreements with the participation of all previously identified key forest sector stakeholders.

**Review and updating of forest monitoring and control policies and tools:** The primary objective of this activity will be to highlight the main actions needed to make improvements so as to reduce and control illegal logging and trade and establish proposals for amendments.

**Development of a chain of custody and traceability system:** The implementation of the project is aimed at establishing an effective chain of custody system so as to identify the origin and final destination of timber and timber products.

**Communication system on the impacts of illegal logging and trade so as to promote responsible forest management and trade:** One of the main pillars of the project will be the development and implementation of a National Responsible Purchasing Campaign with the participation of communication media through partnerships with producers, industrialists and end-consumers.

### 3.3 Work plan for the 24-month project implementation period

Outputs /Activities	Responsible Party	SCHEDULE (in quarters)							
		1	2	3	4	5	6	7	8
<b>Output 1:</b> An integrated timber harvesting and marketing monitoring and control system has been validated and implemented in the Eastern Region of Panama (Bayano and Darien).									
Activity 1.1 Implement a study to identify main weaknesses in the current monitoring system used by Panama's forest authorities, including registration systems.	Project Coordinator, Consultant in forest monitoring & control systems, ANAM and WWF								
Activity 1.2 Develop and validate an integrated timber harvesting, production, storage and marketing monitoring and control system.	Project Coordinator, Consultant in forest monitoring & control systems, ANAM and WWF								
<b>Output 2:</b> An improved timber traceability system with capacity to monitor timber production from the harvesting to the forest product marketing stage.									
Activity 2.1 Implement a study to identify critical weaknesses in the implementation of the timber traceability system currently used by ANAM in Panama.	Project Coordinator, Consultant in traceability systems, ANAM and WWF								
Activity 2.2 Develop and implement an action plan to improve the current traceability system used by environmental authorities, including a bar-code based monitoring system.	Project Coordinator, Consultant in traceability systems, ANAM and WWF								
Activity 2.3 Carry out the field validation of the traceability system including the bar-code system.	Project Coordinator, Consultant in traceability systems, ANAM and WWF								
Activity 2.4 Train system users on the adequate implementation of the traceability tools developed by the project.	Project Coordinator, Consultant in traceability systems, ANAM and WWF								
<b>Output 3:</b> The capacities of ANAM's personnel have been developed for the adequate implementation of forest policies and integrated management, harvesting and marketing monitoring tools.									
Activity 3.1 Carry out a diagnosis of national capacity weaknesses in the implementation of forest policies and monitoring tools.	Project Coordinator, Consultants in forest monitoring & control and traceability systems, ANAM and WWF								
Activity 3.2 Develop a capacity building plan and curricula for training courses to strengthen the skills and knowledge of the personnel to be trained.	Project Coordinator, Consultants in forest monitoring & control and traceability systems, ANAM and WWF								
Activity 3.3 Implement the capacity-building plan through the provision of training in coordination with the technical personnel of Panama's environmental authorities.	Project Coordinator, Consultants in forest monitoring & control and traceability systems, ANAM and WWF								
<b>Output 4:</b> Increased public awareness about responsible purchasing through a national campaign.									
Activity 4.1 Develop a National Responsible Purchasing Campaign in coordination with stakeholders involved in the forest production and marketing chain in Panama.	Project Coordinator, Consultant specialized in outreach campaigns (communications specialist)								
Activity 4.2 Implement the National Responsible Purchasing Campaign.	Project Coordinator, Consultant specialized in outreach campaigns (communications specialist)								
Activity 4.3 Facilitate the signing of at least 4 responsible purchasing policy documents with key stakeholders in the forest production and marketing chain.	Project Coordinator, Consultant specialized in outreach campaigns (communications specialist)								

### 3.4 Budget

#### 3.4.1 Master Budget

Item	Budget Components	UNIT COST	Unit	ITTO	ANAM	WWF	TOTAL \$
10	<b>Project Personnel</b>						
	<b>11. National Experts</b>						
	Project Coordinator 1/24 months (Forest Engineer)	3,755	month	45,061		45,061	90,122
	One Forest Engineer /Regional Director ANAM Metelí 1/24 months	1,200	month		28,800		28,800
	One Administrator – ANAM Regional Office 1/24 months	800	month		19,200		19,200
	Two ANAM technicians for monitoring & control 2/24 months	600	month		14,400		14,400
	<b>12. National Consultants</b>						
	Forest monitoring consultant 1/24 months	1,800	month	43,200			43,200
	Traceability consultant 1/12 months	1,800	month	21,600			21,600
	Outreach strategy consultant 1/18 months	2,000	month	36,000			36,000
	<b>13. Other labour</b>						
	6 Field workers 1/24 (checkpoints @ \$ 400 each)	57,600	month		57,600		57,600
	One boat driver 1/24 months (ANAM supervision)	300	month		7,200		7,200
	<b>14. Fellowships &amp; Training</b>						
	<b>15. International Experts</b>						
	International consultant in traceability system development	8,000	consultancy	8,000			8,000
	<b>16. International Consultants</b>						
	Initial and final evaluation (2 @ \$ 4,000 each)	4,000	consultancy	8,000			8,000
	<b>19 Component Total</b>			<b>161,861</b>	<b>127,200</b>	<b>45,061</b>	<b>334,122</b>
20	<b>Sub-contracts</b>						
	21.1.Workshops on monitoring system 6	1,500	sub-contract	7,500		1,500	9,000
	21.2 Workshops on traceability 6	1,500	sub-contract	7,500		1,500	9,000
	21.3 Workshops for the design of the Responsible Purchasing Campaign 4	1,500	sub-contract	4,500		1,500	6,000
	Responsible Purchasing Campaign	12,000	sub-contract	12,000			12,000
	Development of responsible purchasing policies 4	2,000	sub-contract	4,000		4,000	8,000
	<b>29. Component Total</b>			<b>35,500</b>	<b>0</b>	<b>8,500</b>	<b>44,000</b>
30	<b>Duty Travel</b>						
	31. DSA 24 months – project activities	1,000	month	12,000		12,000	24,000
	32. DSA 24 months- ANAM personnel	600	month		14,400		14,400
	33. International travel for experts 10	700	fare	4,900		2,100	7,000
	34. Transport costs charged to project 24 months	500	month	12,000			12,000
	35. Local transport costs – ANAM personnel 24 months	500	month		12,000		12,000
	<b>39. Component Total</b>			<b>28,900</b>	<b>26,400</b>	<b>14,100</b>	<b>69,400</b>
40	<b>Capital Items</b>						
	42. Acquisition of software for traceability system (bar-code) and installation materials	50,000	software	50,000			50,000
	43. Office space - WWF in Panama \$1500/month	1,500	month			36,000	36,000
	47. Capital equipment (comput, printers and forestry equipment) 2	2,000	equipment	2,000		2,000	4,000
	<b>49. Component Total</b>			<b>52,000</b>	<b>0</b>	<b>38,000</b>	<b>90,000</b>



Item	Budget Components	UNIT COST	Unit	ITTO	ANAM	WWF	TOTAL \$
50	<b>Consumable Items</b>						
	51. Raw materials 24 months	300	month	3,600	1,800	1,800	7,200
	52. Spares 24 months – project activities	200	month	2,400	1,200	1,200	4,800
	53. Utilities/fuel 24 months	1,000	month	10,000	7,000	7,000	24,000
	54. Office supplies 24 months - project	300	month	3,600	1,800	1,800	7,200
	<b>59. Component Total</b>			<b>19,600</b>	<b>11,800</b>	<b>11,800</b>	<b>43,200</b>
60	<b>Miscellaneous</b>						
	61. Sundry 24 months	50	month	600	300	300	1,200
	62. Auditing 1 per year (total: 2)	3,000	audit	6,000			6,000
	63. Contingencies 24 months	50	month	600	300	300	1,200
	64. Communication services 24 months	300	month	3,600	1,800	1,800	7,200
	<b>69. Component Total</b>			<b>10,800</b>	<b>2,400</b>	<b>2,400</b>	<b>15,600</b>
70	<b>Executing Agency Management Costs</b>						
	71. Project administration costs	3,727	month	24,693	17,550	12,541	54,784
	<b>79. Component Total</b>			<b>24,693</b>	<b>17,550</b>	<b>12,541</b>	<b>54,784</b>
	<b>ITTO &amp; WWF Total</b>			<b>333,354</b>	<b>185,350</b>	<b>132,403</b>	<b>651,107</b>
80	<b>ITTO Administration, Monitoring and Evaluation</b>						
	81. ITTO monitoring & review (\$ 10,000/year)						20,000
	82. ITTO ex-post evaluation (\$ 15,000 final)						15,000
	83. Programme support - 12% of ITTO total						44,202
	<b>89. Component Total</b>						<b>79,202</b>
90	Refund of pre-project costs						0
100	<b>GRAND TOTAL (US \$)</b>						<b>730,309</b>

### 3.4.2 Consolidated budget by component and by year

Item	Budget Components	UNIT COST	Unit	Year 1	Year 2	TOTAL \$
10	<b>Project Personnel</b>					
	<b>11. National Experts</b>					
	Project Coordinator 1/24 months (Forest Engineer)	3,755	month	22,531	67,592	90,122
	One Forest Engineer /Regional Director ANAM Metetí 1/24 months	1,200	month	14,400	14,400	28,800
	One Administrator – ANAM Regional Office 1/24 months	800	month	9,600	9,600	19,200
	Two ANAM technicians for monitoring & control 2/24 months	600	month	7,200	7,200	14,400
	<b>12. National Consultants</b>					
	Forest monitoring consultant 1/24 months	1,800	month	21,600	21,600	43,200
	Traceability consultant 1/12 months	1,800	month	10,800	10,800	21,600
	Outreach strategy consultant 1/18 months	2,000	month	18,000	18,000	36,000
	<b>13. Other labour</b>					
	6 Field workers 1/24 (checkpoints @ \$ 400 each)	57,600	month	28,800	28,800	57,600
	One boat driver 1/24 months (ANAM supervision)	300	month	3,600	3,600	7,200
	<b>14. Fellowships &amp; Training</b>					
	<b>15. International Experts</b>					
	International consultant in traceability system development	8,000	consultancy	8,000		8,000
	<b>16. International Consultants</b>					
	Initial and final evaluation (2 @ \$ 4,000 each)	4,000	consultancy	4,000	4,000	8,000
	<b>19 Component Total</b>			<b>148,531</b>	<b>185,592</b>	<b>334,122</b>
20	<b>Sub-contracts</b>					
	21.1.Workshops on monitoring system 6	1,500	sub-contract	4,500	4,500	9,000
	21.2 Workshops on traceability 6	1,500	sub-contract	4,500	4,500	9,000
	21.3 Workshops for the design of the Responsible Purchasing Campaign 4	1,500	sub-contract	4,500	1,500	6,000
	Responsible Purchasing Campaign	12,000	sub-contract	6,000	6,000	12,000
	Development of responsible purchasing policies 4	2,000	sub-contract		8,000	8,000
	<b>29. Component Total</b>			<b>19,500</b>	<b>24,500</b>	<b>44,000</b>
30	<b>Duty Travel</b>					
	31. DSA 24 months – project activities	1,000	month	12,000	12,000	24,000
	32. DSA 24 months- ANAM personnel	600	month	7,200	7,200	14,400
	33. International travel for experts 10	700	fare	3,500	3,500	7,000
	34. Transport costs charged to project 24 months	500	month	6,000	6,000	12,000
	35. Local transport costs – ANAM personnel 24 months	500	month	6,000	6,000	12,000
	<b>39. Component Total</b>			<b>34,700</b>	<b>34,700</b>	<b>69,400</b>
40	<b>Capital Items</b>					
	42. Acquisition of software for traceability system (bar-code) and installation materials	50,000	software	50,000	0	50,000
	43. Office space - WWF in Panama \$1500/month	1,500	month	18,000	18,000	36,000
	47. Capital equipment (comput, printers and forestry equipment) 2	2,000	equipment	4,000	0	4,000
	<b>49. Component Total</b>			<b>72,000</b>	<b>18,000</b>	<b>90,000</b>

Item	Budget Components	UNIT COST	Unit	Year 1	Year 2	TOTAL \$
50	<b>Consumable Items</b>					
	51. Raw materials 24 months	300	month	3,600	3,600	7,200
	52. Spares 24 months – project activities	200	month	2,400	2,400	4,800
	53. Utilities/fuel 24 months	1,000	month	12,000	12,000	24,000
	54. Office supplies 24 months - project	300	month	3,600	3,600	7,200
	<b>59. Component Total</b>			<b>21,600</b>	<b>21,600</b>	<b>43,200</b>
60	<b>Miscellaneous</b>					
	61. Sundry 24 months	50	month	600	600	1,200
	62. Auditing 1 per year (total: 2)	3,000	audit	3,000	3,000	6,000
	63. Contingencies 24 months	50	month	600	600	1,200
	64. Communication services 24 months	300	month	3,600	3,600	7,200
	<b>69. Component Total</b>			<b>7,800</b>	<b>7,800</b>	<b>15,600</b>
70	<b>Executing Agency Management Costs</b>					
	71. Project administration costs	3,727		27,392	27,392	54,784
	<b>79. Component Total</b>			<b>27,392</b>	<b>27,392</b>	<b>54,784</b>
	<b>ITTO &amp; WWF Total</b>			<b>331,523</b>	<b>319,584</b>	<b>651,107</b>
80	<b>ITTO Administration, Monitoring and Evaluation</b>					
	81. ITTO monitoring & review (\$ 10,000/year)					20,000
	82. ITTO ex-post evaluation (\$ 15,000 final)					15,000
	83. Programme support - 12% of ITTO total					44,202
	<b>89. Component Total</b>					<b>79,202</b>
90	Refund of pre-project costs					0
100	<b>GRAND TOTAL (US \$)</b>					<b>730,309</b>

### 3.4.3 Budget by activity

DESCRIPTION	Component		Quantity		UNIT OF MEASUREMENT	UNIT COST (US\$)	TOTAL COST (US\$)	Year 1 US\$	Year 2 US \$	Source
			Yr 1	Yr 2						
Output 1: An integrated timber harvesting and marketing monitoring and control system has been validated and implemented in the Eastern Region of Panama (Bayano and Darien).										
Activity 1.1 Implement a study to identify main weaknesses in the current monitoring system used by Panama's forest authorities, including registration systems.							23,150	22,650	500	
Forest Monitoring Consultant	10	131	3		m/m	1,800	5,400	5,400	0	ITTO
Traceability Consultant		131	1	0	m/m	1,800	1,800	1,800	0	ITTO
Diagnostic workshop on current monitoring system	20	211	1		workshop	1,500	1,500	1,500	0	ITTO
DSA – project activities	30	31	6		DSA/month	1,000	6,000	6,000	0	WWF
DSA – ANAM personnel	30	32	2		DSA/month	600	1,200	1,200	0	ANAM
National transport costs	30	334	3		month	500	1,500	1,500	0	ITTO
Transport costs - ANAM	30	35	2		month	500	1,000	1,000	0	ANAM
Raw materials	50	51	2		unit	300	600	600	0	ANAM
Fuel	50	53	3		month	1,000	3,000	3,000	0	ITTO
Office supplies	50	54	1	1	month	300	600	300	300	ITTO
Spares – project activities	50	52	1	1	month	200	400	200	200	ANAM
Miscellaneous	60	61	1		month	50	50	50	0	WWF
Contingencies	60	63	2	0	month	50	100	100	0	ITTO
Activity 1.2 Develop and validate an integrated timber harvesting, production, storage and marketing monitoring and control system							20,350	9,650	10,700	
Forest Monitoring Consultant	10	131		2	m/m	1,800	3,600	0	3,600	ITTO
Traceability Consultant	10	131	0	1	m/m	1,800	1,800	0	1,800	ITTO
Validation workshop on current monitoring system	20	211		1	workshop	1,500	1,500	0	1,500	WWF
DSA – project activities	30	31	4	2	month	1,000	6,000	4,000	2,000	WWF
DSA – ANAM personnel	30	32	2		month	600	1,200	1,200	0	ANAM
National transport costs	30	334	1		m/month	1,000	1,000	1,000	0	ITTO
Transport costs - ANAM	30	35	1		m/month	500	500	500	0	ANAM
Raw materials	50	51	2		m/month	300	600	600	0	ANAM
Fuel	50	53	2	1	month	1,000	3,000	2,000	1,000	ITTO
Office supplies	50	54		1	month	300	300	0	300	ANAM

DESCRIPTION	Component	Quantity		UNIT OF MEASUREMENT	UNIT COST (US\$)	TOTAL COST (US\$)	Year 1 US\$	Year 2 US \$	Source	
		Yr 1	Yr 2							
		Spares - project activities	50							52
Miscellaneous	60	61	2	1	month	50	150	100	50	ITTO
Contingencies	60	63	1	1	month	50	100	50	50	WWF
<b>Output 2: An improved timber traceability system with capacity to monitor timber production from the harvesting to the forest product marketing stage.</b>										
<b>Activity 2.1 Implement a study to identify critical weaknesses in the implementation of the timber traceability system currently used by ANAM in Panama.</b>										
						21,350	18,850	2,500		
Forest monitoring consultant	10	131	3		m/m	1,800	5,400	5,400	0	ITTO
International consultant in traceability system development		151	1		year	2,000	2,000	2,000	0	ITTO
Traceability consultant		131	1		m/m	1,800	1,800	1,800	0	ITTO
Diagnostic workshop on traceability system	20	212	1		workshop	1,500	1,500	1,500	0	ITTO
DSA – project activities	30	31	1	0	month	1,000	1,000	1,000	0	ITTO
DSA – ANAM personnel	30	32	2	2	month	600	2,400	1,200	1,200	ANAM
International travel	30	322	2	0	air fare	700	1,400	1,400	0	ITTO
National transport costs	30	334	1		m/month	500	500	500	0	ITTO
Transport costs - ANAM	30	335	2	2	month	500	2,000	1,000	1,000	ANAM
Raw materials	50	51	1		month	300	300	300	0	ANAM
Fuel	50	53	2	0	month	1,000	2,000	2,000	0	ITTO
Office supplies	50	54	2	1	month	300	900	600	300	WWF
Miscellaneous	60	61	1		month	50	50	50	0	WWF
Contingencies	60	63	2	0	month	50	100	100	0	ITTO
<b>Activity 2.2 Develop and implement an action plan to improve the current traceability system used by environmental authorities, including a bar-code based monitoring system.</b>										
						67,600	61,400	6,200		
Forest monitoring consultant	10	131	2		m/month	1,800	3,600	3,600	0	ITTO
International consultant in traceability system development		151	1	0	year	2,000	2,000	2,000	0	ITTO
Traceability consultant	10	131	0	1	m/month	1,800	1,800	0	1,800	ITTO
Workshop for the formulation of an action plan to improve the traceability system	20	212	1		workshop	1,500	1,500	1,500	0	WWF
DSA - project activities	30	31	1	0	month	1,000	1,000	1,000	0	ITTO
DSA - ANAM personnel	30	32	1	2	month	600	1,800	600	1,200	ANAM
National transport costs	30	334	0	2	m/month	500	1,000	0	1,000	ITTO
Transport costs - ANAM	30	335	2	1	month	500	1,500	1,000	500	ANAM
Acquisition of software for traceability system (bar code) and installation materials	40	441	1		software	50,000	50,000	50,000	0	ITTO

DESCRIPTION	Component	Quantity		UNIT OF MEASUREMENT	UNIT COST (US\$)	TOTAL COST (US\$)	Year 1 US\$	Year 2 US \$	Source	
		Yr 1	Yr 2							
		Raw materials	50							51
Fuel	50	53	1	1	month	1,000	2,000	1,000	1,000	ITTO
Office supplies	50	54	1	2	month	300	900	300	600	WWF
Miscellaneous	60	61	1	1	month	50	100	50	50	WWF
Contingencies	60	63	1	1	month	50	100	50	50	WWF
<b>Activity 2.3 Carry out the field validation of the traceability system including the bar-code system.</b>						<b>23,800</b>	<b>11,550</b>	<b>12,250</b>		
Forest monitoring consultant	10	131	3		m/month	1,800	5,400	5,400	0	ITTO
International consultant in traceability system development		151	1	0	year	2,000	2,000	2,000	0	ITTO
Traceability consultant	10	131	0	1	m/month	1,800	1,800	0	1,800	ITTO
Workshop to validate traceability system	20	212	1	1	workshop	1,500	3,000	1,500	1,500	ITTO
DSA - project activities	30	31	0	1	month	1,000	1,000	0	1,000	ITTO
International travel	30	322	1	1	ticket	700	1,400	700	700	ITTO
Transport costs - ANAM	30	335	2	3	month	500	2,500	1,000	1,500	ANAM
Spares – project activities	50	52	0	2	unit	200	400	0	400	ITTO
Fuel	50	53	0	4	month	1,000	4,000	0	4,000	ANAM
Office supplies	50	54	0	1	month	300	300	0	300	ANAM
Miscellaneous	60	61	0	1	month	50	50	0	50	WWF
Contingencies	60	63	1	2	month	50	150	50	100	ITTO
Raw materials	50	51	3	3	month	300	1,800	900	900	ITTO
<b>Activity 2.4 Train system users on the adequate implementation of the traceability tools developed by the project.</b>						<b>26,400</b>	<b>12,100</b>	<b>14,300</b>		
Forest monitoring consultant	10	131	3		m/month	1,800	5,400	5,400	0	ITTO
International consultant in traceability system development		151	1	0	year	2,000	2,000	2,000	0	ITTO
Traceability consultant	10	131	0	2	m/month	1,800	3,600	0	3,600	ITTO
Workshop to train traceability system users	20	212	0	2	Workshop	1,500	3,000	0	3,000	ITTO
DSA - ANAM personnel	30	32	0	5	month	600	3,000	0	3,000	ANAM
International travel	30	322	1	2	ticket	700	2,100	700	1,400	ITTO
National transport costs	30	334	0	3	m/month	500	1,500	0	1,500	ITTO
Transport costs - ANAM	30	335	2	2	month	500	2,000	1,000	1,000	ANAM
Spares – project activities	50	52	0	2	unit	200	400	0	400	ITTO
Fuel	50	53	3	0	month	1,000	3,000	3,000	0	ANAM
Office supplies	50	54		1	month	300	300	0	300	ANAM

DESCRIPTION	Component	Quantity		UNIT OF MEASUREMENT	UNIT COST (US\$)	TOTAL COST (US\$)	Year 1 US\$	Year 2 US \$	Source	
		Yr 1	Yr 2							
		Miscellaneous	60							61
Contingencies	60	63		1	month	50	50	0	50	WWF
<b>Output 3: The capacities of ANAM's personnel have been developed for the adequate implementation of forest policies and integrated management, harvesting and marketing monitoring tools.</b>										
<b>Activity 3.1 Carry out a diagnosis of national capacity weaknesses in the implementation of forest policies and monitoring tools.</b>						<b>15,400</b>	<b>13,600</b>	<b>1,800</b>		
National coordinator					*					
Forest monitoring consultant	10	131	2	0	m/month	1,800	3,600	3,600	0	ITTO
Traceability consultant	10	131	2	0	m/month	1,800	3,600	3,600	0	ITTO
Diagnostic workshop to identify national capacity weaknesses for the implementation of forest policies and monitoring actions	20	211	1	1	Workshop	1,500	3,000	1,500	1,500	ITTO
Project staff					*			0	0	
DSA - project activities	30	31	1	0	month	1,000	1,000	1,000	0	ITTO
Transport costs - ANAM	30	335	2		month	500	1,000	1,000	0	ANAM
Spares – project activities	50	52	2	0	unit	200	400	400	0	ITTO
Fuel	50	53	2	0	month	1,000	2,000	2,000	0	WWF
Office supplies	50	54	1	1	month	300	600	300	300	ANAM
Miscellaneous	60	61	2	0	month	50	100	100	0	ANAM
Contingencies	60	63	2	0	month	50	100	100	0	ITTO
<b>Activity 3.2 Develop a capacity building plan and curricula for training courses to strengthen the skills and knowledge of the personnel to be trained.</b>						<b>15,950</b>	<b>15,050</b>	<b>900</b>		
Project Coordinator					*			0	0	
Forest monitoring consultant	10	131	3	0	m/month	1,800	5,400	5,400	0	ITTO
Traceability consultant	10	131	2		m/month	1,800	3,600	3,600	0	ITTO
DSA - project activities	30	31	1	0	month	1,000	1,000	1,000	0	ITTO
Transport costs - ANAM	30	335	2	0	month	500	1,000	1,000	0	ANAM
Raw materials	50	51	1	1	month	300	600	300	300	WWF
Spares – project activities	50	52	3	3	unit	200	1,200	600	600	WWF
Fuel	50	53	3		month	1,000	3,000	3,000	0	WWF
Office supplies	50	54	0	0	month	300	-	0	0	ANAM
Miscellaneous	60	61	2	0	month	50	100	100	0	ANAM
Contingencies	60	63	1	0	month	50	50	50	0	WWF

DESCRIPTION	Component	Quantity		UNIT OF MEASUREMENT	UNIT COST (US\$)	TOTAL COST (US\$)	Year 1 US\$	Year 2 US \$	Source	
		Yr 1	Yr 2							
<b>Activity 3.3 Implement the capacity-building plan through the provision of training in coordination with the technical personnel of Panama's environmental authorities.</b>						<b>19,850</b>	<b>5,850</b>	<b>14,000</b>		
Forest monitoring consultant	10	131	0	3	m/month	1,800	5,400	0	5,400	ITTO
Traceability consultant	10	131	0	1	m/month	1,800	1,800	0	1,800	ITTO
Workshop on forest policy and monitoring	20	211	1	1	workshop	1,500	3,000	1,500	1,500	ITTO
Workshop on timber traceability	20	212			workshop		-	0	0	WWF
DSA - project activities	30	31	1	1	month	1,000	2,000	1,000	1,000	ITTO
DSA - ANAM personnel	30	32	1	1	month	600	1,200	600	600	ANAM
National transport costs	30	334	0	2	m/month	500	1,000	0	1,000	ITTO
Transport costs - ANAM	30	335	1		month	500	500	500	0	ANAM
Raw materials	50	51	3	3	month	300	1,800	900	900	ITTO
Spares – project activities	50	52	1	2	unit	200	600	200	400	ITTO
Fuel	50	53	1	1	month	1,000	2,000	1,000	1,000	WWF
Office supplies	50	54	0	1	month	300	300	0	300	ANAM
Miscellaneous	60	61	1	1	month	50	100	50	50	ANAM
Contingencies	60	63	2	1	month	50	150	100	50	ITTO
<b>Output 4: Increased public awareness about responsible purchasing through a national campaign.</b>										
<b>Activity 4.1 Develop a National Responsible Purchasing Campaign in coordination with stakeholders involved in the forest production and marketing chain in Panama.</b>						<b>18,350</b>	<b>17,950</b>	<b>400</b>		
Project Coordinator					*			0	0	
Outreach strategy consultant		131	6		month	2,000	12,000	12,000	0	ITTO
Workshop for the design of a responsible purchasing campaign	20	213	1		workshop	1,500	1,500	1,500	0	WWF
DSA - project activities	30	31	1		month	1,000	1,000	1,000	0	ITTO
DSA - ANAM personnel	30	32	2		month	600	1,200	1,200	0	ANAM
National transport costs	30	334	3		m/month	500	1,500	1,500	0	ITTO
Spares – project activities	50	52	2	0	unit	200	400	400	0	ANAM
Office supplies	50	54	1	1	month	300	600	300	300	ITTO
Miscellaneous	60	61	1	2	month	50	150	50	100	ITTO
<b>Activity 4.2 Implementation of National Responsible Purchasing Campaign</b>						<b>14,350</b>	<b>13,700</b>	<b>650</b>		
Sub-contract /Responsible Purchasing Campaign	20	201	2	0	Strategy	6,000	12,000	12,000	0	ITTO



DESCRIPTION	Component	Quantity		UNIT OF MEASUREMENT	UNIT COST (US\$)	TOTAL COST (US\$)	Year 1 US\$	Year 2 US \$	Source	
		Yr 1	Yr 2							
International travel	30	322	1	0	ticket	700	700	700	0	WWF
Raw materials	50	51	1	1	month	300	600	300	300	WWF
Office supplies	50	54	2	1	month	300	900	600	300	ITTO
Contingencies	60	63	2	1	month	50	150	100	50	ANAM
<b>Activity 4.2 Implement the National Responsible Purchasing Campaign.</b>						<b>31,150</b>	<b>10,900</b>	<b>20,250</b>		
Project Coordinator					*			0	0	
Outreach strategy consultant		131	4	8	month	2,000	24,000	8,000	16,000	ITTO
DSA - project activities	30	31	1	1	month	1,000	2,000	1,000	1,000	ITTO
National transport costs	30	334	3	5	m/month	500	4,000	1,500	2,500	ITTO
Spares – project activities	50	52	0	2	unit	200	400	0	400	ANAM
Office supplies	50	54	1	1	month	300	600	300	300	ITTO
Miscellaneous	60	61	2	1	month	50	150	100	50	ITTO
						<b>6,550</b>	<b>2,150</b>	<b>4,400</b>		
Workshop for the design of a responsible purchasing campaign	20	213	1	2	Strategy	1,500	4,500	1,500	3,000	ITTO
International travel	30	322		1	ticket	700	700	0	700	WWF
Raw materials	50	51	1	1	month	300	600	300	300	WWF
Office supplies	50	54	1	1	month	300	600	300	300	ITTO
Contingencies	60	63	1	2	month	50	150	50	100	ANAM
<b>Activity 4.3 Facilitate the signing of at least 4 responsible purchasing policy documents with key stakeholders in the forest production and marketing chain.</b>						<b>13,550</b>	<b>6,350</b>	<b>7,200</b>		
Development of responsible purchasing policies 4	20	20	1	1	Strategy	2,000	4,000	2,000	2,000	ITTO
Development of responsible purchasing policies 4	20	20	1	1	Strategy	2,000	4,000	2,000	2,000	WWF
DSA - project activities	30	31	1	1	month	1,000	2,000	1,000	1,000	ITTO
DSA - ANAM personnel	30	32	1	3	month	600	2,400	600	1,800	ANAM
International travel	30	322	1		ticket	700	700	700	0	WWF
Office supplies	50	54	0	1	month	300	300	0	300	ITTO
Miscellaneous	60	61	1	2	month	50	150	50	100	ITTO
<b>NON-ACTIVITY BASED EXPENSES</b>						<b>317,800</b>	<b>221,750</b>	<b>96,050</b>		
Project director	10	111	3	9	m/h	3,755	45,061	11,265	33,796	ITTO
Project director	10	111	3	9	m/h	3,755	45,061	11,265	33,796	WWF
Regional forest engineer	10	112	12	12	m/h	1,200	28,800	14,400	14,400	ANAM
Office administrator - ANAM	10	114	12	12	m/h	800	19,200	9,600	9,600	ANAM

DESCRIPTION	Component	Quantity		UNIT OF MEASUREMENT	UNIT COST (US\$)	TOTAL COST (US\$)	Year 1 US\$	Year 2 US \$	Source	
		Yr 1	Yr 2							
		Two monitoring & control technicians	10							115
4 checkpoint workers	10	131	12	12	unit	2,400	57,600	28,800	28,800	ANAM
1 Boat driver - supervision	10	132	12	12	unit	300	7,200	3,600	3,600	ANAM
Office space within ANAM off.	40	41	0	0	unit	500	-	0	0	ANAM
Office space within WWF off.	40	43	12	12	unit	1,500	36,000	18,000	18,000	WWF
Capital equipment (comput, printers, etc..)	40	47	1		unit	2,000	2,000	2,000	0	ITTO
Capital equipment (comput, printers, etc..)	40	47	1		unit	2,000	2,000	2,000	0	WWF
Project administration costs	70	71	5	5	month	2,281	24,693	12,346	12,346	ITTO
Project administration costs	70	71	4	4	month	2,281	17,550	8,775	8,775	ANAM
Project administration costs	70	71	3	3	month	2,281	12,541	6,271	6,271	WWF
Communication services	60	641	3	9	month	300	3,600	900	2,700	ITTO
Communication services	60	641	1	5	month	300	1,800	300	1,500	WWF
Communication services	60	641	1	5	month	300	1,800	300	1,500	ANAM
ITTO monitoring and review	8	81	1	1	Unit	10,000	20,000	10,000	10,000	ITTO
ITTO ex-post evaluation	8	82		1	unit	15,000	15,000	0	15,000	ITTO
ITTO Programme support costs	8	83	0.5	0.5	unit	29,263	28,397	14,198	14,198	ITTO
Annual auditing	60	62	1	1	Audit	3,000	6,000	3,000	3,000	ITTO
Initial and final evaluation of project	10	16	1	1	baseline	4,000	8,000	4,000	4,000	ITTO
<b>Overall costs</b>							<b>412,509</b>	<b>176,124</b>	<b>236,385</b>	
<b>Grand total – Overall costs +Activity-based costs</b>							<b>730,309</b>	<b>397,874</b>	<b>332,435</b>	

### 3.4.4 Budget by component, by year and by source

#### WWF Contribution (US \$)

Item	Budget Component	YEAR 1	YEAR 2	TOTAL US \$
10	Project personnel	11,265	33,796	45,061
20	Sub-contracts	5,000	3,500	8,500
30	Duty travel	11,400	2,700	14,100
40	Capital items	20,000	18,000	38,000
50	Consumable items	8,400	3,400	11,800
60	Miscellaneous	600	1,800	2,400
70	Executing agency management costs	6,271	6,271	12,541
	<b>SUB-TOTAL US \$</b>	<b>62,936</b>	<b>69,467</b>	<b>132,403</b>

#### ANAM Contribution (US \$)

Item	Budget Component	YEAR 1	YEAR 2	TOTAL US \$
10	Project personnel	63,600	63,600	127,200
20	Sub-contracts	0	0	-
30	Duty travel	14,600	11,800	26,400
40	Capital items	0	0	-
50	Consumable items	5,700	6,100	11,800
60	Miscellaneous	700	1,700	2,400
70	Executing agency management costs	8,775	8,775	17,550
	<b>SUB-TOTAL US \$</b>	<b>93,375</b>	<b>91,975</b>	<b>185,350</b>

#### ITTO Contribution (US \$)

Item	Budget Component	YEAR 1	YEAR 2	TOTAL US \$
10	Project personnel	88,265	73,596	161,861
20	Sub-contracts	23,000	12,500	35,500
30	Duty travel	16,800	12,100	28,900
40	Capital items	52,000	0	52,000
50	Consumable items	12,400	7,200	19,600
60	Miscellaneous	4,650	6,150	10,800
70	Project administration costs	12,346	12,346	24,693
	<b>SUB-TOTAL US \$</b>	<b>209,462</b>	<b>123,892</b>	<b>333,354</b>
80	<b>ITTO Monitoring and Administration</b>			
	81. ITTO monitoring and review (\$ 10,000 per year)			20,000
	82. ITTO ex-post evaluation			15,000
	83. Programme support costs - 12% of ITTO total			44,202
	89. Component Total			79,202
90	Refund of pre-project costs			-
	<b>ITTO TOTAL US \$</b>			<b>412,557</b>

### 3.4.5 Consolidated budget by year and by source

Budget Components	YEAR 1			YEAR 2			TOTAL US \$
	ITTO	ANAM	WWF	ITTO	ANAM	WWF	
10. Project personnel	88,265	63,600	11,265	73,596	63,600	33,796	334,122
20. Sub-contracts	23,000	-	5,000	12,500	-	3,500	44,000
30. Duty travel	16,800	14,600	11,400	12,100	11,800	2,700	69,400
40. Capital items	52,000	-	20,000	-	-	18,000	90,000
50. Consumable items	12,400	5,700	8,400	7,200	6,100	3,400	43,200
60. Miscellaneous	4,650	700	600	6,150	1,700	1,800	15,600
70. Executing agency management costs	12,346	8,775	6,271	12,346	8,775	6,271	54,784
<b>Subtotal 1</b>	<b>209,462</b>	<b>93,375</b>	<b>62,936</b>	<b>123,892</b>	<b>91,975</b>	<b>69,466</b>	<b>685,171</b>
80. ITTO Administration, monitoring & evaluation							
81. ITTO monitoring and review (\$ 10,000 per year)							20,000
82. ITTO ex-post evaluation							15,000
83. Programme support costs - 12% of ITTO total							44,202
89. Component Total							79,202
90. Refund of pre-project costs	-						-
<b>GRAND TOTAL US \$</b>							<b>730,309</b>

### 3.5 Assumptions, risks, sustainability

#### 3.5.1 Assumptions and risks

N o.	Assumptions	Potential risks	Mitigation measures
1.	There is agreement among forest sector stakeholders at multiple levels to implement an institutional strengthening process aimed at improving ANAM's management capacity.	ANAM's does not recognize its weaknesses in the development of effective and efficient forest management.	Implement an institutional strengthening process to improve ANAM's capacity for effective and efficient forest management with the participation of other stakeholders.
2.	There is agreement among forest sector stakeholders at multiple levels to implement the integrated forest harvesting, production and marketing monitoring and control system	Key stakeholders do not support ANAM's initiative	Implement a comprehensive outreach and communication process at project start-up
3.	Illegal loggers and other interest groups get involved in the initiatives related to the strategy	A sector of the production chain does not abide by the provisions of the strategy	Implement an active and ongoing outreach and information process
4.	Tangible support from the police force to implement the strategy	Limited participation of the police force	Develop and implement a coordinated institutional communication process
5.	Progress in the planning and administration of forest lands under sustainable forest management	The targets of the National Forest Strategy are not met	International cooperation helps to expand sustainable forest management
6.	Public and/or private agencies agree to sign the Responsible Purchasing Policy Documents	State bureaucratic requirements delay the responsible purchase of timber	Convene public events so as to ensure the achievement of the State's institutional commitments
7.	There is social commitment and social willingness to verify harvesting permits and fight against illegal timber trade	Some stakeholders continue to support the illegal trade of timber and timber products	Implement a functional outreach campaign to promote the benefits and scope of the strategy
8.	Increased number of informed end consumers aware of the consequences of illegal forest logging and trade.	The key stakeholders identified are not willing to undertake the commitment to work towards reducing and controlling illegal logging and trade.	The National Responsible Purchasing Campaign envisaged in the project will be highly instrumental in raising awareness among all stakeholders in general but in particular, end consumers with the power to demand responsible production and marketing in support of sustainable forest management.

#### 3.5.2 Sustainability

The economic, environmental and social sustainability of forest management will depend, to a great extent, on the ability to strengthen forest governance in the country. In order to achieve this type of sustainability, enabling economic, political and social conditions should be established to promote legality in the forest sector as well as the valuation of forests and their goods and services.

With a view to strengthening forest governance, instruments will be designed to ensure effective forest sector management by ANAM as well as the support of key stakeholders in the forest production and marketing chain and end consumers.

The project's outreach campaign will be aimed at raising awareness among consumers and arousing their interest in responsible forest trade practices, on the firm belief that market forces will act as a catalyst in attracting investments to support sustainable forest management and responsible forest trade. The ultimate goal of this campaign will be the adoption of responsible purchasing policies.

The strengthening of forest governance will have a positive impact on ANAM's management capacity by ensuring the involvement of other civil society stakeholders in the search for solutions to the problem of illegality in the forest sector. This will in turn generate economic benefits to the Panamanian State by reducing the loss of resources and to production-chain stakeholders by facilitating resource access. These positive impacts will guarantee the continuity of actions initiated by the project, not only in the Eastern Region of Panama (Bayano and Darien) but also at the national level.

## 4. IMPLEMENTATION ARRANGEMENTS

### 4.1 Organization structure and stakeholder involvement mechanisms

#### 4.1.1 Executing agency

The WWF office in Panama will be responsible for the administration of project resources and will act as co-executing agency together with ANAM. To this end, and as shown in the budget tables, WWF will make a substantial financial contribution to the implementation of the project, in particular by providing its expertise in the implementation of forest governance strengthening projects. In addition, WWF has proven experience in administrative issues and budget execution for the management of ITTO funds.

Project management will be coordinated from its central office, located in Ciudad del Saber, Clayton, Panama. WWF will hire an accountant who will be responsible for managing project finances and budget execution in accordance with the disbursement schedule established in the work plan and approved by the Project Steering Committee (PSC) and the Executive Council of ITTO. WWF has the support of the legal firm “Sucre, Arias & Reyes”, which is in charge of dealing with all legal aspects of the organization. In addition, WWF receives the support of an auditing firm for the preparation of financial statements, which will carry out the auditing of project accounts, including the funds provided by ITTO.

In accordance with ITTO rules and regulations, WWF will open a specific account for the administration of these funds, or will simply make use of the existing account that has already been opened for the implementation of the project: *“Extending the area under sustainable forest management in the forest lands of the Emberá-Wounaan Comarca, Darien, Panama”*.

WWF and ANAM will set up a project implementation team that will work from a liaison office based in ANAM’s administrative offices in the region of Darien.

#### 4.1.2 Project management team

The project management team will be selected by WWF in agreement with ANAM and will be subject to ITTO’s no objection procedures. This team will be made up of the following professionals and external consultants:

**Project Director:** A forest professional with extensive knowledge of the country’s forest sector and the social, political and administrative conditions enabling illegal timber logging in Darien. In addition, the Project Director should have experience in the management of ITTO-funded projects. The Project Director will be responsible for developing project work plans and operational budgets, as well as promoting actions and guidelines for smooth project implementation, with direct responsibilities in the actual implementation of project activities.

**Administrative officer:** A full-time professional responsible for the management, control, procurement and distribution of the project’s financial and material resources. The Administrative Officer will work under the supervision of the Project Director and will be in charge of preparing and submitting the project financial reports, stocktaking and accounting statements to the Project Director. The Administrative Officer will also be responsible for the conduction of annual audits as established in the project budget.

**Field staff:** A team of ANAM technicians, who will be responsible for the implementation of checkpoint tasks.

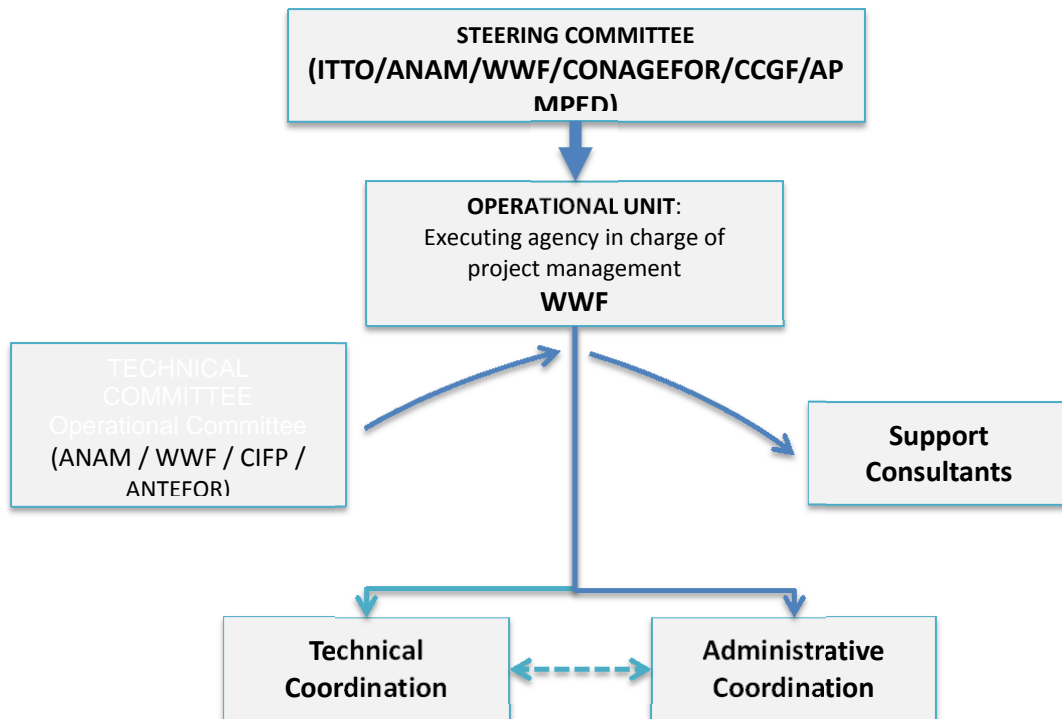
**Outsourcing or consultancies:** Specialized personnel will conduct short-term consultancies and will be responsible for the implementation of specialized actions and processes, particularly the development of the forest monitoring and control system, the traceability system and the National Responsible Purchasing Campaign.

#### 4.1.3 Project decision-making and participatory mechanisms

Several institutions will participate in the implementation of the project, on the one hand, to ensure compliance with ITTO policies and procedures and approval of budgets and work plans for project implementation (by the Project Steering Committee) and on the other hand, to promote/facilitate implementation and provide for technical, operational and programming/logistic consistency (by the project executing agency – WWF) and ensure the involvement and participation of relevant forest stakeholders, organizations and professional associations (through the Technical Committee). This will ensure the adoption of the strategy by all stakeholders in the different links of the forest production chain.

- A. Project Steering Committee (PSC): This committee will be responsible for approving budgets and yearly plans of operation. In addition, it will monitor project actions to ensure their consistency with project objectives. The PSC will be made up of representatives of the following institutions:
- ANAM: This agency is ITTO's contact point in Panama. It is responsible for ensuring the sustainable and responsible management of natural resources in the country. In addition to the submission and negotiation of the project with ITTO, ANAM will ensure its adequate implementation as it is in charge of guiding the national forest policy and adopting and implementing rules and strategies for the management of the forest sector.
  - ITTO: The organization responsible for approving and ensuring the necessary financial resources for the implementation of the project. ITTO officials will participate in the Project Steering Committee meetings for the approval of plans and budgets as required.
  - WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.
  - CONAGEFOR: This agency groups public and civil society institutions. It was established as a consultative and coordination agency for the development of policies as required to promote social and economic growth in the forest sector.
  - Small Timber Producers' Association of Eastern Panama and Darien (APMED): It represents key stakeholders in the forest production and marketing chain.
  - Forest Management Committee of the Emberá-Wounaan Comarca (CCGF): This organization groups the forest enterprises and traditional authorities of the Comarca.
- B. Operational Unit: This unit will be responsible for the administration of resources, recruitment procedures, coordination arrangements and technical monitoring of all project activities. It will be made up of the staff of the local WWF office. It will have an administrative and a technical coordinator.
- WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.
- C. Project Technical Committee: This committee will facilitate the participation and involvement of forest stakeholders, organizations and professional associations. The following institutions will participate in this committee:
- ANAM: This agency is ITTO's contact point in Panama. It is responsible for ensuring the sustainable and responsible management of natural resources in the country. In addition to the submission and negotiation of the project with ITTO, ANAM will ensure its adequate implementation as it is in charge of guiding the national forest policy and adopting and implementing rules and strategies for the management of the forest sector.
  - WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.
  - CIFP and ANTEFOR: As the umbrella associations grouping forest professionals, they will support the implementation of the forest regency system, setting up a regents' committee, providing training, issuing certification and evaluating the performance of forest regents.

Figure 6. Project organizational chart



## 4.2 Reporting, review, monitoring and evaluation

Project progress reports – Six-monthly progress reports will be prepared (four (4) in total) to report on project progress. Such reports will be submitted in the format stipulated by ITTO and according to the schedule of activities approved by the Steering Committee. These progress reports will be available at least 3 weeks before the date planned for the visit of ITTO officers.

Project completion report – This report will be submitted within 1 month of project completion. Both the six-monthly progress reports and the project completion report will be prepared by the Project Coordinator.

Project technical reports – In addition to the six-monthly reports, technical progress reports will be prepared on the implementation of activities and the gradual achievement of outputs. A special article will be prepared every 4 months for the ITTO newsletter *Tropical Forest Update*. The final project report will be based on the final technical report.

Steering Committee monitoring and review visits – The implementation of the Project will be subject to monitoring and evaluation by ITTO officials every six months; ITTO officials will receive progress reports at least 3 weeks before such visits.

Evaluation – Monitoring visits by ITTO officials are expected during the implementation of the project. The dates for these evaluations and supervision visits will be jointly determined by the Project Director and ITTO officials.



### **4.3 Dissemination and mainstreaming of project learning**

#### **4.3.1 Dissemination of project results**

The progress and achievement of project outcomes will be communicated and disseminated through the country's communication media, with special emphasis on the target audiences of the province of Darien. A communication and outreach strategy will be developed to disseminate the scope of the Illegal Logging Prevention and Control Strategy. Furthermore, regular (monthly) publications will be prepared for their dissemination through the web pages of WWF, ANAM and CONAGEFOR. An article will be produced every six months for its publication in ITTO's *Tropical Forest Update*.

#### **4.3.2 Mainstreaming of project learning**

The mainstreaming of project learning will be targeted at two main audiences: a) the country's capital so as to share project outcomes in fora and conferences with the participation of public and private institutions. These fora will be convened by CONAGEFOR and their objective will be to share project experiences, outcomes and impacts. These events are expected to be convened every 6 months; b) the province of Darien, so as to share information on project progress and innovative actions with the direct stakeholders. Mainstreaming tours will also be conducted in the indigenous comarcas so as to provide information on institutional provisions and agreements as well as incentives and benefits associated to the implementation of the Strategy.

## 5. REFERENCES

- ALFARO, M. & HIDALGO M. (2005). Informe Subregional Centro América y México: Estudio de tendencia y perspectivas del sector forestal en América Latina. ESFAL/SR/3 Working Document. FAO, Rome. 174 pp. Available in: <ftp://ftp.fao.org/docrep/fao/009/a0470s/a0470s00.pdf>
- ANAM. (2005). Conservación para el Desarrollo Sostenible, Lineamientos de Política de la Autoridad Nacional del Ambiente, 2004-2009. ANAM Panama. 24pp.
- ARGUELLES, A. (2010). Estrategia Institucional Para la Prevención y Control de la Tala Ilegal en los Bosques del Darién, en Panamá. WWF-Panama. 57 pp.
- Campos Arce, J. at al. 2001. La tala ilegal en Costa Rica: un análisis para la discusión. CATIE. 53 pp.
- CENTRAL AMERICAN COMMISSION FOR ENVIRONMENT AND DEVELOPMENT. (2010). Available in: <http://www.sica.int/busqueda/Noticias.aspx?IDItem=52215&IDCat=3&IdEt=879&Idm=1&IdmStyle=1> (Access date: 17 September 2010).
- DAMES & MOORE. (1998). Programa de Desarrollo Sostenible de Darién, Estrategia de Ordenamiento Territorial y Protección Ambiental; Volumen II: Caracterización de la Situación Actual. MIPPE-BID, Panama.
- DEL GATTO, F. (2004). Un análisis preliminar de la gobernabilidad forestal en Panamá, con referencia particular a la región de Darién. WWF Centroamérica para el Proyecto de Desarrollo Comunitario del Darién que ejecuta ACDI/VOCA con fondos de USAID. Costa Rica. 36pp.
- DIAZ, J.P. (2002). Estado Actual de la Información sobre Productos Forestales, en "Estado de la Información Forestal en Panamá". FAO and European Commission, Santiago, Chile.
- GOMEZ, F. ESPINOSA, C. & BOLAÑOS, S. 2004. Análisis de la dinámica espacial de la cobertura boscosa y la producción forestal en Panamá, con referencia a la región del Darién. WWF Centroamérica para el Proyecto de Desarrollo Comunitario del Darién que ejecuta ACDI/VOCA con fondos de USAID. Costa Rica. 44pp.
- ITTO. (2009). ITTO Manual for Project Formulation. GI Series #13. Third Edition. 93 pp. Available in: <http://www.itto.int/es/projects/>
- ITTO. (2008). ITTO Action Plan 2008-2011. ITTO Policy Development Series No. 18 Available in: [http://www.itto.int/es/policypapers\\_guidelines/](http://www.itto.int/es/policypapers_guidelines/). 24 pp.
- Perafán, C. y Nessin, E.(2001). Consulta Comunitaria: el caso de Darién, Panamá. (S. d. prácticas Ed.) Washington, D.C., USA. Iner-American Development Bank, Felipe Herrera Library.
- REPUBLIC OF PANAMA. (1998). Legislación Forestal de la Republica de Panamá. Ley N° 1 "Por la cual se establece la Legislación Forestal en la Republica de Panamá y se dictan otras disposiciones" Available in: <http://www.anam.gob.pa>.
- REPUBLIC OF PANAMA. (2002). Estrategia Nacional del Ambiente-Panamá. Documento principal 2da. Edición. Republic of Panama. ANAM. 224 pp.
- REPUBLIC OF PANAMA, Province El Darién. (2005). Resolución N° AG-0722-2004 del 10 de Diciembre del 2004 "Por la cual se adoptan medidas de regulación forestal sobre los permisos especiales de aprovechamientos forestal de subsistencia en la Provincia de Darién, Panamá Este y se dictan otras disposiciones. Official Gazette No. 25,230. Tuesday 01 February 2005. 4pp.
- REPUBLIC OF PANAMA. (2010). Proyecto de Ley "Por la cual se crea el Instituto Nacional Forestal, se establece la legislación forestal e incentivos y se dictan otras disposiciones". ANAM Panama. 39pp.
- REPUBLIC OF PANAMA (2003). Decreto ejecutivo 2 del 17 de Enero de 2003 "Por el cual se aprueban los principios y lineamientos básicos, de la política forestal de Panamá". Published in Official Gazette No. 24,724 of 22 January 2003. Republic of Panama.11pp.
- REPUBLIC OF PANAMA, Resolución de Junta Directiva 05-98 de 22 de Enero de 1998. "Por la cual se reglamenta la ley 1 de 3 de febrero de 1994 y se dictan otras disposiciones". Official Gazette No. 23495 of 6 March 1998. Republic of Panama.
- REPUBLIC OF PANAMA. (2009). Decreto ejecutivo No 37 del 3 de Junio del 2009 "Por el cual se aprueba la política nacional forestal, sus principios objetivos y líneas de acción". Official Digital Gazette of the Republic of Panama No. 26302 of Friday 12 June 2009. Panama. 5pp.
- REPUBLIC OF PANAMA. (2002). Ley Numero 22 del 8 de Noviembre de 1983 y Carta Orgánica Administrativa de la Comarca Emberá Wounaan, Decreto ejecutivo Num.84 del 9 de abril 1999. 2da. Edición. Republic of Panama. 62 pp.

## 6. ANNEXES

### 6.1 Causes of illegal logging and trade (Argüelles 2010)

#### Institutional causes:

- **Administration of the forest estate**

Panama's forest legislation (Act No.1 of 3 February 1994)<sup>4</sup> stipulates that natural forests are part of the national heritage and on this basis organizes forest activities through forest concessions granted to third parties. In this context, the role of the forest authority is to monitor and ensure that concession holders comply with the terms of the concession contract and to secure the payment of fees to the government based on logs felled and transport waybills.

According to Article 27 of the Forestry Law, there are several types of permits issued for the harvesting of resources from the country's forest estate: through special forest harvesting permits granted by ANAM for household consumption or subsistence use by the applicant, after confirming the lack of financial resources; through direct or delegated administration by ANAM, under agreements signed with organizations and public and private enterprises in State-owned forest plantations; through forest harvesting concessions granted to private individuals or companies; and harvesting permits granted to indigenous communities.

At present, the formulation of management plans is a pre-requisite for the approval of all permits except those for household consumption or subsistence purposes. Permits requiring the formulation of management plans are issued for a maximum period of a fourth of the duration of the felling cycle provided for in the corresponding plan. In both cases, the current system opens the door to unsustainable forest harvesting practices.

The reality is that most of the remaining natural forest areas in the area of influence of this project are in the hands of indigenous communities as a result of a decision of the State of Panama. The forest industry has limited possibilities to invest in the management of these lands, unless it is through an agreement with the local communities. Under such conditions, the forest industry lost interest in the concession system and as a result, today there are no forest concessions and all forest harvesting operations take place under subsistence permits outside these territories and without any management plans.

Even though the formulation of management plans is a pre-requisite for the issuing of community permits, these plans are not implemented in practice due to the same duration-related problems that disrupted the concession system. The only exceptions are the forests that are under sustainable management in the Embera-Wounaan Comarca, which are receiving technical assistance from WWF with the financial support of ITTO, USAID, the European Commission and the Natura Foundation of Panama. The implementation of management plans in these forests has already been ensured for an area of approximately 80,000 hectares with the participation of local communities and the support of their traditional authorities. In this context, FSC certification has already been obtained for the first 43,000 hectares but these forests are not sufficient to supply all of the country's industry.

- **Weak institutional capacity**

Panama has a national environment strategy and the National Forest Policy was designed in early 2003. Furthermore, the country has worked on the development of instruments such as the National Environmental Information System, the valuation of forest resources and their incorporation into the National Accounting System and the formulation of a Sustainable Forest Management Model as a guide for forest development in the country; however, there is no system of incentives for the management of native forests.

In addition, other relevant instruments have been established since 2011, including the "forest mark" system for timber traceability. However, there is no effective forest monitoring and control system officially established to test current instruments (management plans and "forest mark" procedures) so as to assess their effectiveness in forest production control.

There are a number of difficulties in carrying out field checks for the issuing of forest permits and for the monitoring of forest harvesting operations and forest trade. Due to the limited number of appropriately trained personnel that ANAM's forestry department has available in the region, there is no forest authority presence in harvesting areas and therefore the preferred practice is to carry out timber scaling operations when the timber

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<sup>4</sup> Law No.1 of 3 February 1994: "Which establishes the forest legislation in the Republic of Panama and includes other relevant provisions". (G.O. 22,470 of 7 February 1994).

goes through the control points without having a precise idea about its source. In fact, this is the reason why forest permits can be used indiscriminately to cover up timber sourced from sites other than those authorized by the permits (“timber laundering”) or in other words, timber originating from forests in the Comarcas and probably even from protected areas (Argüelles 2010).

The same factors limiting ANAM’s presence in forest harvesting sites constitute an obstacle in the processing of transport waybills, the monitoring of timber storage and the assessment of the effectiveness of the instruments adopted.

- **Lack of Inter-institutional coordination**

At least in the case of the Embera-Wounaan Comarca, there are three governing bodies that have an interest in forest harvesting operations and, of course, each one of them tries to collect revenue for their respective forest harvesting fees: a) ANAM as the government agency responsible for forest activities, b) the municipality, which charges stumpage fees, and c) the Comarcas (General Congresses) that charge fees for harvesting activities within their territories. To this end, ANAM has forest control posts; the municipality has its own tax collectors; and the Comarcas collect their fees from the communities through a *Noko*, who also receives part of the fees charged by the Comarca. However, each of these institutions acts independently, without coordinating with the others, a fact that does not favor the promotion of forest management in these areas.

Furthermore, the Police Force has presence throughout the region, including the sites where ANAM’s control posts are located, but they do not seem to be acting in a coordinated manner to combat illegal forest sector activities. In some sites, there is evidence of illegal timber marketing taking place without the intervention of the police to address this problem (Argüelles 2010).

- **Leniency in forest law enforcement**

Until recently (2011), ANAM did not require forest permit holders to use timber marking as stipulated by the current forest legislation (1994). Although this is required by a recently adopted resolution<sup>5</sup>, there are serious gaps in this instrument given that it only requires information on the type of harvesting permit involved (concession, community permit, or others) and the origin of the timber as per geographic region (province, comarca and district), and excludes useful information for a reliable chain of custody system that would include information about the species, the tree, no. of permit, the management unit and authorized coupe area.

Similarly, it does not require the owners of timber yards to declare the origin of the stored timber. Because of this, any site or port can become a timber loading/unloading yard, and it also facilitates the free transit of timber throughout the entire Darien Region and between Darien and Bayano, without any timber marking control or transport waybills, given that the latter are only required when the timber goes through a control post when leaving the region. This facilitates the “laundering” of timber, for example, from the cabinet-making workshops, given the lack of records in the timber yards and the undeclared origin of timber in these areas.

### **Socio-economic causes**

- **Rural poverty**

Both the indigenous communities and the residents of population centers live in poverty conditions<sup>6</sup>, and have no employment opportunities or new sources of income not related to forest activities. As a result, the local communities solve their problems in the fastest way possible, which is cutting and selling timber (which is considered to be informal logging) or allowing the timber to be logged in their territories through the network of forest intermediaries operating in the area. Faced with this reality, the authorities of the Comarcas simply stay away from forest activities and whenever possible charge a fee per square meter of timber extracted as established by the Comarca Congresses.

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<sup>5</sup> Resolution N° AG-0244-2011 stipulating the use of timber marking was promulgated on 21 April 2011.

<sup>6</sup> ANAM’s National Environmental Strategy document states that “Indigenous community areas have an alarming poverty rate and difficult access, with over 90% of the population living in these conditions... As much as 16% of children under 5 years of age in the country are suffering from malnutrition in varying degrees. The situation is even more critical in indigenous community areas, where 50% of the children are malnourished”.

- **Lack of community forest production organization**

As a general rule, there has not traditionally been a community forest organizational structure in Darien. Timber harvesting and chainsawing has been carried out by families or small forest teams, with the exception of community forest enterprises promoted by WWF in the Embera-Wounaan Comarca. In this context, the communities that own forest resources are easy prey for the network of intermediaries operating in the area.

- **Excessive intermediation**

High transaction costs in the timber business resulting from the need to obtain timber supplies from intermediaries increase the cost of raw materials for the industry while at the same time decreasing the payment received by the local communities for their timber. Ultimately, this leads to a promotion of unsustainable actions related to indiscriminate forest logging.

- **Lack of competitiveness of the forest industry**

It is generally recognized that the local forest industry is based on obsolete technology using inefficient machinery with high energy consumption levels to obtain a good timber production yield. This coupled with the liberalization of trade makes the forest industry not competitive in the current economic scenario of free market conditions. In addition, there are no institutional incentives for industry retrofitting. Under these conditions, the industry makes no distinction between sustainable timber and illegal timber as the priority is to obtain the timber at the lowest possible cost and with short capital investment return periods.

- **Forest management profitability**

Sustainable forest production involves high costs of preparation of forest management plans and environmental impact assessments, which are not recovered within a year of operation. In these conditions, no company will risk the funding of these studies knowing that the agreements concluded with the communities are only short-term and not stable. In addition, the cost of access roads (100% of which are covered by intermediaries and the industry) and the cost of yearly plans of operation and fees charged by ANAM, municipalities and Comarcas should also be factored in. And this is without considering the cost of delays in the granting of forest permits and/or approval of forest management plans. As a result, forest management is not seen as a profitable activity by the communities or industrialists, especially considering that legal timber from sustainable sources must compete with illegally sourced timber in the market.

This problem was previously identified by the International Tropical Timber Organization (2004), which noted that in the year 2000 the country authorized a harvesting volume of 26,594 m<sup>3</sup> of timber but the estimated roundwood production in the country exceeded 90,000 m<sup>3</sup>, reflecting a marked difference of approximately 70%.

- **Lack of organization within the forest industry**

The Forestry Chamber, which was established some ten years ago with the participation of the production and value-adding chain sectors, has never been effective. Many of the companies that were founding partners have already been closed and the remaining few have focused on other types of business. However, new enterprises have emerged and they could be interested in reactivating the Chamber, including with the participation of the forest enterprises from the Embera-Wounaan Comarca.

The Small Timber Producers' Association of Eastern Panama and Darien has recently been established but it does not seem to have a clear plan of action for the future beyond exerting pressure to expedite the issuing of harvesting permits. Therefore, there is no association to lead the fight for better conditions to enable the development of a sustainable and competitive forest sector.

- **Limited civil society involvement**

The establishment of CONAGEFOR was an important step forward towards strengthening forest governance, but until now it has kept a low profile in the discussion about illegal logging. Even though this body was established with the objective of increasing the participation of different stakeholders in the decision making process so as to achieve an efficient and effective forest management system, there are some important civil society stakeholders who are not represented (associations of professional foresters, indigenous organizations and NGOs, among others).

Finally, at an economic level, it can result in a serious blow to the country's economy. According to Alfaro (2002), Panama's forest sector has an estimated deficit of just over US\$73 million, with illegal logging representing a threat to the sustainability of natural forests and under the current conditions, a serious threat to the sustainability of forest management initiatives that are being promoted in indigenous community lands in the province of Darien. Table 1 shows data on the loss of revenue arising from technical services, transport waybills and municipal taxes, which could be used to support the funding of an effective forest production monitoring and control system.

**Table 1. Estimated economic losses caused by illegal logging**

Description	Amount (USD)	Estimated value (USD) of losses due to non-payment of taxes based on 130,000 m <sup>3</sup> of illegal timber/year <sup>7</sup>
Technical services	<ul style="list-style-type: none"> <li>• \$20 per m<sup>3</sup> of roundwood for high-value and hardwood timber species</li> <li>• \$10 per m<sup>3</sup> of roundwood for softwoods</li> <li>• \$15 per m<sup>3</sup> for Balsamo</li> </ul>	1 950,000
Transport waybills	\$ 1 per m <sup>3</sup> of roundwood	130,000
Municipal tax	\$ 0.5 per m <sup>3</sup> of roundwood <sup>1</sup>	65,000
		2 145,000

Source: Own estimates based on Del Gatto 2004.

## 6.2 Profile of WWF

The World Wildlife Fund - WWF is one of the largest and most experienced independent conservation organizations in the world. WWF has approximately 5 million members and a network of offices in over 100 countries. Since its inception in 1961, it has achieved countless conservation successes. Today, WWF is carrying out some 1,300 projects, with over 3,800 officials throughout the world.

WWF-Panama has been promoting sustainable forest management practices in the lands of the Embera-Wounaan Comarca with the financial support of USAID, EC, ITTO and DFID, among other organizations, and has been addressing the challenge of meeting the country's target of bringing 350,000 ha of forest under sustainable management by 2020 so as to boost the contribution of the forest sector to the Gross Domestic Product (GDP) under sustainability standards<sup>8</sup>. However, it is not only necessary to ensure forest land management but also to close the frontiers to illegal timber trade, as its negative effects lead to the loss of the economic value of forests and their consequent conversion to unsustainable land uses.

### 6.2.1 Mission and priorities

WWF's mission is to arrest the degradation of the planet's natural environment and to build a future in which humans may live in harmony with nature by: ensuring the conservation of the world's biological diversity; guaranteeing the sustained use of renewable natural resources; and promoting the reduction of pollution and wasteful consumption.

### 6.2.2 WWF Mission

WWF works in partnership with governments, local communities, international agencies, and companies and industries, identifying realistic solutions to the most pressing environmental problems. Furthermore, it reinforces its programme of field projects with policy work and campaigns specifically designed to address some of the underlying causes of ecological degradation. It also uses a rational, science-based approach which focuses on a number of key conservation issues and priorities.

WWF carefully monitors all funds received and endeavours to obtain maximum conservation value for these donations through the support of partner organizations. It promotes the replication of its conservation achievements through education and local capacity building, in partnership with other organizations and through communication and outreach activities throughout the world.

<sup>7</sup> Volume estimated by Arguelles (2010).

<sup>8</sup> The current contribution of the forest sector to the national GDP is less than 1.5%.

To carry out its work, WWF works in partnership with organizations such as UN, IUCN, development agencies such as the European Commission, USAID, the World Bank and more recently, the ITTO. With the support of ITTO, WWF has extended the area under forest management in the Embera-Wounaan Comarca, in the Darien Region. Since 2004, WWF has been a pioneer organization in promoting sustainable forest management in this region, and the area covered in the Embera-Wounaan Comarca currently amounts to 80,000 ha. The Fund has a field office next to AMAN's office in the City of Metetí.

### **6.2.3 WWF-Panama**

WWF- Panama Director:	For. Eng. Carlos Enrique Espinosa Peña
Telephone:	00 507 317 1826
Address:	Ciudad del Saber, Edificio 235, Clayton, Código Postal

### **6.3 PROFILE OF THE PROJECT DIRECTOR**

#### **Professional qualifications:**

Forest engineer with at least 5 years experience in similar positions; good oral and written communication skills; ability to write executive reports; leadership skills to promote team work; good organizational skills; capacity to contribute to institutional policies and strategies; and thorough knowledge of the Darien Region.

#### **Duties:**

- Coordinate and supervise the achievement of project outputs and outcomes.
- Provide support and guidance to the operational team and administrative staff.
- Ensure the rational use of project funds and the timely submission of project audits.
- Prepare and implement yearly plans of operation based on the overall project schedule of activities.
- Liaise with the ITTO Secretariat and project donors.
- Prepare regular progress reports as required by ITTO and the Steering Committee.
- Prepare terms of reference for the project team.
- Ensure the publication and dissemination of project outcomes and lessons learned.
- Disseminate the objectives and achievements of the Illegal Logging Prevention and Control Strategy among different sectors of the population.

WWF, as a leader organization in the promotion of responsible forest management and trade (RFMT) in the region of Darien, will be responsible for the technical implementation of the Strategy. To this end, WWF will follow the guidelines and technical directions provided by the Steering Committee in accordance with the project schedule and work plan. One of the main achievements to be accomplished by the Project Director will be the involvement of Panama's forest sector stakeholders to assume joint responsibility in the forest management and production process, as well as the formulation and approval of policy instruments to improve forest monitoring and control systems, in addition to other project-related responsibilities.

### **6.4 PROFILE OF THE EXTERNAL CONSULTANT(S)**

#### **Profile of Forest Monitoring and Control /Traceability Specialist(s)**

Preferably a forest engineer with proven experience in the development of forest monitoring and control / traceability or timber tracking systems as well as forest-to-mill gate chain-of-custody systems. Also desirable is extensive experience in cultural and production aspects in the Bayano and Darien regions with special emphasis on the forest sector and the policy and institutional framework enabling illegal timber trade.

#### **Duties:**

- Prepare a work plan and budget for the organization of consultation and consensus-building workshops on the development of control systems.
- Train both technicians and ANAM officers in the use of timber flow data recording and monitoring and control systems.
- Design and implement a practical forest monitoring and control /timber and timber product traceability system.
- Design and implement a forest-to-mill gate chain-of-custody system.
- Regularly report to the Project Director on the progress made in these consultancies.
- Ensure the timely preparation and submission of invitations to the relevant agencies for their participation in the consultation and decision-making workshops.

Note: These terms of reference may be applied to one individual consultant or several consultants specialized in each of the consultancy fields.

### **6.5 PROFILE OF THE EXTERNAL CONSULTANT(S)**

#### **Profile of Communication Specialist(s)**

Preferably a professional in the area of strategic communications with proven experience in the development of mass communication media campaigns aimed at raising awareness of environmental issues. Also desirable is extensive experience in cultural and production aspects in the Bayano and Darien regions.



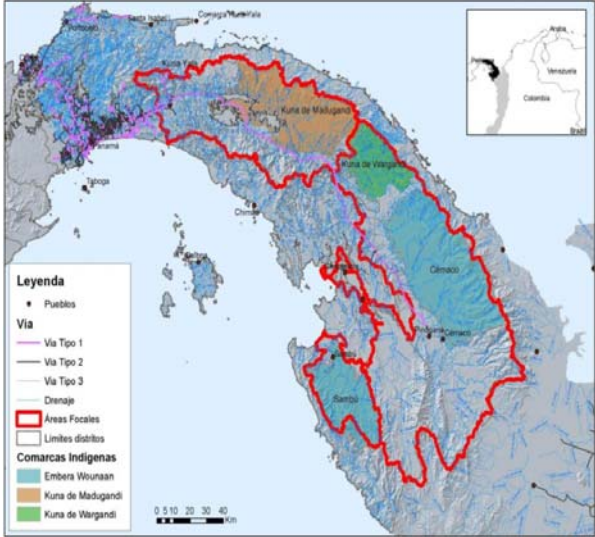
**Duties:**

- Prepare a work plan and budget for the organization of consultation and consensus-building workshops on the development of a national responsible purchasing campaign.
- Design the terms of references of the sub-contract for the design and development of campaign materials.
- Design and implement a project progress communication strategy.
- Design and implement a practical system to monitor the impacts of the outreach campaign.
- Regularly report to the Project Director on the progress made in these consultancies.
- Ensure the timely preparation and submission of invitations to the relevant agencies for their participation in the consultation and decision-making workshops.

Note: These terms of reference may be applied to one individual consultant or several consultants specialized in each of the consultancy fields.

**ANNEX: Responses to reviewer comments/recommendations [TFL-PD 044-13]**

Reviewer Comments /Recommendations	Amendment(s) made	Page #
<p><i>General Comments: The approach and the project appear sound. The project refers to the need for ANAM capacity building. The actual delivery of such capacity building could however be more emphasized.</i></p>	<p>Project summary:</p> <p>This proposal is complementary to an ITTO project on "Tropical Forest Governance in the Region of Darien, Panama" [PD 602/11 Rev.3 (F), which was approved during the 49th Session of the International Tropical Timber Council in Gabon and is expected to start in 2014] as it proposes actions to strengthen ANAM's institutional capacity through the implementation of an institutional and governance framework for the prevention and control of illegal logging by developing an efficient timber traceability mechanism and promoting responsible forest management and trade in the natural forests of Panama through an awareness campaign on responsible purchasing practices.</p> <p>The macro outcomes expected at project completion to strengthen ANAM's management capacities are:</p> <ul style="list-style-type: none"> <li>✓ Development and implementation of an integrated system for the monitoring and control of timber harvesting and trade in the Eastern Region of Panama (Bayano and Darien) as a pilot system to be replicated throughout the country. The system will include monitoring actions in low-intensity harvesting sites and timber traceability up to the storage and marketing stages. A fundamental component in this strengthening process will be the training of ANAM's personnel in the adequate use of integrated monitoring and control tools for the management, harvesting, production and marketing of timber and timber products.</li> <li>✓ Raising community awareness about forest degradation and illegal logging and trade through the design and implementation of an awareness-raising campaign for consumers regarding the positive impact of responsible purchasing practices on the conservation of forest resources in Panama. This campaign will be supplemented by actions aimed at promoting the conclusion of responsible purchasing agreements between key stakeholders of the production and marketing chain.</li> </ul>	<p>Page #3</p>
<p><i>Origin: Should include a statement about ANAM needs in terms of training and governance of forest natural resources to provide context for the proposal.</i></p>	<p>1. PROJECT CONTEXT</p> <p><i>1.1 Origin</i></p> <p>As a result of the declaration of Basic Principles and Guidelines for the Forest Policy of Panama, promulgated through Executive Decree No. 2 of 17 January 2003, ANAM officially presented a National Forest Development Plan in 2008. This Plan, which is aimed at achieving sustainable forest development, was derived from an intensive diagnostic study on the needs of the country and the institution responsible for forest management. It includes various programs such as the Forest Administration Program, which proposes actions to improve monitoring and control and increases the participation of all key stakeholders of the production and marketing chain.</p> <p>The National Forest Development Plan has led <i>inter alia</i> to a program to promote community forest management, which received financial support from ITTO through project PD 405/06 Rev.3 (F): "<i>Extending the area under sustainable forest management in the forest lands of the Emberá-Wounaan Comarca, Darien, Panama</i>", implemented by WWF between 2009 and 2011. This project conducted an analysis and</p>	<p>Page # 6</p>

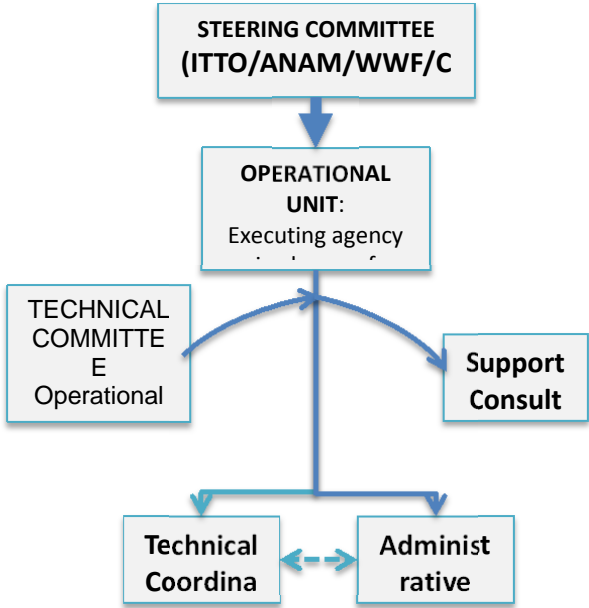
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	<p>produced a proposal for the development of a strategy to prevent and control illegal logging. This strategy stresses the urgent need to develop actions aimed at strengthening forest governance in the region. This need was assessed during a sectoral survey carried out with various stakeholders, including forest consultants, ANAM officers, DEMAFOR, forest professionals, timber sale outlets, forest industry, timber traders, transport operators, forest workers, community timber producers, timber trade intermediaries, leaders of community forest enterprises, WWF staff, and the Municipal Authorities of Cemaco and the Embera-Wounaan Comarca.</p>	
<p><b>Origin:</b> <i>Should include a statement about ANAM needs in terms of training and governance of forest natural resources to provide context for the proposal.</i></p>	<p>This proposal is complementary to an ITTO project on "Tropical Forest Governance in the Region of Darien, Panama" [PD 602/11 Rev.3 (F), which was approved during the 49th Session of the International Tropical Timber Council in Gabon and is expected to start in 2014] as it proposes actions to strengthen ANAM's institutional capacity through the implementation of an institutional and governance framework for the prevention and control of illegal logging by developing an efficient timber traceability mechanism and promoting responsible forest management and trade in the natural forests of Panama through an awareness campaign on responsible purchasing practices.</p>	Page # 6
<p><b>Geographic location:</b> <i>Map of the target area should also be shown under "Geographical location".</i></p> <p>.....</p>	<p><b>1.1 TARGET AREA</b></p> <p><b>1.1.1 Geographic location</b></p> <p>Figure 1. Map of project area – Eastern Region of Panama</p>  <p>SOURCE: WWF 2013</p>	Page # 11
<p><b>Social, cultural, economic and environmental aspects:</b> The social, cultural, economic and cultural aspects of the project target area are well elaborated. However, the social, cultural economic and environment impacts of the project on target area is not well explained.</p>	<p><b>1.3.2 Social, cultural, economic and environmental aspects</b></p> <ul style="list-style-type: none"> <li><b>Natural and environmental factors</b></li> </ul> <p>The implementation of this project will have a positive impact on the conservation of the integrity of forest ecosystems that are currently threatened by the selective harvesting of a limited number of species. By implementing an integrated system to monitor and control timber harvesting and marketing in the Eastern Region of Panama (Bayano</p>	Page # 12

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	<p>and Darien) as a pilot system to be replicated throughout the country and incorporating monitoring actions in low-intensity harvesting sites, it will address one of the main causes of forest degradation and enhance the conservation of the potential of forests for the provision of (timber and non-timber) products and environmental services. Furthermore, by improving forest harvesting monitoring and control, the project will indirectly contribute to reducing wildlife hunting for direct consumption by informal workers, the capture of wild fauna and disturbance of vital habitats for threatened or vulnerable species, trafficking of species, and reduction of populations of endemic and/or threatened species.</p> <ul style="list-style-type: none"> <li>• <b>Social, economic and cultural aspects</b></li> </ul> <p>A number of positive project impacts have been identified as follows. The project will reduce the pressure currently exerted on forests located in indigenous community areas in the region, which is affecting the livelihoods of these communities. It will also contribute to reducing and controlling encroachment on indigenous community territories and will prevent resource access related conflicts between local community members and between the communities and other stakeholders of the forest production and marketing chain.</p> <p>In the institutional field, the project will help improve ANAM's relationship with forest sector stakeholders and the community in general through agreements to prevent and control illegal activities and address existing gaps that lead to corruption and infringement of formal procedures. The proposed communication campaign is expected to increase the participation of multiple civil society stakeholders in the establishment of effective governance structures.</p> <p>This project will have a positive impact on tax evasion, which is currently taking place as a result of illegal activities in the forest sector, in the municipalities, in the indigenous territories (<i>comarcas</i>) and throughout the region, thus having a positive impact in the whole country.</p>	<p>Page # 13</p>
<p><b>Institutional set up and organizational issues:</b> Proposal should clearly define the institutional arrangements regarding the roles of WWF, ANAM and other stakeholders in the implementation of the project.</p>	<p><b>2.1.1 Institutional set-up and organizational issues</b></p> <p>Thanks to its close collaboration with WWF in the implementation of the ITTO-financed project PD 405/06 Rev.3 (F): "<i>Extending the area under sustainable forest management in the forest lands of the Emberá-Wounaan Comarca, Darien, Panama</i>", ANAM has been able to promote a change in the forest harvesting model used in the Embera-Wounaan Comarca, which has now been extended to other areas such as the Kuna Wargandi Comarca. The participation of WWF has been a key factor in the progress that has been achieved, given the experience of this organization in the development of similar processes and its technical capacity.</p> <p>Given the success of this experience, ANAM believes it should continue its collaboration with WWF-Panama Office as project co-executing agency, to assist in the management of the resources requested to the International Tropical Timber Organization (ITTO) and contribute the expertise gained in the implementation of similar initiatives, particularly in neighbouring countries such as Colombia<sup>9</sup>. As an experienced independent organization, WWF will be able to provide technical assistance and facilitate the necessary consensus-building</p>	<p>Page # 20</p>

<sup>9</sup> WWF has been a key player in the success achieved with the Cross-sectoral Pact for Legal Timber in Colombia ([http://www.wwf.org.co/sala\\_redaccion/publicaciones/?199930/Pacto-intersectorial-por-la-madera-legal-en-Colombia](http://www.wwf.org.co/sala_redaccion/publicaciones/?199930/Pacto-intersectorial-por-la-madera-legal-en-Colombia)).

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	<p>spaces so that key stakeholders of the Panamanian forest sector may reach agreements to contribute to the achievement of project objectives. Furthermore, WWF has the expertise required for the design of sustainable forest management instruments that will strengthen ANAM for the improved administration and control of the forest sector.</p> <p>ANAM and WWF have signed a collaboration agreement for the implementation of actions aimed at reverting forest ecosystem degradation in the region. Under this agreement, both institutions have been working since 2004 to promote an alternative model for sustainable forest management and responsible trade in support of local communities and the forest industry in the country.</p> <p><b>4.1 Organization structure and stakeholder involvement mechanisms</b></p> <p><b>4.1.1 Executing agency</b></p> <p>The WWF office in Panama will be responsible for the administration of project resources and will act as co-executing agency together with ANAM. To this end, and as shown in the budget tables, WWF will make a substantial financial contribution to the implementation of the project, in particular by providing its expertise in the implementation of forest governance strengthening projects. In addition, WWF has proven experience in administrative issues and budget execution for the management of ITTO funds.</p> <p>Project management will be coordinated from its central office, located in Ciudad del Saber, Clayton, Panama. WWF will hire an accountant who will be responsible for managing project finances and budget execution in accordance with the disbursement schedule established in the work plan and approved by the Project Steering Committee (PSC) and the Executive Council of ITTO. WWF has the support of the legal firm "Sucre, Arias &amp; Reyes", which is in charge of dealing with all legal aspects of the organization. In addition, WWF receives the support of an auditing firm for the preparation of financial statements, which will carry out the auditing of project accounts, including the funds provided by ITTO.</p> <p><b>4.1.3 Project decision-making and participatory mechanisms</b></p> <p>Several institutions will participate in the implementation of the project, on the one hand, to ensure compliance with ITTO policies and procedures and approval of budgets and work plans for project implementation (by the Project Steering Committee) and on the other hand, to promote/facilitate implementation and provide for technical, operational and programming/logistic consistency (by the project executing agency – WWF) and ensure the involvement and participation of relevant forest stakeholders, organizations and professional associations (through the Technical Committee). This will ensure the adoption of the strategy by all stakeholders in the different links of the forest production chain.</p> <p>A. Project Steering Committee (PSC): This committee will be responsible for approving budgets and yearly plans of operation. In addition, it will monitor project actions to ensure their consistency with project objectives. The PSC will be made up of representatives of the following institutions:</p>	<p>Page # 46</p> <p>Page # 46-47</p>

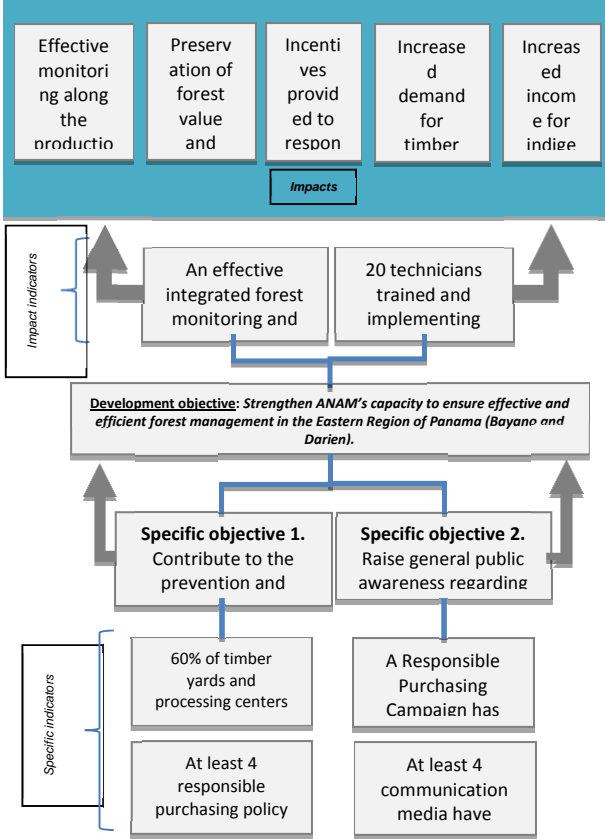
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	<ul style="list-style-type: none"> <li data-bbox="678 195 1279 422">– ANAM: This agency is ITTO's contact point in Panama. It is responsible for ensuring the sustainable and responsible management of natural resources in the country. In addition to the submission and negotiation of the project with ITTO, ANAM will ensure its adequate implementation as it is in charge of guiding the national forest policy and adopting and implementing rules and strategies for the management of the forest sector.</li> <li data-bbox="678 453 1279 596">– ITTO: The organization responsible for approving and ensuring the necessary financial resources for the implementation of the project. ITTO officials will participate in the Project Steering Committee meetings for the approval of plans and budgets as required.</li> <li data-bbox="678 627 1279 854">– WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.</li> <li data-bbox="678 886 1279 1029">– CONAGEFOR: This agency groups public and civil society institutions. It was established as a consultative and coordination agency for the development of policies as required to promote social and economic growth in the forest sector.</li> <li data-bbox="678 1060 1279 1142">– Small Timber Producers' Association of Eastern Panama and Darien (APMED): It represents key stakeholders in the forest production and marketing chain.</li> <li data-bbox="678 1173 1279 1262">– Forest Management Committee of the Emberá-Wounaan Comarca (CCGF): This organization groups the forest enterprises and traditional authorities of the Comarca.</li> </ul> <p data-bbox="634 1293 1230 1457">B. Operational Unit: This unit will be responsible for the administration of resources, recruitment procedures, coordination arrangements and technical monitoring of all project activities. It will be made up of the staff of the local WWF office. It will have an administrative and a technical coordinator.</p> <ul style="list-style-type: none"> <li data-bbox="678 1493 1279 1719">– WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.</li> </ul> <p data-bbox="634 1751 1279 1860">C. Project Technical Committee: This committee will facilitate the participation and involvement of forest stakeholders, organizations and professional associations. The following institutions will participate in this committee:</p> <ul style="list-style-type: none"> <li data-bbox="678 1892 1279 1944">– ANAM: This agency is ITTO's contact point in Panama. It is responsible for ensuring the sustainable and responsible</li> </ul>	

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	<p>management of natural resources in the country. In addition to the submission and negotiation of the project with ITTO, ANAM will ensure its adequate implementation as it is in charge of guiding the national forest policy and adopting and implementing rules and strategies for the management of the forest sector.</p> <ul style="list-style-type: none"> <li>- WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.</li> <li>- CIFP and ANTEFOR: As the umbrella associations grouping forest professionals, they will support the implementation of the forest regency system, setting up a regents' committee, providing training, issuing certification and evaluating the performance of forest regents.</li> </ul> <p style="text-align: center;">Figure 6. Project organizational chart (See main body of the proposal)</p>  <pre> graph TD     SC["STEERING COMMITTEE (ITTO/ANAM/WWF/C)"] --&gt; OU["OPERATIONAL UNIT: Executing agency"]     OU --&gt; TC["TECHNICAL COMMITTEE Operational"]     OU --&gt; SCONS["Support Consult"]     OU --&gt; TCOR["Technical Coordina"]     OU --&gt; ADMIN["Administ rative"]     TCOR &lt;--&gt; ADMIN   </pre>	Page#48								
<p>Development objective and impact indicators: Emphasis should be on ANAM capacity building (governance) and then on the Forest Registry (logical inconsistency)</p>	<p>2.1.4 Logical Framework Matrix</p> <table border="1" data-bbox="634 1682 1279 1940"> <thead> <tr> <th>STRATEGY OF INTERVENTION</th> <th>IMPACT INDICATORS</th> <th>MEANS OF VERIFICATION</th> <th>KEY ASSUMPTIONS</th> </tr> </thead> <tbody> <tr> <td>DEVELOPMENT OBJECTIVE: Strengthen ANAM's capacity to ensure effective and efficient forest management in the Eastern Region of Panama (Bayano and Darien).</td> <td>An effective integrated forest monitoring and control system is operating within ANAM's structure.  20 ANAM technicians have been trained and are efficiently and effectively implementing the integrated forest monitoring and control</td> <td>Reports from the Integrated Forest Monitoring and Control System.  Reports of training workshops and record of technicians involved in the implementation of the integrated forest monitoring and control system.</td> <td>There are no technical, social, political or financial barriers hindering the implementation of the integrated forest monitoring and control system.</td> </tr> </tbody> </table>	STRATEGY OF INTERVENTION	IMPACT INDICATORS	MEANS OF VERIFICATION	KEY ASSUMPTIONS	DEVELOPMENT OBJECTIVE: Strengthen ANAM's capacity to ensure effective and efficient forest management in the Eastern Region of Panama (Bayano and Darien).	An effective integrated forest monitoring and control system is operating within ANAM's structure.  20 ANAM technicians have been trained and are efficiently and effectively implementing the integrated forest monitoring and control	Reports from the Integrated Forest Monitoring and Control System.  Reports of training workshops and record of technicians involved in the implementation of the integrated forest monitoring and control system.	There are no technical, social, political or financial barriers hindering the implementation of the integrated forest monitoring and control system.	Page # 24-26
STRATEGY OF INTERVENTION	IMPACT INDICATORS	MEANS OF VERIFICATION	KEY ASSUMPTIONS							
DEVELOPMENT OBJECTIVE: Strengthen ANAM's capacity to ensure effective and efficient forest management in the Eastern Region of Panama (Bayano and Darien).	An effective integrated forest monitoring and control system is operating within ANAM's structure.  20 ANAM technicians have been trained and are efficiently and effectively implementing the integrated forest monitoring and control	Reports from the Integrated Forest Monitoring and Control System.  Reports of training workshops and record of technicians involved in the implementation of the integrated forest monitoring and control system.	There are no technical, social, political or financial barriers hindering the implementation of the integrated forest monitoring and control system.							

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	<p><b>Specific objective 1:</b> Contribute to the prevention and control of illegal forest logging and trade in the Eastern Region of Panama (Bayano and Darien).</p>	<p><u>system.</u></p> <p>By the end of the project, 60% of timber yards and processing centers in the Eastern Region of Panama (Bayano and Darien) (as compared to the year 1 baseline) have been registered in the Forest Registry and are complying with timber origin declaration requirements.</p> <p>At least 4 responsible purchasing policy documents have been signed with key stakeholders in the forest production and marketing chain.</p>	<p>Reports from the Integrated Forest Monitoring and Control System.</p>	<p>Interest and political will at the inter-institutional level and willingness of key stakeholders along the forest production and marketing chain to prevent and control illegal forest logging and trade.</p>	
	<p><b>Output 1:</b> An integrated timber harvesting and marketing monitoring and control system has been validated and implemented in the Eastern Region of Panama (Bayano and Darien).</p>	<p>By the end of year 1, a baseline diagnostic study has been carried out on the status of the forest information system in the Eastern Region of Panama (Bayano and Darien) and an integrated timber harvesting and marketing monitoring and control system has been designed for the Eastern Region of Panama (Bayano and Darien) where most of the country's timber comes from.</p> <p>By the end of year 2 an integrated timber harvesting, production, storage and marketing system has been implemented and validated in the Eastern Region of Panama (Bayano and Darien).</p>	<p>Document on baseline diagnostic study on the current status of ANAM's forest information system.</p> <p>Design of the integrated timber harvesting, production, storage and marketing monitoring and control system for Panama.</p> <p>Integrated timber harvesting, production, storage and marketing monitoring and control system validated and operational on a pilot scale in the Eastern Region of Panama (Bayano and Darien).</p>	<p>The system can be easily adopted by ANAM's technicians.</p>	
	<p><b>Output 2:</b> An improved timber traceability system with capacity to monitor timber production from the harvesting to the forest product marketing stage.</p>	<p>By the end of year 1, a baseline diagnostic study has been carried out on the effectiveness of the "forest mark" traceability system and a work plan has been developed for the implementation of remedial actions to improve the government's timber traceability system.</p> <p>In the second year of the project, ANAM is implementing the action plan to improve its timber traceability system and validates the system in the field with the active participation of key stakeholders along the production and marketing chain.</p> <p>By the end of year 2, there is an improved traceability system with capacity to monitor timber production from the harvesting stage to the forest product marketing stage.</p>	<p>Document on diagnostic study on the current traceability system implemented by ANAM in Panama.</p> <p>Action plan to improve the current traceability system of ANAM.</p> <p>Traceability system validated by ANAM, operational and linked to the integrated monitoring system.</p>	<p>ANAM and key stakeholders in the production and marketing chain reach an agreement for the implementation of the timber traceability system.</p>	



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	<p><b>Output 3:</b> The capacities of ANAM's personnel have been developed for the adequate implementation of forest policies and integrated management, harvesting and marketing monitoring tools.</p>	<p><b>By the end of year 1,</b> national weaknesses in the implementation of forest policies and integrated management, harvesting and marketing monitoring tools have been identified and a strategic capacity-building plan has been designed.</p> <p><b>During the second year,</b> a training program has been implemented for the technical personnel of ANAM and other identified institutions, and at least 4 responsible purchasing policies have been signed between key stakeholders in the forest production and marketing chain.</p>	<p>Diagnosis of national capacity weaknesses in the implementation of forest policies and monitoring tools.</p> <p>Training curricula/program for the personnel of ANAM and other selected institutions.</p> <p>Reports and lists of participants of training events.</p>	<p>Active participation of technicians from ANAM and partner institutions in training activities.</p> <p>Interest and political will at the inter-institutional level to improve the integrated management, harvesting and marketing monitoring system.</p>	
	<p><b>Specific objective 2:</b> Raise general public awareness regarding forest degradation and illegal forest logging and trade.</p>	<p>At least 4 communication media have joined the National Responsible Purchasing Campaign.</p> <p>At least 4 responsible purchasing policy documents have been signed by key stakeholders in the forest production and marketing chain.</p>	<p>Support agreements.</p> <p>Signed responsible purchasing policy documents.</p>	<p>There is a positive response to the National Responsible Purchasing Campaign.</p>	
	<p><b>Output 4:</b> A National Responsible Purchasing Campaign.</p>	<p><b>By the end of year 1,</b> a National Responsible Purchasing Campaign has been designed for Panama with the participation of national stakeholders linked to natural forest management activities.</p> <p><b>By the end of year 2,</b> at least 4 responsible purchasing policy documents have been signed with key stakeholders in the forest production and marketing chain.</p>	<p>Design of national responsible purchasing campaign approved by institutional partners in Panama.</p> <p>Memoranda of understanding with institutions and companies joining the campaign.</p> <p>Promotional material for the National Responsible Purchasing Campaign.</p> <p>Responsible purchasing policy documents signed.</p>	<p>Consensus agreement reached with relevant national institutions related to the forest sector for their participation in and support to the National Responsible Purchasing Campaign.</p> <p>Positive response of the local industry to responsible purchasing commitments.</p>	
<p><b>2.2 Objectives</b></p> <p><b>2.2.1 Development objective</b></p> <p>Strengthen ANAM's capacity to ensure effective and efficient forest management.</p> <p>Impact indicators are:</p> <p>c) An integrated forest monitoring and control system has been established.</p> <p>d) 20 ANAM technicians have been trained and are efficiently and effectively implementing the integrated forest monitoring and control system.</p> <p><b>2.2.2 Specific objectives</b></p> <p><b>2.2.2.1 Contribute to the prevention and control of illegal forest logging and trade in the Eastern Region of Panama (Bayano and Darien).</b></p> <p>Indicators:</p> <p>c) 60% of timber yards and processing centers have been</p>					

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	<p>registered in the Forest Registry and are complying with timber origin declaration requirements.</p> <p>d) At least 4 responsible purchasing policy documents have been signed with key stakeholders in the forest production and marketing chain.</p> <p><b>2.2.2.2 Raise general public awareness regarding forest degradation and illegal forest logging and trade.</b></p> <p>c) A Responsible Purchasing Campaign has been designed and implemented.</p> <p>d) At least 4 communication media have joined and support the National Responsible Purchasing Campaign.</p> <p>Figure 5. Objectives Tree (See main body of proposal)</p>  <p><b>3. DESCRIPTION OF PROJECT INTERVENTIONS</b></p> <p><b>3.1 Outputs and activities</b></p> <p>Output 1: An integrated timber harvesting and marketing monitoring and control system has been validated and implemented in the Eastern Region of Panama (Bayano and Darien).</p> <p>Activity 1.1 Implement a study to identify main weaknesses in the current monitoring system used by Panama's forest authorities,</p>	

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	<p>including registration systems.</p> <p>Activity 1.2 Develop and validate an integrated timber harvesting, production, storage and marketing monitoring and control system.</p> <p>Output 2: An improved timber traceability system with capacity to monitor timber production from the harvesting stage to the forest product marketing stage.</p> <p>Activity 2.1 Implement a study to identify critical weaknesses in the implementation of the timber traceability system currently used by ANAM in Panama.</p> <p>Activity 2.2 Develop and implement an action plan to improve the current traceability system used by environmental authorities, including a bar-code based monitoring system.</p> <p>Activity 2.3 Carry out the field validation of the traceability system including the bar-code system.</p> <p>Activity 2.4 Train system users on the adequate implementation of the traceability tools developed by the project.</p> <p>Output 3: A training program for ANAM's personnel in the adequate implementation of forest policies and integrated management, harvesting and marketing monitoring tools.</p> <p>Activity 3.1 Carry out a diagnosis of national capacity weaknesses in the implementation of forest policies and monitoring tools.</p> <p>Activity 3.2 Develop a capacity building plan and curricula for training courses to strengthen the skills and knowledge of the personnel to be trained.</p> <p>Activity 3.3 Implement the capacity-building plan through the provision of training in coordination with the technical personnel of Panama's environmental authorities.</p> <p>Output 4: Increased public awareness about responsible purchasing through a national campaign.</p> <p>Activity 4.1 Develop a National Responsible Purchasing Campaign in coordination with stakeholders involved in the forest production and marketing chain in Panama.</p> <p>Activity 4.2 Implement the National Responsible Purchasing Campaign.</p> <p>Activity 4.3 Facilitate the signing of at least 4 responsible purchasing policy documents with key stakeholders in the forest production and marketing chain.</p> <p style="text-align: center;">Figure 6. Work Breakdown Structure</p> <p><i>(See main body of the proposal – page 29)</i></p>	
<p>ITTO Budget by Component: EA administrative costs could be upped to 15% of project cost, but the EA should eliminate the finance accountant requested from the ITTO</p>	<p>3.4 Budget</p> <p><i>(See budget tables in the main body of the proposal – pages 32-44)</i></p>	<p>Page # 32-44</p>

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<p>budget. Executing agency costs should not only come from ITTO. The budget should be reduced accordingly</p> <p><b>Executing Agency Budget by Component:</b> Same as above. EA administrative costs could be upped to 15% of project cost, but the EA should eliminate the finance accountant requested from the ITTO budget. Executing agency costs should not only come from ITTO. The budget should be reduced accordingly</p>																																						
<p><b>Assumptions and risks:</b> key risk is to not adequately realize the capacity building of ANAM. This needs to be identified and addressed</p>	<p><b>3.5 Assumptions, risks, sustainability</b></p> <p><b>3.5.1 Assumptions and risks</b></p> <table border="1" data-bbox="625 646 1289 1528"> <thead> <tr> <th>No.</th> <th>Assumptions</th> <th>Potential risks</th> <th>Mitigation measures</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>There is agreement among forest sector stakeholders at multiple levels to implement an institutional strengthening process aimed at improving ANAM's management capacity.</td> <td>ANAM's does not recognize its weaknesses in the development of effective and efficient forest management.</td> <td>Implement an institutional process to improve ANAM's effective and efficient forest with the participation of other</td> </tr> <tr> <td>2.</td> <td>There is agreement among forest sector stakeholders at multiple levels to implement the integrated forest harvesting, production and marketing monitoring and control system</td> <td>Key stakeholders do not support ANAM's initiative</td> <td>Implement a comprehensive outreach and communication process at project start-up</td> </tr> <tr> <td>3.</td> <td>Illegal loggers and other interest groups get involved in the initiatives related to the strategy</td> <td>A sector of the production chain does not abide by the provisions of the strategy</td> <td>Implement an active and ongoing outreach and information process</td> </tr> <tr> <td>4.</td> <td>Tangible support from the police force to implement the strategy</td> <td>Limited participation of the police force</td> <td>Develop and implement a coordinated institutional communication process</td> </tr> <tr> <td>5.</td> <td>Progress in the planning and administration of forest lands under sustainable forest management</td> <td>The targets of the National Forest Strategy are not met</td> <td>International cooperation helps to expand sustainable forest management</td> </tr> <tr> <td>6.</td> <td>Public and/or private agencies agree to sign the Responsible Purchasing Policy Documents</td> <td>State bureaucratic requirements delay the responsible purchase of timber</td> <td>Convene public events so as to ensure the achievement of the State's institutional commitments</td> </tr> <tr> <td>7.</td> <td>There is social commitment and social willingness to verify harvesting permits and fight against illegal timber trade</td> <td>Some stakeholders continue to support the illegal trade of timber and timber products</td> <td>Implement a functional outreach campaign to promote the benefits and scope of the strategy</td> </tr> <tr> <td>8.</td> <td>Increased number of informed end consumers aware of the consequences of illegal forest logging and trade.</td> <td>The key stakeholders identified are not willing to undertake the commitment to work towards reducing and controlling illegal logging and trade.</td> <td>The National Responsible Purchasing Campaign envisaged in the project will be highly instrumental in raising awareness among all stakeholders in general but in particular, end consumers with the power to demand responsible production and marketing in support of sustainable forest management.</td> </tr> </tbody> </table>	No.	Assumptions	Potential risks	Mitigation measures	1.	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<p><b>Project Steering Committee:</b> Some local stakeholders may be considered to be part of the PSC</p>	<p><b>4.1.3 Project decision-making and participatory mechanisms</b></p> <p>Several institutions will participate in the implementation of the project, on the one hand, to ensure compliance with ITTO policies and procedures and approval of budgets and work plans for project implementation (by the Project Steering Committee) and on the other hand, to promote/facilitate implementation and provide for technical, operational and programming/logistic consistency (by the project executing agency – WWF) and ensure the involvement and participation of relevant forest stakeholders, organizations and professional associations (through the Technical Committee). This will ensure the adoption of the strategy by all stakeholders in the different</p>	Page # 46-48																																				

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	<p>links of the forest production chain.</p> <p>A. Project Steering Committee (PSC): This committee will be responsible for approving budgets and yearly plans of operation. In addition, it will monitor project actions to ensure their consistency with project objectives. The PSC will be made up of representatives of the following institutions:</p> <ul style="list-style-type: none"> <li>– ANAM: This agency is ITTO's contact point in Panama. It is responsible for ensuring the sustainable and responsible management of natural resources in the country. In addition to the submission and negotiation of the project with ITTO, ANAM will ensure its adequate implementation as it is in charge of guiding the national forest policy and adopting and implementing rules and strategies for the management of the forest sector.</li> <li>– ITTO: The organization responsible for approving and ensuring the necessary financial resources for the implementation of the project. ITTO officials will participate in the Project Steering Committee meetings for the approval of plans and budgets as required.</li> <li>– WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.</li> <li>– CONAGEFOR: This agency groups public and civil society institutions. It was established as a consultative and coordination agency for the development of policies as required to promote social and economic growth in the forest sector.</li> <li>– Small Timber Producers' Association of Eastern Panama and Darien (APMED): It represents key stakeholders in the forest production and marketing chain.</li> <li>– Forest Management Committee of the Emberá-Wounaan Comarca (CCGF): This organization groups the forest enterprises and traditional authorities of the Comarca.</li> </ul> <p>B. Operational Unit: This unit will be responsible for the administration of resources, recruitment procedures, coordination arrangements and technical monitoring of all project activities. It will be made up of the staff of the local WWF office. It will have an administrative and a technical coordinator.</p> <ul style="list-style-type: none"> <li>– WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of</li> </ul>	

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	<p>the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.</p> <p>C. Project Technical Committee: This committee will facilitate the participation and involvement of forest stakeholders, organizations and professional associations. The following institutions will participate in this committee:</p> <ul style="list-style-type: none"> <li>– ANAM: This agency is ITTO's contact point in Panama. It is responsible for ensuring the sustainable and responsible management of natural resources in the country. In addition to the submission and negotiation of the project with ITTO, ANAM will ensure its adequate implementation as it is in charge of guiding the national forest policy and adopting and implementing rules and strategies for the management of the forest sector.</li> <li>– WWF: A non-political, non-governmental organization of global scope in natural resource conservation policies. It will be responsible for the technical and financial implementation of the project and for submitting technical and financial reports according to schedule. In addition, WWF will be responsible for the conduction of the project's annual audits and for regularly providing updated information on project progress to the Steering Committee.</li> <li>– CIFP and ANTEFOR: As the umbrella associations grouping forest professionals, they will support the implementation of the forest regency system, setting up a regents' committee, providing training, issuing certification and evaluating the performance of forest regents.</li> </ul> <p style="text-align: center;">Figure 6. Project organizational chart (See main body of the proposal – page 48)</p>	

*Please expand table as needed*