

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

TITLE	PROTECTION AND RESTORATION OF FORESTED WATER CATCHMENT, REGULATION AND RECHARGE AREAS IN THE UPPER SALINAS RIVER WATERSHED, GUATEMALA, TO ENSURE WATER SUPPLY FOR GUATEMALAN COMMUNITIES
SERIAL NUMBER	PD 896/19 Rev.2 (F)
COMMITTEE	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY	GOVERNMENT OF GUATEMALA
ORIGINAL LANGUAGE	SPANISH

SUMMARY

Guatemala has an estimated (2010) forest cover of 3,722,595 hectares, the equivalent of 34% of the national land area. However, as a result of intense agricultural encroachment, illegal logging and other factors, the deforestation rate was 29,222.4 hectares per year for 2006-2010 (1.0% per year of existing forests in 2006). The loss of forest cover affects the amount of water available to supply Guatemala's population, resulting in water shortages, and causing an impact on living standards. This situation has become particularly critical since Guatemala has been identified as one of the most vulnerable countries to extreme weather events and other consequences of climate change.

The department of Quiché, located 164 km from Guatemala City, in the upper Salinas River watershed, is one of the departments most affected by this problem, with an annual loss of forest cover estimated at 1,742 hectares (equivalent to 0.68% of its cover).

An awareness of the significance of forests and their link to water-related environmental services has led Water for People – WFP to develop this project proposal in coordination with the National Forest Institute – INAB. The project seeks to maintain, recover and increase forest cover over a minimum area of 1000 hectares, in areas of high and very high water recharge significance in the upper Salinas River Watershed, and thus to ensure water supply for at least 100 communities in the municipalities of San Antonio Ilotenango, San Andrés Sajcabajá, San Bartolomé Jocotenango, Santa Cruz del Quiché and San Pedro Jocopilas, as well as to implement two compensation mechanisms for water environmental services as a way of strengthening water governance in the area and ensuring the social, economic and environmental sustainability of water resources.

Project work will be jointly implemented in coordination with local municipal councils, communities and other stakeholders in the project's target area. In addition, municipal and community empowerment will be promoted through the planning and implementation of participatory municipal plans for the protection of water sources in order to guarantee the continuity of these actions after project completion.

EXECUTING AGENCY	WATER FOR PEOPLE (WFP)
COLLABORATING AGENCY	NATIONAL FOREST INSTITUTE (INAB)
DURATION	24 MONTHS
APPROXIMATE STARTING DATE	UPON APPROVAL

BUDGET AND PROPOSED SOURCES OF FINANCE:	Source	Contribution in US\$
	ITTO	150,000
	WFP	126,875
	INAB	37,575
	TOTAL	314,450

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PROJECT BRIEF

1. Current situation and problems to be solved by the project

Guatemala has an estimated (2010) forest cover of 3,722,595 hectares¹, the equivalent of 34% of the national area. As a result of intense agricultural encroachment, illegal logging and other factors, the deforestation rate was 29,222.4 hectares per year for 2006-2010 (1.0% per year of existing forests in 2006). The loss of forest cover affects the amount of water available to supply Guatemala's population, resulting in water shortages, and causing an impact on living standards. This situation has become particularly critical since Guatemala has been identified as one of the most vulnerable countries to extreme weather events and other consequences of climate change.

Over recent years, the Government of Guatemala, through the National Forest Institute (Instituto Nacional de Bosques, INAB), has been striving to maintain and conserve forests in strategic water catchment and regulation areas, by implementing programmes and projects to strengthen and improve forest management, including the Forest Incentives Programme –PINFOR–, Forest Incentives Programme for Small Forest or Agroforestry Land Holders –PINPEP– and more recently the PROBOSQUE programme established by the Law on the Promotion of the Establishment, Recovery, Restoration, Management, Production and Protection of Forests in Guatemala.

Water for People (WFP) operates in 9 countries globally, including Honduras, Nicaragua, Peru and Bolivia in Latin America as well as Malawi, Rwanda and Uganda in Africa, and India in Asia. It has operated in Guatemala since 1994, to facilitate water access for communities in the Department of Quiché in the upper Salinas River watershed, in the western highlands of Guatemala. This service is directly associated with forests through water management.

The annual loss of forest cover in the Department of Quiché, in the upper Salinas River watershed, is estimated at 1,742 hectares (the equivalent of 0.68% of its cover); this has resulted in the following major effects:

- a) Degradation of forests in forested water catchment, regulation and recharge lands;
- b) Reduction of quality and quantity of water available to the population of the Department.

The project "Protection and restoration of forested water catchment, regulation and recharge areas in the upper Salinas River Watershed, Guatemala, to ensure water supply for Guatemalan communities" is an effort to help solve the above problem. This is a local project, since its work will focus mainly in 06 municipalities in the upper Salinas River watershed in the Department of Quiché, implementing actions to conserve and restore areas of very high water recharge rates in these municipalities, and to establish compensation mechanisms for water environmental services that help improve water quality and quantity for the population.

Water For People (WFP) will be the executing agency of this project; it will take on responsibility for coordination and outputs, and will ensure compliance with the main indicators and assumptions in the Logical Framework Matrix of this proposal. The Collaborating Agency will be the National Forest Institute (INAB), which will provide technical support.

2. Development and specific objectives

The development objective of the project is: "To help maintain and recover forest cover in watershed areas of Guatemala".

The specific objective of the project is: "To ensure the conservation and restoration of areas of high and very high water recharge rates to contribute to the availability of water quantity and quality for the population of five municipalities in Quiché, Guatemala".

¹ Map of Guatemala's Forest Cover 2010 and Forest Cover Dynamics 2006-2010. Universidad del Valle de Guatemala/Instituto Nacional de Bosques/Consejo Nacional de Áreas Protegidas/Universidad Rafael Landívar. Guatemala, April 2012

3. Beneficiaries and Outcomes

The main beneficiaries will be 100 communities situated in the upper Salinas River watershed, in the Municipalities of: San Antonio Ilotenango, San Andrés Sajcabajá, San Bartolomé Jocotenango, Santa Cruz del Quiché and San Pedro Jocopilas.

Expected outcomes at project completion include:

- High and very high water recharge areas in the upper Salinas River watershed are conserved and restored.
- Improved availability of water quantity and quality for human consumption in 100 communities situated in the upper Salinas River watershed.
- At least 2 compensation mechanisms have been established for water environmental services in the upper Salinas River watershed.

4. Implementation approaches and methods and stakeholder involvement

The project will execute its activities by strengthening the capacities of Water For People and of key partners in project implementation, mainly INAB and also Municipal Technical Offices dealing with forests and water. The project will implement a participatory approach and will involve beneficiaries and strengthen the capacity of landowners and land holders in high and very high water recharge areas, as well as those of water project beneficiaries.

In the implementation of this approach, the project will carry out the following actions:

- a. Strategic partnerships: Work meetings with municipal authorities, government institutions (associated with water and forests), municipal foresters, technicians of Municipal Water and Sanitation Offices (*Oficinas Municipales de Agua y Saneamiento - OMAS*) and representatives of water committees (service providers), to determine the mechanisms for coordination and alignment of efforts.
- b. Restoration of degraded areas in the upper Salinas River watershed: degraded forest areas will be identified in areas of high and very high water-recharge rates to develop restoration management plans to benefit from forest incentive programs;
- c. Monitoring of water quantity and quality in the communities that are running water harvesting projects for consumption: Annual monitoring of the quantity (gauging) and quality (bacteriological testing) of water sources used by the community.
- d. Strengthening of the Municipal Water and Sanitation Offices (OMAS) and Municipal Forest Offices (*Oficinas Forestales Municipales - OFM*). This will be done by providing equipment and inputs to carry out water quantity and quality monitoring and other activities relating to the restoration and management of degraded areas in the upper Salinas River watershed. Furthermore, the project will provide forest and water resources training
- e. Establishment of compensation mechanisms for water environmental services. To this end, potential sites will be identified for the establishment of compensation mechanisms, negotiation with municipal authorities, community and private sector leaders, and finally, establishment of two compensation mechanisms.

5. Sustainability of project outcomes

The restoration of degraded areas of high and very high water recharge rates contributes to the recovery of forest cover in these areas, and this in turn helps maintain and/or increase water quantity and quality in the sources situated in these areas, which are being used by communities of five municipalities in the upper Salinas River watershed.

Strengthening Municipal Water and Sanitation and Forest Offices will develop and increase skills, and provide the equipment needed to monitor water quantity and quality during and after the project, as well as the link between forest cover and water resources.

Furthermore, the implementation of compensation mechanisms will result in cooperation agreements between water users and land owners in areas of high and very high water recharge rates to ensure the permanence of forest cover and the associated water supply.

Institutional sustainability

Water For People (WFP) is an American development organization based in the City of Denver, Colorado, United States of America. Currently it operates in nine countries. It was incorporated in Guatemala in 2009. Its mission and vision seek to achieve the strategic goal “Everyone Forever”. One of its aims is to ensure water resource management so that communities have access to water by promoting the efficient use of water, thus ensuring water resource sustainability over time. In its work, WFPG is guided by Sustainable Development Goal number 6 (SDG 6). Water For People will be the executing agency of the project, from its offices in Guatemala (with headquarters in Santa Cruz del Quiché) and it will coordinate closely with INAB and the Municipal Councils where the project will be implemented.

In Guatemala, INAB is the governing institution for forests other than protected areas; it is responsible for the implementation of the PROBOSQUE Law that clearly provides the modalities to be encouraged with financial resources, i.e. *“Natural forest management for environmental service protection and supply”* and *“Restoration of degraded forest lands”*; additionally, section 19 of the Law provides that *“INAB in coordination with beneficiaries and other stakeholders, shall promote the operation of compensation mechanisms targeting projects that generate forest-related ecosystem and environmental services”*. INAB will be a collaborating agency in this project, and through its Environmental Services Unit and its Regional Bureaux, will promote compensation mechanisms and incentive modalities, in a technical consultancy role, to ensure the smooth implementation of the project in the field.

Financial sustainability

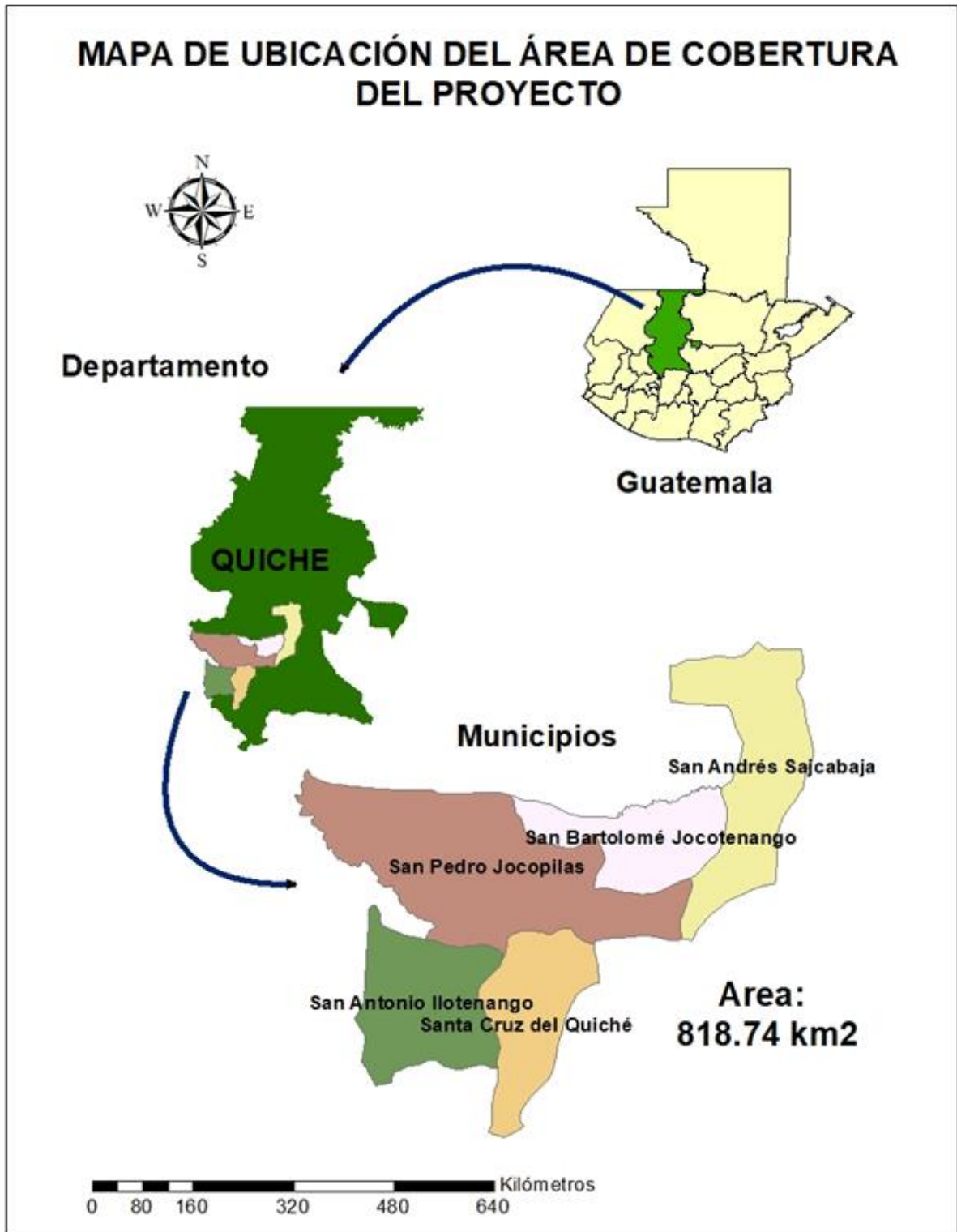
Water For People develops project initiatives and executes them on the ground, supporting institutions under an efficient and transparent management approach that guarantees the appropriate use of the resources it has obtained. Projects are aimed at facilitating water supply in the areas where WFPG works, as well as promoting sustainable sanitation. Furthermore, at the community and municipal level, it promotes and incorporates water resource management into system sustainability, through a diversity of actions such as payment of fair fees including payment of water service, watershed protection services or reforestation and savings to cover the costs of capital replacement, as a way to ensure that water sources are sufficient for the population; it also involves the community in integrated management to recover, maintain and increase vegetation cover in upper, middle and lower micro-watersheds.

Source of finance	Contribution (US\$)	%
ITTO	150,000	46.08
Water for People	126,875	42.38
National Forest Institute - INAB	<u>37,575</u>	<u>11.54</u>
<u>TOTAL</u>	<u>314,450</u>	<u>100.00</u>

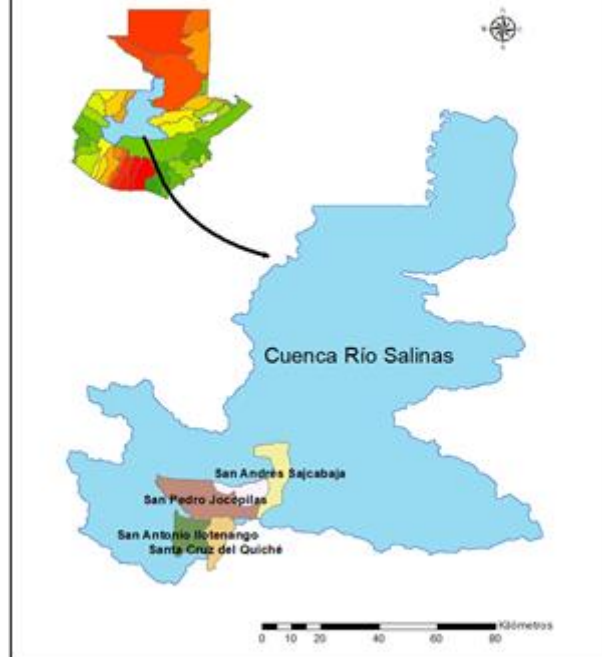
LIST OF ABBREVIATIONS AND ACRONYMS

CC	Climate change
CEFE	Departamento Conservación de Ecosistemas Forestales Estratégicos de INAB (<i>INAB Department of Conservation of Strategic Forest Ecosystems</i>)
GIMBUT	Grupo Interinstitucional de Monitoreo de Bosques y Uso de la Tierra (<i>Interinstitutional Group for Forest and Land-Use Monitoring</i>)
INAB	Instituto Nacional de Bosques (<i>National Forest Institute</i>)
MAGA	Ministerio de Agricultura, Ganadería y Alimentación (<i>Ministry of Agriculture, Livestock and Diet</i>)
OFM	Oficina Forestal Municipal (<i>Municipal Forest Office</i>)
ITTO	International Tropical Timber Organization
OMAS	Oficinas Municipales de Agua y Saneamiento (<i>Municipal Water and Sanitation Offices</i>)
NGOs	Non Governmental Organizations
PINPEP	Programa de Incentivos Forestales para Poseedores de Pequeñas Extensiones de Tierras de Vocación Forestal o Agroforestal (<i>Forest Incentives Programme for Small Forest and Agroforestry Landholders</i>)
PROBOSQUE	Ley de Fomento al Establecimiento, Recuperación, Restauración, Manejo, Producción y Protección de Bosques en Guatemala (<i>Law on the Promotion of Forest Establishment, Recovery, Restoration, Management, Production and Protection in Guatemala</i>)
TFCRH	Forested water catchment, regulation and recharge areas
WFP	Water For People
WFPG	Water For People – Guatemala

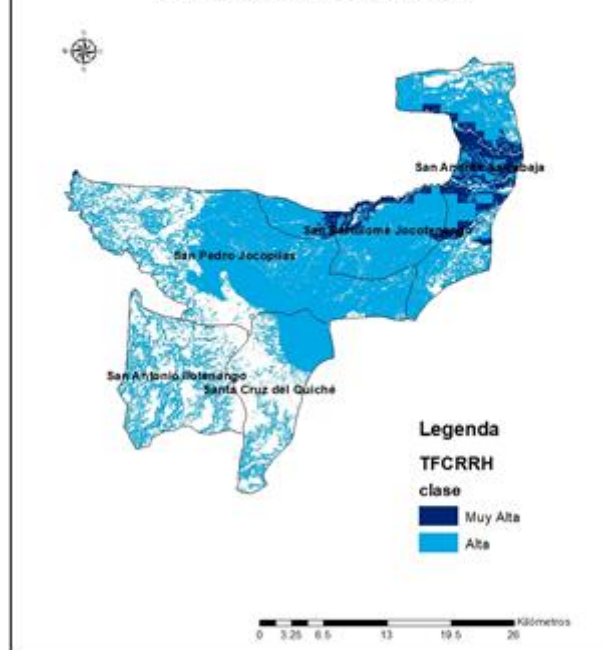
MAP OF PROJECT AREA



MAPA DE UBICACIÓN DEL ÁREA DE COBERTURA DEL PROYECTO EN LA CUENCA DEL RÍO SALINAS, GUATEMALA



MAPA DE TIERRAS FORESTALES DE CAPTACIÓN, REGULACIÓN Y RECARGA HÍDRICA DEL ÁREA DE COBERTURA DEL PROYECTO



PART. 1 PROJECT CONTEXT

1.1 Origin

In 2012 Guatemala had 3,674,728 hectares² under forest cover according to the Forest and Land Use Map 2012 (GIMBUT, 2014). The study of land use dynamics for 2006-2010 showed that Guatemala's forests are under intense pressure resulting in annual deforestation rates that went from 1.43% (between 1991 – 2001) to 1.16% between 2001 – 2006 and to 1.0% between 2006 – 2010 (146,112 hectares in the latter period) (INAB-CONAP-UVG-URL, 2012). However, and despite the progress made in decreasing deforestation, forest loss continues and, as a result, so does the loss of the goods and services generated by forests.

The loss of forest cover affects the amount of water available to supply Guatemala's population, resulting in water shortages causing an impact on living standards. This situation has become particularly critical since Guatemala has been identified as one of the most vulnerable countries to extreme weather events and other consequences of climate change.³

According to the Intergovernmental Panel on Climate Change (IPCC, 2007), the change in rainfall patterns will probably alter the frequency and intensity of extreme weather events, which will have negative impacts on natural and economic systems. In 2010 Central America's Centre for the Coordination of the Prevention of Natural Disasters estimated the losses in human lives, affected people and financial losses resulting from extreme weather events in the 2000-2009 period: 2,950 people killed, 5.8 million affected people and USD 32.725 billion worth of damage.

According to the study coordinated by the Sub-regional Headquarters of the Economic Commission for Latin America and the Caribbean (ECLAC), climate change could increase the demand for water in the Region by 12% over the trends by 2050 and 19% by 2100; additionally, increased pressure on water resources in times of limited rainfall, inadequate agricultural practices and the lack of urban drainage systems and water treatment plants, compound the problem of contamination of surface and ground waters, affecting the quality of the water available to the population.

In the Guatemalan highlands, specifically in the Department of Quiché, the loss of forest cover is estimated at 1,742 hectares annually (the equivalent of 0.68% of its cover), thus increasing the vulnerability of the population, since this Department is one of the five most vulnerable to the impact of climate change in the country, with rising temperatures one of the most latent risks, which are linked to the occurrence of prolonged droughts which in turn have an impact on the quantity of water available for human consumption³.

Furthermore, the role of forests in water catchment, regulation and recharge areas is clear; therefore it is important to promote the conservation and restoration of those areas where forests have been degraded, especially areas considered to be of high and very high water recharge significance. As a result, over recent years, the Government of Guatemala, through the National Forest Institute (INAB), has been striving to maintain and conserve forests in strategic water catchment and regulation areas, by implementing programmes and projects to strengthen and improve forest management, including PINFOR, PINPEP and more recently the PROBOSQUE programme.

Similarly, Water For People is working to facilitate access to water for the communities of four municipalities in the upper Salinas River watershed, in the Department of Quiché. This access involves promoting actions associated with the Forest-Water link through water resources management; this has made water available to the population for consumption.

The project "Protection and restoration of forested water catchment, regulation and recharge areas in the Upper Salinas River Watershed, Guatemala, to ensure water supply for Guatemalan communities" is an effort to help solve the above problem. This is a local project, since its work

² Guatemala Forest Landscape Restoration Round Table 2015. Restoration of Forest Landscape Strategy: Mechanism for Sustainable Rural Development in Guatemala, 58pp

³ The Nature Conservancy, 2016. Facing climate change in Guatemala's western highlands.

will focus mainly in five municipalities in the upper Salinas River Watershed in the Department of Quiché, implementing actions to conserve and restore areas of high and very high water recharge rates in these municipalities, and to establish compensation mechanisms for water environmental services that facilitate the governance of water resources, thus ensuring their sustainability. The project will be executed by a work and coordination partnership between Water For People and INAB in the project area.

1.2 Relevance

1.2.1 Conformity with ITTO's objectives and priorities

The project is consistent with ITTO policies and actions as provided by the International Tropical Timber Agreement (ITTA) 2006:

"Promoting better understanding of the contribution of non-timber forest products and environmental services to the sustainable management of tropical forests with the aim of enhancing the capacity of members to develop strategies to strengthen such contributions in the context of sustainable forest management, and cooperating with relevant institutions and processes to this end".

The project is also consistent with the ITTO Strategic Action Plan 2013 – 2018. Priority 4: Reduce tropical deforestation and forest degradation and enhance the provision of environmental services. In particular, the project is consistent with the Thematic Programme Reducing Deforestation and Forest Degradation and Enhancing Environmental Services in tropical forests (REDDES). The objective of the REDDES Thematic Programme is to strengthen the capacity of ITTO developing member countries and their stakeholders to reduce forest degradation; maintain and enhance environmental services of tropical forests; contribute to the social and economic sustainability through forest restoration and rehabilitation, as well as payments for forest-based environmental services; and enhance adaptation and resilience of tropical forests to the effects of climate change. The activities that can be supported through the REDDES Thematic Programme, and which are taken into consideration in this project, include:

- Improve data and knowledge on forest environmental services and their enhancement;
- Creation of enabling conditions for reducing deforestation and forest degradation and establishing mechanisms for the payment of environmental services

1.2.2 Relevance to the submitting country's policies

Guatemala's forest policy⁴ is based on principles such as "forests have a crucial role in satisfying the demand for goods, maintaining ecological processes, protecting catchment basins and water resources (water-forest link), and conserving biodiversity and genetic resources". Furthermore, this policy is the guiding framework to ensure consistency of production uses with the conservation of forest resources and land's fitness-for-use.

The Forest Law (Legislative Decree 101-96), section 47, Watersheds, *bans the elimination of forests in the highlands of forested watershed areas, especially if they are located in water catchment zones that supply water sources, which will be protected in particular. Therefore, only sustainable forest management may be used in these areas.*

*Furthermore, special regeneration and rehabilitation programmes must be developed for deforested areas in important water catchment zones in state, municipal or private lands.*⁵

⁴ Forest Policy of Guatemala. MAGA/PAFG/INAB/CONAP. Guatemala, 1999

⁵ Forest Law, Legislative Decree number 101-96. MAGA/PAFG/INAB. Guatemala, 1997.

1.3 Target Area

1.3.1 Geographic location

This is a local project, since its work will focus on the Department of Quiché, one of the departments with the largest forested water catchment, regulation and recharge areas in the 'High' and 'Very High' categories. Project activities will be located in the Municipalities of San Antonio Ilotenango, Santa Cruz del Quiché, San Pedro Jocopilas, San Bartolomé Jocotenango and San Andrés Sajcabajá, all situated in the upper Salinas River watershed.

1.3.2 Social, cultural, economic and environmental aspects

The population in the project area belongs to the K'iché ethnic group, who are mainly smallholder farmers growing self-sufficiency crops and selling the small surplus of their harvest. At certain times of the year, there is a migration towards the south coast of the country for the coffee or sugarcane harvests, thus providing income for the households. Regarding water demand in these municipalities, WFP annual monitoring data shows the following levels of cover: Santa Cruz del Quiché 80.6%, San Bartolomé Jocotenango 76.3%, San Antonio Ilotenango 79.3% and San Andrés Sajcabajá 77.6%; no data available for the municipality of San Pedro Jocopilas⁶. Four of the five municipalities in the project have a Municipal Water and Sanitation Office, while there are only three Municipal Forest Offices.

Despite the fact that over half of Guatemala's area is land suitable for forestry; the country has limited forest cover, especially in watershed areas. Natural resources are under increasing pressure as a result of both the lack of awareness of the current situation and the population explosion, coupled with inappropriate land management. This situation is similar in the area of implementation of the project. Efforts have been deployed to establish forest incentive programmes related to forest protection; in this respect, the data reported for the five project municipalities indicates:

Municipality	Modality	Area	Amount (Q.)	Amount (US\$)
San Andrés Sajcabajá	Management of natural forest for protection purposes	559.44	1515228.6	202030.48
	Forest plantation	2.42	6188.15	825.09
Sub-total		561.86	1521416.75	202855.57
San Bartolomé Jocotenango	Management of natural forest for protection purposes	1257.39	3356056.05	447474.14
	Forest plantation	10.6	18262.34	2434.98
Sub-total		1267.99	3374318.39	449909.12
San Pedro Jocopilas	Management of natural forest for protection purposes	1001.65	2748576.35	366476.8467
	Forest plantation	1	2872.32	382.98
Sub-total		1002.65	2751448.67	366859.82
Santa Cruz del Quiché	Management of natural forest for protection purposes	425.9	1156799.65	154239.95
	Forest plantation	1.12	3281.6	437.55
Sub-total		427.02	1160081.25	154677.50
San Antonio Ilotenango	Management of natural forest for protection purposes	0	0	0
	Forest plantation	0	0	0
Sub-total		0	0	0
Total		3259.52	8807265.06	1174302.01

Source: National Forest Institute

⁶ The municipality of San Pedro Jocopilas is not one of the municipalities where WFP is working; however, there is a good relationship with the authorities, and it may be possible that activities in this project may go ahead

1.4 Expected outcomes at project completion

Expected outcomes at project completion include:

- Areas of high and very high water recharge rates in the upper Salinas River watershed are conserved and restored.
- Improved availability of water quantity and quality for human consumption in 100 communities situated in the upper Salinas River watershed.
- At least 2 compensation mechanisms have been established for water environmental services in the upper Salinas River watershed.

PART 2. PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

Guatemala is committed to contribute to the Sustainable Development Goals. This project will contribute to the achievement of SDG 6 related to clean water and sanitation, and SDG 15, terrestrial ecosystems. In its efforts to help achieve safe water for "Everyone Forever", Water For People has supported the development of strategic planning instruments at municipal level including Water Resources Management Plans, which provide for the protection, conservation and restoration of forest cover in micro-watersheds where community water services originate.

Furthermore, INAB has defined forest incentive modalities in the PROBOSQUE Law that focuses on promoting the restoration of degraded areas and the conservation and protection of those areas where water sources are found that supply human settlements. INAB also has an Environmental Services Unit that promotes and establishes compensation mechanisms including local agreements to ensure water supply to the population, under a sustainability modality.

Over the past few years, the National Forest Institute (INAB) has endeavoured to maintain and conserve strategically important forests for water catchment and flow regulation; to do so, it has developed programmes and projects to strengthen and enhance forest management. However, as a result of the intense pressure of climate change, immediate actions are required to protect and conserve forested watershed areas, and to prevent and adapt to current and future conditions arising from climate change, in particular actions to ensure water quality and quantity for the country's population.

The implementation of the project will also contribute to municipal government initiatives to manage water resources efficiently in order to ensure sustainable and permanent water service provision to the population.

2.1.1 Institutional set-up and organizational issues

Article 253 of Guatemala's Constitution provides that Municipalities will deal with local utilities, including drinking water and sanitation.

The Municipal Code, Decree N. 12-2002, and its Reform, Decree N. 56-2002, both passed by the National Congress, also indicate clearly in Chapter 1, Title V, that municipal competences "to be enforced by a municipality, by two or more municipalities by agreement, or by a collective of municipalities", include, firstly: "a) Supply duly chlorinated drinking water to the home; sewage; etc."

Guatemala's Forest Law (Decree Number 101-96) provides that reforestation and forest conservation are a national priority in the interests of social development; to this end it will promote forest development and sustainable management through the following objectives: "To reduce deforestation and agricultural encroachment in lands suitable for forestry, by increasing land use according to its suitability and taking into consideration soil, topography and climate characteristics"; "To encourage reforestation of forest areas currently denuded of their forests, to provide the country with the forest products it requires"; "To promote improved community living standards by increasing the supply of forest goods and services to satisfy its basic needs (particularly water)".

Section 47 of the Forest Law bans the destruction of forests in the highlands of forested watershed areas, particularly if they are located in water catchment zones that supply water sources, which will be protected in particular. Therefore, only sustainable forest management may be used in these areas. Furthermore, special regeneration and rehabilitation programmes must be developed for deforested areas in important watershed zones in state, municipal or private lands.

Water For People in Guatemala promotes water resource management through the creation and implementation of tools that help the community contribute to the efficient use of water, and the

maintenance, recovery and increased forest cover in the micro-watersheds that supply water to the population. All these actions are consistent with, and contribute to the provisions of the National Policy for the Water and Sanitation Sector and of the Forest Law. To do so, Water For People has an office in Guatemala and, under the sustainability component, follows up initiatives relating to water management and, additionally, under the Monitoring and Evaluation component, and in coordination with the Municipalities, it monitors the level of water service cover and water quality reaching the dwellings. This structure and coordination ensure the efficient implementation of the project.

2.1.2 Stakeholder analysis

Stakeholders were identified through consultations, workshops and interviews, and they collaborated in the development and analysis of the Problem Tree. Project users were identified as the government sector (including MSPAS, INAB and MARN), local governments (five Municipal Councils), communities, forest managers working in the Quiché area and society at large.

The beneficiaries of water projects executed in these municipalities are a major stakeholder group, since in the short, medium and long term they will benefit from the protection, conservation and restoration of forest resource activities, and will have an impact on improved availability and quality of the water obtained from the sources they are using.

Group of stakeholders	Characteristics	Problems, needs or interests	Potential	Involvement in the project
Primary Stakeholders				
Water users	Demand for water for human, industrial, irrigation and other uses. The main stakeholders affected by the loss of forest cover in the upper and middle watershed and the water recharge areas.	Increased demand from population growth, areas under irrigation. In most cases already affected by scarce supply of water	Interest in consuming good quality water Organization through local committees that manage water system administration, operation and maintenance. Interested in, and available to participate in water management activities	Primary beneficiary of the project
Government sector	Responsible for enforcing legislation, but lacks effective means and coordination for this	Lack of effective joint instruments and plans	Strong interest in the restoration of forested watershed areas, conservation and protection of natural resources, especially to generate availability of water for the population	Direct involvement in project implementation

Group of stakeholders	Characteristics	Problems, needs or interests	Potential	Involvement in the project
Local governments	Have forested watershed areas that are used by the community, and four Municipal Water and Sanitation Offices and three Municipal Forest Offices.	Strong interest in resource conservation and protection to reduce social conflicts and supply water to their population	May become excellent agents to boost community involvement in water resource management. Interested in managing projects for the protection of water sources	May provide community involvement spaces
Secondary stakeholders				
NGOs	Deeply concerned about the lack of water resources for the population.	Unavailability of funds to implement water resource management activities	Strong links with community and willingness to support project implementation	Beneficiaries and active parties in promoting water resource management

2.1.3 Problem analysis

The unavailability of water resources for the population is affecting communities in the municipalities of the upper Salinas River watershed. This problem is compounded by the fact that most of the Quiché mountain areas that are of very high, high or medium significance for water regulation have lost forest cover, or the cover is significantly degraded and does not allow the full water cycle to be completed in the area, resulting in soil erosion with the consequential lack of infiltration and percolation. In this respect, the project aims to deal with the following social, environmental and technical pressures:

- a) Social pressures, to ensure water supply in sufficient quantity and quality, from sources that are being captured and used by the community.
- b) Environmental pressures, resulting from the loss of forest cover in forest lands situated in areas of very high, high and medium significance for water regulation.
- c) Lack of technical knowledge among local governments about water resource management.
- d) In most cases, the benefit of forest restoration and protection incentives has not been linked to the protection of water sources that supply townships.

2.1.4 Community outreach

Project actions will benefit about 100 rural communities that use water for household consumption in five municipalities of the Department of Quiché, accounting for more than 10,000 people, mostly living in poor or extremely poor conditions.

Project work will be jointly implemented in coordination with local municipal councils, communities and other stakeholders in the project's target area. Beneficiary communities will participate in reforestation activities in degraded areas, in the establishment and maintenance of firebreaks, and in the monitoring and surveillance of forests designated for protection purposes.

Furthermore, municipal and community empowerment will be promoted through the planning and implementation of participatory municipal plans for the protection of water sources in order to guarantee the continuity of these actions after project completion.

2.2 Objectives

2.2.1 Development objective and impact indicators

To help maintain and recover forest cover in watershed areas of Guatemala.

Impact indicators: By 2028, the project has helped maintain, restore and increase an additional **forest** area of at least 1,000 hectares, benefitting a minimum of 10,000 people through the conservation and protection of 100 water sources.

2.2.2 Specific objective and outcome indicators

To ensure the conservation and restoration of areas of very high water recharge rate through compensation mechanisms for environmental services, thus contributing to the availability of water in quantity and quality for the population of five municipalities in the Department of Quiché, Guatemala.

PART 3 DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs and activities

3.1.1 Outputs

- Output 1.** 1,000 hectares of forests with high to very high watershed significance have been conserved, protected or restored through the implementation of management plans for forest incentives under protection and/or restoration modalities.
- Output 2.** 100 sources of water used by the population for human consumption are protected and the water quantity and quality is monitored.
- Output 3:** Five Municipal Water and Sanitation Offices (OMAS) and Five Municipal Forest Offices (OFM) have been strengthened with tools and inputs to help efficiently manage water and forest resources in the municipality.
- Output 4:** Two compensation mechanisms for water environmental services have been established in the project area, helping strengthen governance and ensure water resource sustainability in this area.

3.1.2 Activities and Inputs

- Output 1. 1,000 hectares of forests with high to very high watershed significance have been conserved, protected or restored through the implementation of management plans for forest incentives under protection and/or restoration modalities.**
- Activity 1.1 Nursery production of native forest plants to be used in watershed areas.
- Activity 1.2 Reforestation of 100 hectares of areas surrounding the sources of water that are used by the community.
- Activity 1.3 Identify lands with forest cover, lands without forest cover or lands with degraded forest cover, situated in areas of high and very high water recharge rates.
- Activity 1.4 Develop and implement management plans for protection or restoration of lands with and without forest cover situated in areas of high and very high water recharge rates.
- Output 2. 100 sources of water used by the population for human consumption are protected and the water quantity and quality is monitored.**
- Activity 2.1 Identification and characterization of water sources situated in areas of high and very high water-recharge rates.
- Activity 2.2 Annual monitoring of the quantity and quality of water that people are receiving from the sources that supply communities in the project area.
- Output 3: Five Municipal Water and Sanitation Offices (OMAS) and Five Municipal Forest Offices (OFM) have been strengthened with tools and inputs to help efficiently manage water and forest resources in the municipality.**
- Activity 3.1 Outfitting and strengthening of OMAS for monitoring activities of water quantity and quality.
- Activity 3.2 Outfitting of OFMs to carry out activities associated with the protection, conservation and restoration of areas of high and very high water recharge rates.
- Activity 3.3. Capacity building relating to the integrated management of forest and water resources (quantity and quality of water), and others.

- Output 4:** **Two compensation mechanisms for water environmental services have been established in the project area, helping strengthen governance and ensure water resource sustainability in this area.**
- Activity 4.1 Promote forest incentive programs related to forest protection and restoration.
- Activity 4.2 Identification of potential sites for the establishment of compensation mechanisms for water environmental services.
- Activity 4.3 Tours to gather experiences of compensation mechanisms for environmental services established in other areas of the country (targeting municipal authorities, community members and municipal technicians).
- Activity 4.4 Negotiation and establishment of two compensation mechanisms for water environmental services, in project areas, to strengthen governance and ensure the sustainability of water resources.

3.2 Strategic approaches and methods

The project will implement its activities by strengthening the capacity of Water For People, INAB, Municipal Water and Sanitation Offices and Municipal Forest Offices, **community leaders and project beneficiaries** in particular, and in general, a diversity of forest and water and sanitation sector stakeholders who have a presence and cover in the municipalities where the project is executed. The project will apply a participatory approach including all key stakeholders involved, and will develop mechanisms to help achieve water resource sustainability in the area. This will include meetings, mainstreaming / validation workshops and field visits. **Andragogy methods will be used to provide training with a gender focus in various workshops to teach about the techniques to be applied and care to be given to ensure the sustainable use of forest resources and the conservation of watersheds and thus ensure the sustainability of water resources in the project implementation areas.**

Project implementation will take the following steps to ensure the use of this approach:

Strategic partnerships: A set of workshops and meetings will be held with key community stakeholders, local governments and government institutions to plan and coordinate the identification, prioritisation, implementation, monitoring and evaluation of project activities.

Annual monitoring of forest cover and water quality in the communities: in coordination with the OMAS and using the *Akvo Flow* tool, annual tours in the communities whose water systems come from water sources situated in the project area, will determine the level of cover in the community and the quality of the water that the population is receiving.

Implementation of activities and processes for the protection, conservation and restoration of areas of high and very high water recharge rates: the purpose of the activities will be to help maintain, conserve, recover and increase forest cover in areas of high and very high water recharge rates, to ensure quantity and quality of the water supply. **To this end, the gender-focused training to be provided will underscore the importance of conserving and protecting the forest in water recharge areas within the watershed so as to ensure their conservation.**

Consultation and validation processes for the development and implementation of compensation mechanisms for water environmental services: workshops and meetings will be held with technical personnel of the stakeholders involved, water users and other stakeholders, to analyse and validate the potential of sites for the establishment of compensation mechanisms that promote good governance, **contribute to the conservation and protection of water recharge areas within the watershed and thus ensure the** sustainability of the resource at the site.

3.3 Work plan

The project will involve the following activities, persons in charge of implementing them and the time to carry them out.

Activity	Responsible Party	Year 1				Year 2			
		1	2	3	4	1	2	3	4
Output 1. 1,000 hectares of forests with high to very high watershed significance have been conserved, protected or restored through the implementation of management plans for forest incentives under protection and/or restoration modalities									
A.1.1 Nursery production of native forest plants to be used in watershed areas.	OFM								
A.1.2 Reforestation of 100 hectares of areas surrounding the sources of water that are used by the community.	OFM, Water Committees								
A.1.3 Identify lands with forest cover, lands without forest cover or lands with degraded forest cover, situated in areas of high and very high water recharge rates.	WFP								
A.1.4 Develop and implement management plans for protection or restoration of lands with and without forest cover situated in areas of high and very high water recharge rates.	WFP								
Output 2. 100 sources of water used by the population for human consumption are protected and the water quantity and quality is monitored.									
A.2.1 Identification and characterization of water sources situated in areas of high and very high water-recharge rates.	WFP, OMAS								
A.2.2 Annual monitoring of the quantity and quality of water that people are receiving from the sources that supply communities in the project area.	OMAS, WFP								
Output 3: Five Municipal Water and Sanitation Offices (OMAS) and Five Municipal Forest Offices (OFM) have been strengthened with tools and inputs to help efficiently manage water and forest resources in the municipality.									
A.3.1 Outfitting and strengthening of OMAS for monitoring activities of water quantity and quality.	WFP								
A.3.2 Outfitting of OFMs to carry out activities associated with the protection, conservation and restoration of areas of high and very high water recharge rates.	WFP								
A.3.3 Capacity building relating to the integrated management of water resources, quantity and quality of water, and others.	WFP, INAB								

Activity	Responsible Party	Year 1				Year 2			
		1	2	3	4	1	2	3	4
Output 4: Two compensation mechanisms for water environmental services have been established in the project area, helping strengthen governance and ensure water resource sustainability in this area.									
A.4.1 Promote forest incentive programs related to forest protection and restoration.	WFP, OFM, INAB								
A.4.2 Identification of potential sites for the establishment of compensation mechanisms for water environmental services.	WFP, OFM, INAB								
A.4.3 Tours to gather experiences of compensation mechanisms for environmental services established in other areas of the country (targeting municipal authorities, community members and municipal technicians).	WFP								
A.4.4 Negotiation and establishment of two compensation mechanisms for water environmental services, in project areas, to strengthen governance and ensure the sustainability of water resources.	WFP, INAB								

3.4 Budget

3.4.1 Master budget schedule

Output and/or Activity	Description	Budget Item	Quantity		Units	Unit cost (US\$)	Total Cost (US\$)	ITTO		EA	CA
			Year 1	Year 2				Year 1	Year 2		
Output 1	1,000 hectares of forests with high to very high watershed significance have been conserved, protected or restored through the implementation of management plans for forest incentives under protection and/or restoration modalities.										
A.1.1	Nursery production of native forest plants to be used in watershed areas.										
	Inputs for the establishment and/or strengthening of 5 municipal nurseries	61	2	3	Nurseries	1,100	5,500	2,200	3,300	0	0
A.1.2	Reforestation of 100 hectares of areas surrounding the sources of water that are used by the community.										
	10 reforestation campaigns (75 people/campaign, 1 day)	61	150	600	Person/day/food	8	6,000	1,200	4,800	0	0
A.1.3	Identify lands with forest cover, lands without forest cover or lands with degraded forest cover, situated in areas of high and very high water-recharge rates.										
	Production of specific maps per municipality	61	5	0	Maps	75	375	0	0	0	375
	5 mainstreaming workshops to propose the selection of sites (20 people, 1 day)	61	100	0	Person/day/food	15	1,500	1,500	0	0	0
A.1.4	Develop and implement management plans for protection or restoration of lands with and without forest cover in areas of high and very high water-recharge rates.										
	Consultant to develop management plans (for protection or restoration purposes)	13	6	6	Person/month	1,100	13,200	6,600	6,600	0	0

Output and/or Activity	Description	Budget Item	Quantity		Units	Unit cost (US\$)	Total Cost (US\$)	ITTO		EA	CA
			Year 1	Year 2				Year 1	Year 2		
	Consultant for forest management plan processing through INAB and incorporation of amendments (same consultant)	13	2	2	Person/month	1,100	4,400	2,200	2,200	0	0
Output 2.	100 sources of water used by the population for human consumption are protected and the water quantity and quality is monitored.										
A.2.1	Identification and characterization of water sources situated in areas of high and very high water-recharge rates.										
	Sustainability technician (WFP)	12	12	12	Person/month	900	21,600	0	0	21,600	0
	Consultant to characterize 150 water sources and to develop 5 municipal participatory plans for the protection of water sources	13	4	2	Person/month	1,100	6,600	4,400	2,200	0	0
	Map of location of water sources situated in areas of high and very high water recharge rates.	61	5	0	Maps	75	375	0	0	375	0
	10 networking workshops with COCODES and Water Committees (20 people, 1 day)	61	200	0	Person/day/food	15	3,000	3,000	0	0	0
	10 workshops to develop municipal plans (25 people, 1 day)	61	250	0	Person/day/food	15	3,750	3,750	0	0	0
	Design and printing of 5 participatory municipal plans for the protection of water sources	61	100	0	Plans	40	4,000	4,000	0	0	0

Output and/or Activity	Description	Budget Item	Quantity		Units	Unit cost (US\$)	Total Cost (US\$)	ITTO		EA	CA
			Year 1	Year 2				Year 1	Year 2		
A.2.2	Annual monitoring of the quantity and quality of water that people are receiving from the sources that supply communities in the project area.										
	Hiring of temporary personnel to monitor water quantity and quality (3 people)	12	2	2	Person/month	500	10,000	2,000	2,000	6,000	0
Output 3:	Five Municipal Water and Sanitation Offices (OMAS) and Five Municipal Forest Offices (OFM) have been strengthened with tools and inputs to help efficiently manage water and forest resources in the municipality.										
A.3.1	Outfitting and strengthening of OMAS for monitoring activities of water quantity and quality.										
	Portable computer equipment (laptop with 8GB RAM, 1TB hard disk drive, 1.6 GHZ Processor Core i5)	44.1	2	0	Equipment	800	1,600	1,600	0	0	0
	Reagents to test water quality	44.3	500	500	Equipment	5	7,500	2,500	2,500	2,500	
A.3.2	Outfitting of OFMs to carry out activities associated with the protection, conservation and restoration of areas of high and very high water recharge rates.										
	Portable computer equipment (laptop with 8GB RAM, 1TB hard disk drive, 1.6 GHZ Processor Core i5)	44.1	2	0	Equipment	800	1,600	1,600	0	0	0
	Forest measurement equipment (tape measure, diametric tape, GPS, hypsometer)	44.2	5	0	Equipment	<u>640</u>	<u>3,200</u>	<u>3,200</u>	0	0	0
A.3.3	Capacity building relating to the integrated management of forest and water resources, quantity and quality of water, and others										
	20 training workshops on different themes (25 people, 1 day)	61	250	250	Person/day/food	15	7,500	3,750	3,750	0	0

Output and/or Activity	Description	Budget Item	Quantity		Units	Unit cost (US\$)	Total Cost (US\$)	ITTO		EA	CA
			Year 1	Year 2				Year 1	Year 2		
Output 4:	Two compensation mechanisms for water environmental services have been established in the project area, helping strengthen governance and ensure water resource sustainability in this area.										
A.4.1	Promote forest incentive programmes related to forest protection and restoration.										
	1 INAB technician to run workshops to promote forest incentive programmes	12	3	3	Person/month	900	5,400	0	0	0	5,400
	10 workshops to promote forest incentive programmes (20 people, 1 day)	61	100	100	Person/day/food	15	3,000	1,500	1,500	0	0
A.4.2	Identification of potential sites for the establishment of compensation mechanisms for water environmental services.										
	1 INAB technician specialising in compensation mechanisms (site identification)	12	3	0	Person/month	1,200	3,600	0	0	0	3,600
	Report on the identification of sites with potential for the establishment of compensation mechanisms	61	1	0	Report	1,000	1,000	0	0	0	1,000
A.4.3	Tours to gather experiences of compensation mechanisms for environmental services established in other areas of the country (targeting municipal authorities, community members and municipal technicians).										
	Tours to gather successful experiences in compensation mechanisms (30 people 2 days)	61	30	30	Person /food /transport	80	4,800	2,400	2,400	0	0
A.4.4	Negotiation and establishment of two compensation mechanisms for water environmental services, in project areas, to strengthen governance and ensure the sustainability of water resources.										
	1 INAB technician specialising in compensation mechanisms (negotiation and establishment)	12	9	12	Person/month	1,200	25,200	0	0	0	25,200
	Consultant for the establishment of compensation mechanisms	13	4	4	Person/month	1,100	8,800	4,400	4,400	0	0

Output and/or Activity	Description	Budget Item	Quantity		Units	Unit cost (US\$)	Total Cost (US\$)	ITTO		EA	CA
			Year 1	Year 2				Year 1	Year 2		
	10 meetings with beneficiaries of water resources, municipal authorities, community and private sector leaders (15 people per meeting, 1 day)	61	75	75	Person/day/food	15	2,250	1,125	1,125	0	0
	Report on the establishment of compensation mechanisms	61	1	1	Reports	1,000	2,000	0	0	0	2,000
SUB-TOTAL		-	-	-	-	-	157,750	52,925	36,775	30,475	37,575
A0.0	Non-activity based costs										
	Project Coordinator	11	12	12	person/month	2,100	45,360	2,520	2,520	40,320	0
	Accounting and secretariat support	12.2	12	12	person/month	450	9,720	540	540	8,640	0
	Accountant – Administrator	12.3	12	12	person-month	1,650	35,640	1,980	1,980	31,680	0
_	Duty Travel (Coordination)	31	12	12	monthly amount	127	3,048	1,524	1,524	0	0
_	DSA for project activities	31	12	12	monthly amount	100	6,400	1,200	1,200	4,000	0
	Office costs WFP (Capital items)	41	12	12	monthly rent	425	9,180	510	510	8,160	0
	Fuel	53	12	12	monthly amount	150	3,600	1,800	1,800	0	0
	Utilities WFP	53	12	12	monthly amount	150	3,600	0	0	3,600	0

Output and/or Activity	Description	Budget Item	Quantity		Units	Unit cost (US\$)	Total Cost (US\$)	ITTO		EA	CA
			Year 1	Year 2				Year 1	Year 2		
	Office costs (Consumables)	54	12	12	monthly amount	75	1,800	900	900	0	0
	Materials and Supplies	54	12	12	monthly amount	75	1,800	900	900	0	0
-	Miscellaneous	61	12	12	monthly amount	75	1,800	900	900	0	0
	Audits (annual and final)	62	0	1	person/month	3,488	3,488	0	3,488	0	0
SUB-TOTAL	-	-	-	-	-	-	125,436	12,774	16,262	96,400	0
A0.5	Monitoring and evaluation										
	ITTO monitoring and review	82	1	1	Lump sum	15,000	15,000				
	ITTO Programme Support Costs (12%)	72	0	0	lump sum		16,264				
SUB-TOTAL	-	-	-	-	-	-	31,264				
GRAND TOTAL							314,450				

3.4.2 Consolidated budget by component

Category	Description	TOTAL	YEAR 1	YEAR 2
10	Personnel			
12	1 INAB technician to run workshops to promote forest incentive programmes	5,400	2,700	2,700
13	Consultant to develop management plans for protection or restoration of lands with and without forest cover in areas of high and very high water-recharge rates	13,200	6,600	6,600
13	Consultant for forest management plan processing through INAB and incorporation of amendments (same consultant)	4,400	2,200	2,200
12	Sustainability technician (WFP)	21,600	10,800	10,800
13	Consultant to characterize 150 water sources and to develop 5 municipal participatory plans for the protection of water sources	6,600	4,400	2,200
12	Hiring of temporary personnel to monitor water quantity and quality (3 people)	10,000	2,000	2,000
12	1 INAB technician specialising in compensation mechanisms (site identification)	3,600	3,600	0
12	1 INAB technician specialising in compensation mechanisms (negotiation and establishment)	25,200	10,800	14,400
13	Consultant for the establishment of compensation mechanisms	8,800	4,400	4,400
11	Project Coordinator	50,400	22,680	22,680
12.2	Accounting and secretariat support	10,800	540	540
12.3	Accountant – Administrator	39,600	1,980	1,980
	19 Component Total	199,600	72,700	70,500
31	Duty Travel (Coordination)	3,048	1,524	1,524
31	DSA for project activities	6,400	1,200	1,200
	39. Component Total	9,448	2,724	2,724
40	Capital items			
44.3	Reagents to test water quality	7,500	2,500	2,500
44.1	Portable computer equipment (laptop with 8GB RAM, 1TB hard disk drive, 1.6 GHZ Processor Core i5)	1,600	1,600	0
44.2	Forest measurement equipment (tape measure, diametric tape, GPS, hypsometer)	3,200	3,200	0
44.1	Portable computer equipment (laptop with 8GB RAM, 1TB hard disk drive, 1.6 GHZ Processor Core i5)	1,600	1,600	0
	49 Component Total	13,900	8,900	2,500
50	Consumables			
54	Office costs (Consumables)	1,800	900	900
53	Fuel	3,600	1,800	1,800
53	Utilities WFP	3,600	1,800	1,800
54	Materials and Supplies	1,800	900	900
54	Office costs (Capital items)	9,180	510	510
	59. Component Total	19,980	5,910	5,910

Category	Description	TOTAL	YEAR 1	YEAR 2
60	Miscellaneous			
61	Production of specific maps per municipality	375	375	0
61	5 mainstreaming workshops to propose the selection of sites (20 people, 1 day)	1,500	1,500	0
61	10 workshops to promote forest incentive programmes (20 people, 1 day)	3,000	1,500	1,500
61	Map of location of water sources situated in areas of high and very high water recharge rates.	375	375	0
61	10 networking workshops with COCODES and Water Committees (20 people, 1 day)	3,000	3,000	0
61	10 workshops to develop municipal plans (25 people, 1 day)	3,750	3,750	0
61	Design and printing of 5 participatory municipal plans for the protection of water sources	4,000	4,000	0
61	Inputs for the establishment and/or strengthening of 5 municipal nurseries	5,500	2,200	3,300
61	10 reforestation campaigns (75 people/campaign, 1 day)	6,000	1,200	4,800
61	20 training workshops on different themes (25 people, 1 day)	7,500	3,750	3,750
61	Report on the identification of sites with potential for the establishment of compensation mechanisms	1,000	1,000	0
61	Tours to gather successful experiences in compensation mechanisms (30 people 2 days)	4,800	2,400	2,400
61	10 meetings with beneficiaries of water resources, municipal authorities, community and private sector leaders (15 people per meeting, 1 day)	2,250	1,125	1,125
61	Report on the establishment of compensation mechanisms	2,000	1,000	1,000
61	Miscellaneous	1,800	900	900
62	Audits (annual and final)	3,488	0	3,488
69	Component Total	50,338	28,075	22,263
80	Project monitoring and administration			
81	ITTO monitoring and review	15,000		
83	ITTO programme support (12%)	16,264		
89	Component Total:	31,264		
100	GRAND TOTAL	314,450.00		

3.4.3 ITTO budget by component

Category	Description	TOTAL	YEAR 1	YEAR 2
10	Personnel			
13	Consultant to develop management plans for protection or restoration of lands with and without forest cover in areas of high and very high water-recharge rates	13,200	6,600	6,600
13	Consultant for forest management plan processing through INAB and incorporation of amendments (same consultant)	4,400	2,200	2,200
13	Consultant to characterize 150 water sources and to develop 5 municipal participatory plans for the protection of water sources	6,600	4,400	2,200
12	Hiring of temporary personnel to monitor water quantity and quality (3 people)	4,000	2,000	2,000
13	Consultant for the establishment of compensation mechanisms	8,800	4,400	4,400
11	Project Coordinator	5,040	2,520	2,520
12.4	Accounting and secretariat support	1,080	540	540
12.3	Accountant – Administrator	3,960	1,980	1,980
	19 Component Total	47,080	24,640	22,440
31	Duty Travel (Coordination)	3,048	1,524	1,524
31	DSA for project activities	2,400	1,200	1,200
	39. Component Total	5,448	2,724	2,724
40	Capital items			
44.1	Portable computer equipment (laptop with 8GB RAM, 1TB hard disk drive, 1.6 GHZ Processor Core i5)	1,600	1,600	
44.1	Portable computer equipment (laptop with 8GB RAM, 1TB hard disk drive, 1.6 GHZ Processor Core i5)	1,600	1,600	
44.2	Forest measurement equipment (tape measure, diametric tape, GPS, hypsometer)	3,200	3,200	
44.3	Reagents to test water quality	5,000	2,500	2,500
	49. Component Total	11,400	8,900	2,500
50	Consumables			
54	Office costs WFP (Capital items)	1,020	510	510
54	Office costs (Consumables)	1,800	900	900
53	Fuel	3,600	1,800	1,800
54	Materials and Supplies	1,800	900	900
	59 Component Total	8,220	4,110	4,110

Category	Description	TOTAL	YEAR 1	YEAR 2
60	Miscellaneous			
61	5 mainstreaming workshops to propose the selection of sites (20 people, 1 day)	1,500	1,500	0
61	10 workshops to promote forest incentive programmes (20 people, 1 day)	3,000	1,500	1,500
61	10 networking workshops with COCODES and Water Committees (20 people, 1 day)	3,000	3,000	0
61	10 workshops to develop municipal plans (25 people, 1 day)	3,750	3,750	0
61	Design and printing of 5 participatory municipal plans for the protection of water sources	4,000	4,000	0
61	Inputs for the establishment and/or strengthening of 5 municipal nurseries	5,500	2,200	3,300
61	10 reforestation campaigns (75 people/campaign, 1 day)	6,000	1,200	4,800
61	20 training workshops on different themes (25 people, 1 day)	7,500	3,750	3,750
61	Tours to gather successful experiences in compensation mechanisms (30 people 2 days)	4,800	2,400	2,400
61	10 meetings with beneficiaries of water resources, municipal authorities, community and private sector leaders (15 people per meeting, 1 day)	2,250	1,125	1,125
61	Miscellaneous	1,800	900	900
62	Audits (annual and final)	3,488	0	3,488
69	Component Total	46,588	25,325	21,263
80	Project monitoring and administration			
	82. ITTO monitoring and review	15,000		
	Sub-total (11-82)	133,736		
	83. ITTO programme support costs (12% of 1-82)	16,264		
89	Component Total:	133,736		
100	GRAND TOTAL	150,000		

3.4.4 Executing agency budget by component

Category	Description	Total	Year 1	Year 2
10	Personnel			
12	Hiring of temporary personnel to monitor water quantity and quality (3 people)	6,000	3,000	3,000
12	Sustainability technician (WFP)	21,600	10,800	10,800
11	Project Coordinator	40,320	20,160	20,160
12.2	Accounting and secretariat support	8,640	4,320	4,320
12.3	Accountant – Administrator	31,680	15,840	15,840
	19. Component Total	108,240	54,120	54,120
30	Duty travel			
31	DSA for project activities	4,000	2,000	2,000
	39. Component Total	4,000	2,000	2,000
40	Capital items			
41	Office costs WFP (Capital items)	8,160	4,080	4,080
44.3	Reagents to test water quality	2,500	1,250	1,250
	49. Component Total	10,660	5,330	5,330
50	Consumables			
53	Utilities WFP	3,600	1,800	1,800
	59. Component Total	3,600	1,800	1,800
60	Miscellaneous			
61	Map of location of water sources situated in areas of high and very high water-recharge rates.	375	375	0
	69. Component Total	375	375	0
	GRAND TOTAL	126,875		

3.4.5 Collaborating agency budget by component

Category	Description	Total	Year 1	Year 2
10	Personnel			
12	1 INAB technician to run workshops to promote forest incentive programmes	5,400	2,700	2,700
12	1 INAB technician specialising in compensation mechanisms (site identification)	3,600	3,600	0
12	1 INAB technician specialising in compensation mechanisms (negotiation and establishment)	25,200	10,800	14,400
	19. ComponentTotal	34,200	17,100	17,100
60	Miscellaneous			
61	Production of specific maps per municipality	375	375	0
61	Report on the identification of sites with potential for the establishment of compensation mechanisms	1,000	1,000	0
61	Report on the establishment of compensation mechanisms	2,000	1,000	1,000
	69. ComponentTotal	3,375	2,375	1,000
	GRAND TOTAL	37,575	19,475	18,100

PART 4. IMPLEMENTATION ARRANGEMENTS

4.1 Executing agency and partners

The Executing Agency of the Project will be Water For People (WFP) that will be responsible for coordination and outcomes, and for ensuring output and outcome compliance with this project. The Collaborating Agency, National Forest Institute (INAB) will provide technical support for the implementation of the activities in the field and mainly those relating to Activities [A.4.1](#) and [A.4.2](#).

The role of WFP in this project will be two-fold: a) financial administration of the project; and b) direct implementation of the full project cycle, providing technical assistance, methodological support, training and mentoring in the development and use of tools and instruments to ensure the success of the project in the field.

In coordination with INAB with respect to the methods used to determine potential watershed areas, WFP will provide:

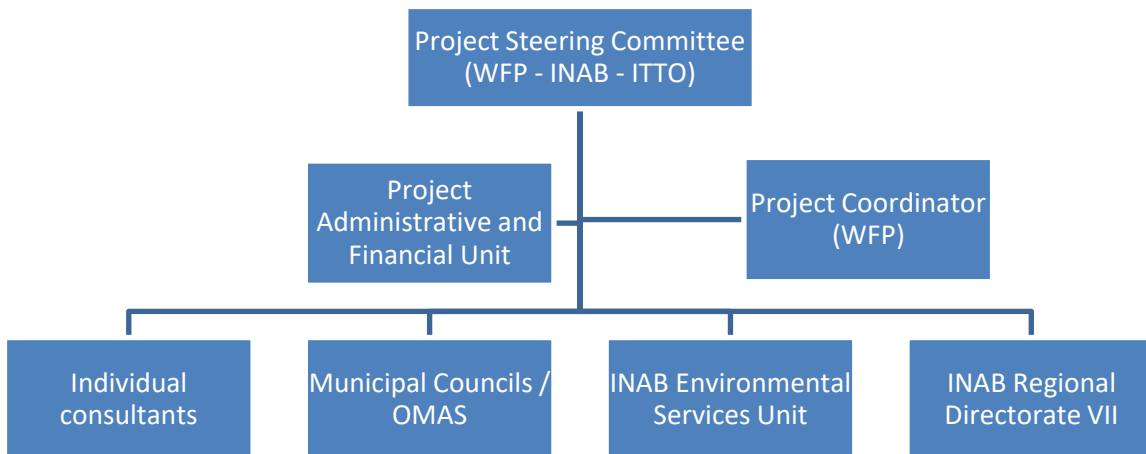
- a) Strategic and methodological guidance to help:
 - Define and prioritise potential forest lands for cover maintenance, recovery and extension in lands of high and very high water recharge significance;
 - Develop intervention strategies including the establishment of compensation mechanism schemes for water environmental services; and
 - Provide training in forest incentives, water resource management, monitoring of water quantity and quality.
- b) Mentoring and guidance of OMAS and OFMs in their field execution, including:
 - Training of OMAS and OFM personnel in subjects relating to water quantity and quality monitoring, and water resource management;
 - Supporting OMAS in the annual monitoring of levels of water cover, data analysis, review and mainstreaming of monitoring outcomes; and
 - Disseminating and communicating project outcomes with a view to scaling up and replicating them, and impacting on forest and water management decisions and public policy framework.

4.1.2 Project management team

WFP will appoint a Coordinator. This person will be a forester, agronomist or environmentalist, and will have over 5 years proven experience in forest or associated project management. The Coordinator will be in charge of overall project coordination and successful implementation, as well as technical team supervision. INAB will appoint all the members of this team at the start of project activities, according to the following:

- 1 Project Coordinator,
- 1 Specialist in water resource sustainability
- 1 Specialist in monitoring and evaluation
- 1 Financial administrator of the project

The project management structure is shown in the following flowchart:



4.1.3 Project Steering Committee

WFP will set up a Project Steering Committee (PSC) that will operate according to the relevant ITTO regulations, and which will consist of the following members:

- Representative of INAB (the Manager or their appointee) (President)
- Representative of WFP (The national director or their appointee) (Secretary)
- ITTO Representative
- Representative of Municipal Councils (to be determined once the project is approved)

The PSC will meet at least 3 times: 2 meetings in the first year of the project and one meeting in year two.

4.1.4 Stakeholder involvement mechanisms

The involvement of stakeholders and beneficiaries will use an inter-institutional mechanism that promotes feedback on activities to be implemented and outcomes. Annually, WFP organises a workshop to reflect on water and this space welcomes community, local government, government institutions, and NGO representatives.

4.2 Project management

Water For People will be directly responsible for the technical and financial administration of the project; it will coordinate directly with the communities, Municipal Councils – specifically with the Municipal Water and Sanitation Offices and the Municipal Forest Offices - and the National Forest Institute in its role as direct collaborator in the project and governing body for forest resources other than protected areas in the country.

4.3 Monitoring and reporting

Within 8 weeks of the start of the project, the Project Coordinator will prepare an initial report for the first meeting of the Project Steering Committee. This report will include the detailed plan of operation for the first 12 months. The plan of operation will be based on the logical framework and on activity details such as are defined in the project proposal. It will include resources needed, assign responsibility for each activity and present the plan for the implementation of activities per month or week.

Every 6 months, WFP will submit **technical and financial** progress reports to the ITTO Secretariat in accordance with the relevant ITTO requirements. The consultancy reports will also be sent to the ITTO Secretariat. Final **technical and financial reports** will be sent to the Secretariat no later than 3 months after project completion. ITTO's monitoring missions will take place according to that Organization's schedule. Such missions will check project progress with respect to the indicators in the logical framework matrix, compliance of ITTO project management regulations and procedures, and implementation of the Project Steering Committee's recommendations and decisions. All progress reports as well as the project completion report will be timely submitted according to the schedule established by ITTO through the online system specifically created by the Organization to monitor project progress.

4.4 Mainstreaming of project learning

Mainstreaming of the experience, achievements and progress of the project will be through a variety of media, starting with the publication in both English and Spanish, on the Water For People website and on its social media networks.

Furthermore, information on project outcomes and achievements will be disseminated by the Department of Communication and Education of INAB, the collaborating agency in this project, in printed material, the INAB webpage and other media.

ANNEX 1. Profiles of the executing and collaborating agencies

A. Executing Agency (WFP)

Expertise: Water For People is a non-profit organization incorporated in Guatemala as a branch of the head office (Denver Co.) in deeds numbers 42 Incorporation Deed, 46 Statutes and 48 Social Charter on its desire to operate and be incorporated in Guatemala, prepared by Carmen Torselli Bech BA. It is registered in the Legal Entities Registry of the Ministry of Internal Affairs under number 19296, folio 19296 and Volume 1 of the single electronic system for legal entity registration. Currently the Executive Director and legal representative is Edgar Oliverio Fajardo Olive, also registered with the Ministry of Internal Affairs.

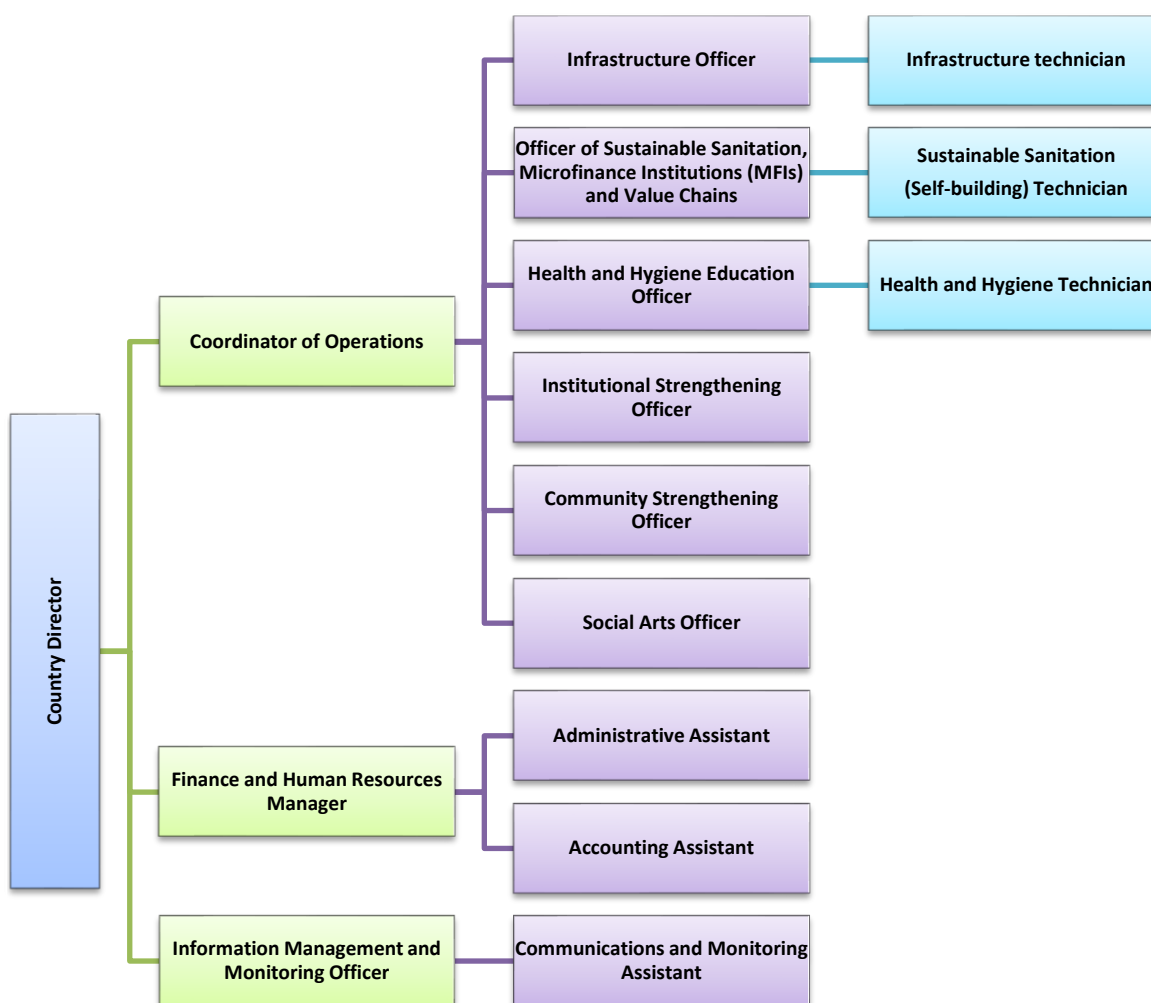
Water For People is registered with the Superintendence of Tax Administration (Superintendencia de Administración Tributaria) under NIT 6492411-4, and is exempt from paying tax under Resolution number 2013-03-14-000024. It is also registered with the Guatemalan Institute of Social Security (Instituto Guatemalteco de Seguridad Social) under employer number 121968.

Its mission is: "Water For People exists to promote the development of high-quality drinking water and sanitation services, accessible to all, and sustained by strong communities, businesses, and governments". Currently it is focusing its efforts in the Municipalities of: Santa Cruz del Quiché, San Andrés Sajcabajá, San Antonio Ilotenango and San Bartolomé Jocotenango.

Water For People has experience in:

- Sustainability of water and sanitation services in communities and public institutions.
- Technical assistance in local management of water resources.
- Technical implementation and consultancy on water with different technologies according to the community context.
- Monitoring and Evaluation of water and sanitation services, through the *AKVO FLOW* monitoring system.
- Institutional strengthening for partners including municipal councils and collectives in the water and sanitation fields.
- Management of a variety of funds including: BID Coca Cola, Colgate Palmolive, LDS (the Church of the Latter Day Saints), Charity Water, One Drop, Green and Blue and EDUCO.
- Promotion of behavioural change through social art.
- Technical implementation and consultancy for hygiene modules for the promotion of water, sanitation and hygiene in public institutions.
- Sustainable sanitation projects through self-building and micro-credits.
- Health and hygiene education at various levels.
- Impact and advocacy nationally in the various government and water and sanitation sector institutions.
- Accounts management in the Netsuite software to ensure appropriate control of resources and funds to be used.

Water For People Organizational Structure



Budget of Water For People (In US\$)

Year	Investment	Personnel	Transport	Operations	total
2019	809,609.00	489,273.00	70,566.00	60,060.00	1,429,508.00
2018	931,200.00	475,558.00	68,912.00	63,995.00	1,539,665.00
TOTAL	1,740,809.00	964,831.00	139,478.00	124,055.00	2,969,173.00

Personnel:

- a) Consultants with post-graduate degrees 5
- b) Experts with university degrees 11
- c) Intermediate level technicians 6

B. Collaborating Agency (INAB)

Expertise: The National Forest Institute – INAB is an autonomous, decentralised government body with legal capacity, its own capital and administrative independence. It is the management body of the competent authority of the forest Public Agricultural Sector established by the current Forest Law of Guatemala (1996).

INAB has statutory oversight of forests other than protected areas; it has 33 sub-regional offices and 9 regional bureaux, which have allowed it to cover the entire country. This structure has helped it implement many actions and programmes, such as the Forest Incentives Programme, PINFOR, which has reforested 94,000 hectares and managed 174,000 hectares of natural forests, constantly promoting decentralisation of the forest administration.

It mainly deals with the following: a) Execute forest policies; b) Promote and foster the country's forest development through sustainable forest management, reforestation, forest industry and crafts, based on forest resources and the protection and development of catchment basins; c) Encourage forest research; d) Coordinate the implementation of forest development programmes; and e) Develop forest conservation programmes and projects.

Its mission is “To execute and foster national forest policies and to facilitate access to technical assistance, forest technology and services, for silviculturists, municipal councils, universities, national and international investment groups, and other forest sector stakeholders, through the design and encouragement of strategies and actions to promote the country's economic, ecological and social development”.

INAB has experience in the following areas:

- Incentive-driven forest promotion and development
- Sustainable forest management promotion
- Forest protection
- Forest activity administration, regulation and monitoring
- Forest promotion, training and education
- Forest research and technical and economic information
- Institutional strengthening
- Forest production upgrade
- Support to local government in forest administration
- Forest awareness-building
- Forest conservation
- Geographic Information Systems
- National forest inventories

Infrastructure: INAB's infrastructure for the activities associated with this project includes a regional office and a sub-regional office in the Municipality and Department of Quiché, covering the municipalities in the area of the project. Each of INAB's offices has office space equipped with furniture, telephone, fax, and computer equipment. Furthermore, each one has its own budget and motor vehicles and motorcycles available. Its personnel include technicians, administrative staff and legal advisors.

Professional qualifications: INAB's professional staff to be involved in the project will include: 1 regional director, 1 technical director, 10 foresters, 1 head of the Department of Conservation of Strategic Forest Ecosystems, 1 manager of the Environmental Services Unit, who all possess experience in forest restoration, water recharge, compensation mechanisms for environmental services, and other fields.

ANNEX 2. Tasks and responsibilities of key experts provided by the executing agency

A. Project Coordinator

The Coordinator will be in charge of planning, organization and implementation of project activities. Furthermore, he/she will coordinate with the National Forest Institute (INAB), Municipal Councils and the Project Technical Committee, to successfully complement project efforts.

For these purposes, the project Coordinator's duties will include:

- Lead the work team, and manage, monitor, coordinate and provide the necessary guidance for activity execution.
- Develop a detailed Work Plan and yearly plans of operation, and manage the budget in accordance with project Objectives.
- Participate in the selection of project personnel.
- Evaluate and design requirements for tasks assigned to project personnel.
- Coordinate with coordinators or persons in charge of the institutions within the Steering Committee and technicians of the project.
- Supervise and review the production of documents and publications disseminated by the project.
- Draft and present project reports and technical and administrative documents.

Duration: 24 months

B. Administrator - Accountant:

The Administrator – Accountant will be in charge of the administration of project funds and financial aspects of the project, prepare budgets and ensure the adequate implementation of the project, strictly adhering to the provisions in the project and in compliance with the transparency standards of Water For People and ITTO requirements.

Duties:

- Administration of the budget of the project.
- Project accounts management applying national regulations and ITTO and WFP procedures.
- Carry out administration processes in accordance with WFP and ITTO policy, and ensure the transparency of financial resources of the project.
- Provide support to Project Coordinator in monitoring the use of project funds.
- Draft financial reports according to ITTO and WFP requirements.

Requirements:

- Mid-level and/or university administrative and accounting expertise.
- Suitable project administration and accounting experience in international cooperation.
- No criminal or judicial records.
- Sound knowledge of computer packages.

Mario Martín Velásquez



Forester, Registration N. 2954

M. Sc. in Natural Resources and Environmental Economics

Marital Status:	Married
Place and date of birth	Huehuetenango, Guatemala, 01 January 1977
Individual Identification Code (CUI)	1909 38765 1301
Driver's Licences:	Types B and M
Additional Languages:	Spanish (native) and English (intermediate)
Contact: telephones, email:	41071830; 53372922; mariovelasquez_99@yahoo.com

ACADEMIC TRAINING

- 2008 - 2010 Masters in Natural Resources and Environmental Economics, Universidad de Concepción. Concepción, Chile. Organization of American States (OAS) Scholarship
- 1999 – 2003 Forester, Bachelor's Degree in Forest Sciences, Universidad de San Carlos de Guatemala, Centro Universitario del Nor-Occidente, Huehuetenango, Guatemala.
- 1996 – 1998 Forestry and Forest Management Specialist, Universidad de San Carlos de Guatemala, Centro Universitario del Nor-Occidente, Huehuetenango, Guatemala
- 1993 – 1995 Accountant, Colegio Evangélico Mixto Jerusalén, Huehuetenango, Guatemala

OTHER STUDIES

Course on Tropical Forest Restoration in Disturbed Latin American Landscapes; online mode. Environmental Leadership and Training Initiative, Yale School of Forestry and Environmental Studies. United States of America. September to November 2017.

Water and Climate Change Governance Programme with a Watershed Focus, online mode. International Union for the Conservation of Nature (IUCN) and Central American Institute of Public Administration (ICAP). Costa Rica. June to August 2017.

Graduate in Restoration of Ecosystems and Environmental Services; online mode. Instituto de Ecología A. C. and Colegio de la Frontera Sur. Mexico. March to August 2016.

Degree in Ecological Rehabilitation and Silvicultural Management of Mangroves; online mode. Instituto de Ecología y Pronatura Veracruz, A. C. Coatepec, Veracruz, Mexico. March to July 2016.

CAT Technology and Training Update Course Level 2, e-learning mode. Universidad Mariano Gálvez de Guatemala. Guatemala. April to June 2016.

Scientific Research Update Course; e-learning mode. Universidad de San Carlos de Guatemala. Quetzaltenango. May to October 2015.

Graduate in Environmental Safeguards; Virtual Environmental Safeguards Course offered by the REDD-CCAD-GIZ Programme; 2013 / 2014

CAT Technology and Training Update Course Level 1. Classroom attendance mode. Universidad Mariano Gálvez de Guatemala. Guatemala. April 2014.

Economics for REDD+ Course - Economics for REDD+ Programme, German Cooperation GIZ – Granada, Nicaragua. July 2013.

International Course on New Water Catchment Management Tools - Tropical Agricultural Research and Training Centre (Centro Agronómico Tropical de Investigación y Enseñanza, CATIE) - Costa Rica. September 2011.

Holistic Water Catchment Management Focusing on Sustainable Development, Rural Lands and the Environment – Chile National Forest Commission (Comisión Nacional Forestal) - Santiago de Chile. March 2011.

Short Course “Applying Game Theory and Behavioral Economics to the Environment” - The Beijer Institute of Ecological Economics - Montreal, Canada. 27 and 28 June 2010.

Graduate in Cadastres - Colegio de Ingenieros Agrónomos de Guatemala, USAC, Centro Universitario de Nor-Occidente, Huehuetenango. 2007.

Holistic Management of Water Catchments - Virtual course – FODEPAL. 2006.

Trainer in Rural Development and Sustainable Agriculture - Train the trainer course. Cartagena de Indias, Colombia. 22 to 26 May 2006.

PROFESSIONAL EXPERIENCE

ROLE	INSTITUTION	RESPONSIBILITIES
Operations Coordinator	Water For People January 2018 to date	<ul style="list-style-type: none"> • To ensure the implementation of the Strategic Water for People Plan and the relevant AOP, enforcing technical, social and financial regulation policies. • To support the Country's management in the development and implementation of the institutional strategy 'Cobertura Total – Para Siempre' (Total Coverage - Forever) both for water and sustainable sanitation. • To plan and manage resource allocation for programme streams and their effective implementation. • To monitor and report regularly on the progress of active, future and completed projects implemented by social organizations with Water For People finance.

<p>Coordinator of the Small Grants Sub-programme of the Tropical Forest Conservation Fund (SGP/FCA), in the Cadena Volcánica Altiplano Occidental Region</p>	<p>Association for Holistic Development of the Western region</p> <p>–ADIPO–</p> <p>January to August 2017</p>	<ul style="list-style-type: none"> • To develop the technical and financial Annual Operating Plan of the Small Grants Sub-programme (SGP/FCA) for the Cadena Volcánica Altiplano Occidental Region (Totonicapán, Quetzaltenango, San Marcos and Retalhuleu). • To ensure the implementation of, and compliance with the technical and financial Annual Operating Plan of the Small Grants Sub-programme (SGP/FCA) for the Cadena Volcánica Altiplano Occidental Region. • To support and monitor the implementation of projects receiving small grants within the framework of the Sub-programme for the Region comprising the municipalities of Totonicapán, Quetzaltenango, San Marcos and Retalhuleu. • To draft six-monthly and annual reports on the technical and financial implementation of the Sub-programme in the Cadena Volcánica Altiplano Occidental Region.
<p>Full Professor in the Business Administration course</p>	<p>Universidad Mariano Gálvez de Guatemala</p> <p>Huehuetenango campus</p> <p>July 2013 to date</p>	<ul style="list-style-type: none"> • Moderator in the following courses: General Economics, Microeconomics, Statistics I and II, Mathematics I and II, Project Development and Evaluation, Thesis Preparation, Graduation Project. • Undergraduate Thesis Assessor • Co-Coordinator of the Committee for the publication Revista Vanguardia Empresarial. • Follow-up of the various courses taught through the Moodle and BBLearn platforms
<p>Provisional Teacher in the Forester course.</p>	<p>Universidad de San Carlos de Guatemala</p> <p>Centro Universitario del Nor-Occidente</p> <p>March 2015 to December 2016</p>	<ul style="list-style-type: none"> • To assist in the drafting of the Annual Operating Plan for the Forester course. • Person in charge of the Economics subject in the following courses: Forester and Social Work • Coordinator of the scientific publication 'Revista Científica del Centro Universitario del Nor-Occidente'. • To assess and advise on degree theses in the Forester course. • To design research project proposals relating to natural resources and strengthening for the Forester course.

<p>Coordinator of the project “Enhanced governance and sustainable management of Guatemala's mangrove ecosystem as a climate change adaptation action.” RED-SPD 079/12 Rev. 1 (F)</p>	<p>International Tropical Timber Organization, ITTO August 2013 to July 2015</p>	<ul style="list-style-type: none"> • Technical assistance in mangrove management for communities on the Pacific coast of Guatemala. • To promote the implementation of the “National Mangrove Strategy”. • To promote and lead the consultation process for the update of mangrove regulations. • Establishment of local mangrove community groups. • Consultancy for Pacific Municipal Councils on sustainable mangrove forest management. • Staff: 05 people. Coordination with 12 Municipal Councils on the south coast of Guatemala.
<p>Head of the Department of Strategic Forest Ecosystem Conservation. Nationally</p>	<p>National Forest Institute June 2012 to February 2015</p>	<ul style="list-style-type: none"> • To design and implement the Department's (technical and financial) Annual Operating Plan and to ensure its completion. • To coordinate the design and implementation of Inter-institutional Strategies for the Conservation and Sustainable Use of Strategic Forest Ecosystems (including Mangroves, Cloud Forests, Dry Forests, Pine-Oak Forests, Guatemalan Fir or Pinabete Forests). • To lead the process to implement payments of ecosystem services with communities and Municipal Councils. • To identify and prioritise areas for water recharge studies. • To design and manage strengthening project proposals. • To manage Department personnel. • Mentoring and consultancy for Municipal Councils and communities in the management of their natural resources and promotion of production activities.
<p>Assistant Forest expert for Finnfor project, Forests and forest management in Central America.</p>	<p>Tropical Agricultural Research and Training Centre (Centro Agronómico Tropical de Investigación y Enseñanza, CATIE) September 2011 to May 2012</p>	<ul style="list-style-type: none"> • Mentoring and consultancy for communities in the use and management of their forest resources. • Technical assistance in silvicultural management of forest plantations. • Identification, promotion and strengthening of value chains associated with forest-derived products. • Establishment of permanent forest measurement plots of Natural Broadleaved Forests, Natural Pine Forests and forest plantations.

<p>Regional Director at the Altiplano Occidental (Quetzaltenango, San Marcos, Totonicapán and Huehuetenango)</p>	<p>National Council for Protected Areas</p> <p>February 2010 to August 2011</p>	<ul style="list-style-type: none"> • To design and implement the Department's (technical and financial) Annual Operating Plan and to ensure its completion. • To promote the creation and strengthening of the management of Protected Areas in the Altiplano Occidental Region, mainly Regional Municipal Parks, Private Natural Reserves, Permanent Prohibition Zones, Marine turtles and Mangroves. • To define and implement community Biodiversity Conservation. • To implement biological monitoring systems of indicator species in the Region. • Mentoring and consultancy for Municipal Councils in Regional Municipal Park administration.
<p>National Coordinator of the Pinabete project.</p>	<p>National Forest Institute</p> <p>January 2006 to February 2008</p>	<ul style="list-style-type: none"> • To design and implement the project's (technical and financial) Annual Operating Plan and to ensure its completion. • To lead the Implementation of the Inter-institutional Pinabete Strategy. • To coordinate activities with Municipal Councils and organised community groups to promote pinabete forest conservation. • To organise and advise community groups for the sustainable management of pinabete plantations and the conservation of natural forests. • To encourage promotion events for forest and forest plantation products and by-products.
<p>Technical assistant for the National Pinabete Coordination</p>	<p>National Forest Institute</p> <p>January 2003 to December 2005</p>	<ul style="list-style-type: none"> • To provide technical advice to community groups and individual landowners on the implementation of silvicultural practices to produce pinabete Christmas trees. • To prepare forest management plans for pinabete forests. • Technical assistance to nurseries growing regionally significant forest species. • To identify and promote seed sources. • To coordinate with municipal forest offices and/or the Department of Protected Areas in Guatemalan Altiplano municipalities.

CANDELARIA MARLENY LUX LUX

Spanish-English Bilingual Secretary



Marital Status: Married

Place and date of birth: Santa Cruz del Quiché 18 August 1992

Individual Identification Code (CUI): 2139 87562 1401

Driver's Licences: Type "C" 2139 87562 1401

Additional Languages: K'iche' and English

Contact: telephones, email: +502 5945-2773/ clux@waterforpeople.org / kandy_lux@hotmail.com

ACADEMIC TRAINING

2012-2016	Legal and Social Sciences
2010-2012	Spanish-English Bilingual Secretary

OTHER STUDIES

1. Social Art for Behavioural Change and Monitoring, Assessment and Learning; Modality: classroom attendance; Institution: ONE DROP; Guatemala; Month: February; Year: 2017.
2. Mi Escuela Saludable SWASH+; Modality: classroom attendance; Institution: National Commission for Healthy Schools (Comisión Nacional de Escuelas Saludables); Country: Guatemala; Month: November; Year: 2016.
3. Forensic Discourse in Guatemala; Modality: classroom attendance; Institution: Universidad Mariano Gálvez de Guatemala; Country: Guatemala; Month: June; Year: 2014.
4. ISR Business Income; Modality: classroom attendance; Institution: Tax Administration Superintendence (Superintendencia de Administración Tributaria, SAT); Country: Guatemala; Month: March; Year: 2014.
5. Income Tax Withholdings; Modality: classroom attendance; Institution: Tax Administration Superintendence (Superintendencia de Administración Tributaria, SAT); Country: Guatemala; Month: March; Year: 2014.
6. Organization Development; Modality: classroom attendance; Institution: INTECAP; Country: Guatemala; Month: February; Year: 2014.

PROFESSIONAL EXPERIENCE

ROLE	INSTITUTION	RESPONSIBILITIES
Administrative Assistant	Water For People	<ul style="list-style-type: none"> ● Management of internal and external documents ● Person in charge of volunteer and donor logistics ● Person in charge of the Organisation's vehicle logbooks ● Person in charge of managing the server and IT champion ● Person in charge of drafting minutes ● Interpretation support ● Written translations (Spanish-English and English-Spanish) ● Preparation of contracts for personnel, contractors and consultants ● Person in charge of the Organization's physical inventory ● Settlement of personnel advances ● Preparation of procurement processes for materials and food required by personnel ● Knowledge of the NETSUITE accounting system ●
Secretary	Friendship Bridge	<ul style="list-style-type: none"> ● External and internal client support ● Entry of files into the OMNI system ● Personnel programming ● Settlement of personnel expenses ● Drafting of minutes ● Monitoring of field personnel ● Management and monitoring of corporate cell phones ● Member of the HR Committee at headquarters

Héctor Giovanni Aragón Ruano

Occupation, Registration N.13,172
Bachelor in Business Administration



Marital Status: Single
Place and date of birth: Guatemala City, 18 November 1975
Individual Identification Code (CUI): 2492 03774 0101
Driver's Licences: Type B, 2492037740101
Additional Languages: English
Contact: telephones, email: +502 55187026; giosvani@hotmail.com

ACADEMIC TRAINING

2014 - 2015 Closed curriculum Master's in Talent and Human Resources Management
2000 – 2008 Bachelor's degree in Business Administration
1990 - 1992 Accountant specialising in Commercial IT

OTHER STUDIES

Psychometric Measurement Gender and Diversity

PROFESSIONAL EXPERIENCE

ROLE	INSTITUTION	RESPONSIBILITIES
Financial and HR Manager	Water For People	<ul style="list-style-type: none">• Administration of the financial and business plan, and of HR at WFPG• Drafting and preparation of reports for international donors;• Control and management of investments and fund capitalization;• Financial analysis and cash flow control;• Audits and reviews of the management of partner organisation funds.• Control and management of disbursements for partner organizations in accordance with the operational plan and reports submitted;• Preparation of executive reports relating to partner organisation reviews;• Inventory management and control;• Training and capacity-building in financial and accounting aspects;

Financial and Administration Officer for Latin America	Trickle UP	<ul style="list-style-type: none"> • Drafting and preparation of reports for international donors; • Control and management of investments and fund capitalization; • Financial analysis and cash flow control; • Audits and reviews of the management of partner organisation funds. • Control and management of disbursements for partner organizations in accordance with the operational plan and reports submitted; • Preparation of executive reports relating to partner organisation reviews; • Inventory management and control; • Training and capacity-building in financial and accounting aspects;
Director of Institutional Development and HR	National Forest Institute (Instituto Nacional de Bosques, INAB)	<ul style="list-style-type: none"> • Consultancy and management of upgrading institutional and organizational development processes; • Coordination of strengthening and development processes in accordance with current legal and strategic frameworks; • Long-term strategies for transformation of the organisational culture to incorporate changes generated by upgrade projects; • Strategic and operational planning to incorporate strengthening and upgrade plans;
Person in charge of Human Resources	National Forest Institute, INAB	<ul style="list-style-type: none"> • Coordination of performance and training programme review processes; • Coordination of industrial and organizational environment review processes; • Implementation of administration policies and guidelines through the training plan; • Management of gender and diversity based tools; • Workload studies in accordance with established processes;
Manager of Training, Recruitment and Selection	National Forest Institute, INAB	<ul style="list-style-type: none"> • Preparation of Training Needs Diagnoses; • Planning and follow-up of induction and re-induction programmes. • Fit-for-purpose HR allocation through personnel screening processes; • Psychometric tool management for personnel evaluation and selection;
Person in charge of Treasury and Accounts Payable	CARE Guatemala	<ul style="list-style-type: none"> • Management of funds received from international grants; • Preparation of business proposals and models to obtain funding; • Budget management and control with national and international organisations: USAID, European

		<p>Community, Governments of Norway, Austria and others;</p> <ul style="list-style-type: none"> • Drafting and preparation of reports for international donors; • Control and management of investments and fund capitalization; • Financial analysis and cash flow control; • Audits and reviews of the management of partner organisation funds. • Control and management of disbursements for partner organizations in accordance with the operational plan and reports submitted; • Preparation of executive reports relating to partner organisation reviews; • Inventory management and control; • Training and capacity-building in financial and accounting aspects;
Administration Assistant and Accountant of the Water Sector	National Forest Institute, INAB	<ul style="list-style-type: none"> • Management and control of payments via taxes; • Calculation and generation of ISR reconciliation, and reporting to ISR; • Reconciliation and entry of bank accounts; • Purchases based on a procurement plan; • Preparation of quotes and comparison tables; • Budget control based on the procurement plan; • Management of vehicle fleet and maintenance of facilities; • Management of Overseas Financial System –SFM-, Scala and HPM accounting systems;

MAJOR PUBLICATIONS

1. Author: Héctor Aragón (2007) "The impact of gender and diversity on recruitment and selection processes in the city's banking system"

ANNEX 3. Terms of reference of personnel and consultants funded by ITTO

POSITION: Consultant to Develop Restoration and Forest Protection Plans (2 consultants)

OBJECTIVES OF THE POSITION: To identify forested or degraded forest areas in areas of high and very high water recharge significance, and to coordinate with their owners or holders on the development of forest restoration and/or protection plans so that they can benefit from INAB forest incentive programmes. Provide support to the Project Coordinator in the achievement and scope of outcomes provided in the project document.

SPECIFIC DUTIES:

These include, but are not limited to:

- Ensure the implementation of restoration and protection activities in areas of high and very high water recharge significance as set out in the project.
- Provide support to technicians of Municipal Water and Sanitation Offices and Municipal Forest Offices, in the identification and monitoring of water sources that are supplying the population in the project area.
- Ensure the effective and efficient implementation of the monthly, quarterly and annual budgets of the project, in compliance with Water For People and ITTO standards and procedures.
- Enable the holding of information workshops related to the project and which may include subjects such as water quality, forest restoration, and forest protection.
- Provide assistance to the Project Coordinator in specific fields including water recharge and forest protection and restoration.
- Carry out field inspections in watershed areas of high and very high significance, to identify water sources that are in use, and determine their production capacity.
- Develop the relevant management plans for the protection and restoration of identified areas in the upper and mid-watersheds.
- Coordinate, report, and participate in monthly meetings of the Water For People team, and in meetings with the OMAS and OFMs.
- Other duties and tasks as allocated by the Project Coordinator or by the Country Director.

QUALIFICATIONS:

- Bachelor in Forest Sciences, Agronomy or similar
- Training as: author of forest management plans, land use capacity studies
- Currently registered Regent with the National Forest Register.

EXPERIENCE AND SKILLS

- Experience in the implementation of projects focused around water resource management
- Experience in the development and management of forest protection and restoration plans
- Experience in the management of projects under the Forest Incentives Programme
- Experience in coordination with Municipal Office personnel
- Ability to work in the field in coordination with rural communities
- Strategic thinking to detect opportunities for water resource management.

JOB DESCRIPTION

- Contract for professional fees
- The job will be located at the Water For People office in Santa Cruz del Quiché
- There will be frequent visits to the area of implementation of the project, in five municipalities in the Department of Quiché, in the upper and middle Salinas River watershed.

2. POSITION: Temporary personnel to monitor water quantity and quality (2 people)

OBJECTIVES OF THE POSITION:

- Coordinate actions with the Project Coordinator to establish a follow-up and monitoring system on outcomes and outputs in accordance with project indicators.
- Guide and support the design of surveys and the collection of quantitative and qualitative project data at community level.
- Ensure the availability of information through data monitoring and collection in the communities within the project target area.

SPECIFIC DUTIES: These include, but are not limited to:

- Develop a survey in accordance with project indicators.
- Provide technical assistance to technical experts at municipal water and sanitation offices for capacity-building in the management of the monitoring tool and survey.
- Coordinate with the Municipal Water and Sanitation Office, OMAS, the schedule for the collection of information in watershed areas.
- Coordinate with water committees for the collection of information in watershed zones.
- Lead the collection of information in watershed zones.
- Screen the data collected in the monitoring.
- Analyse the information collected in surveys.
- Provide support in the preparation of technical reports on the progress of monitoring outcomes.
- Present monitoring outcomes to partners and other stakeholders.

QUALIFICATIONS:

Bachelor's degree or university student in Social Work, IT Systems, Statistics or similar

EXPERIENCE AND SKILLS

- Experience in database management and analysis.
- Management of information systems and statistical analysis.
- Experience in the design, implementation and analysis of surveys.
- Management of statistical software (SPSS, PSPP or other).
- Desirable experience in the use of IT data collection tools or applications through electronic devices (App Kobo Collect, mwater, Akvo FLOW, and others).
- Excellent social and communication skills.
- Desirable command of the Kich'è' language.
- Driver's licence: 2 and 4-wheel drive vehicles.
- Ability to work with partners and stakeholders.
- Team work ability.
- Proactive nature; used to working under pressure and reaching goals.
- Ability to resolve conflicts and to establish spaces for the involvement of a diversity of people.

JOB DESCRIPTION

- Contract for professional fees
- The work will be performed in the communities of the five municipalities of the Quiché Department, located in the Salinas River upper and mid-watershed areas.

3. POSITION: Consultant for the establishment of compensation mechanisms for water environmental services. (01 person)

OBJECTIVE OF THE CONSULTANCY: To promote the design and implementation process for two Payment for Environmental Services (PES) mechanisms in the project target area.

SPECIFIC DUTIES:

- Prepare a general diagnosis of biophysical and socioeconomic aspects including the identification of environmental services, providers, buyers and others in the project target area.
- Organize information collection meetings with water resource beneficiaries, municipal, community and private authorities.
- Identify a minimum of two sites with potential for the establishment of compensation mechanisms for water environmental services in the project target area.
- Design and implement a communication, awareness-building and negotiation strategy among the various stakeholders involved in the selected PES mechanisms.
- Design the Payment for Environmental Services mechanism and the operational structure (including the financial structure) for the selected mechanisms.
- Support the negotiation and approval process for the PES mechanism proposal.

QUALIFICATIONS:

- Bachelor's degree in Forest Sciences, Agricultural Sciences, Environmental Sciences or similar.

EXPERIENCE AND SKILLS

- Five years minimum experience in identification and launch of payment of environmental services mechanisms.
- Ability to draft documents and technical reports.
- Ability to work in the field in coordination with rural communities and municipal technical experts.

JOB DESCRIPTION

- Contract for professional fees
- The job will be located at the Water For People office in Santa Cruz del Quiché.
- There will be frequent visits to the area of implementation of the project, in five municipalities in the Department of Quiché, in the Salinas River upper and mid-watershed areas.

4. POSITION: Consultant to characterize water sources and to develop municipal participatory plans for the protection of water sources (01 person)

OBJECTIVES OF THE POSITION: To identify and describe at least 150 sources of water situated in the municipalities of San Andrés Sajcabajá, San Bartolomé Jocotenango, San Pedro Jocopilas, San Antonio Ilotenango and Santa Cruz del Quiché, and to develop five municipal participatory plans for the protection of water sources to ensure the continuity of environmental services.

SPECIFIC DUTIES:

- Collect all the water resources information that may be available in public and private institutions in the area of the project, and that may be useful as baseline information for project analyses.
- Describe at least 150 surface water sources situated in the municipalities within the project target area, using an inventory of them, and containing the following details: type of source, geo-positioning, water flow, water quality, uses and users, type of forest or vegetation cover around the source, as well as information considered relevant for the study.
- Prepare five diagnoses of the status of the resources in the municipalities in the target area of the project.
- Organize at least ten workshops (two for each municipality), with representatives of Water Committees, COCODES, technical experts of the Municipal Water and Sanitation Offices and Environmental Council Members, to prepare municipal participatory plans for the protection of water sources.
- Prepare five municipal participatory plans for the protection of water sources, to ensure the continuity of environmental services, including short, medium and long-term goals.
- Provide support to the implementation of the municipal participatory plans for the protection of water sources.

QUALIFICATIONS AND REQUIREMENTS

- Bachelor's degree in Environmental Sciences, Forest Sciences, Agronomy or similar.
- The consultant will be based in the project target area.

EXPERIENCE AND SKILLS

- Experience in surface water source characterization studies.
- Experience in the formulation of participatory plans focused on the protection of natural resources, preferably water resources.
- Experience in the organization of participatory workshops with community and municipal leaders.
- Experience in coordination with Municipal Water and Sanitation Office personnel.
- Ability to prepare technical documents.

JOB DESCRIPTION

- Contract for professional fees.
- The cost of holding participatory workshops will be covered by the project.
- Desk work will be carried out at the Water For People office in Santa Cruz del Quiché.

ANNEX 4. Response to the recommendations of ITTO's Expert Panels

No.	EP recommendation	Modification made	Page No.
1	Remove the first paragraph related to Executive Agency (WFFP) history and include the key problem, development, specific objectives and expected outcomes in summary of the cover page	The first paragraph was deleted as requested The key problem, development objective, specific objectives and expected outcomes were included in the summary section of the cover page	Page 1
2	Include Sub-section 1.2.1 (conformity with ITTO's objectives and priorities) in table of contents	Sub-section 1.2.1 was included in the table of contents	Page 2
3 & 4	Rearrange activities in Sub-section 3.1.2 (Activities and Inputs), Sub-section 3.3 (work plan) and Sub-section 3.4.1 (Master budget schedule) so that activities support outputs; Activity 1.2 should move under Output 4 and Activity 2.2 and 2.3 should move under Output 1 Combine Activity 1.3 and Activity 1.4 in one Activity due to these two activities are the same activity	The activities in the indicated sub-sections were rearranged to support the achievement of outputs	Pages 17-26
5	Include budget contribution from INAB in cover page; maintain consistency of the total budget amount cover page, master budget (3.4.1) and consolidated budget (3.4.2); Improve budget category number arrangement and budget calculation in all budget tables (change number of budget Item for ITTO management cost from item 72 to item 82)	INAB's contribution to the overall budget was included in the cover page, the master budget and the consolidated budget tables The budget category number arrangement was improved The budget item for ITTO management costs was changed	Page 1 Pages 21-32
6	Provide clear picture of project site map Organization Structure of Executive Agency (Water for People)	A clear image of the organizational structure of Water For People was included	Page 37
7	Provide information on type of delivering reports and their reporting time in sub-section 4.3 (monitoring and reporting)	Explanatory information was included in sub-section 4.3	Page 35
8	Provide CVs of key personnel of the executing agency in Annex 2	The CVs of key personnel from Water For People were included in Annex 2	Pages 40-49
9	Provide Terms of Reference of seven consultants funded by ITTO in Annex 3	Annex 3 now includes the terms of reference for the consultants to be funded by ITTO. Four sets of TORs are included because two of them cover two positions	Pages 50-53

Recommendations of the 55th Expert Panel

<u>No.</u>	<u>55th Expert Panel's recommendation</u>	<u>Modifications made</u>	<u>Page No.</u>
<u>1</u>	<u>Improve the Section 3.2 (strategic approaches and methods) by adding elements on the way to educate the public and local communities on how to sustainably conserve watersheds;</u>	<u>Information was added on how the public and communities will be educated, taking into account a gender-focused approach</u>	<u>Page 17</u>
<u>2</u>	<u>Amend the ITTO budget in line with the above overall assessment and specific recommendations and also in the following way: a) Recalculate the ITTO Programme Support Costs (budget sub-item 83) so as to conform with standard rate of 12% of the total ITTO project costs (on budget items 10 to 82), and b) Adjust all budget tables taking into account the correct amount regarding the budget sub-item 83.</u>	<u>ITTO programme support costs were recalculated</u> <u>Adjustments were made in the following tables:</u> <u>Master budget</u> <u>Consolidated budget by component</u> <u>ITTO budget by component</u>	<u>Pages 20-29</u>
<u>3</u>	<u>Include an Annex that shows the overall assessment and specific recommendations of the 55th Expert Panel and respective modifications in tabular form. Modifications should also be highlighted (bold and underline) in the text.</u>	<u>Annex included</u>	<u>Page 54</u>