

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

TITLE:	FOREST FIRE PREVENTION AND RESPONSE IN TROPICAL FORESTS AND FOREST PLANTATIONS IN PERU
SERIAL NUMBER:	PD 853/17 Rev.2 (F)
COMMITTEE:	REFORESTATION AND FOREST MANAGEMENT
SUBMITTED BY:	GOVERNMENT OF PERU
ORIGINAL:	SPANISH

SUMMARY

Inadequate and illegal use of fire and the lack of awareness about its negative effects on the environment and human health are causing major forest fires, leading to a loss of large forest areas and the disturbance of countless natural processes. In Peru, and particularly in the departments of Cajamarca, Pasco, Junin and Cusco, this problem is aggravated in communities with an ancestral tradition of burning practices to attract rain or as a technique to clear stubble vegetation left behind by agricultural activities. This results in a high incidence of wildfires in natural forests, other wild vegetation formations and forest plantations, eventually leading to the loss of forest cover and natural wild flora and fauna habitats; damages to the physical integrity, health or property of individuals; greenhouse gas emissions; and loss of economic value of forest lands and wildlife resources.

The development objective of this project is to contribute **to the conservation of forest ecosystems and other wild vegetation formations threatened by forest fires**, while its specific objective is **to reduce the occurrence of forest fires through capacity strengthening in forest fire prevention and response aimed at local communities and local authorities**. Positive impacts of the project will include a reduction in the loss of forest cover and natural habitats of wild fauna and flora; increased response capacity of social stakeholders in the prevention and management of forest fires; reduced greenhouse gas emissions; and social stakeholders' awareness about forest fire impacts so as to facilitate the implementation of regional action plans.

Expected project outputs include: best forest and agricultural waste practices; public and private institutions effectively managing forest fire prevention and response protocols; efficient forest fire monitoring system; and population trained on forest fire impacts. In order to achieve these outputs, the project will raise awareness among agricultural producers regarding best forest and agricultural waste management practices, will strengthen social organizations and will ensure coordination between public and private institutions. In addition, the project will coordinate with institutions equipped with early-warning and information systems and will disseminate forest-related regulations. The sustainability of the project will be ensured because it is of institutional interest and will be part of the management actions of SERFOR's General Directorate for Sustainable Forest and Wildlife Heritage Management.

EXECUTING AGENCY: NATIONAL FOREST AND WILDLIFE SERVICE (SERFOR) OF THE MINISTRY OF AGRICULTURE AND IRRIGATION (MINAGRI)

COLLABORATING AGENCIES ---

DURATION: 24 MONTHS

APPROXIMATE STARTING DATE UPON APPROVAL AND FINANCING

PROPOSED BUDGET AND

OTHER FINANCING SOURCES:

Source	Contribution in US\$
ITTO	<u>441,045</u>
SERFOR	<u>372,736</u>
TOTAL	<u>813,781</u>

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PROJECT BRIEF

Forest fires can be classified as natural disasters according to Article 2 of the Regulations of the Law of the National System for Disaster Risk Management – SINAGERD, which reads: “A *disaster* is a sudden event causing a combination of damage and loss of health, livelihoods, physical habitat, infrastructure, economic value and environment, as a consequence of the impact caused by hazards or threats to such a degree of intensity that results in a serious disruption of the functioning of social units, exceeding the local response capacity to effectively address its consequences; it can be a natural or human-induced event”.

Fire is a natural regulator of certain ecosystems; however, its ecological role in the functioning and maintenance of these ecosystems has been affected by major disasters caused by inadequate and illegal use and by a lack of awareness on the negative effects on the environment and human health, in particular, of burning practices, which have resulted in major wildfires that, together with deforestation, have contributed to the loss of large forest areas and the disruption of countless natural processes.

Peru is not exempt from this situation; on the contrary, the problem is aggravated in communities with an ancestral tradition of burning practices to attract rain or as a technique to clear stubble vegetation left behind by agroforestry activities. This has resulted in a high incidence of wildfires in natural forests, other wild vegetation formations and forest plantations, eventually leading to the loss of forest cover and natural wild flora and fauna habitats; damages to the physical integrity, health or property of individuals; greenhouse gas emissions; and loss of economic value of forest lands and wildlife resources.

In view of the above, SERFOR hereby submits this project proposal with the objective of contributing to **the conservation of forest ecosystems and other wild vegetation formations threatened by forest fires**. The achievement of this objective will be measured at project completion through increased awareness and training of a total of **1,800** local dwellers and 960 representatives of key public and private institutions in the project target area, as well as sound coordination between the communities and public and private institutions to strengthen forest fire prevention and response.

The project will directly benefit local communities as well as local and regional authorities in priority areas where project activities will be implemented. Expected outcomes at project completion include reduced loss of forest cover from wildfires, increased awareness and capacity strengthening among local communities regarding best forest and agricultural waste management practices through the production of a manual; wildfire monitoring through an efficient forest fire monitoring system; increased capacity of public and private institutions to respond to forest fire events based on established protocols; and a communication strategy to inform beneficiaries on forest regulations and forest fire impacts. Basically, four outputs are expected to be produced to achieve these outcomes: best forest and agricultural waste practices; public and private institutions effectively managing forest fire prevention and response protocols; efficient forest fire monitoring system; and population trained on forest fire impacts.

The project will be implemented under the supervision of a steering committee to be made up of representatives from SERFOR and ITTO. The project management team will comprise a project leader and a project coordinator, who will monitor project activities from Lima; in addition, an area coordinator and an assistant will be recruited for each of the 3 departmental offices to carry out project operational activities. For the two-year implementation period, experts, consultants and services will be hired, mainly for the training of previously identified beneficiaries, who will include local leaders, local extension officers, authorities, producers, and key stakeholders, who will replicate project activities in their own areas.

A consultative committee will also be set up with the participation of key stakeholders. This committee will provide a discussion and feedback platform to ensure ongoing project improvement. It should be pointed out that in order to improve the operational efficiency of project activities, a participatory, inclusive and multidisciplinary approach will be used, including planning and information methodologies.

Project sustainability will be based on the establishment and consolidation of community organizations and improved coordination among institutions involved in forest fire management, whose capacities will be strengthened to enable them to address forest fire events with the support of a monitoring system. It should also be considered that according to the Forest and Wildlife Law, SERFOR’s mandate includes promoting forest fire prevention activities.

Required assumptions for the achievement of project objectives include the Peruvian Government’s interest in the development of a national forest policy and public and private institutions’ interest in participating in project events, among others; main risks that may hinder the achievement of objectives and implementation of activities

is an increase in forest fires in the target areas; a failure to implement best agricultural practices; a lack of interest of public and private institutions in participating in the process, etc. In order to mitigate these risks, the project will focus on specific objective 1 of the National Forest and Wildlife Policy: “Achieve effective management of forest ecosystems and other components of the Nation’s Forest and Wildlife Heritage”, which in its item 1.5.7 states the need to prevent and control forest fires with the active participation of local communities.

Furthermore, SINAGERD member institutions as well as key public and private institutions will be invited in advance to attend awareness and training meetings and events, providing them with user-friendly manuals and documents, which will be translated into local languages as required to reach the largest number of people possible. The regional office assistants will be in continuous and direct contact with the local communities and representatives of public and private institutions based in the proximity of the target areas so as to build trust links and thus consolidate communication as well as participation and interest in project events.

The budget required from ITTO for the implementation of this project is US\$ **441,045**, with personnel and capital items costs comprising **36.50%** and **3.11%** of this total, respectively. The contribution of the executing agency will be **US\$ 372,736**.

LIST OF ACRONYMS AND ABBREVIATIONS

AGRORURAL	Programa de Desarrollo Productivo Agrario Rural (<i>Rural Agrarian Production Development Programme</i>)
ARFFS	Administración Regional Forestal y de Fauna Silvestre (<i>Regional Forest and Wildlife Administration</i>)
ATFFS	Administración Técnica Forestal y de Fauna Silvestre (<i>Technical Forest and Wildlife Administration</i>)
CENEPRED	Centro Nacional de Estimación, Prevención y Reducción del Riesgo de Desastres (<i>National Center for Estimation, Prevention and Reduction of Disaster Risks</i>)
COEN	Centro de Operaciones de Emergencia Nacional (<i>National Emergency Operations Center</i>)
INDECI	Instituto Nacional de Defensa Civil (<i>National Civil Defense Institute</i>)
ITTC	International Tropical Timber Council
ITTO	International Tropical Timber Organization
MINAGRI	Ministerio de Agricultura y Riego (<i>Ministry of Agriculture and Irrigation</i>)
SERFOR	Servicio Nacional Forestal y de Fauna Silvestre (<i>National Forest and Wildlife Service</i>)
SERNANP	Servicio Nacional de Áreas Naturales Protegidas por el Estado (<i>National Service for State-Protected Natural Areas</i>)
SENAMHI	<u>Servicio Nacional de Meteorología e Hidrología de Peru (National Meteorology and Hydrology Service of Peru)</u>
SINAGERD	Sistema Nacional de Gestión del Riesgo de Desastres (<i>National System for Disaster Risk Management</i>)

MAP OF THE PROJECT AREA



PART 1: PROJECT CONTEXT

1.1 Origin

Forest fires are an ongoing problem for Peru, having recorded an alarming increase in forest fire occurrence over the last few years (2011-2016).

The losses caused by these events in 2016 alone amount to nearly 94,200 ha. Affected forest ecosystems include plantations, tropical forests, other wild vegetation formations, and associated wildlife.

SERFOR, in its capacity as the National Forest and Wildlife Authority, whose role includes managing and promoting the sustainable use, conservation and protection of forest and wildlife resources in the country, needs to enhance its actions aimed at mitigating this problem in accordance with its mandate of addressing all aspects related to forest fire prevention and control¹.

In this context, the General Director for Sustainable Forest and Wildlife Heritage Management has decided to formulate this project proposal within the framework of the functions established for this institution and its decentralized agencies (ATFFS²), which are a pivotal element in the coordination of stakeholders in the area where the problem is to be addressed.

This diverse group of stakeholders includes local authorities, community leaders, the local population in general and organizations and institutions in charge of forest fire response. In this respect, SERFOR has effective coordination and cooperation mechanisms with fire fighters, INDECI and local governments, as specialized bodies responsible for addressing forest fire events. In addition, SERFOR is also in ongoing communication with national institutions in charge of planning and prevention actions related to forest fires (CENEPRED and INDECI). The project will have the support of the aforementioned institutions and pre-existing synergies established within the framework of cooperative actions undertaken in this field.

1.2 Relevance

By aiming to reduce the occurrence of forest fires, this project is consistent with ITTO objectives and priorities as well as relevant national policies.

1.2.1 Conformity with ITTO's objectives and priorities

ITTO objectives (ITTA 2006)

The loss of forest and wildlife resources worsens the poverty conditions of local communities and prevents the establishment of enabling conditions for sustainable development; in this respect, all project courses of action will address this problem, mainly focusing on reducing a phenomenon that leads to the loss of forest resources (objective c).

The project seeks to strengthen governance structures so as to facilitate the enforcement of current – and future – policies and regulations, promoting partnerships and coordination with key stakeholders in regional scenarios. Even though the current regulatory framework in the country is quite comprehensive when it comes to the sustainable management of forests, the lack of knowledge about these regulations and the low priority given to their enforcement in some levels, limits its effectiveness. The project will address these weaknesses, focusing on creating awareness to value resources so as to encourage their management under an ecosystem approach (objective n).

The project will empower rural communities, indigenous communities, ancestral and local peoples through the transfer of technology and knowledge, use of beneficial practices and training, all of which will strengthen their capacities and will promote their involvement in planning processes for the utilization of forests on a sustainable basis. These will indeed be the direct beneficiaries of the project as it will promote the conservation of a resource base of paramount importance for their livelihoods and life styles (objective r).

The project will strengthen both human resource skills and technological equipment to address an increasing phenomenon that requires a multifocal approach, particularly in the face of current climate change conditions, which in the case of forest fires, exacerbate the problem intensifying desertification in vulnerable regions (objective s).

¹ Act No. 29763 – Forest and Wildlife Law.

² Technical Forest and Wildlife Administration Services (*Administraciones técnicas forestales y de fauna silvestre* – ATFFS).

ITTO Guidelines on Fire Management in Tropical Forests – 1997

This projects falls within the scope of the ITTO Guidelines on Fire Management in Tropical Forests, in Principle 4 “The selection and application of fire management options depend upon the conditions and circumstances found at the national, provincial, and local levels which may include, inter alia:

- **Risk and sources of fire,**
- **Fire management capabilities or means.**

Item b of Recommended Action 4 stipulates that “An integrated fire management program should be developed which may include some or all of the following fire management measures:

- **Community participation in fire protection,**
- **Fire pre-suppression measures, e.g. weather and fire danger forecasts, detection and early warning and reporting systems.**
- **Training, extension and public awareness programs, and**
- **A compost processing policy for agricultural waste or residues from other operations carried out near forest areas.”**

ITTO priorities (ITTO Strategic Action Plan 2013-2018)

Governance strengthening in priority areas will be ensured through the capacity-building component addressed to community organizations and authorities, as well as through the development of stakeholder coordination mechanisms and spaces in the field of forest management in problem areas (consistent with Strategic priority 1). Furthermore, the project seeks to reduce the degradation of tropical forests by improving their conservation so as to maintain the provision of environmental services and promote sustainable forest management, which in turn will contribute to national and, in particular, local economies (Strategic priorities 3, 4 and 2).

Finally, the project will focus on raising awareness about the value of production and competitive resources to encourage their management under an ecosystem approach (priorities 3 and 4).

1.2.2 Relevance to the submitting country’s policies

The project is consistent with the National Forest and Wildlife Policy, approved through Supreme Decree No. 009-2013-MINAGRI, and in particular with its Policy Guideline 2 on resource sustainability, which promotes *special management for the conservation and sustainable utilization of forest ecosystems and other types of wild vegetation that are threatened or subject to degradation*. Forest fires constitute a threat to the national forest and wildlife heritage.

In this context, the National Forest and Wildlife Service – SERFOR implements various actions aimed at the production of the country’s Forest Heritage within the framework of its mandate as defined in Act No. 29763 – Forest and Wildlife Law, which states *inter alia* that SERFOR’s responsibilities are “To management and promote the sustainable use, conservation and protection of forest and wildlife resources”. It is for this reason that SERFOR is in charge of promoting actions for the prevention and control of wild fires and the rehabilitation of fire-affected areas.

Furthermore, the National Agreement explicitly details commitments undertaken in order to “Integrate the national environmental policy with economic, social, cultural and land management policies and institutionalize public and private environmental management so as to protect biological diversity and facilitate the utilization of natural resources...”.

1.3 Target area

1.3.1 Geographic location

The project’s direct area of influence is located in four departments, which are under the jurisdiction of three technical forest and wildlife administration services – ATFFS, which are SERFOR’s decentralized local agencies as described below:

Department	Geographic location			ATFFS
	ZONE	X	Y	
Junín	19	185757	8501670	Selva Central
Pasco				
Cajamarca	17	777040	9207332	Cajamarca
Cusco	18	460133	8770034	Cusco

See map on page 5.

1.3.2 Social, cultural, economic and environmental aspects

According to the National Institute of Statistics and Information Technology (*Instituto Nacional de Estadística e Informática* – INEI), the population in the project target area is characterized by the following data:

Department	Population according to census (year)					
	1940	1961	1972	1981	1993	2007 a/
Cajamarca 1/	482,431	731,256	902,912	1,026,444	1,259,808	1,387,809
Cusco	486,592	611,972	715,237	832,504	1,028,763	1,171,403
Junín 1/	338,502	521,210	696,641	852,238	1,035,841	1,225,474
Pasco 1/	91,617	140,426	175,657	211,918	226,295	280,449

1/ Restructured according to 2007 Political-Administrative Division, considering changes occurred in each department during the relevant periods.

Source: National Institute of Statistics and Information Technology (INEI) – National Population and Housing Census, 1940, 1961, 1972, 1981, 1993 y 2007.

The Project area mainly covers Andean and Amazon communities where there is a culturally embedded tradition about technical agricultural practices, in particular the burning of (agricultural and forestry) stubble vegetation is a common practice to attract rain or, in the best of cases, it is used as a technique to eradicate residues. These actions are often the cause of forest fires that can destroy thousands of hectares per year, including natural forests, plantation forests and seasonal crops, as well as homes and human lives, and can also affect the general landscape, directly impacting activities such as tourism.

The main economic activities in the Andean region include rain-fed agriculture with crops such as tubers, fruit trees, wheat, barley, corn, peas, lentils; cattle ranching (milk, meat and cheese production); forestry: tara harvesting from natural forests, non-timber forest products for export markets; as well as pine and eucalyptus forest plantations; the communities use all of these products in their daily lives for food, medicines, firewood, fencing and economic livelihood.

The products are marketed at the local and regional levels in fairs, while other products such as rice and cocoa are mainly marketed in coastal cities. Due to the improvements made to the road network in these localities, there is a constant trade flow, as well a reciprocal trade with neighbouring districts.

The Amazon region has large areas of natural forests with high commercial value timber species such as cedar. These forests are under constant pressure from shifting agriculture and land-use changes as well as indiscriminate logging, which affects the headwaters of watersheds where the water sources that feed the agricultural valleys are found. In order to improve the regeneration process and the quality of pastures for livestock feeding, the local communities carry out burns.

The production of coffee and cocoa is the driving force behind the local and regional economies and has become one of the main economic activities in the region, as these products are in high demand in international markets.

In the departments covered by the project area there are natural protected areas that are home to very valuable flora and fauna species, which are being threatened by the expansion of the agricultural frontier and bad agricultural practices such as the burning of stubble vegetation or burns caused by land-use changes.

The environmental impacts caused by these practices include: loss of habitats and forest cover, including forest wildlife heritage areas; considerable air pollution affecting the health and vision of the local population; land fragmentation and rifting in natural biological corridors; loss of organic matter (micro flora and micro fauna), affecting the physical-chemical properties of soils, which in the short term, will lead to the impoverishment and degradation of soils and will have a direct impact on cattle and/or agricultural production, with the subsequent abandonment of these lands. The areas in question are affected by landslides, mud floods, soil erosion, deterioration of water quality, and sedimentation of rivers, among others.

1.4 Expected outcomes at project completion

After project completion, it is expected that the loss of forest cover caused by forest fires will be reduced as a consequence of the following outcomes:

- Manuals on sustainable management techniques will be available and the local communities in the project's target areas will have been sensitized and trained on these issues and will be implementing good forest and agricultural waste management practices.
- Response protocols will be available for forest fire events and these will have been used to train personnel from local public and private institutions, who will be coordinating and effectively responding to forest fire situations.
- An early warning management and implementation manual will be available and personnel from the regional offices and other public institutions will have been trained to systematically coordinate the monitoring of forest fires through the use of an efficient forest fire monitoring system.
- Communication systems will be available and the local communities and local authorities will have acquired knowledge about forest and related regulations and about the impacts and consequences of forest fires.

PART 2: PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

2.1.1 Institutional set-up and organizational issues

The local authorities, as the basic units in the government organizational structure, are in charge of liaising directly with the local communities. The district and province municipalities are politically and administratively autonomous and coordinate with the regional governments, which represent the administrative and political authority responsible for the management of resources in the departments.

SERFOR is a specialized technical public agency attached to the Ministry of Agriculture and Irrigation – MINAGRI. It has full legal capacity under the public domestic law of the State with budgetary allocations from MINAGRI. The institution has technical forest and wildlife administrations (ATFFS), which are decentralized local agencies with budgetary allocations from MINAGRI.

The National Civil Defense Institute – INDECI is a public agency within the National System for Disaster Risk Management – SINAGERD, a synergic, decentralized, cross-sectoral and participatory inter-institutional system aimed at identifying and reducing the risk of disasters or at minimizing their effects, as well as avoiding the generation of new hazards and ensuring adequate preparation and response in the face of disasters. INDECI is technically responsible for coordinating, facilitating and supervising the formulation and implementation of the National Policy and National Plan for Disaster Risk Management through preparation, response and rehabilitation actions. It should be pointed out that MINAGRI is a member of SINAGERD.

CENEPRED is a public agency that is also a member of SINAGERD. It is technically responsible for coordinating, facilitating and supervising the National Policy for Disaster Risk Management and the National Plan for Disaster Risk Management through estimation, prevention, disaster risk reduction, rehabilitation and reconstruction actions.

Furthermore, the General Voluntary Firefighters Department of Peru is the competent authority in the prevention, control and suppression of fires, providing voluntary services to the community based on a strong commitment to service, social awareness, dedication and discipline, in order to prevent, protect and support the population in the event of fires and natural or human-induced emergencies at the national level.

In the project target areas, the local communities are not fully aware of the impacts of forest fires, and the representatives of local public and private institutions are not adequately trained. Thus, there is no coordination structure for the prevention of and response to forest fires, and there is a need to strengthen this coordination through the activities proposed in this project with the support of ATFFS as focal decentralized centers of SERFOR for the provision of information derived from the Early Warning System. In addition, the ATFFS will carry out participatory training activities addressed to local community members and representatives of key public and private institutions, with a view to reducing the occurrence of fires in natural forests, other wild vegetation formations and forest plantations.

Moreover, coordination links with SINAGERD will also be strengthened at the local level so as to enhance the positive impact of project activities.

2.1.2 Stakeholder analysis

The Project will directly benefit the local communities and the local and regional authorities in the target areas where project activities will be implemented.

A detailed breakdown of project stakeholders/beneficiaries is shown below:

Stakeholder group	Characteristics	Problems, needs and interests	Strengths	Relationship with the project
<i>Primary stakeholders</i>				
Indigenous organizations	Involved in forest harvesting	Ecosystem services threatened	Ancestral knowledge	Beneficiaries
Farmer organizations	Use of agricultural lands	Loss of soil fertility	Ancestral knowledge	Beneficiaries
Forest producers	Income from the harvesting of natural forests and forest plantations	Illegal logging	Forest management	Beneficiaries
Forest producer associations	Use of agricultural lands	Increased use of agrochemicals	Export products	Beneficiaries
Cattle ranchers	Involved in forest clearing to increase cattle ranching areas	Forest logging	Food for the population	Beneficiaries
<i>Secondary stakeholders</i>				
<u>Volunteer Fire Brigades of Peru</u>	<u>Active participation in response to forest fire incidents</u>	Very few fire brigades that specialize in fighting forest fires	Experience in <u>responding to forest fire incidents</u>	<u>Will provide support for the training of local dwellers and institutions in response to forest fire incidents</u>
Local governments	<u>Local authorities that are involved in the prevention and response to forest fire incidents</u>	<u>Weak management</u>	<u>Convening capacity</u>	<u>Involvement in the dissemination of written and oral information for the prevention of forest fires</u>
NGOs	<u>Private non-profit organizations that provide support for the sustainable development of natural resources</u>	<u>They implement coordinated activities with the State</u>	Experience at the local and regional levels	<u>Sharing of information</u>
Cooperatives	<u>Community organizations grouping local dwellers who are involved in production activities</u>	Need to preserve <u>the national forest and wildlife heritage, forest plantations and agricultural and cattle-raising production activities</u>	Improved production <u>and utilization of forest resources</u>	<u>Will call on their members to participate in project activities</u>

<i>Tertiary stakeholders</i>				
Journalists	<u>Social communicators</u>	<u>Will keep local dwellers informed about the risks of forest fires</u>	<u>Wide dissemination of information through social communication mass media</u>	<u>Maintain the population informed on prevention and warning measures related to forest fires</u>
SENAMHI	<u>Records and provides meteorological information</u>	<u>Cooperates with State institutions by providing meteorological information</u>	<u>Provides timely meteorological information</u>	<u>Active participation in early warning activities</u>
Universities	<u>Training professionals</u>	Limited budget	<u>Capacity to pass on knowledge to local communities</u>	<u>Provides technical assistance and training to local communities</u>
Banks	Regional and national financing	Local presence	Credit expertise	Credit possibilities

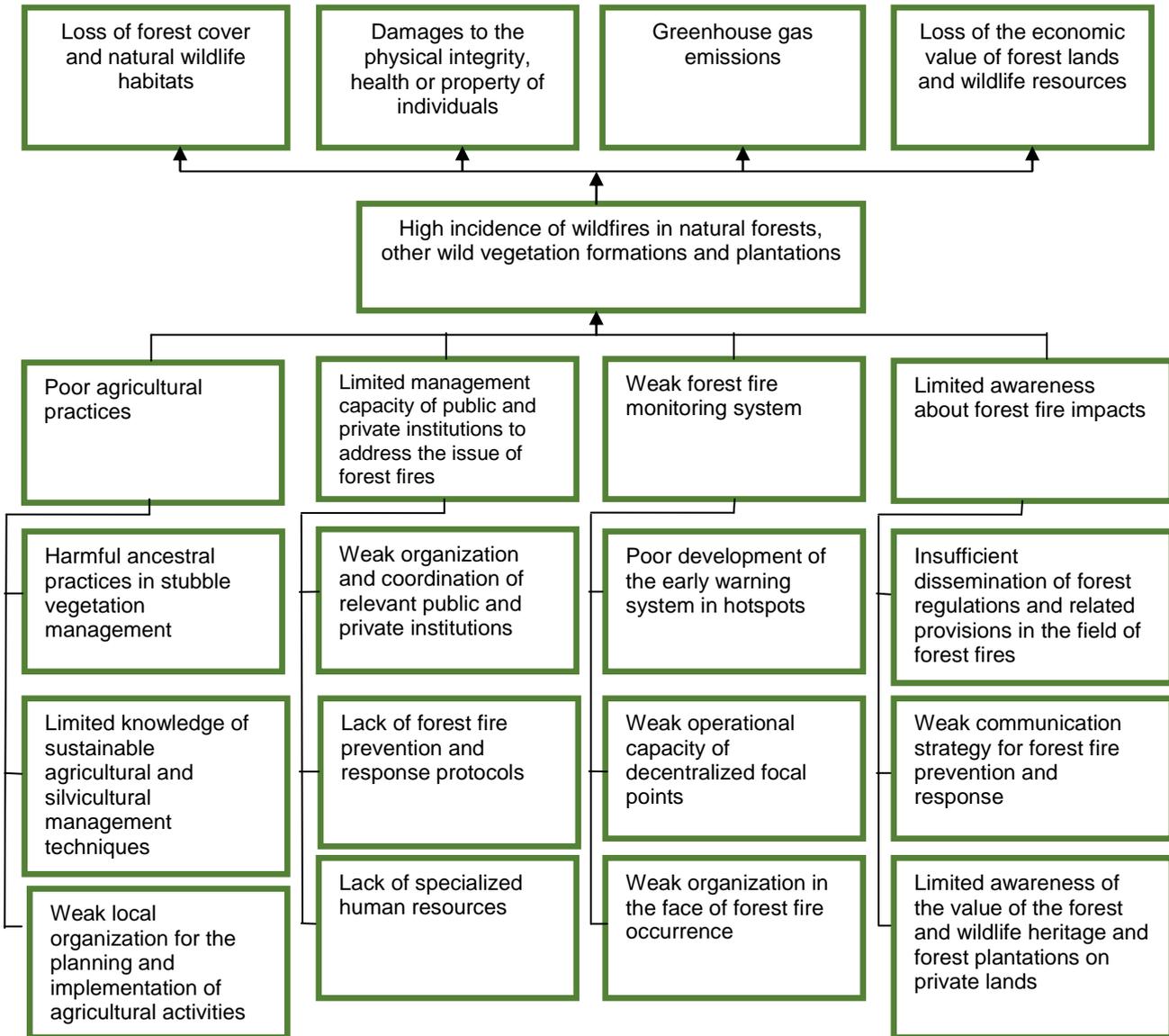
List of project beneficiaries: **1800 local dwellers**

Department	Province	Beneficiaries	Organization	No. of beneficiaries
Cajamarca	Cajabamba	Community members	Llucho rural community	90
Cajamarca	Cajabamba	Dwellers	Pampa Grande hamlet	80
Cajamarca	Cajabamba	Dwellers	Jocos hamlet	90
Cajamarca	Cutervo	Community members	Mochadín rural community	100
Cajamarca	Cajamarca	Dwellers	San José hamlet	80
Cajamarca	Chota	Dwellers	Tacabamba hamlet	100
Cajamarca	Jaén	Dwellers	Association of residents of the Pucara District	90
Cajamarca	San Ignacio	Dwellers	Rural patrols of the Chirinos District	90
Cusco	Quispicanchis	Dwellers	Association of farmers of the Quispicanchis districts	100
Cusco	Cusco	Dwellers	Association of residents of San Sebastian and San Jeronimo	90
Cusco	La Convención	Dwellers	Association of Coffee and Cacao Cooperatives	80
Cusco	Paucartambo	Dwellers	Association of residents of the Paucartambo District	100
Junín	Chanchamayo	Dwellers	Association of residents of Pichanaki	100
Junín	Chanchamayo	Dwellers	Association of farmers of Perene	80
Junín	Satipo	Community members	Ashaninka native communities	110
Junín	Satipo	Dwellers	Association of farmers of Mazamari	80
Pasco	Oxapampa	Dwellers	Association of cattle breeders of Pozuzo	90
Pasco	Oxapampa	Dwellers	Association of farmers of Palcazu	80
Pasco	Oxapampa	Dwellers	Association of farmers of Huancabamba	90
Pasco	Oxapampa	Dwellers	Association of timber producers of Puerto Bermudez	80

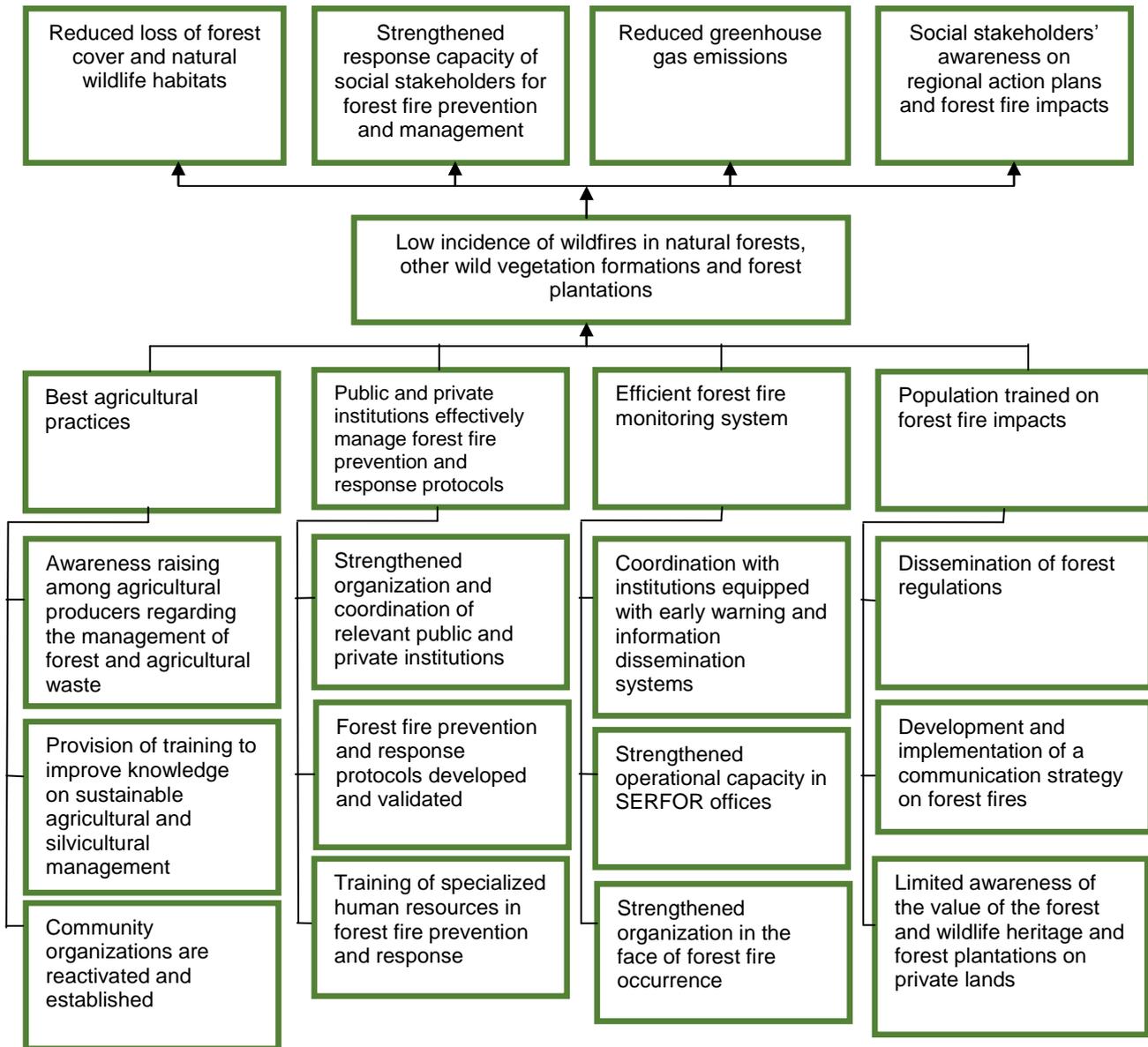
2.1.3 Problem analysis

After identifying the key problem, four causes were recognized as detailed in the problem tree below:

Problem tree



Solutions tree



2.1.4 Logical framework

Intervention strategy	Measurable indicators	Means of verification	Assumptions
<p>Development objective Contribute to <u>the conservation of forest ecosystems and other wild vegetation formations threatened by forest fires.</u></p>	<ul style="list-style-type: none"> • A total of 1,800 local dwellers and 960 representatives of key public and private institutions in the project target area have been sensitized and trained • Sound coordination links have been established between the population and public and private institutions for forest fire prevention and response • A publication on forest fires has been produced 	<ul style="list-style-type: none"> • Guidelines, legal regulations • Reports • Proceedings of meetings • Protocol for forest fire prevention and response 	<ul style="list-style-type: none"> • The Peruvian Government is interested in developing a national forest policy aimed at the sustainable development of forests in consonance with the project objective • Public and private institutions are willing to participate in the events organized by the project
<p>Specific objective <u>Reduce the occurrence of forest fires through capacity strengthening in forest fire prevention and response aimed at local communities and local authorities</u></p>	<ul style="list-style-type: none"> • In the first year of the project, two (02) protocols have been developed – one for forest fire prevention and another one for forest fire response • In the first year of the project, one (01) manual for early warning management and implementation is available • By the end of year 1, there are three (03) manuals on best agroforestry practices available • By the end of year 1, one (01) communication action on forest fires has been established 	<ul style="list-style-type: none"> • Official reports on field visits and workshops • Official statistical reports • Commitments and/or agreements with key social stakeholders 	<ul style="list-style-type: none"> • Regional offices raise awareness on forest fire prevention, management and control • Public and private institutions are willing to participate in workshops and awareness events • Reduced risk of forest fires in priority areas
<p>Output 1 Best forest and agricultural waste practices</p>	<ul style="list-style-type: none"> • 12 awareness workshops on best practices for forest and agricultural waste management, in the 1st year of the project (3 regional offices and 4 workshops/office) • 6 awareness workshops on best practices for forest and agricultural waste management, in the 2nd year of the project • 3 publicity billboards, in the 1st year • 3 radio spots in the 1st year • 3 radio spots in the 2nd year • 3 publicity videos • 3 courses on sustainable agricultural and silvicultural management techniques, in the 1st year • 3 courses on sustainable agricultural and silvicultural management techniques, in the 2nd year • 1 manual for the course on sustainable agricultural and silvicultural management techniques, in the 1st year • Distribution of invitations, in the 1st year • 9 work meetings with community organizations, in the 1st year • 9 work meetings with community organizations, in the 2nd year 	<ul style="list-style-type: none"> • Workshop, meeting and course reports • Reports containing photographs of publicity billboards and CD with publicity videos • Newsletters/spot/audios • Proceedings of meetings 	<ul style="list-style-type: none"> • The best practices for forest and agricultural waste management help reduce the incidence of forest fires
<p>Output 2 Public and private institutions effectively managing forest fire prevention and response protocols</p>	<ul style="list-style-type: none"> • 3 training workshops/courses for social stakeholders to enhance forest fire response capacity, in the 1st year • 3 training workshops/courses for social stakeholders to enhance forest fire response capacity, in the 2nd year • 1 forest fire prevention protocol, in the 1st year • 1 forest fire response protocol, in the 1st year • 3 validation workshops for the implementation of forest fire prevention and response protocols, in the 1st year • 3 validation workshops for the implementation of forest fire prevention and response 	<ul style="list-style-type: none"> • Forest fire prevention and response protocols • Reports on workshops and courses • Proceedings • Technical manuals and/or guidelines 	<ul style="list-style-type: none"> • Regional offices and public and private institutions are interested in the various workshops and courses implemented by the project • Regional offices and public and private institutions are interested in the implementation of forest fire prevention protocols

	<ul style="list-style-type: none"> protocols, in the 1st year • 3 training workshops on forest fire prevention and response, in the 1st year • 3 specialization workshops on forest fire prevention and response, in the 2nd year 		<ul style="list-style-type: none"> • Regional offices and public and private institutions are interested in the implementation of forest fire response protocols
Output 3 Efficient forest fire monitoring system	<ul style="list-style-type: none"> • 01 induction course for regional office on early warning management and implementation, in the 1st year • 01 early warning management and implementation manual • 03 information workshops on early warning systems, in the 1st year, per regional office • 01 tool kit for regional offices • 03 training workshops for the implementation of forest fire prevention and response protocols, in the 1st year • 03 training workshops for the implementation of forest fire prevention and response protocols, in the 2nd year 	<ul style="list-style-type: none"> • Technical reports on workshops • Maps • Equipment • Trained personnel • Records, miscellaneous documents • Early warning management and implementation manual • Hotspot detection procedural manual 	<ul style="list-style-type: none"> • Regional offices and public and private institutions are interested in the various courses and workshops implemented by the project • Regional offices and public and private institutions are interested in early warning management and implementation • Professionals working at the regional offices make good use of the tool kit provided • Regional offices and public and private institutions apply the early warning management and implementation manual • The forest fire monitoring system helps reduce the incidence of forest fires
Output 4 Population trained on forest fire impacts	<ul style="list-style-type: none"> • 06 dissemination workshops on forest and related regulations, in the 1st year • 06 dissemination workshops on forest and related regulations, in the 2nd year • 10 outreach factsheets developed • 01 forest fire communication strategy • 03 Dissemination workshops for the implementation of the forest fire communication strategy, in the 1st year • 1 concept design and outline service • 3 outreach factsheets on the economic value of the forest and wildlife heritage and forest plantations on private lands 	<ul style="list-style-type: none"> • Workshop reports • Outreach factsheets • Forest fire communication strategy 	<ul style="list-style-type: none"> • Communities, regional offices and public and private institutions are interested in participating in the workshops • Regional offices and public and private institutions are interested and internalize the message conveyed through outreach factsheets

2.2 Objectives

2.2.1 Development objective and impact indicators

Contribute to the conservation of forest ecosystems and other wild vegetation formations threatened by forest fires

Impact indicators:

- A total of **1,800** local dwellers and 960 representatives of key public and private institutions in the project target area have been sensitized and trained.
- Sound coordination links have been established between the population and public and private institutions for forest fire prevention and response.
- A publication on forest fires has been produced.

2.2.2 Specific objective and outcome indicators

Reduce the occurrence of forest fires through capacity strengthening in forest fire prevention and response aimed at local communities and local authorities.

Outcome indicators:

- In the first year of the project, two (02) protocols have been developed – one for forest fire prevention and another one for forest fire response.
- In the first year of the project, one (01) manual for early warning management and implementation is available.
- By the end of year 1, there are three (03) manuals on best agroforestry practices available.
- By the end of year 1, one (01) communication action on forest fires has been established.

PART 3: DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs and activities

3.1.1 Outputs

- Output 1: Best forest and agricultural waste practices.
- Output 2: Public and private institutions effectively managing forest fire prevention and response protocols.
- Output 3: Efficient forest fire monitoring system.
- Output 4: Population trained on forest fire impacts.

3.1.2 Activities

Activity 1.1: Raise awareness among agricultural producers on best practices for forest and agricultural waste management.

- Services will be hired during the first year of project implementation for the design and development of publicity billboards as well as services for awareness and outreach radio spots; in addition, the design and printing of outreach factsheets, posters and stickers will also be sub-contracted.
- A total of 18 awareness workshops will be organized and publicity billboards, radio spots and videos will be produced and promoted in order to raise community awareness on best forest and agricultural waste management practices so as to avoid forest fires.

Activity 1.2: Provide training on sustainable agricultural and silvicultural management techniques.

- Manuals on best agroforestry practices will be produced and six courses on sustainable agricultural and silvicultural management techniques will be implemented for local community members.

Activity 1.3: Reactivate and establish community organizations.

- Work meetings will be held to reactivate or establish community organizations to strengthen community skills in forest fire prevention and response.

Activity 2.1: Strengthen the organization and coordination of public and private institutions.

- Six training workshops/courses will be implemented for the personnel of relevant public and private institutions so as to enhance their response capacity in the face of forest fire events.

Activity 2.2: Develop and validate forest fire prevention and response protocols.

- A forest fire consultant will be hired during the first year of project implementation in order to develop two framework protocols – one on forest fire prevention and another one on forest fire response.
- These protocols will be validated in workshops to be implemented in each of the project offices with the participation of representatives from public and private institutions.

Activity 2.3: Train specialized human resources in forest fire prevention and response.

- A consultant on forest fire prevention and response will be hired to develop six training courses on forest fire prevention and response strategies.

Activity 3.1: Coordinate with institutions equipped with early warning and information dissemination systems

- During the first year of the project, a manual on early warning management and implementation will be produced and an induction workshop will be implemented for project office specialists to provide training on the management and implementation of these early warning systems.
- In addition, during the first year, three information workshops on early warning systems will be organized for key public and private institutions.

Activity 3.2: Strengthen SERFOR offices' operational capacity.

- During the first year of the project, three fully equipped motorcycles will be acquired together with appropriate clothing for forest fire prevention and response.

Activity 3.3: Strengthen organization in the event of forest fires.

- During the project implementation period, six training workshops will be organized for representatives of public and private institutions so as to implement forest fire prevention and response protocols.

Activity 4.1: Carry out dissemination actions on forest regulations.

- During the first year of the project, a sub-contract will be signed for the production of outreach factsheets, posters and stickers to disseminate forest regulations.
- Twelve workshops addressed to local communities will subsequently be implemented to disseminate forest regulations.

Activity 4.2: Develop and implement communication and outreach actions on forest fires.

- A communication and outreach consultant will be hired during the first year of the project for the implementation of outreach and communication actions on forest fires. This consultant will organize three dissemination workshops addressed to public and private institutions.

Activity 4.3: Assess and disseminate the value of the forest and wildlife heritage and forest plantations on private lands.

- During the first year of the project, outreach material will be prepared to disseminate the value of the forest and wildlife heritage and forest plantations on private lands. These materials will be distributed in various events organized by SERFOR and other organizations.

Activity 4.4: Establish and maintain project coordination and management.

- This activity is part of the project management process. It includes the preparation of monthly, six-monthly and final reports, yearly plans of operation, coordination, monitoring, administration, etc.
- At project start-up, a project leader will be recruited with ITTO funds. In addition, the executing agency will assign a project coordinator and a local coordinator for each regional office represented by the technical administrator of the relevant ATFFS.

3.2 Approaches and methods

In order to ensure the achievement of project objectives, the operational execution of project activities must take into account the approaches, methods and mechanisms to be used to attain this goal; the following approaches are considered:

- Participatory and inclusive approach: Improving the implementation of project activities; in this respect, it is envisaged that the project will endeavour to ensure the participation, both collectively and individually, of agencies from the tree levels of government, from local stakeholders to national stakeholders from both the public and private sectors, by including the strengthening of knowledge and capacities such as community forest management techniques. The project will highlight the economic and environmental benefits that would be generated through indirect harvesting operations to improve land quality and

increase (agricultural and forest) productivity, as well as through community forest management and the establishment of response mechanisms in accordance with the requirements of each area affected at the local level. This will be achieved by ensuring the participation of local organizations involved in activities such as burnings, the management of agricultural waste, and prevention and control of hot spots and forest fires.

- **Multidisciplinary approach:** The project will establish multidisciplinary professional and technical teams and identify local leaders and government authorities so as to determine appropriate responses to risks such as forest fires; the project will work with and train experts in forest fires, including professionals such as forest engineers, biologists and specialists in areas such as economics, social sciences and communications.
- **Synergies:** It is essential to work and establish partnerships and foster joint work relationships with local, provincial and regional institutions, in order to strengthen forest fire prevention and control actions and avoid duplication of efforts and dispersion of budgetary resources, so as to improve the use of available resources to cover larger areas of action. Furthermore, good relationships must be maintained and agreements must be reached with neighbouring sectors, districts, provinces and regional governments in the area, in case the management of major forest fires exceeds the capacity of one jurisdiction.
- **Leadership and capacity strengthening at the local level:** The project will organize, identify and train community leaders and children, and will provide information and training to local personnel for field work and implementation of project activities. The topics to be covered in capacity-building activities include the prevention and control of forest fires, forest conservation and improvement of environmental services, as well as various issues related to forest management, harvesting, business management and carbon trade.

In order to achieve the objective of helping to curb the loss of forest cover and wildlife habitats caused by forest fires by reducing the occurrence of forest fires that affect natural forests, forest formations and forest plantations at the national level, the following methods will be applied:

- **Planning, identification and demarcation of the most important areas for the establishment of head offices from where project activities will be coordinated.**
- **Activities:** assess needs so that through support, training, inter-institutional coordination, local community involvement, education and preparedness, it will be possible to address forest fire events through their prevention or appropriate management.
- **Information and results:** prepare regular reports on the actions taken to provide feedback and evaluate the progress made and the achievement of objectives, so as to strengthen areas as required or implement actions to ensure ongoing improvement.

3.3 Work Plan

Outputs & activities		Responsible party	Year 1				Year 2			
			Quarter				Quarter			
			1	2	3	4	1	2	3	4
OUTPUT 1	Best agrarian practices									
A1.1	Raise awareness among agricultural producers on best practices for forest and agricultural waste management	ATFFS technical administrators	■	■	■	■				
A1.2	Provide training on sustainable agricultural and silvicultural management techniques	Consultant in sustainable agricultural and silvicultural management techniques	■	■	■	■				
A1.3	Reactivate and establish community organizations	ATFFS technical administrators	■	■	■	■				
OUTPUT 2	Public and private institutions effectively managing forest fire prevention and response protocols									
A2.1	Strengthen the organization and coordination of public and private institutions	ATFFS technical administrators	■	■	■	■				
A2.2	Develop and validate forest fire prevention and response protocols	ATFFS technical administrators	■	■	■	■				
A2.3	Train specialized human resources in forest fire prevention and response	ATFFS technical administrators	■	■	■	■				
OUTPUT 3	Efficient forest fire monitoring system									
A.3.1	Coordinate with institutions equipped with early warning and information dissemination systems	Project leader	■	■	■	■				
A.3.2	Strengthen SERFOR offices' operational capacity	Project leader	■	■	■	■				
A.3.3	Strengthen organization in the event of forest fires	Project leader	■	■	■	■				
OUTPUT 4	Population trained on forest fire impacts									
A.4.1	Carry out dissemination actions on forest regulations	ATFFS technical administrators	■	■	■	■				
A.4.2	Develop and implement communication and outreach actions on forest fires	Communication and outreach consultant for the development of forest fire communication and outreach actions	■	■	■	■				
A.4.3	Assess and disseminate the value of the forest and wildlife heritage and forest plantations on private lands	Project leader	■	■	■	■				
A.4.4	Establish and maintain project coordination and management	Project leader	■	■	■	■				

3.4 Project budget

3.4.1 Master budget (US\$)

Outputs /activities	Description	Budget comp.	Quantity	Unit	Unit cost (\$)	Total cost (\$)	ITTO		Executing agency
							Year 1	Year 2	
Output 1	Best forest and agricultural waste management practices								
A1.1	Raise awareness among agricultural producers on best practices for forest and agricultural waste management								
	SERFOR specialists	11.3	18	M/D	100	1,800			1,800
	Event participants	12.3	675	M/D	10	6,750			6,750
	Factsheets, posters and stickers	21	3	Sub-contract	2,000	6,000	6,000		
	DSA	31.3	108	day	100	10,800	7,200	3,600	
	Land travel	33.3	36	ticket	40	1,440	960	480	
	Local transport	33.3	18	workshop	300	5,400	3,600	1,800	
	Multimedia projector	44.1	4	unit	600	2,400			2,400
	Laptop computer	44.1	4		800	3,200	3,200		
	Sound equipment	44.3	3	unit	500	1,500	1,500		
	Office supplies	54	18	workshop	80	1,440	960	480	
	Banners	54	4	unit	50	200	200		
	Fuel and lubricants	55	540	gallon	5	2,700	1,800	900	
	Promotion services	61.1	18	workshop	50	900	600	300	
	Radio spots	61.2	6	service	100	600	300	300	
	Broadcasting of radio spots	61.2	6	service	1,000	6,000	6,000		
	Dissemination of awareness videos	61.2	3	service	1,000	3,000	3,000		
	Design and development of publicity billboards	61.2	3	unit	500	1,500	1,500		
	Awareness videos	61.2	3		2,000	6,000			6,000
	Refreshments service	61.3	18	workshop	375	6,750	2,250	1,125	3,375
	Facilitation services	61.5	18	workshop	150	2,700	1,800	900	
	Venue rental	61.7	18	workshop	100	1,800	600	300	900
A1.2	Provide training on sustainable agricultural and silvicultural management techniques								
	SERFOR specialists	11.3	12	M/D	100	1,200			1,200
	Event participants	12.3	450	M/D	10	4,500			4,500
	Consultant in agroforestry techniques	13.2	6	consultant	2,000	12,000	6,000	6,000	
	Three manuals on best agroforestry practices	22	1	Sub-contract	6,000	6,000	6,000		
	DSA	31.3	24	day	100	2,400	1,200	1,200	
	Land travel	33.3	12	ticket	40	480	240	240	
	Local transport	33.3	12	course	300	3,600	1,800	1,800	
	Office supplies	54	12	course	80	960	240	240	480
	Fuel and lubricants	55	180	gallon	5	900	225	225	450
	Promotion services	61.1	6	workshop	50	300	150	150	
	Refreshments service	61.3	12	course	375	4,500	1,500	750	2,250
	Venue rental	61.7	12	course	100	1,200	600	600	
A1.3	Reactivate and establish community organizations								
	SERFOR specialists	11.3	18	M/D	100	1,800			1,800
	Event participants	12.3	150	M/D	10	1,500			1,500
	DSA	31.3	36	day	100	3,600	1,800	1,800	
	Office supplies	54	18	meeting	80	1,440			1,440
	Fuel and lubricants	55	180	gallon	5	900			900
	Promotion services	61.1	18	meeting	50	900	450	450	
	Radio announcement	61.2	18	service	100	1,800	900	900	
	Refreshments service	61.3	18	meeting	150	2,700	900	450	1,350
	Venue rental	61.7	18	meeting	100	1,800			1,800
Output 2	Public and private institutions effectively managing forest fire prevention and response protocols								
A2.1	Strengthen the organization and coordination of public and private institutions								
	SERFOR specialists	11.3	6	M/D	100	600			600
	Event participants from institutions	12.3	120	M/D	100	12,000			12,000
	Office supplies	54	6	workshop	80	480	240	240	
	Fuel and lubricants	55	180	gallon	5	900	450	450	
	Refreshments service	61.3	6	workshop	375	2,250	750	375	1,125
	Facilitation services	61.5	6	workshop	150	900	450	450	
	Venue rental	61.7	6	workshop	100	600			600

Outputs /activities	Description	Budget comp.	Quantity	Unit	Unit cost (\$)	Total cost (\$)	ITTO		Executing agency
							Year 1	Year 2	
A2.2	Develop and validate forest fire prevention and response protocols								
	SERFOR specialists	11.3	6	M/D	100	600			600
	Event participants from institutions	12.3	150	M/D	100	15,000			15,000
	Consultant in forest fires	13.3	2	M/H	2,000	4,000	4,000		
	Office supplies	54	6	workshop	80	480	240	240	
	Fuel and lubricants	55	180	gallon	5	900	450	450	
	Refreshments service	61.3	6	workshop	375	2,250	750	375	1,125
	Facilitation service	61.5	6	workshop	150	900	450	450	
	Venue rental	61.7	3	workshop	100	300	300		
	Rental of premises	61.7	3	workshop	100	300			300
A2.3	Train specialized human resources in forest fire prevention and response								
	SERFOR specialists	11.3	18	M/D	100	1,800			1,800
	Event participants from institutions	12.3	450	M/D	100	45,000			45,000
	Consultant in forest fire prevention and response	13.3	6	workshop	1,500	9,000	4,500	4,500	
	DSA	31.3	108	day	100	10,800	5,400	5,400	
	Transport services	33.3	6	workshop	100	600	300	300	
	Office supplies	54	6	workshop	80	480	240	240	
	Fuel and lubricants	55	180	gallon	5	900	450	450	
	Refreshments service	61.3	18	workshop	250	4,500	1,500	750	2,250
	Venue rental	61.7	12	workshop	100	1,200	600	600	
Output 3	Efficient forest fire monitoring system								
A3.1	Coordinate with institutions equipped with early warning and information dissemination systems								
	SERFOR specialists	11.3	8	M/D	100	800			800
	Event participants from institutions	12.3	30	M/D	100	3,000			3,000
	DSA	31.3	6	day	100	600	600		
	Air travel	33.1	2	ticket	200	400	400		
	Land travel	33.3	2	ticket	40	80	80		
	Office supplies	54	4	workshop	80	320	320		
	Refreshments service	61.3	1	workshop	150	150	150		
	Refreshments service	61.3	3	workshop	375	1,125	750		375
	Venue rental	61.7	4	workshop	100	400			400
A3.2	Strengthen SERFOR offices' operational capacity								
	Equipped motorcycle	43	3	unit	3,000	9,000	9,000		
	Clothing	52	3	kit	1,000	3,000			3,000
	Fuel and lubricants	55	21	month	90	1,890	810	1,080	
	Motorcycle maintenance	61.4	21	month	100	2,100	900	1,200	
A3.3	Strengthen organization in the event of forest fires								
	SERFOR specialists	11.3	6	M/D	100	600			600
	Event participants from institutions	12.3	120	M/D	100	12,000			12,000
	Office materials	54	6	workshop	80	480	240	240	
	Fuel and lubricants	55	180	gallon	5	900	450	450	
	Refreshments service	61.3	6	workshop	375	2,250	750	375	1,125
	Facilitation service	61.5	6	workshop	150	900	450	450	
	Venue rental	61.7	6	workshop	100	600	300		300
Output 4	Population trained on forest fire impacts								
A4.1	Carry out dissemination actions on forest regulations								
	SERFOR specialists	11.3	12	M/D	100	1,200			1,200
	Event participants from institutions	12.3	450	M/D	10	4,500			4,500
	Consultant in forest regulations	13.1	6	workshop	400	2,400			2,400
	Design and printing of factsheets, posters and stickers	23	1	sub-contract	2,000	2,000	2,000		
	DSA	31.3	24	day	100	2,400	1,200	1,200	
	Land travel	33.3	12	ticket	40	480	240	240	
	Office supplies	54	12	workshop	80	960	480	480	
	Fuel and lubricants	55	360	gallon	5	1,800	450	450	900
	Promotion services	61.1	12	workshop	50	600	300	300	
	Refreshments service	61.3	12	workshop	375	4,500	1,500	750	2,250
	Venue rental	61.7	12	workshop	100	1,200	600	600	

Outputs /activities	Description	Budget comp.	Quantity	Unit	Unit cost (\$)	Total cost (\$)	ITTO		Executing agency
							Year 1	Year 2	
A4.2	Develop and implement communication and outreach actions on forest fires								
	SERFOR specialists	11.3	3	M/D	100	300			300
	Communication and outreach consultant	13.4	2	M/H	2,000	4,000	4,000		
	Editing and printing of publication on forest fires	24	1	sub-contract	2,000	2,000		2,000	
	DSA	31.3	6	day	100	600		600	
	Land travel	33.3	6	ticket	40	240		240	
	Office supplies	54	3	workshop	80	240	240		
	Fuel and lubricants	55	90	gallon	5	450	450		
	Refreshments service	61.3	3	workshop	375	1,125	750		375
	Facilitation service	61.5	3	workshop	150	450	450		
	Venue rental	61.7	3	workshop	100	300	300		
	Production and editing of project dissemination video	61.2	1	service	10,000	10,000		10,000	
	Lima- Mato Grosso del Sol-Lima fare	33.1	2	ticket	1,000	2,000		2,000	
	DSA - Brazil	31.3	12	day	250	3,000		3,000	
A4.3	Assess and disseminate the value of the forest and wildlife heritage and forest plantations on private lands								
	Local transport	33.3	3	month	150	450	450		
	Printing of outreach materials	61.6	1	service	1,000	1,000	1,000		
A4.4	Establish and maintain project coordination and management								
	Project leader	11.1	24	M/H	3,000	72,000	36,000	36,000	
	Project coordinator	11.2	24	M/H	1,000	24,000			24,000
	Regional assistant	12.1	60	M/H	1,000	60,000	27,000	33,000	
	Regional coordinator	12.2	72	M/H	700	50,400			50,400
	Meeting participants	12.3	32	M/D	100	3,200			3,200
	DSA	31.3	162	day	100	16,200	5,400	5,400	5,400
	Air travel	33.1	36	ticket	200	7,200	2,400	2,400	2,400
	Land travel	33.3	18	ticket	40	720	240	240	240
	Local transport	33.3	48	month	150	7,200	1,800	1,800	3,600
	Office rental	41	24	month	500	12,000			12,000
	Vehicle spares	52	48	month	150	7,200	1,800	1,800	3,600
	Utilities	53	48	month	130	6,240	1,560	1,560	3,120
	Office supplies	54	48	month	80	3,840	960	960	1,920
	Fuel and lubricants	55	2,160	gallon	5	10,800	1,800	1,800	7,200
	Refreshments	61.3	24	month	40	960	320	160	480
	Equipment maintenance	61.4	48	month	60	2,880	720	720	1,440
	Vehicle maintenance	61.4	48	month	150	7,200	1,800	1,800	3,600
	Project dissemination and mainstreaming events	61.8	6	event	1,000	6,000	3,000	3,000	
	Steering committee meetings	61.8	2	unit	80	160			160
	Consultative committee meetings	61.8	4	unit	80	320		320	
	Bank charges and courier services	61.9	24	month	40	960	480	480	
	Financial audits	62	2	unit	1,000	2,000			2,000

3.4.2 Consolidated budget by component (US\$)

Item	Description	Total	Year 1	Year 2
10	Project personnel			
11.1	Project leader	72,000	36,000	36,000
11.2	Project coordinator	24,000	12,000	12,000
11.3	SERFOR specialists	10,700	5,800	4,900
12.1	Regional assistant	60,000	27,000	33,000
12.2	Regional coordinator	50,400	25,200	25,200
12.3	Participants in events and meetings	107,450	56,600	50,850
13.1	Consultant in forest regulations	2,400	2,400	
13.2	Consultant in agroforestry techniques	12,000	6,000	6,000
13.3	Consultant in forest fires	13,000	8,500	4,500
13.4	Consultant in communication and outreach	4,000	4,000	
19	Sub-total	355,950	183,500	172,450
20	Sub-contracts			
21	Factsheets, posters and stickers	6,000	6,000	
22	Manuals on best agroforestry practices	6,000	6,000	
23	Design and printing of factsheets, posters and stickers	2,000	2,000	
24	Editing and printing of publication on forest fires	2,000		2,000
29	Sub-total	16,000	14,000	2,000
30	Travel			
31.3	DSA	50,400	25,500	24,900
33.1	Land travel	9,600	4,000	5,600
33.3	Local transport	20,690	11,630	9,060
39	Sub-total	80,690	41,130	39,560
40	Capital items			
41	Office rental	12,000	6,000	6,000
43	Equipped motorcycle	9,000	9,000	
44.1	Laptop computer, multimedia projector	5,600	5,600	
44.3	Sound equipment	1,500	1,500	
49	Sub-total	28,100	22,100	6,000
50	Consumable items			
52	Vehicle spares and clothing	10,200	6,600	3,600
53	Utilities	6,240	3,120	3,120
54	Office supplies	11,320	6,280	5,040
55	Fuel and lubricants	23,040	12,060	10,980
59	Sub-total	50,800	28,060	22,740
60	Miscellaneous			
61.1	Promotion services	2,700	1,500	1,200
61.2	Videos, spots and broadcasting services	28,900	17,700	11,200
61.3	Refreshments	33,060	22,840	10,220
61.4	Equipment maintenance	12,180	5,940	6,240
61.5	Event facilitation services	5,850	3,600	2,250
61.6	Printing of outreach materials	1,000	1,000	
61.7	Venue services	9,700	5,500	4,200
61.8	Project dissemination events and meetings	6,480	3,000	3,480
61.9	Bank charges and courier services	960	480	480
62	Financial audits	2,000		2,000
69	Sub-total	102,830	61,560	41,270
	SUB-TOTAL/All components	634,370	350,350	284,020
70	National management costs	95,156		
80	Project monitoring and administration			
81	ITTO monitoring and review	25,000		
82	Mid-term, final and ex post ITTO evaluations	12,000		
	Sub-total (items 11-82 above)	393,790		
83	ITTO programme support costs (12%)	47,255		
89	Sub-total	84,255		
100	GRAND TOTAL	813,781		

3.4.3 ITTO budget by component (US\$)

Item	Description	Total	Year 1	Year 2
10	Project personnel			
11.1	Project leader	72,000	36,000	36,000
12.1	Regional assistant	60,000	27,000	33,000
13.2	Consultant in agroforestry techniques	12,000	6,000	6,000
13.3	Consultant in forest fires	13,000	8,500	4,500
13.4	Consultant in communication and outreach	4,000	4,000	
19	Sub-total	161,000	81,500	79,500
20	Sub-contracts			
21	Factsheets, posters and stickers	6,000	6,000	
22	Manuals on best agroforestry practices	6,000	6,000	
23	Design and printing of factsheets, posters and stickers	2,000	2,000	
24	Editing and printing of publication on forest fires	2,000		2,000
29	Sub-total	16,000	14,000	2,000
30	Travel			
31.3	DSA	45,000	22,800	22,200
33.1	Land travel	7,200	2,800	4,400
33.3	Local transport	16,850	9,710	7,140
39	Sub-total	69,050	35,310	33,740
40	Capital items			
43	Equipped motorcycle	9,000	9,000	
44.1	Laptop computer, multimedia projector	3,200	3,200	
44.3	Sound equipment	1,500	1,500	
49	Sub-total	13,700	13,700	-
50	Consumable items			
52	Vehicle spares and clothing	3,600	1,800	1,800
53	Utilities	3,120	1,560	1,560
54	Office supplies	7,480	4,360	3,120
55	Fuel and lubricants	13,590	7,335	6,255
59	Sub-total	27,790	15,055	12,735
60	Miscellaneous			
61.1	Promotion services	2,700	1,500	1,200
61.2	Videos, spots and broadcasting services	22,900	11,700	11,200
61.3	Refreshments	16,980	11,870	5,110
61.4	Equipment maintenance	7,140	3,420	3,720
61.5	Event facilitation services	5,850	3,600	2,250
61.6	Printing of outreach materials	1,000	1,000	
61.7	Venue services	5,400	3,300	2,100
61.8	Project dissemination events and meetings	6,320	3,000	3,320
61.9	Bank charges and courier services	960	480	480
69	Sub-total	69,250	39,870	29,380
	SUB-TOTAL/All components	356,790	199,435	157,355
80	Project monitoring and administration			
81	ITTO monitoring and review	25,000		
82	Mid-term, final and ex post ITTO evaluations	12,000		
	Sub-total (items 11-82 above)	393,790		
83	ITTO program support costs (12%)	47,255		
89	Sub-total	84,255		
100	GRAND TOTAL	441,045		

3.4.4 Executing agency budget by component (US\$)

Item	Description	Total	Year 1	Year 2
10	Project personnel			
11.2	Project coordinator	24,000	12,000	12,000
11.3	SERFOR specialists	10,700	5,800	4,900
12.2	Regional coordinator	50,400	25,200	25,200
12.3	Event participants	107,450	56,600	50,850
13.1	Consultant in forest regulations	2,400	2,400	
19	Sub-total	194,950	102,000	92,950
30	Travel			
31.3	DSA	5,400	2,700	2,700
33.1	Air travel	2,400	1,200	1,200
33.3	Local transport	3,840	1,920	1,920
39	Sub-total	11,640	5,820	5,820
40	Capital items			
41	Office rental	12,000	6,000	6,000
44.1	Multimedia projector	2,400	2,400	
49	Sub-total	14,400	8,400	6,000
50	Consumable items			
52	Vehicle spares	6,600	4,800	1,800
53	Utilities	3,120	1,560	1,560
54	Office supplies	3,840	1,920	1,920
55	Fuel and lubricants	9,450	4,725	4,725
59	Sub-total	23,010	13,005	10,005
60	Miscellaneous			
61.2	Awareness videos	6,000	6,000	
61.3	Refreshments	16,080	10,970	5,110
61.4	Equipment maintenance	5,040	2,520	2,520
61.7	Venue rental	4,300	2,200	2,100
61.8	Steering committee meetings	160		160
62	Financial audits	2,000		2,000
69	Sub-total	33,580	21,690	11,890
70	Management costs	95,156		
	GRAND TOTAL	372,736		

The budgetary provisions allocated to the participants of events and meetings (item 12.3) are based on non-monetary valuations made by the executing agency. In the case of local community participants, it is based on the equivalent of one day's work (US\$ 10 per day), and in the case of professional staff their daily participation is valued at US\$ 100 per day.

Given that the number of local project beneficiaries has been reduced to 1,800, the budget allocation for refreshments has been reduced. Furthermore, part of ITTO's budgeted contribution to the project has been transferred to the budgeted contribution of the executing agency.

An appropriate budget item for the dissemination of project outputs has been included for the production and editing of a video about the project, as well as for participation in the Seventh International Wildland Fire Conference (Brazil)

3.5 Assumptions, risks and sustainability

3.5.1 Assumptions and risks

The assumptions considered for the achievement of project outputs and the project's development and specific objectives include the following:

- The Peruvian Government is interested in developing a national forest policy aimed at the sustainable development of forests in consonance with the project objective
- Public and private institutions are willing to participate in the events organized by the project
- Regional offices raise awareness on forest fire prevention, management and control
- The implementation of best practices for forest and agricultural waste management help reduce the incidence of forest fires
- Reduced risk of forest fires in the target areas.

Some of the risks that could hinder the achievement of project outputs and the project's development and specific objectives include:

- The Peruvian government does not develop a national forest policy aimed at sustainable forest development in consonance with the project objective.
- There is a lack of interest of the regional offices and public and private institutions to participate in the activities implemented within the framework of the project.
- Regional offices do not implement awareness programs for the prevention, management and control of forest fires for public and private institutions and local communities.
- Best agricultural practices are not implemented.
- The risk of forest fires increases in the target areas.

In order to mitigate these risks, the project will focus on specific objective 1 of the National Forest and Wildlife Policy: "Achieve effective management of forest ecosystems and other components of the Nation's Forest and Wildlife Heritage", which in its item 1.5.7 states the need to prevent and control forest fires with the active participation of local communities.

Furthermore, SINAGERD member institutions as well as key public and private institutions will be invited in advance to attend awareness and training meetings and events, providing them with user-friendly manuals and documents, which will be translated into local languages as required to reach the largest number of people possible. The regional office experts will be in continuous and direct contact with the local communities and representatives of public and private institutions based in the proximity of the target areas so as to build trust links and thus consolidate communication as well as participation and interest in project events.

3.5.2 Sustainability

- The development of this project is part of the management activities of SERFOR's General Directorate for the Sustainable Management of the Forest and Wildlife Heritage (*Dirección General de Gestión Sostenible del Patrimonio Forestal y de Fauna Silvestre*) and it is therefore in the interest of this institution to guarantee the sustainability of the project.
- Furthermore, the project seeks to reactivate community organizations and improve coordination between public and private institutions by inviting them to participate in awareness-raising and training workshops and courses so as to achieve the desired impact in addition to providing them with the materials and knowledge in accordance with their needs and local practices. This will not only serve as a long-term reference but will also create a sense of project ownership. Moreover, project activities have been planned taking into consideration the characteristics of the target areas and beneficiary groups.
- In order to ensure the appropriate uptake of knowledge, the project will run courses and workshops during its two-year implementation period so as to strengthen the acquired knowledge and the use of new techniques, in accordance with project objectives, which will be adapted to the local conditions.

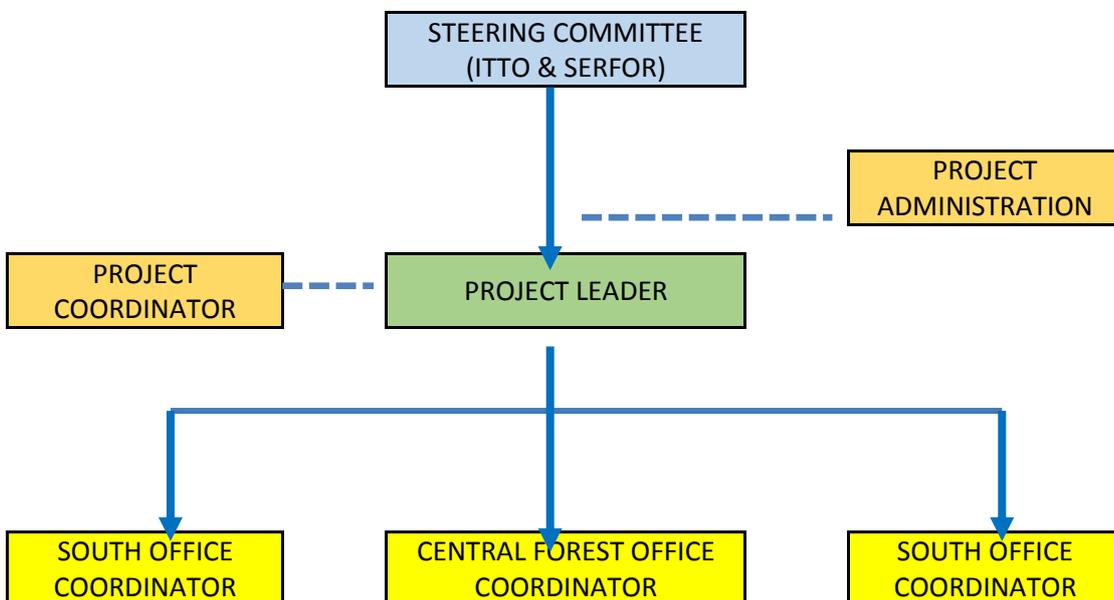
- With regard to the Regional Offices, which are SERFOR's decentralized offices with full legal powers, the project will strengthen their capacity to monitor forest fires as well as their operational capacity and ensure their coordination with other public and private institutions working in this field.
- It should be pointed out that within the existing regulatory framework, Article 20 of the Forest Management Regulations of Forest and Wildlife Law No. 29763 promotes *inter alia* the implementation of activities aimed at the prevention of forest fires, thus supporting the project and guaranteeing its institutional and political sustainability.
- Training and awareness raising will be provided to 1,800 local dwellers and 960 representatives of public and private institutions. However, there are larger numbers of local dwellers living in the vicinity of the project's area of influence. In view of this, the representatives of the public institutions to be trained by the project, within the framework of their prescribed duties, will continue to provide training by replicating the workshops to local dwellers who could not participate in the project's training and awareness raising activities.
- The plots, where the training activities will be implemented during the project for the management of agricultural and forest residues and agroforestry practices, will serve as demonstration plots for future training activities and, to this end, agreements will be duly signed with the plot owners.
- Technical forest and wildlife services involved in the project area – ATFFS, decentralized SERFOR offices –will play an active role during project implementation and will continue to develop these activities after project completion. Furthermore, they will be responsible for bringing together trained and sensitized professionals from the institutions participating in the project so as to continue with these joint actions.
- Within the framework of their prescribed duties, public institutions participating in the project provide a service to the local communities and are committed to continue with forest fire prevention and response activities after project completion.

PART 4: IMPLEMENTATION ARRANGEMENTS

4.1 Organization structure and stakeholder involvement mechanisms

4.1.1 Executing agency and partners

The project organizational chart is shown below:



4.1.2 Project management team

The project management team will comprise the following:

- A project coordinator (SERFOR)
- A project leader
- Three regional office coordinators (ATFFS)
- Three regional office assistants

4.1.3 Project steering committee

The membership of the project steering committee will be as follows:

- A representative of SERFOR
- A representative of ITTO
- A representative of a local institution

SERFOR will propose an officer to supervise the implementation of the project in conjunction with a representative proposed by ITTO.

4.1.4 Stakeholder involvement mechanisms

The executing agency will establish a Consultative Committee made up of a representative each of civil society, the Peruvian Army, MINAGRI, SERNANP, INDECI, CENEPRED, the Firefighters Department and AGRORURAL. This committee will provide a platform for the sharing of views among stakeholders/beneficiaries and will offer feedback for the improvement of project implementation.

4.2 Reporting, review, monitoring and evaluation

The following reports will be prepared and submitted:

- Inception report – upon project approval
- Work plan – together with the inception report
- Yearly plan of operation – at the beginning of each project implementation year
- Monthly reports
- Six-monthly progress reports – by 28 February and 31 August and/or 4 weeks before the arrival of a review and monitoring mission
- Technical report – every 6 months during the project implementation period
- Annual and final financial reports
- Completion report – upon project completion

In addition, the project will be monitored through an international monitoring system.

4.3 Dissemination and mainstreaming of project learning

4.3.1 Dissemination of project results

As project implementation progresses, project outcomes will be disseminated, both in relation to training activities and scheduled workshops. This dissemination process will be part of the project's communication and outreach actions.

Based on the experience of the first year of the project, the information derived from partial outcomes will be disseminated as part of the activities scheduled for the second year, using platforms provided by both relevant authorities and institutions involved in forest fire management.

SERFOR's institutional webpage will be used to disseminate information on project progress and outcomes. **Information will also be disseminated, both to the rest of the country and throughout South America and the Caribbean, as they have similar forest fire occurrence problems.**

The project will also participate in the Seventh International Wildland Fire Conference to be held in May 2019 in Mato Grosso del Sol, Brazil, where project outcomes will also be disseminated through the screening of a video, which will be produced and edited in order to disseminate project experiences.

4.3.2 Mainstreaming of project learning

The project will help ensure that the authorities and institutions, as well as the local communities, in the target departments will acquire and/or apply knowledge on best agricultural and forest practices, which may later be replicated in other areas of the country; furthermore, it will improve organization to address the occurrence of forest fires.

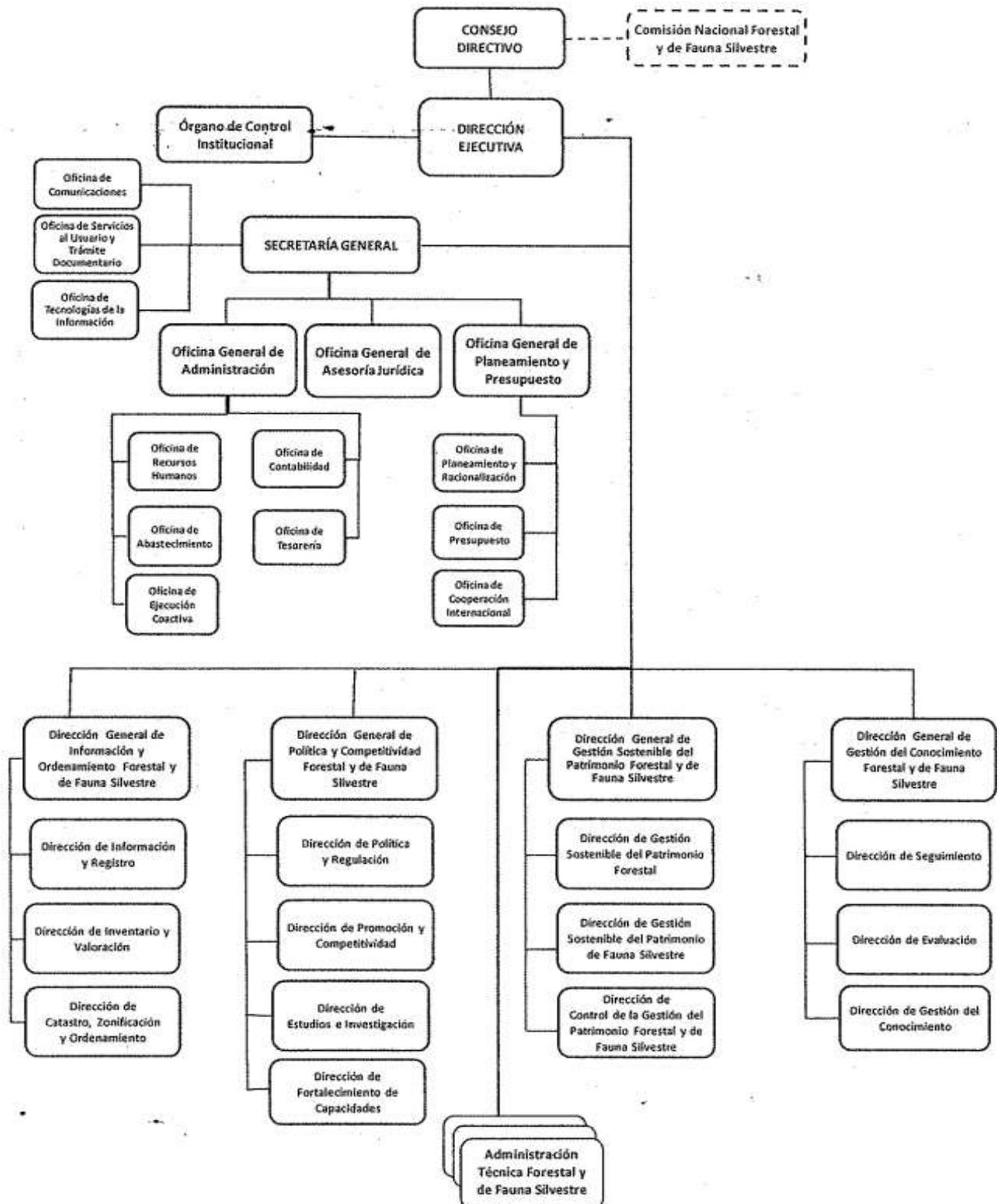
The development of forest fire prevention and response protocols will lead to improved responses in the face of forest fires and will contribute to the formulation of relevant regulations, thus improving governance in the target departments, with the possibility of replication at the national level. All of these issues will be validated with the relevant institutions and local communities in the target areas.

The organization of project start-up or launching events is envisaged with the participation of stakeholders involved in forest fire management. In addition, a dissemination event will also be implemented to disseminate the results and/or findings of project experiences with the participation of forest fire related stakeholders, which has already been considered in the project budget under the relevant component. Project progress will also be reported to the project steering committee.

Moreover, the mainstreaming of project experiences will be facilitated by the dissemination of results in all the participatory events to be organized throughout the project with the participation of key stakeholders and representatives that are directly and indirectly involved in forest fire management in the project's areas of action.

ANNEX 1. Profile of the executing agency – SERFOR

The National Forest and Wildlife Service – SERFOR was established under Article 13 of the Forest and Wildlife Law – Act No. 29763 as a specialized technical public agency with full legal capacity under the public domestic law of the State with budgetary allocations from the Ministry of Agriculture and Irrigation – MINAGRI. The technical forest and wildlife administrations (ATFFS) were incorporated to SERFOR as decentralized local agencies with budgetary allocations from MINAGRI through the First Complementary Transitory Provision of Supreme Decree No. 016-2014-MINAGRI, by virtue of which the amendment to the Regulations on SERFOR’s Organization and Functions was approved. The head of these decentralized agencies is the Technical Forest and Wildlife Administrator. SERFOR’s organizational chart is shown below:



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

Project coordinator

Tasks and responsibilities

- Provide project implementation support and follow-up
- Coordinate with institutions equipped with early warning and information dissemination systems and incorporate these into an integrated system with local authorities
- Provide training, propose regulations and strengthen effective actions by public and private institutions in the event of forest fires at the local, provincial and departmental levels
- Validate and disseminate the communication strategy in the Forest Fire Management Plan
- Assess and disseminate the value of the forest and wildlife heritage and forest plantations on private lands through training
- Work in coordination with the project regional coordinators (SERFOR)
- Meet with the project consultative committee
- Participate in work teams and/or committees for training workshops in his/her areas of expertise
- Implement the Forest Fire Prevention and Control Plan
- Other actions related to forest fire management.

Project regional coordinators (03) – Cajamarca, Selva Central and Cusco

Tasks and responsibilities

- Organize workshops and/or courses to be implemented throughout the project; responsible for the distribution of invitations to community members and public and private institutions in the project target areas.
- Review and update the directory of district mayors, provincial authorities, lieutenant governors, justices of the peace, chairs of associations, and rural patrols, among others.
- Establish coordination mechanisms with local authorities for the implementation of the early warning system.
- Coordinate with early warning stations available in Peru under the responsibility of relevant institutions.
- Arrange a timely response to the occurrence of forest fires with local and national authorities.
- Review communication and outreach proposals and various documents to be produced according to the situation of the target population within the framework of the project.
- Develop one (01) manual on early warning management and implementation.
- Implement project scheduled activities in coordination with the Project Leader in compliance with the functions stipulated in the first complementary transitory provision of Supreme Decree No. 016-2014-MINAGRI, endorsing the amendment to the Regulations for SERFOR's organization and functions, approved under Supreme Decree No. 007-2013-MINAGRI.

Forest regulations expert

Objective

Carry out actions aimed at the dissemination of forest regulations.

Qualifications

Academic background:

- Forest engineer, lawyer or professional in a related field, duly registered and accredited, preferably with a Master's degree.
- A minimum of 5 years work experience in the public and/or private sectors.
- Knowledge of forest regulations.
- Knowledge of workshop facilitation techniques.
- Knowledge of forest fire issues.

Tasks and responsibilities

- Carry out actions aimed at the dissemination of forest regulations.
- Organize the program and implement 12 decentralized workshops – Cajamarca, Cusco and Selva Central
- Prepare activity reports.

ANNEX 3: Terms of reference of personnel and consultants and sub-contracts funded by ITTO

Project leader

Assignment objective

The Project Leader shall lead the management of the project.

Qualifications

- Degree in forest engineering, geographic engineering, geography or related discipline.
- GIS studies or specialization.
- Courses in leadership and/or conflict resolution.
- Professional with expertise in training at all levels in the fields of forest management and administration.
- Public management courses.
- Preferably training in databases and statistical analysis.
- Training in forest fire management.
- Knowledge of forest regulations.
- A minimum of five (05) years of professional experience, including at least two (02) years in the forest or agricultural sectors.

Duties

- Responsible for project management: drafting of yearly plans of operation (YPOs), drafting of reports, coordination and monitoring of project implementation, etc.
- Develop the content and design of outreach factsheets on the value of the forest and wildlife heritage and forest plantations on private lands.
- Establish, coordinate and obtain feedback on the implementation of the project.
- Coordinate with institutions equipped with early warning and information dissemination systems and incorporate these into an integrated system with local authorities.
- Generate, strengthen and develop strategic partnerships with public and private institutions.
- Provide training on the use of information regarding warnings on potential hotspots and actions related to potential forest fire hazards.
- Organize actions, provide training, propose regulations and strengthen skills to ensure effective responses in the face of forest fires at the local, provincial and departmental levels.
- Validate and disseminate the communication and outreach strategy of the plan against forest fires.
- Assess and disseminate the value of the forest and wildlife heritage and forest plantations on private lands through the provision of training.
- Organize three (03) training workshops/courses for social stakeholders to enhance forest fire response capacity, in the 1st year of project implementation.
- Work in coordination with the project coordinator (SERFOR).
- Meet with the regional coordinators to assess project progress.
- Assess and develop the skills of identified local leaders.
- Meet with the project consultative committee.
- Prepare monthly, six-monthly and annual reports.
- Participate in work teams and/or committees for training workshops in his/her areas of expertise.
- Travel to the regional areas where the project will be implemented.
- Other actions related to forest fire management.

Regional project assistant

Assignment objective

Responsible for the implementation of project activities according to instructions given by the regional project coordinators.

Qualifications

- Degree in forest engineering or related discipline with 2 years of experience in forest fire issues.
- Immediate availability.
- Availability to work in provincial areas.
- Ability to interact with local communities and public and private institutions.
- Knowledge of the local language in the area of action.
- Knowledge of agroforestry management.
- Knowledge of forest plantation management.

Duties

- Support the organization of project workshops or courses as required, including distribution of invitations to local residents and public and private institutions in the project target area.
- Prepare a directorate of district mayors, provincial authorities, lieutenant governors, justices of the peace, chairs of associations, and rural patrols, among others.
- Ensure daily coordination (from June to December) with SERFOR's Land Registry Directorate so as to assess existing hotspots in localities, districts and provinces.
- In the event of an early warning on a hotspot, notify local authorities and institutions so as to send a warning through all communication media to instruct the population to "avoid burnings".
- Draft communication and outreach proposals according to the specific situation of the target population.

Consultant in sustainable agricultural and silvicultural management techniques

Assignment objective

Hire a consultant in agroforestry management for the provision of training so as to enhance knowledge on sustainable agricultural and silvicultural management techniques.

Qualifications

- Degree in forest engineering, agriculture and/or related discipline with expertise in sustainable agricultural and silvicultural management techniques.
- Professional expertise in training and education in areas related to sustainable agricultural and silvicultural management techniques.
- A minimum of three (03) years of professional experience.
- Availability to travel to provincial areas.

Duties

- Organize and develop a training course on sustainable agricultural and silvicultural management techniques.
- Prepare a course report and proceedings and submit both documents in printed and digital formats to the coordinator of the region where the course is implemented.
- Train local community members participating in the project courses on sustainable agricultural and silvicultural management techniques.
- Implement courses in the departments targeted by the project.

Consultant – Development of forest fire prevention and response protocols

Assignment objective

Develop and validate forest fire prevention and response protocols within the framework of activity 2.2 under output 2 (Public and private institutions effectively managing forest fire prevention and response protocols).

Qualifications

- Professional with two years experience in the development of institutional regulations or guidelines related to forest fire management and prevention.
- Two years experience in field work related to forest fire response procedures.

Duties

The consultant should deliver two outputs:

First output: Forest fire prevention protocols.

These protocols should be prepared in detail, including:

- Identification of stakeholders (government institutions, private organizations, grassroots community organizations and the population at large), including their role in forest fire prevention and their capacity for action.
- Identify strategies to enhance the participation and involvement of civil society and local authorities (education, communication and outreach strategies including events for the launch of the forest fire prevention and control campaign at the regional and municipal levels and dissemination of information on fire risk and hazard areas) so as to raise awareness among all stakeholders.
- Development of mechanisms and identification of responsible parties in the systematization of information on contingency or similar plans related to forest fires, budget resources, human resources, logistics, etc.
- Identification of strategies to enhance monitoring and means for immediate communication on fire risk and occurrence in rural areas.
- Identification of risk and hazard areas using the data provided by existing information platforms complemented with historical data.
- Development of field contingency operational methodologies.

The protocols should include:

- Abbreviations
- Glossary of terms based on current legislation in the field
- Types of forest fires and danger rating
- Technical, logistic and financial considerations for actions to be proposed
- Institutions involved at a general level and their counterparts at the local level, taking into account that different localities may have various institutions playing the different roles.
- Operational mechanics.
- Description of actions to be implemented.
- Institution in charge of implementation.
- Necessary coordination.
- Financing mechanisms.
- Flow-charts.
- Bibliographic references (annex).

The protocols should also be adequately disseminated and validated, including evidence of actions taken in this respect.

The consultant shall submit an activity report.

Second output: Forest fire response protocols:

These protocols should be developed from a general perspective to number, arrange and prioritize response actions in the event of a forest fire warning in any area, but including specific considerations for their local application in different geographic locations.

- Describe the activities to be implemented in the face of a forest fire, including lines of action from the local level (hamlets, sectors, etc.) to specialized agencies at the regional and national levels.
- Type of direct and indirect responses to be undertaken by local dwellers as the first course of action (considering risk assessment and personal safety).
- Actions to be taken by institutions at the regional level according to an identification of institutional roles.
- Outline of stages identifying the level of action, either local or national.

These protocols should be adequately disseminated and validated by key public and private institutions involved in forest fire prevention and management, as well as civil society organizations, and the consultant should show evidence of these dissemination and validation actions by the relevant institutions. Dissemination and validation will be carried out through 3 workshops financed by the project. The consultant will coordinate these activities (including planning, scheduling and implementation), with the incorporation of a facilitator to be provided by the project. Similarly, the consultant will coordinate with SERFOR regarding the list of stakeholders that will participate in dissemination activities and will deliver a report on the aforementioned workshops.

Consultant – Training on forest fire prevention and response**Assignment objective**

Provide training to technical personnel in forest fire prevention and response within the framework of activity 2.3 under output 2 (Public and private institutions effectively managing forest fire prevention and response protocols).

Qualifications

- Professional with expertise in training and education, strategy implementation and forest fire management operations.
- At least three years professional experience in working and/or training in forest fire related issues.
- Experience in conflict resolution.
- Two years field experience in forest fire response procedures.

Duties

- Coordination of training workshops including planning, scheduling and implementation.
- Training on forest fire prevention, strategies, operations and management.
- Training on identification and implementation of direct and indirect forest fire fighting and suppression techniques, taking into account safety issues.
- Training on risk factors related to the inadequate use of tools and equipment, among others.
- Assessment of participants on procedures, tasks, safety, tools, etc., as well as individual and group activities to apply the skills learned by participants.
- Preparation of theoretical and practical workshop reports on forest fires in the project training area, and course proceedings.
- Participation in work teams and/or committees related to training workshops in his/her field of expertise.
- The consultant will coordinate with SERFOR to prepare the list of stakeholders to be involved in outreach activities and will deliver a report on the aforementioned workshops.

Consultant – Development of communication and outreach actions on forest fires

Assignment objective

Develop and implement effective communication and outreach actions related to forest fires to all stakeholders involved in the protection of the forest and wildlife heritage in constant coordination with the Project Leader and the Regional Coordinators.

Qualifications

- Journalist in the project area.
- Two years experience in the forest sector.
- Knowledge of forest fire issues.
- Immediate availability.
- Knowledge of the local language in the project area.
- Communication and outreach experience addressing local communities.

Duties

- Develop a communication and outreach proposal for the project area, including leaflets, banners, radio spots, flyers, factsheets, manuals, etc. Validate the contents with the regional coordinator.
- Design and layout of communication/outreach materials.
- Identify existing communication media in the project areas as well as appropriate spaces and timetables for the broadcasting of messages.
- Draft radio messages in the language of the local residents.
- Develop a directory of holidays, football matches, regional fairs, and governor meetings, among others, so as to disseminate forest fire prevention and response materials.
- Distribute the materials to strategic partners.
- Advise the regional coordinator regarding potential dates for the implementation of workshops and courses.
- Prepare news releases at the local and national levels.
- Keep a file of outreach materials.
- Identify the materials most widely accepted by stakeholders (communities and institutions).

Sub-contract – Development of factsheets, posters and stickers on best agroforestry practices

Assignment objective

Design, layout and printing of factsheets, posters and stickers on best agroforestry practices translated into two languages.

Qualifications

- Company/individual with expertise in the design, layout and printing of publicity graphic materials.
- Experience in the provision of at least 5 services with positive feedback.
- Experience in the design, layout and printing of publicity graphic materials in the Quechua language.

Description of service

- Design factsheets, posters and stickers on best agroforestry practices according to the agroforestry systems established in each of the three regional areas targeted by the project.
- Disseminate the design and layout of factsheets, posters and stickers with the technical administrators of the target areas.
- Translate the text of the factsheets, posters and stickers into two (02) languages.
- Print 1,000 factsheets in two languages after coordinating with the coordinators of the target areas.
- Print 100 copies of posters in two languages after coordinating with the coordinators of the target areas.
- Print 1,000 stickers in two languages after coordinating with the coordinators of the target areas.

Sub-contract – Development of manual on sustainable agricultural and silvicultural management techniques

Assignment objective

Design, layout and printing of three (03) manuals on best agroforestry practices translated into two languages.

Qualifications

- Company/individual with expertise in the design, layout and printing of texts.
- Experience in the provision of at least 5 services with positive feedback.
- Experience in the design, layout and printing of text in the Quechua language.

Description of service

- Design three manuals on best agroforestry practices according to the agroforestry systems established in each of the three regional areas targeted by the project.
- Disseminate the design and layout of the manuals with the technical administrators of the target areas.
- Translate the text of the manuals into two (02) languages.
- Print 1,000 copies of the manuals in two languages after coordinating with the coordinators of the target areas.

Sub-contract – Development of factsheets, posters and stickers on dissemination of forest regulations

Assignment objective

Design, layout and printing of factsheets, posters and stickers on dissemination of forest regulations.

Qualifications

- Company/individual with expertise in the design, layout and printing of publicity graphic materials.
- Experience in the provision of at least 5 services with positive feedback.
- Experience in the design, layout and printing of publicity graphic materials in the Quechua language.

Description of service

- Design factsheets, posters and stickers on dissemination of forest regulations.
- Disseminate the design and layout of factsheets, posters and stickers with the technical administrators of the target areas.
- Translate the text of the factsheets, posters and stickers into two (02) languages.
- Print 1,000 factsheets in two languages in two languages after coordinating with the coordinators of the target areas.
- Print 100 copies of posters in two languages after coordinating with the coordinators of the target areas.
- Print 1,000 stickers in two languages after coordinating with the ATFFS in the target areas.

Sub-contract – Editing and printing of a publication on forest fires

Assignment objective

Editing and printing of a publication on forest fires translated into two languages (Quechua and Asháninca) within the framework of the development and implementation of communication and outreach actions on forest fires.

Qualifications

- Company/individual with expertise in the design, layout and printing of texts.
- Experience in the provision of at least 5 services with positive feedback.

Description of service

- Editing and printing of 100 copies of the publication on forest fires – full colour, size A5, laminated cover.

ANNEX 4: Modifications made in response to the recommendations of the ITTO Expert Panel

The modifications made in response to the recommendations of the ITTO Expert Panel are presented in tabular form. The modifications appear in the text in bold and underlined.

<u>Reviewer comment</u>	<u>Amendment (s) made</u>	<u>Page No.</u>
Comment 1: Elaborate the relevance of the project proposal with the OIMT Guidelines on Fire Management in Tropical Forests (Section 1.2.1);	The section on the relevance of the project proposal has been improved taking into account the ITTO Guidelines on Fire Management.	7
Comment 2: Further improve the stakeholder analysis by clearly describing the involvement of primary stakeholders in project implementation (Section 2.1.2);	The involvement of primary stakeholders has been included.	11 & 12
Comment 3: Refine the statements of the development and specific objectives (Section 2.1.4 and Section 2.2) to reflect the effects to be achieved in the long term and the short term. The current statement of the development objective looks like the statement of the specific objective and vice versa;	The development and specific objectives have been improved.	15 & 17
Comment 4: Refine the outcome indicators as training of a total of 2,300 local dwellers seems to be too optimistic (Section 2.1.4 and Section 2.2.);	The number of local project beneficiaries has been reduced to 1,800.	15 & 17
Comment 5: Further improve the sustainability of the project after its completion by specifying the extended work on the training programme and curriculums to be established by the project (Section 3.5.2);	Actions have been included to ensure the sustainability of the project after project completion.	29
Comment 6: Justify the budget provisions allocated for participants in events and meeting (item 12.3) and for refreshments (item 16.4) (Section 3.4). Consider reducing the refreshments provision from the OIMT contribution while increasing the EA contribution on this item. Ensure the inclusion of an appropriate budget to facilitate the dissemination of project results;	ITTO's contribution to the budget item on refreshments has been amended The payment of US\$10 to local dwellers and US\$100 to professionals participating in the project has been duly justified as a contribution of the executing agency. The costs for the dissemination of project results have been added.	27
Comment 7 : Recalculate the OIMT Programme Support Costs (sub-item 83) so as to confirm with standard rate of 12% of the total OIMT project costs (on the budget items 10 to 82);	Program Support costs were recalculated at the standard rate of 12%.	26
Comment 8: Further elaborate the dissemination of project results (Section 4.3.1) by considering the use of social media including Facebook. As the 7th International Wildland Fire Conference (IWFC) will take place in May 2019 in Mato Grosso do Sul, Brazil, it is encouraged to disseminate the outcome of the project in this international event; and	In addition to disseminating project outputs through social media, provisions have been included to ensure their dissemination at the 7 th International Wildland Fire Conference (Brazil).	31
Comment 9: Include an annex that shows the recommendations of the 52nd Expert Panel and the respective modifications in tabular form. Modifications should also be highlighted (bold and underline) in the text.	This annex has been included in accordance with the recommendations of the 52 nd ITTO Expert Panel.	40