

PROJECT BRIEF

Sandalwood (*Santalum album* Linn.) is an important natural asset for the East Nusa Tenggara (ENT) province. It has also contributed significantly to the local economy. Over the last two decades, the sandalwood population has been decreasing at an alarming rate. Policy framework tend to neglect local people's right to the benefits of the valuable sandalwood and thus discourage them from participating in the maintenance of the resource. The Indonesian government has shown concern for the future of sandalwood and has begun working collaboratively with the government of the ENT province with support from the International Tropical Timber Organization (ITTO) to implement a study on sandalwood through an ITTO funded project PD 459/07 (F) Rev. 1, "*Improving the enabling conditions for sustainable management of sandalwood forest resources in East Nusa Tenggara (ENT) Indonesia*". The project focuses on the development of sustainable sandalwood resource management in this province.

This project is constitutes the project 459/07 (F) that completed at December 2012. It will continue efforts to contribute to the sustainable management of sandalwood resource. Its specific objective is to promote the effective participation of local communities in Sandalwood plantation development and management on private/community lands in East Nusa Tenggara Province. Major outputs include: (1) appropriate incentives for local communities to develop and manage sandalwood plantations identified and applied; (2) local communities trained on skills for proper sandalwood plantation development and management; (3) adequate awareness program on sandalwood resource development formulated and operationalized. They will be achieved by among others: to widely disseminate the newly adopted regulations; to review and simplify existing procedure for obtaining Sandalwood utilization; to establish model sandalwood plantation, to train local communities on efficient techniques for nursery and development and; to develop awareness programme on sandalwood resource development.

The proposed strategies and activities outlined in this proposal are: 1) review and identify procedures for obtaining Sandalwood utilization and obtaining soft loan from local banks ;2) respectful recognition to local leaders actively involved in Sandalwood resource development and conservation; 3) establish a model Sandalwood nursery and plantation for demonstration and training of local communities; 4) train local communities on efficient techniques for nursery and plantation development as well as for Sandalwood processing and small-scale business planning ; 5) develop campaigning program on Sandalwood resource development particularly extension program with due respect to younger generation 6) Exchanging of information on Sandalwood resource development and conservation; 7) design an extra-curriculum activities for student relating to Sandalwood resource development

The expected outputs of the project are: 1) Effective implementation of the new policy on sustainable management of sandalwood resource through increased participation of local communities; (2) Enhance the low quality and quantity of seedling, improve capacity of local communities on provision of seedling and planting techniques to be more efficient and effective (3) Formulate campaign program on sandalwood resource development and operationalize particularly for young generation. The program need to be undertaken to motivate and improve commitment among stakeholders in supporting sustainable sandalwood resource

The project beneficiaries are wide range of stakeholders, The primary beneficiaries of the project will go to local communities/endogenous people owning or managing sandalwood plantation in private land. They will have more chance to participate in managing the resources and local people receive fair benefits from sandalwood under the new system. Their capacity in cultivation, intensive plantation and sustainable harvesting will improve local income. The local government (in province and district level) capacities in managing the Sandalwood resources accordance with best management practice will be improved. NOG's, universities and other relevant agencies will have an opportunity in involving in decision making process in managing the resources. They will allow to interact for the exchange of information and experiences. For its sustainability, capacity building activities undertaken to all involved stakeholders maintain active communication with relevant stakeholder in collaborative management including private sectors. Provincial and district forestry service will allocate annual budget to support the project results as integral part of local government program in sustainable development.

Maintain the effective networking among stakeholders through coordination and intensive meetings will be strengthened.

The potential risks associated with the project and likely will affect its implementation are:

- Political and policy in sustainable use of forest resource change in the institutional system.
- Lack of support from key stakeholders(local government of district level and local communities) to the implementation of the project activities
- Another risk associated with conflict of interest between the local government and local communities involve in utilizing protected area

Those risks will be mitigated through the strategy implemented in the project as follow (1) Improving capacity of responsible institution, (2) intensive approach and in the planning process will be discussed and consulted with local government at the province and districts leve even sub district, (3) Coordination through regular meeting and dialogue in order to get better common understanding about problems and opportunities to conserve and manage the protected area in the field

The proposed project indicated a total number of : 692,955.20 will be needed. A significant amount of fund : 592,155.20 US\$ (85%) is expected come from main donor (ITTO). Counter budget will be needed to run the Executing Agency totally US\$ 100,800 (15%).

LIST OF ABBREVIATIONS AND ACRONYMS

AAC	: The annual allowable cutting
APBD	: Local government Budget
Bappeda	: Regional Planning Agency
BP2HP	: Unit Office of Utilization of Production Forest in Aceh Province
Bupati	: The Regent in District Level
BUK	: Directorate General of Forest Utilization
BUMN	: State-owned enterprises
CBO	: Community Based Organization
CIFOR	: Center for International Forest Research
CSIRO	: Commonwealth Scientific and Industrial Research Organisation
DPRD	: Local Government Legislative
FGD	: Focussed Group Discussion
FORDA	: Forest Research Development Agency
FPC	: Forest Product Commission in Perth Australia
GOI	: Government of Indonesia
HTI	: <i>Hutan Tanaman Industri</i> (Forest Plantation Estate)
ITTA	: International Tropical Timber Agreement
ITTO	: International Tropical Timber Organization
MoF	: Ministry of Forestry
NGO	: Non Government Organization
NTT	: Nusa Tenggara Timur
PMU	: Project Management Unit
PSC	: Project Steering Committee
RADJA	: A King
RPJMD	: Long Term Provincial Planing
RPJMN	: Long Term National Development Planning
SCBFWM	: Strengthening Communities Based Forest Watershed Management
TTS	: Timor Tengah Selatan

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Part.1. PROJECT CONTEXT

1.1 Origin

This proposal is the extension of the Project PD 459/07 (F) Rev.1, "Improving the enabling conditions for sustainable management of sandalwood forest resources in East Nusa Tenggara (ENT) Indonesia". This project proposal is a follow up the local people/government request for extension and the recommendations of PSC meeting of the project convened at December 2012. This project is recommended to be extended considering that there are still critical gaps in sustainable management of sandalwood in East Nusa Tenggara province and the request of local communities for extension of the project because they have been seen how beneficial it was particularly in improving regulation on sandalwood management at the district level.

In the past, the policy framework tend to neglect local people's right to the benefits of the valuable sandalwood and thus discourage them from participating in the maintenance of the resource. The local people gain little from sustaining sandalwood resources, and unclear rights over sandalwood production have even burdened them. Concerned about the future sustainability of sandalwood, at 2007, the Ministry of Forestry, in collaboration with the government of the ENT province and with the support of the International Tropical Timber Organization (ITTO), has taken concrete action through project PD 459/07 (F) Rev. The purpose of the project was to improve the enabling conditions for sustainable management of sandalwood, and the activities are focused primarily on the regulatory framework.

The previous project focused on strengthening the enabling conditions for sustainable sandalwood resource and improving the local ability to ensure the resources are managed with best management practices. Corresponding to the main causes of the key problems, the achieved outputs of the previous project were : (1) New regulations (PERDA in TTS district and East Sumba district) for managing the resource have been formulated through multi stakeholder processes and endorsed by executive and legislative bodies. (2) Economic incentive framework to support sustainable sandalwood resource has been identified and developed (3) Improving capacity on cultivation of sandalwood for some community group in target districts.

The existence of the ITTO Project PD 459/07 has created a significant change in the development of sandalwood, such as in policies which are now changing and the project activities become a stimulus for movement of sandalwood planting by local communities. Master Plan of Sandalwood Development 2010-2030 has been formulated as guideline for stakeholders in implementing development and conservation of sandalwood. However several challenges to ensure sustainable resource management of sandalwood are still to be faced such as operational constrain to implement the new policy. Local capacity particularly communities to ensure implementation of policies and practices remain weak. Capacity among communities also need to be built up. The policies should be implemented with close collaboration with the local communities. Recent study have demonstrated clearly that communities are well aware of the value and importance of sandalwood in their land, and they are already actively involved in planting and conserving sandalwood. However, local communities recognise that they could do this better if they received intensive technical support and guidance to improve their capacity.

Therefore local capacity and skills for proper sandalwood plantation development and management still need to be enhanced. Although the previous project activity has facilitated community trainings on sandalwood cultivation, but provision of seedling and plantation remain constrains that have to be overcome by communities in enhancing sandalwood productivity independently to support family economy. In addition, awareness of related stakeholders in development and conservation of sandalwood is still low. Generally it is the old generation farmers who still have high interest to plant sandalwood while young generation farmers are more interested in planting commercial and fast growing species. Therefore it is necessary to develop extensive awareness programs to support sustainable sandalwood resource development particularly for youth in community level.

In view of this challenge, a back up support for this proposed project is necessary to increase the local people's participation in maintaining sandalwood resources. Through this project the participation of local communities in sandalwood plantation development and management on community lands will be promoted through the following ways: (1) Effective implementation of the new policy on sustainable management of sandalwood resource through increased participation of local communities; (2) Enhance the low quality and quantity of seedling, improve capacity of local communities on provision of seedling and planting techniques to be more efficient and effective (3) Formulate campaign program on sandalwood resource development and

operationalize particularly for young generation. The program need to be undertaken to motivate and improve commitment among stakeholders in supporting sustainable sandalwood resource.

There are several key instruments at the national level that help to inform national orientation of forest policy in general and Sandalwood policy in particular. These include: (1) MoF strategic planning 2009-2014, which has been set up in 6 (six) priorities program among others, Rehabilitation and improving on watershed management and empowerment of community's economic condition. Furthermore, in MoF strategic planning 2009-2014, one of the priority species in developing forest plantation in ENT is sandalwood.; (2) At the Provincial level national policy directions are interpreted through some instruments that give direction to the Districts for implementation such as Sandalwood Master Plan (2010) for 20 years. The central government encouraged the regional government of NTT to rehabilitate critical land within the state land area with sandalwood plantation. However, in its implementation the tree species planted is not only sandalwood but other species as well. The constrain lies in the inability of the government and community to provide enough good sandalwood seedling. Because of it, understanding the technical aspects in developing sandalwood is very much needed. The Province has stated that the establishment of Sandalwood plantations is a priority issues that requires immediate actions by all District governments and related stakeholders. Each District government is required to allocate local budget to maintain sandalwood nurseries and plantations.

1.2 Relevance

Conformity with ITTO's objectives and priorities

1.2.1 Conformity with ITTO's objectives and priorities

(1) Compliance with ITTA 2006 Objectives

The project is confirming to the objectives contained in Article 1 of ITTA 2006 through implementation of strategy and policy framework in managing sandalwood resource particularly:

Objective 1 : Providing an effective framework for consultation, international co-operation and policy development among all members with regard to relevant aspect of the world timber economy,
Objective 3 : Contributing to sustainable development and to poverty alleviation
Objective 13 : Encouraging members to develop national policies aimed at sustainable utilization and conservation of timber producing forests and maintaining ecological balance in the context of tropical timber trade.

The proposed project will made effort to improve awareness of relevant stakeholders not only in forestry sector but also other sectors/institutions in sustainable sandalwood management. It will comply to the objectives as follow:

Objective 14 : Strengthening capacity of members to improve forest law enforcement and governance and address illegal logging and related trade in tropical timber.
Objective 18 : Encouraging members to recognized the role of forest dependent indigenous and local communities in achieving sustainable forest managed and develop strategies to enhance the capacity of these communities to sustainable manage tropical timber producing forest.

The proposed project will promote Sandalwood resource development through developing campaign program to local communities particularly to younger generation; It will contribute contribute to the objective in article :

Objective 9 : Encouraging members to support and develop tropical timber reforestation as well as rehabilitation and restoration of degraded forest land with due regards for the interest of local communities depend on forest resource

(2) Compliance with Action Plan 2013-2018

The proposed project complies with various aspects as raised in the ITTO Action Plan 2013-2018 particularly :

Strategic Priority 1. Promote good governance and enabling policy frameworks for strengthening SFM and related trade and enhancing SFM financing and investment. This strategic priority will be accomplished through project activities , inter alia: to apply appropriate incentives for local communities to develop and manage Sandalwood plantations; to enhance local capacity on skills for proper

Sandalwood plantation development and management enhanced; to formulate adequate campaigning program on Sandalwood resource development formulated and operationalized(output 1, 2 and output 3). The proposed project also focuses on strengthening capacity of community and other small and medium size enterprises

Strategic Priority 2. Increase the contribution of tropical forests to national and local economies, including through international trade, Activities in this project is relevant with this strategy particularly in assisting communities in meeting requirements in international markets and promoting understanding of new initiatives related to trade in legal and sustainable timber in Indonesia one of them is from Sandalwood product.

Strategic Priority 6 : Build and develop human resource capacity to implement SFM and increase trade in forest goods and services from sustainable managed forests. This strategic will be implemented through project activities such as development model Sandalwood plantation for demonstration and training of local communities and training local communities on efficient techniques for nursery and plantation development as well as for Sandalwood processing and small-scale busuiness planning (Output 1 and Output 2)

1.2.2 Relevance to the submitting Indonesia policies

The Ministry of Forestry has long promoted the policy of sustainable management of the forest resources and has promulgated many regulations intended to ensure sustainability of the resource. The main references for managing forest resources in Indonesia are the Law No. 41/1999 on Forestry. which replaced the 1967 Basic Forestry Law, for example, stipulates that:

- The balance between the forest's conservation, protection and production roles should be optimized in order to sustain its environmental, cultural and economic uses;
- The ability of communities to develop capacity and resourcefulness in creating social and economic security as well as guaranteeing the equitable and sustainable distribution of benefits should be increased;
- The community has important part to play in forest development and the government, which assisted interested parties, must promote this responsibility.

In term of management of non timber forest product, Minister of Forestry has released Ministerial Decree SK No 6886 Year 2002 regarding procedure and management of non timber forest product. One of non- is Sandalwood (*Santalum album*).The national Government (Long Term National Planning-RPJPMN) has committed itself to work towards the sustainable management of the country's forest resources and to develop a national macro policy environment to support this goal. In order to achieve this overall goal the Government has developed six priority programs, which include:

- Rehabilitation and increased carrying capacity of forest resources,
- Revitalisation of forest utilisation and forest industries,
- Empowerment of people living around the forest, and
- Strengthening forest institutions.

These four programs recognize the importance of two key aspects of the national policy, i.e. the biophysical one of resource conservation (including sustainable management) and the socio-economic one related to community empowerment and local economic development.

At the Provincial level national policy directions are interpreted through (National Strategy Planing of Province-RPJMD), Provincial regulation (PERDA's) and other instruments that give direction to the Districts for implementation.With support by previous project, the ENT provincial government has developed a Master Plan for Sandalwood development for the next 20 years. The Province has stated that the establishment of Sandalwood plantations is a priority issues that requires immediate actions by all District governments and related stakeholders. Each District government is required to allocate local budget to maintain sandalwood nurseries and plantations.Recent instruments and other relevant statements from the Provincial government include:

- Sandalwood Strategic Action Plan (2010) for the period 2009-2013;
- Implementation Guidelines for Sandalwood Strategic Action Plan;
- Governor's statement on "Cendana Icon" (1997).

Some Districts in the Province have enacted District Perdas (e.g. TTS and Sumba Timur) but some have not, (e.g. Alor and Flores Timur)

Some revised policies have been enacted to provide for the local people's needs, an achievement of the previous project are newly PERDA's (Local Government regulation) have been issued; PERDA of Provincial Government No 5/2012 and PERDA of Sumba Timur district No 6/2012 regarding Sandalwood management. Those regulations have accommodated the local people's rights and stimulated their participation. Ministry of Forestry currently improving the regulation related to Non Timber Forest Product (including sandalwood) and regulation regarding wood legality from community forest (*Penata usahaan hasil hutan kayu dari hutan hak/hutan rakyat*) namely P. 51/2006 and P. 33/2007 and revised to P.30/Menhut-II/2012. This is also a concern of stakeholders in ENT, because the regulation will be a reference in improving PERDA Sandalwood in province.

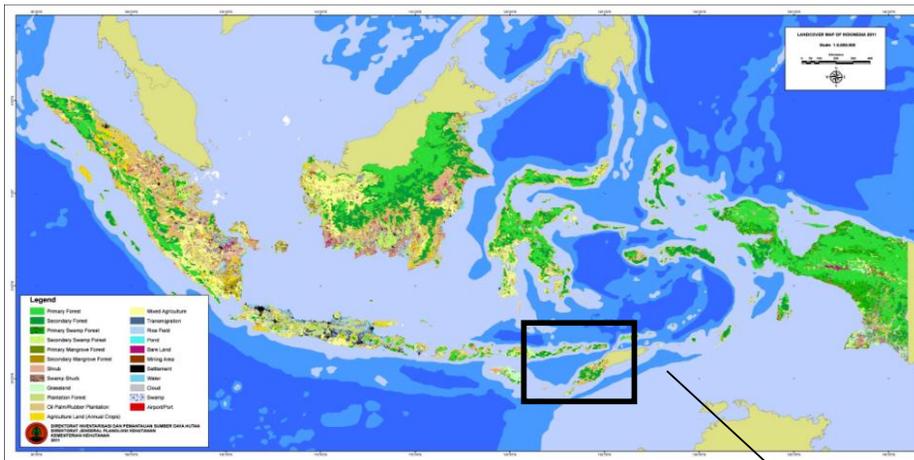
In international level, Indonesia has also confirmed its adherence to international commitments. This includes ITTO Yokohama Action Plan 2002-2006, the objectives and recommendation of the United Nations Conference on the Environment and Development held in Rio de Janeiro in 1992, the Convention on International Trade in Endangered Species, (CITES) and the world heritage. Since Indonesia is a member of ITTO, it has an obligation to support the ITTO objectives towards sustainable forest management. As signatory to the Convention of Biological Diversity (CBD), the government policy is also taking into account the importance of the ecological and biological value of forest resources.

1.3 Target Area

1.3.1 Geographic location

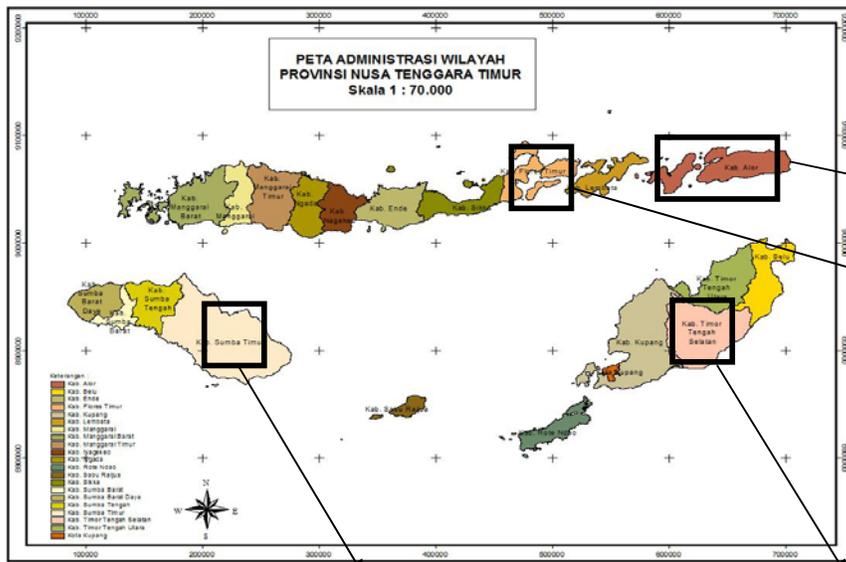
Project activities located in East Nusa Tenggara province, and four target Districts to be included in the project activities, namely Districts of Timor Tengah Selatan – TTS (representing Timor island), Sumba timur (representing Sumba island), Alor (representing Alor Island) and Flores timur (representing Flores island). The selection of the four districts is based on the following consideration (i) the sandalwood natural distribution was still found in Timor, Sumba, Flores and Alor islands, (ii) ineffective local government policy in the past has resulted in socio-psychological impact particularly for the communities in Timor and Sumba island. (iii) Districts of Alor and Flores timur have developed sandalwood planting activities together with the local communities. Some activities particularly training, extension and campaign will be implemented in eight villages within the island Alor, Timor, Flores and Sumba. Project activities will be conducted in villages within 4 target districts.

Picture 1. Map of Indonesia



ENT province

Picture 2. Map of Districts target

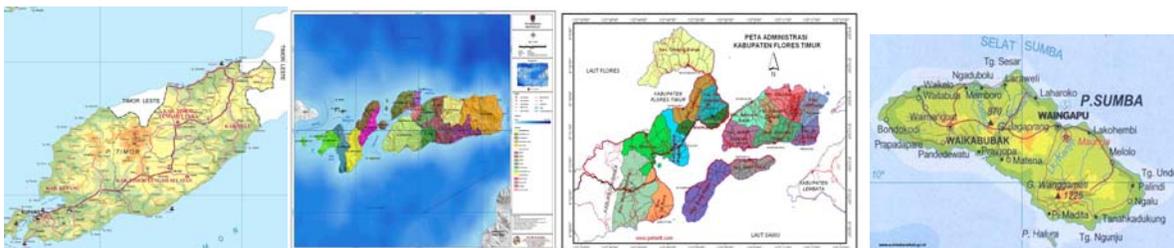


Sumba timur

Timor Tengah

Alor

Flores timur



Timor Tengah Selatan

Alor district

Flores timur district

Sumba Timur district

1.3.2 Social, cultural, economic and environmental Aspects

Social Cultural Aspect

Social aspect

East Nusa Tenggara or ENT (Indonesian name: Nusa Tenggara Timur or NTT) is a province of Indonesia that is located in the eastern portion of the Lesser Sunda Islands. The provincial capital is Kupang, located in West Timor. The province consists of about 550 islands, but is dominated by the three main islands of Flores, Sumba, and Timor. Other islands include Adonara, Alor, Komodo, Lembata etc. In 2008, the population of the province was estimated to be 4,534,319. The religious mix is non typical of Indonesia, with 91% Christian, 8% Muslim, 0.6% Hindu or Buddhist, and 0.4% holding traditional beliefs. Government activity in the province is still largely dependent on finance from central government and there is little interest from outside investors.

ENT is the most ethnically pluralistic provinces of Indonesia. There are many ethnic groups, including two in West Timor, five on the islands of Sumba, Sabu, Alor and eight in Flores. Each ethnic group has a separate language. These ethnic and language difference are paralleled by differences in social cultural behaviour. The traditional life is regulated by natural law or adat where in some area it has loss its influence but in most village is still significant. The principal kinship group of ENT communities is clan, which manages traditional activities along with elders of the clan. Each group has rites and procedure involving land, marriage, burial, inheritance, labour exchange, environmental management and it is here that social divergences has arisen. There are differences in decision-making processes and level of participation within different ethnic group in ENT.

Based on community knowledge, felling sandalwood must be done at the right time, taking into account the right age of trees, the proper day of felling and to follow the traditional rules. Trees should be cut down only after 20 years of age and done in the dry months of July and August. Sandalwood should not be cut down during cloudy weather or at night. This symbolizes that sandalwood tree must be cut down with an attitude of a sincere heart, clean and honest. Felling should be done at daylight on days toward the full moon and not at days where the moon approaches its disappearance. These are the times sandalwood is believed to be in good condition with maximum content of core wood that is dense and fragrant. After sandalwood tree is felled, the wood should not be left alone unattended. The timber must be transported to a safe place and taken care of continuously until the time the wood is to be utilized. If it is to be sold it must be safeguarded until it is the right time to sell the wood.

Customary rules governing the use of forest products – including sandalwood – stressed the importance of the conserv of nature, as not all sandalwood trees could be taken out of the forest, some trees must be left standing as mother trees to preserve sustainability. The traditional rules that restricts arbitrary cutting of sandalwood trees, are among others wood need is allowable only if collected from fallen trees and burning or damaging sandalwood is prohibited. Those who violate the rules will be punishable by a fine of a buffalo or goat. The amount of the fine depends on the age of the damaged or destroyed plant, the older the tree the more severe the penalty is.

Most of the communities in ENT especially in TTS, has very little knowledge on the concept of sandalwood planting, because of the idea that sandalwood can't be planted by human, that sandalwood planting occurs naturally through birds. The birds eat ripe sandalwood fruits and throw away its seed, which then become sandalwood seedlings. Further, the plants grow bigger without any need of tending. Communities perceived that at the initial period of its growth, sandalwood need host plants and the species considered to be good at the initial period of its growth (primary host plant) are cabai plants (*Capsicum annum*) and turi (*Sesbania grandiflora*). Secondary host plants are Johar (*Sesbania siamea*) or kaliandra (*Calliandra calothyrsus*).

Community has local wisdom in planting sandalwood which are:

- To preserve soil humidity, young sandalwood seedlings are provided with banana stems buried around it.
- Fencing small sandalwood trees with wooden fence to protect it against disturbance from livestock.
- Sandalwood is protected against fire danger by wrapping it with banana trees sheaves; and is circled by zinc sheeting as an effort to prevent it from being stolen

Involvement and the role of women in the development of sandalwood is particularly in the nursery stage. Many women's groups involved in this stage do the filling of media feed on polybags and watering seedlings in the nursery. In some villages, women became chairman of sandalwood farmer groups. In terms of rights to utilize sandalwood by communities in their private land, a local (Perda) law stated that they will receive 100% of the results of the use of their private land for sandalwood planting.

The role of local communities who have already local wisdom in project implementation will contribute positively to the social aspects. The core activities are directed to empower local communities on resources development activities in such way that the activities of the project could improve the social welfare for the local people in the project area and its surroundings. On the other hand, the most important thing caused by the successful implementation of the project is that it will generate awareness of local people to participate in protecting forestland.

Economic Aspect

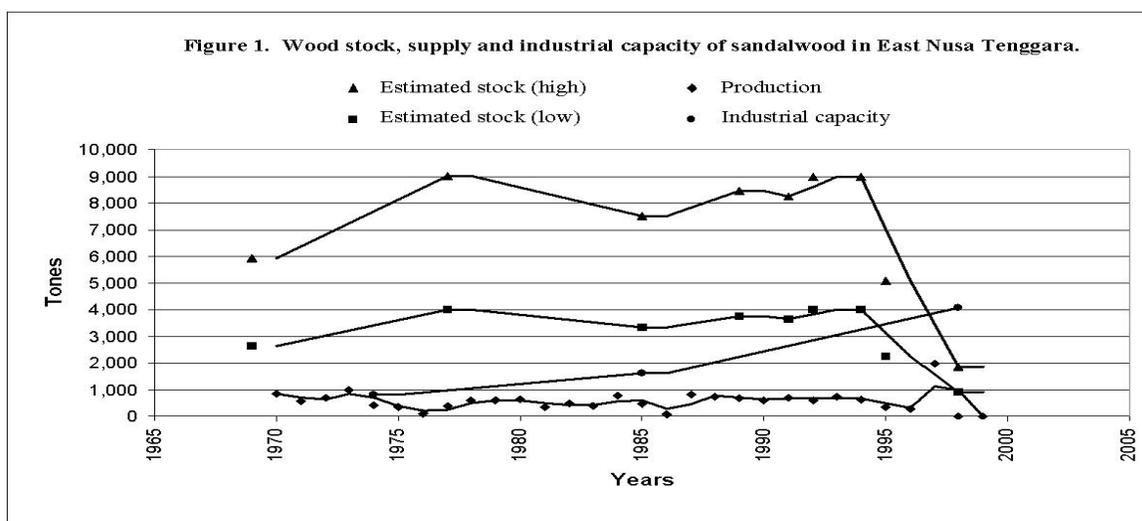
East Nusa Tenggara is one of the poorest provinces in Indonesia. Social economic indicators are low compared with most other provinces in Indonesia. In TTS district, The local economy in the area is poor and underdeveloped. Subsistence agriculture is the main economic activity in many villages. In addition, when opportunities are available, some local village communities sometimes undertake unregulated mining or other resource-based activities. Economy in almost all districts is dominated with agriculture which accounted for 35% and almost entirely involved smallholders. Food crops grow mainly for subsistence, followed by livestock for markets elsewhere in Indonesia. Agriculture followed by importance by services which were 26 % in GDP.

There is no oil and gas in ENT. So effort at improvement must necessarily focus on agriculture and forestry and associated aspect and especially improving yields and marketing. There are major potential for this. Farmers still regarded as having limited knowledge on agriculture/forestry trees particularly resulting from lack of access to formal education and vocational training. Furthermore, farmers lack incentives (and support) to invest in practical technologies which can improve quality and quantity of production. In term of marketing there are weak links between different value-chain actors, farmer have limited access to market information and there is generally limited product.

Data on sandalwood plantation taken from 23 villages in the district of South Central Timor was collected and analyzed in the previous project. A total of 1,426 trees¹ were identified and measured on selected patches of private land across 23 of the 240 villages in the District. The emphasis was on recording trees greater than 20 cm circumference, but smaller trees were also measured if they were considered robust enough and has the potential of good growth into mature trees that could produce viable seed. The experience of officers carrying out the survey is that virtually every rural household in the District has at least 1-2 sandalwood trees growing on their land, while quite a few have more than 100. If it assumed that on the average there are about 10 trees of all sizes per household (this approximate figure was arrived at during discussions with several farmers), then with about 60,000 households in the District there would be about 600,000 sandalwood trees of all sizes in the District. However, if the 30,000 mother trees above 20 cm circumference are taken into consideration, the majority of the total (about 570,000) must be small trees less than 20 cm circumference, This represents a potential large financial asset in the hands of villagers that will be available for harvesting in the future. It should be kept in mind however that there seems to be a high mortality of seedlings and saplings.

Data related to sandalwood oil production and its export from ENT has not been analyzed by many. The following data shows

¹ This figure can be put into perspective by remembering that it represents a little more than one hectare of Sandalwood plantation as grown in Australia.



Since ten years ago sandalwood trade is in the form of sapwood. From year 2001 there is only one refinery for sandalwood oil left in Kupang, Many sandalwood refineries are closed due to lack of supply of raw material. Sandalwood oil producer in Kupang and East Nusa Tenggara advised that most of their sandalwood supply comes from Timor Leste – little available from ENT, Because of it little sandalwood oil is being traded from NTT. Result of field investigation on sandalwood price can be seen in the following table:

Category of Sandalwood	Price paid to farmer by buyer (Rp per kg)	Price paid to buyer at factory (Bali, Surabaya, Jakarta) (Rp per kg)
White wood (sapwood)	2,500	7,000-7,500
50% sapwood and 50% heartwood	30,000-40,000	65,000-70,000
Good heartwood	80,000-100,000	150,000-170,000
Small twigs	15,000	25,000-30,000
Long block (10-100 cm circum)	100,000-150,000 → 350,000-400,000 (price in Kupang market)	500,000
Short blocks (10 cm circum)	80,000 – 100,000 → (150,000-200,000 price in Kupang market)	175,000-250,000

It can be seen from above figures that with the increase of production and improved product quality it is expected to generate local income and jobs that in turn will improve the standard of living of local people.

Environmental Aspect

NTT is a difficult region to grow crops or forest plantation due to its short intense wet season, long dry season and landscapes considerably less fertile and fragile. Rainfall in West Timor for example, which is between 1000 to 1500 mm / year. Sandalwood grows in areas with average rainfall of 625-1625 mm / year, climate type D and E according to Schmidt and Ferguson (1951). Average temperatures range between 10 ° C - 35 ° C during the day. The relative humidity in the dry season is 50% - 60%. Evidently from the project study that

sandalwood has not yet lost its properties and the need for climatic tolerance limits of their natural habitat. Sandalwood also can actually live in co-existence with other plants without interruption its growth. Observations at five locations in TTS district show that in all strata of sandalwood growth it can grow with a variety of other plants that are also living on the same growth strata.

In the list of IUCN (2007) sandalwood ecology is described as plants that can live in a variety of situations that support its growth as a hemi-parasitic plant that can live in a variety short and long term host plants in order to support its life as a hemi-parasitic plant. It was found that three species of long-term secondary host are the best are: *Casuarina junghunniana*, *Cassia siamea* and *Azederachta indica* and for medium term secondary host area *Acacia villosa*, *Leucaena leucocephala* and *Sesbania grandiflora*

Sandalwood farmers/local communities will be trained on efficient techniques for nursery and plantation development. It will make them more understanding such as response of the sandalwood population for different biophysical ecological conditions. Furthermore, this project will provide positive benefit to the local, regional and global level environmentally. This will reduce the damaged area of forestland, increase biodiversity conservation and promote a long-term flow of sandalwood for industry.

1.4 Outcomes at project completion.

It is expected that upon completion of the project: (1) appropriate incentives for local communities to develop and manage Sandalwood plantations is applied; (2) local capacity on skills for proper Sandalwood plantation development and management enhanced; (3) adequate campaigning program on Sandalwood resource development formulated and operationalized.

By the end of project, the newly adopted provincial and district regulations and secure communities' rights to utilize Sandalwood trees occupying private/community lands widely disseminated, procedures for obtaining Sandalwood utilization permit is simplify. Local government recognize to local leaders actively involved in sandalwood resource development and develop subsidy for Sandalwood plantation establishment by local communities. Information and procedures for obtaining soft loan from local banks to support sandalwood resource development is disseminated to local community group/cooperatives.

Communities will get lesson learned from model nursery for production of good quality planting materials and sandalwood processing for purpose of value-adding generation. Participation of local communities in sandalwood plantation development and management on community lands will be promoted.

Local communities particularly the younger generation will get better understanding on Sandalwood resource development benefit and they are motivated to participate in Sandalwood plantation development and management. It will contribute to poverty reduction and the pursuit of sustainable development in east Nusa Tenggara. A long term effect of the project intervention is expected that forest dependent communities welfare increased and Sandalwood Resources in East Nusa Tenggara Province are increasingly able to meet the social, environmental and economical needs of local community

The expected short benefits to be generated from Sandalwood plantations are : (1) Local community will gain economic benefit from selling Sandalwood seedling to improve their monthly income; and (2) After 5 ages Sandalwood can produce mature seed (+ 0,5 kg per annum), and communities could sell it for cosmetic industries.

For long term benefit , local community will gain economic benefit by producing hardwood. Actually, cultivation sandalwood is economically attractive as it is demanded by market and it has high price. At the international market, it may reach up to AUS\$ 40,000 per ton of wood. In an intensive sandalwood plantation with density up to 250 plants per hectare may yield up to Rp 1.875 billions, or may contribute to annual income up to Rp 37.5 million. The Ministry of Forestry (MoF, 2012) recently releases report on global shortage of sandalwood oil that may reach up to 80 tons per year.

It is known that Sandalwood plays an important role to the livelihood of the people of ENT province, not only for economical but also for cultural reasons. Existence of sandalwood is tightly related to cultural pattern and knowledge of local communities. They believe certain mythical stories related to

the existence of sandalwood. By planting the sandalwood trees, they preserved the traditional culture that has been observed for generations. Sandalwood oil is commonly used by communities in spiritual activities and creates peaceful feelings. They used also sawdust of sandalwood as raw material to make incense in their religious rituals such as during burial, veneration and preserving the body of the deceased.

2. PROJECT RATIONALE AND OBJECTIVES

2.1 STAKEHOLDER

2.1.1 Institutional set-up and organizational issues

Sandalwood has long been used as an icon of East Nusa Tenggara (ENT) region. Sandalwood was predicted to have been intensively traded in ENT region since the early BC (Before Christ) era. After Indonesia gained its independence, the authority of sandalwood was taken over by the Indonesian government. Sandalwood authority was then regulated by regional laws (*Peraturan Daerah* or PERDA). Along with the development of national government system from central into decentralization (regional autonomy), initiated in late 1990s, administrative procedures within forestry sector have also changed. Sandalwood management was one among the commodities affected by these changes, among others because of strong pressures from local community requesting their rights over sandalwood resources. In 1999, the Regional Government of ENT handed over sandalwood resource management from provincial government to district governments.

During the transition era, when the district governments have not yet issued their regional policies or regulations, sandalwood resources were managed based on Implementation Guideline introduced by the Governor of ENT. The progress shows that each district implements different policies over sandalwood resources in their areas. In the case of Alor and East Flores districts, the district governments have so far not issued any new policy regarding to sandalwood resources. In Alor, this *status quo* is articulated that sandalwood is treated similarly as with other timber species. Local communities are free to own and sell sandalwood from their gardens or yards.

In fact, the MoF supported through the previous ITTO project through formulating a Master Plan of sandalwood production and development; they will be used as a guideline and policy direction in developing sustainable management of sandalwood in ENT. The previous project has facilitated internal meeting and consultation/dialogue to synchronize regulation in provincial and national level but still lack information dissemination of that regulation in district level. The issue that needs to be overcome under the project through improved communication with district level and dissemination of the new regulation to local communities.

In grass root level, traditional institution exist that regulates the utilization of sandalwood growing in land owned by indigenous people. The existence of elders/religious leaders is very much respected by local communities. In some villages such as in TTS (Timor Tengah Selatan) and East Sumba district, the utilization of sandalwood in community land is regulated by tradition. Training activities and campaign programs on sandalwood resource development need to involve existing traditional institution. In fact, regional government support the formation of sandalwood farmers association as a vehicle for communities empowerment and at the same time protect farmers in sandalwood trading/market and to make access for funding easier in developing sandalwood plantations. However up to now no association has as yet been formed in the four target districts.

Since 2009, the Ministry of Forestry is cooperating with two international institutions in ENT which are; (1) cooperation between the Directorate General of Watershed Management and Social Forestry (*Ditjen RLPS*) with GEF through UNDP called the "Strengthening Community-Based Forest and Watershed Management" (SCBFWM). The purpose of the cooperation is to strengthen government program in community based Forest and Watershed (DAS) Management. One of the activity components is the making of a CBFWM demonstration plot at the Sub DAS Besian in the District of TTS and the supply of seeds (one of which is sandalwood seeds) to communities through Community Based Organization or CBO. (2) Cooperation between Forest Research and Development with CSIRO of Australia with the purpose of developing genetic conservation of sandalwood species and the making of nurseries together

with the communities from sandalwood seeds taken from the result of research at the District of TTS. **The challenge for the project is to strengthen cooperation and coordination/communication among international institution. Weak communication among them will be strengthened under the project through regular consultation and regular dialogues. The project also will initiate an informal stakeholder forum. The purpose of informal Forum is to provide stakeholders with the information of project progress/result. Through this forum, it is expected that projects activity/programm will be synerigized and complemented each other. Publication or manual related to Sandalwood which produced by the two international project above, will be used as references.**

2.1.2 Stakeholder analysis

This proposal has been developed after long process of brainstorming and intensive discussion with various stakeholders in province and national as well district level to get consensus and to ensure that they will benefit as well as participate in all stages of the project's life (design, implementation, monitoring and evaluation, and post-project period). And The project was a follow-up the recommendation of the ITTO Project PD 459/07 PSC meeting at February 2013. To know the perception as well as interest and opinion of a problem in managing Sandalwood resource, Project initiator and formulator have carried out several focused discussions involving related stakeholders to in ENT province to map stakeholder role in managing Sandalwood (since August 2012, November 2012 and April in Kupang). Stakeholder analysis which has been done as table 1 such as below:

Tabel 1. Stakeholder analysis

Stakeholder Group	Characteristics	Problems, needs, interests	Potentials	Involvement in the project
Primary Stakeholder				
Local communities / endogenous people villages in 4 target districts	<ul style="list-style-type: none"> - Limited options for economic development - Limited assistance from the local government in terms of economic development and education related issues. 	Land use rights to the forest. Increased incomes Preserving typical NTT plants of high economic value.	Having indigenous knowledge/ local knowledge Having traditional law (customary law)	<ul style="list-style-type: none"> - Primary project beneficiaries - Local communities will get necessary information and improve capacity as well as adequate economic incentives to involve in managing Sandalwood resource
Religious/communities leaders (Toga / Tomas)	Initiate community-based development activities related to sandalwood	Increase awareness of crops and environmental maintenance	Have an emotional /spiritualconnection with the community	Involved in project activities particularly in training and dissemination newly regulation to local communities
Village officials	<ul style="list-style-type: none"> - The villages are situated within forest area; - Having authority in governing forest in village level 	Data on potential of sandalwood on private land not yet available Village head must know about sandalwood plantation in village. lack of extension and training about right to issue documents	Having indigenous knowledge/ local knowledge/ people alliance Understand traditional law (customary law) in the villages	<ul style="list-style-type: none"> - Primary project beneficiaries - Village official will involved in the programme of community empowerment as well as adequate economic incentives to involve in managing Sandalwood resource
Youth group in the village/Students	<ul style="list-style-type: none"> - Less motivation in cultivating Sandalwood (long term tree); - Not interest to work in forestry sector 	Limited information/publication related to Sandalwood resource in ENT Sandalwood resource development not included in local vocational /formal education curriculum	Could mobilize massive action in Sandalwood planting As agent of change in return "Cendana icon" in ENT	<ul style="list-style-type: none"> - Primary project beneficiaries - Youth will involved in the programme of community empowerment as well as adequate economic incentives to involve in managing Sandalwood management

Stakeholder Group	Characteristics	Problems, needs, interests	Potentials	Involvement in the project
		In adequate appropriate programme for youth related to Sandalwood development		
Provincial government of ENT	<ul style="list-style-type: none"> The policy and economic legal framework in sustainable management of sandalwood resource in effective Lack of coordination with districts and national government Lack of capacity to integrate policies 	<ul style="list-style-type: none"> Harmonize policy and formulate economic framework Socialize of new government regulation Have institutional and human resource in management resource Strengthen of the coordination with relevant parties 	<p>Having data and information related to sandalwood in ENT province</p> <p>Having resources to implement some activities</p>	<p>Facilitation on formulating regulation through consultation process in participatory way as well as dissemination of newly regulation</p> <p>Directly involved in project implementation</p>
Districts Government (4 target districts)	Lack of coordination with provincial and national level in forestry policy framework	Inter-institutional coordination Exchange information	Authority in District level to adopt adjusted policy	Have willingness to adopt policy for sustainable resource Have resource to implement some activities
Secondary Stakeholders				
Ministry of Forestry	Lack of capacity in integrating macro planning for Non Timber Forest Product	A efficient model to implement effective sustainable resource	Involved at national level strategy in policy framework	<ul style="list-style-type: none"> National Strategy National commitment for sustainable resources mainly for non timber forest product
BP2HP Bali (Agency for Monitoring of production forest for Bali and East Nusa Tenggara)	<ul style="list-style-type: none"> Representative of DG of Forest utilization MoF in provincial level has authority on implementation of forest utilization policy in region Bali and Nusa tenggara 	<ul style="list-style-type: none"> Limited coordination with local government in district level Lack of capacity in monitoring utilization of forest product 	<ul style="list-style-type: none"> Have authority in managing production forest at region Bali and Nusa tenggara Have network and resource in provincial level 	Involved in project activities mainly in facilitating dialogue and discussion at provincial and district levels
BPTH2 Bali (Agency for seeding forest trees) Bali and East Nusa Tenggara)	<ul style="list-style-type: none"> Representative of DG of land Rehabilitation in provincial level has authority on standardization seedling quality of edogenous species in region Bali and Nusa tenggara 	<ul style="list-style-type: none"> Limited coordination with local government in district level Lack of capacity in monitoring seedling and mother trees in district area 	<ul style="list-style-type: none"> Having a task to contribute for forest plantation development Having capacity in managing and testing seedling resource Monitoring seedling distribution including sandalwood for east nusa tenggara Have network and resource in provincial level 	Involved in project activities mainly in facilitating dialogue and discussion at provincial and district levels regarding rehabilitation/sandalwood plantation programme
Agency of Conservation and Nature Resource in Nusa Tenggara Region (BALAI BESAR BKSDA)	Managing protected and conservation areas in Indonesia	Pressures and threats on protected and conservation areas	<ul style="list-style-type: none"> Has strong networks; Has ample resources; Has great experience in coordinating projects on 	<ul style="list-style-type: none"> Supports the project process by developing and creating policy Involve in project implementation and monitoring

Stakeholder Group	Characteristics	Problems, needs, interests	Potentials	Involvement in the project
			conservation areas	
Tertiary Stakeholders				
University and Forest Research Institute/Training Institute Kupang	Lack of technology to gain important data and information Limited network	<ul style="list-style-type: none"> System information database for sandalwood resource Improve network with relevant research parties 	Involved as collaborator of the project	Contribution in reviewing and analyzing some matters which is related to wood based sandalwood development strategy
Local NGO's (SANLIMA etc)	Collaborative partner of the national park management authority	<ul style="list-style-type: none"> Implementation of collaborative works with BKPN is not well performed 	Has experience in designing, conducting, evaluating conservation activities; Has links with local communities	Project implementing partner/ <u>sub</u> contract
Institutions of Higher Education	The institution has a mission of education and research.	Limited funding for collaboration. Maintaining sandalwood as an endemic species in NTT.	Have competence in areas of study and survey research.	Involving in developing extra curriculum activities for student
State enterprises, associations, and private sector (PERHUTANI etc)	To contribute and support the existence of sandalwood as a sustainable resource in NTT.	Increasing the capacity and role of stakeholders in the development and preservation of sandalwood.	Have potential and the authority over the work of each stakeholder and can support the government's program.	Involving in activities related to formulating campaign programe and training/extensions
Mass media	Disseminate information on the development of sandalwood	Information about sandalwood is still limited at grassroots level	Has the means to reach different segments of society	Involved in disseminating of sandalwood publication and project activities

The primary beneficiaries of the project particularly are: local community, small/medium forest industries and local government in provincial and district level. Involvement of these beneficiaries in project implementation can be summarized as follows:

Direct beneficiaries of this project are:

- a. Local communities
They will have more chance to participate in managing the resources and local people received fair benefits from sandalwood under the new system. Their capacity in cultivation, intensive plantation and sustainable harvesting as well as local income have been improved.
- b. East Nusa Tenggara Province Forestry Service
Through this project the capacity of Forestry Service in provincial and district level in managing the sandalwood resource in accordance with best management practice will be improved. The Forestry Service has played a big role in strengthening the policy and economic framework for that commodity.
- c. Local Government (Districts level) of East Nusa Tenggara Province
This project has provided better knowledge of applied appropriate sandalwood management particularly in economic framework as well as the provision of incentives and economic instrument.
- d. Ministry of Forestry Republic of Indonesia and forestry office in Nusa tenggara region
The Ministry of Forestry obtained data/ information in management plan of Non timber forest product including sandalwood resources.
- e. Local NGOs and other relevant agencies (universities etc)

They will have an opportunity in involving in decision making process in managing the resources. This will allow them to interact in the exchange of information and experiences

Indirect beneficiaries of this project, mainly from the data and information prepared from the project are:

f. ITTO related programs and projects

Through this project the ITTO related programs and projects could benefit the data and information available in ENT province

g. Commercial Organizations

Through this project, commercial organizations interested in sandalwood commodity could easily and accurately get the data and information against commercial subscription fees.

h. Local NGOs and other relevant agencies (universities etc)

Interested local NGOs can use and obtain the data and information from the Centre against fairly small subscription fees.

2.1.3 Problem Analysis

The proposed project is a follow-up to the completed ITTO-assisted project namely PD 459/07 Rev. 1 (F) titled "Improving the enabling conditions for sustainable management of sandalwood forest resources in East Nusa Tenggara province, Indonesia". Although the above projects had been successfully completed and delivered their intended objectives, management of sandalwood resource in ENT is still facing several challenges which include:

(1)The new policy on sustainable management of sandalwood resource through increased participation of local communities effectively is not as yet operational.

The past regulatory framework was framed to emphasise regulation and policing and control by the government rather than providing an enabling environment in which communities and government can work in partnership to achieve mutually agreed and beneficial objectives. The regulation dictated that the ownership of all sandalwood rested with the government, and villagers on whose land it grew were paid only a token sum at the time they are involved during its harvest. Thus, these policies acted as a major disincentive for villagers to encourage or even allow sandalwood to grow on their land, as virtually all proceed will go to the government. It seems clear that this has contributed to the degradation of the sandalwood resource and inhibited the active involvement of villagers in sandalwood rehabilitation and management. These policies are now changing, but to some extent the perceptions created by past experiences still exist and influence community attitudes to sandalwood production. Local leaders in communities should be developed to share responsibility. Capacity among communities need to be build up. The new policy should be implemented with close collaboration with local communities.

Communities living in Timor Tengah Selatan are deeply confident that everything including the sandalwood tree is a gift from the ruler of the heavens and the earth and blessed the life of the community. They applied traditional wisdom to conserve sandalwood mother trees and maintain the stands. The fact that local leaders are actively involved in sandalwood resource development and conservation should be respectfully recognized.

The major elements of an incentive framework to encourage farmers to invest in sandalwood production are secure tenure and an assurance that they can retain 100% of the selling price received for sandalwood. In all villages, farm is considered to be private land held by the family, and the boundaries of this land are largely uncontested. Some families have formal land registration certificates, but some do not. Decisions made on what to plant, where and when to plant, are made by the family. The exception was in customary land, where customary (adat) practices still apply, and there is a fierce and proud determination to retain these traditions. The land is held as communal property, and a local "king" (radja) is still the paramount decision maker about all land use management (and other) decisions in the village. Any villagers who transgress local rules and norms are dealt with by the radja and other relevant village custodians. Communities expressed the view that their land tenure was secure, and respected by their neighbours and village authorities, even if they have no

formal land registration certificate. Therefore the new regulation need to be widely disseminated and secure communities' rights to utilize sandalwood trees occupying community and private lands

Land ownership in the region of ENT is a delicate matter. Most of lands in this region is under the designation as state forest areas, although in practice people have been cultivating the land for a long time, either individually or communally. Formal land certificate is often not available, although among villagers they respect the land ownership and recognize the land borders. The absence of legal document often put villagers into trouble when they want to sell their sandalwood. Based on past PERDA which regulates utilization including the marketing of wood of sandalwood stipulated that owner of sandalwood tree need a cutting permit from the district forestry office. The past regulation does not fully recognized the rights of ownership on sandalwood on private lands. The reason for that is because government control the sandalwood trade creating high transaction costs and burdens local people. To simplify the administrative requirements of wood from community forests/land, the authority of forestry district in issuing the documents of origin has already been delegated to the lowest local government system at the village level. According to new regulation, all forest products including sandalwood harvested in both State Forests and private land must be accompanied by appropriate documentation (SKAU – certificate of timber origin) or transaction receipts when wood is to be transported so that it is clear that the products are from legal area. SKAU issued by the Head of Village or equivalent officer/other officials in the village where the timber will be transported. Security of tenure proven by land registration certificate that is recognized by National Land Agency (BPN). However implementation of these regulations must be reviewed whether it is effective or not, or has the regulation become a new burden to communities and discouraging them to plant sandalwood again. Most people said that they need to obtain a certificate from the Head of the village certifying that the sandalwood to be cut is the rightful property of the person, although some noted that when selling sandalwood in the past they just negotiated directly with a buyer and did not require a certificate. Therefore the project contain an activity proposal “to review and simplify procedures for obtaining sandalwood utilization permit”

To encourage farmers to plant sandalwood in their land by simplifying procedures for obtaining access to obtain soft loan from local banks to support sandalwood resource preservation. At the moment access to credit for farmers is limited due to the perceived high risk sector and lack of financial instruments to help farmers access money. There are also problems with rights and titling which creates obstacels for access to credit and undermines and discourages investment. Other issue is the absence of local instution or farmer cooperative to improve community epowerment in village level. Because of it this project is also pushing the formation of discussion forum at village level to regularly discuss problems / difficulties faced by sandalwood farmers and to facilitate agreement on the rights and obligations of members of the group, to discuss technical and non technical issues at farm level by involving local government.

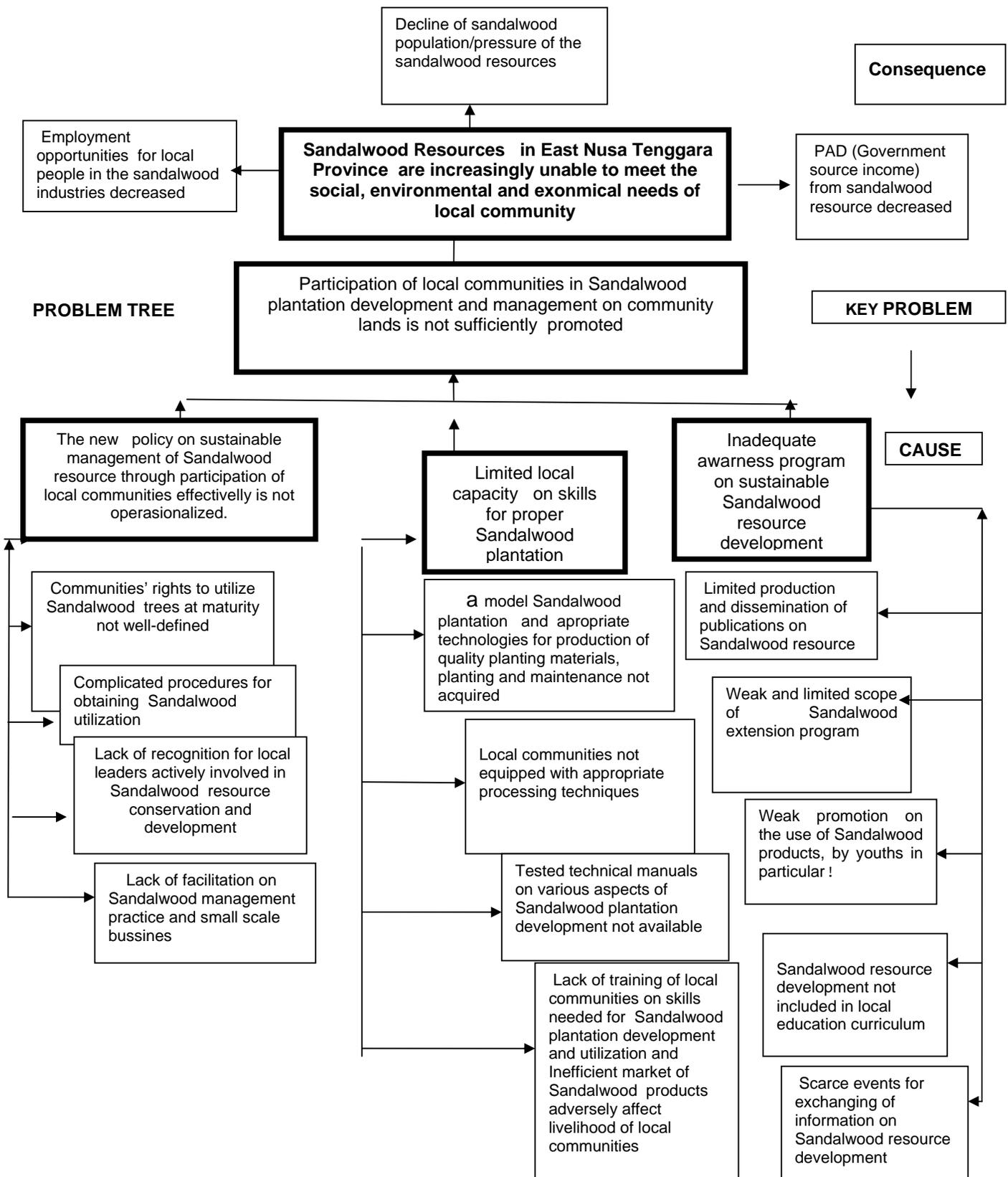
(2) Limited local capacity on skills for proper sandalwood plantation development and management

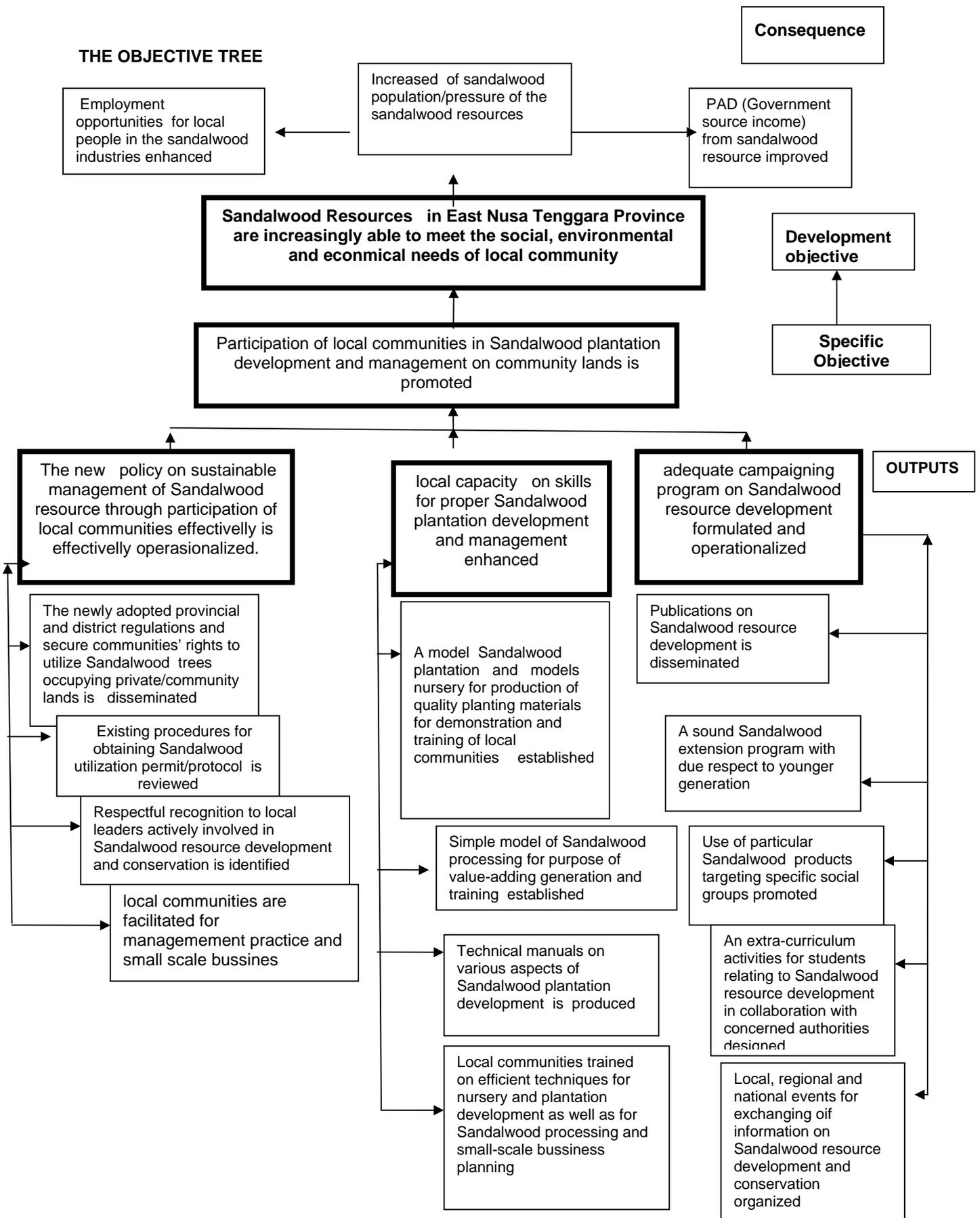
On the technical aspects, villagers have limited knowledge and skill on how to cultivate sandalwood. Seedling mortality of sandalwood plantations has been very high, due to low maintenance during the adaptation phase from the nursery into the field. Given that sandalwood is native for ENT region, naturally the plant should have adapted to local condition. The other main *problem* for community participation to establish *sandalwood* plantation is the low quantity and quality of *sandalwood seedlings*. The problem comes from farming activities, including land preparation for agricultural activities and cattle grazing that reduced the ability of sandalwood to survive. When intensive cultivation was introduced, many of management aspects in sandalwood cultivation have not been fully understood. These aspects among others are on the nursery management (including in using host plants) and in maintaining survival of the plants from drought, pests and diseases. The results of this case study have demonstrated clearly that communities are well aware of the value and importance of sandalwood in their farming system, and they are already actively involved in planting and protecting sandalwood. However, communities recognise that they could do this better if they received technical support and guidance from the government to improve their capacity to be more effective tree and forest managers. Development of sandalwood nursery and plantation model as well as processing for purpose of value-adding generation are needed for demonstration and training of local communities. It will also encourage implementaion of sandalwood family movement (*Gerakan Cendana Keluarga*) in community land.

(3) Inadequate awareness program on sustainable sandalwood resource development

Awareness level and participation of related parties in sandalwood development in NTT is still very low. Many people thought that sandalwood development is the responsibility of forestry office. The younger generation has less interest to be involved in sandalwood plantation. Therefore, increasing awareness of community and relevant stakeholders is needed to support the success of sandalwood development in ENT. Sound campaign program will bring together community resources, neighbours and schools/student/youth and other stakeholders to promote sandalwood development. It is needed to include sandalwood cultivation into school curricula, so that the younger generation will be well motivated to plant and maintain sandalwood resource. It is also important for the students to learn the value of the plantation before they actually began planting. Radio and local TV programme will be involved in campaigning to reach out the general public about activities to promote public awareness particularly local communities in village level. The media has now also mainstream campaign communications, as is already known by many.

The following Problem tree and objective tree will show what the key problem is and its causes and effects:





2.1.4 Logical Framework

Strategy Intervention	Measurable Indicators	Mean of Verification	Key Assumption
<p>Development Objective</p> <p>To contribute to the sustainable management of Sandalwood resource in Indonesia</p>	<p>Impact Indicator:</p> <p>By 2018, non timber forest product and diversification 5 % enhanced (in 26 provinces including East Nusa tenggara)</p> <p>By 2018, non timber forest production 5 % enhanced and Forest Product Distribution well performed</p> <p>By 2018, planted area in forest land increased increased 2,65 million ha enhanced</p>	<p>Report of Provincial and national level</p> <p>Ministry of Forestry Strategy</p> <p>ITTO project completion report</p>	<p>National and provincial policy to support sustainable sandalwood management</p>
<p>Specific objective:</p> <p>To promote the effective participation of local communities in Sandalwood plantation development and management on private/community lands in East Nusa Tenggara Province</p>	<p>Outcome Indicators:</p> <p>By 2018, Appropriate incentives for local communities to develop and manage Sandalwood plantations is applied in 4 target districts</p> <p>At the end of second year, local capacity of the 4 target districts enhanced on skills for proper Sandalwood plantation development and management</p> <p>At the end of the project, Adequate campaigning program on Sandalwood resource development formulated and operationalized at least in 4 target districts and in province ENT</p>	<p>Annual Report</p> <p>Progress Report on collaborative management; database</p> <p>Report of field visits ; Training/Meeting/extension Report ;Publication</p>	<p>Strong political will for sustainable sandalwood management</p> <p>Strong support from the local government and various stakeholders in ENT for sustainable sandalwood management</p>
<p>Output 1.</p>	<p>1.1 The newly adopted provincial and district regulations and secure</p>	<p>List of key stakeholders ;dialogue reports; Discussion</p>	<p>Strong support from various stakeholders</p>

Strategy Intervension	Measurable Indicators	Mean of Verification	Key Assumption
<p>The new policy on sustainable management of Sandalwood resource through participation of local communities effectively is effectively operasionalized</p>	<p>communities' rights to utilize Sandalwood trees occupying private/community lands disseminated to 8 villages within 4 districts</p> <p>1.2 One package study to review and simplify existing procedures for obtaining Sandalwood utilization permit available</p> <p>1.3 At least an Award respectful recognition to local leaders actively involved in Sandalwood resource development and conservation identified in 2 target districts</p> <p>1.4 local communities are facilitated for managemement practice and small scale bussines</p>	<p>reports; documentations</p> <p>Consultant report/documentation</p> <p>Assessment report</p> <p>Study report/policy paper</p> <p>Technical report; dialogue report Documentation</p>	<p>Strong support from all stake holders in developing incentive framework on Sandalwood resource management</p>
<p>Output 2: Local capacity on skills for proper Sandalwood plantation development and management enhanced</p>	<p>2.1 One model Sandalwood plantation and nursery (for production of quality planting materials for demonstration and training of local communities covering seed collection and selection, storage, germination and maintenance of seedlings) for demonstration and training of local communities established at least in one target district</p> <p>2.2 A simple model of Sandalwood processing for purpose of value-adding generation and training at least established in one village within 2 target districts</p> <p>2.3 One set technical manuals on various aspects of Sandalwood plantation development produced and disseminated to four target districts</p> <p>2.4 Five local communities group in at least four village trained on</p>	<p>Consutancy report field visit documentations</p> <p>Report on field visit ; meeting report; documentations</p> <p>Training report; list of participants; documentation</p> <p>Manual/publication</p>	<p>Continuous interest of the local instutions particularly local government in district level in improving local capacity to support sustainable Sandalwood management</p> <p>Ecological condition controlled</p>

Strategy Intervension	Measurable Indicators	Mean of Verification	Key Assumption
	efficient techniques for nursery and plantation development as well as for Sandalwood processing and small-scale bussiness planning	Training report; list of participants; documentation	
Output 3: Adequate campaigning program on Sandalwood resource development formulated and operationalized	<p>3.1 Publications on Sandalwood Resource development disseminated at least to four taget districts</p> <p>3.2 A set sound Sandalwood extension program with due respect to younger generation developed</p> <p>3.3 Use of particular Sandalwood products targeting one specific social groups in provincial level established</p> <p>3.4 One set extra-curriculum activities for students relating to Sandalwood resource development in collaboration with at least 2 concerned authorities designed</p> <p>3.5 At least one local/provincial and national events organized/participated for exchanging of information on Sandalwood resource development and conservation</p>	<p>Publication; field visit documentations;</p> <p>Consultant report</p> <p>Activity report;dialogue report</p> <p>extra curricullum</p> <p>Report/Proceeding</p>	<p>Strong support from all stake holders in sustainableSandalwood conservation</p> <p>Keys target group are cooperatively involved</p>

2.2 . Objectives

2.2.1 Development objective and impact indicators

To contribute to sustainable management of sandalwood resource in Indonesia

Impact indicator :

- a) By 2018, non timber forest product and diversification 5 % enhanced (in 26 provinces including East Nusa Tenggara)
- b) By 2018, non timber forest production 5 % enhanced and Forest Product Distribution well performed
- c) By 2018, planted area in forest land increased increased 2,65 million ha enhanced

2.2.2 Specific objective and outcome indicators

To promote the effective participation of local communities in Sandalwood plantation development and management on private/community lands in East Nusa Tenggara Province

Outcome Indicators :

- a) By 2018, Appropriate incentives for local communities to develop and manage Sandalwood plantations is applied in 4 target districts
- b) At the end of second year, local capacity of the 4 target districts enhanced on skills for proper Sandalwood plantation development and management
- c) At the end of the project, Adequate campaigning program on Sandalwood resource development formulated and operationalized at least in 4 target districts and in province ENT

3. DESCRIPTION OF PROJECT INTERVENTIONS

3.1. Outputs and Activities

3.1.1 Outputs

Output 1:

The new policy on sustainable management of Sandalwood resource through participation of local communities effectively is effectively operationalized

Indicators:

- 1.1 The newly adopted provincial and district regulations and secure communities' rights to utilize Sandalwood trees occupying private/community lands disseminated to 8 villages within 4 districts
- 1.2 One package study to review and simplify existing procedures for obtaining Sandalwood utilization permit available
- 1.3 At least an Award respectful recognition to local leaders actively involved in Sandalwood resource development and conservation identified in 2 target districts
- 1.4 Local communities are facilitated for management practice and small scale bussines

Output 2:

Local communities trained on skills for proper Sandalwood plantation development and management

Indicators:

- 2.1 One model Sandalwood plantation for demonstration and training of local communities established at least in one target district. And a model nursery for production of quality planting materials for demonstration and training of local communities covering seed collection and selection, storage, germination and

maintenance of seedlings established at least in one village within 4 target districts

- 2.2 A simple model of Sandalwood processing for purpose of value-adding generation and training at least established in one village within 2 target districts
- 2.3 One set technical manuals on various aspects of Sandalwood plantation development produced and disseminated to four target districts.
- 2.4 Five local communities group in at least four village trained on efficient techniques for nursery and plantation development as well as for Sandalwood processing and small-scale bussiness planning

Output 3.

Adequate awareness program on Sandalwood resource development formulated and operationalized

Indicators:

- 3.1 Publications on Sandalwood resource development disseminated at least to four target districts
- 3.2 A set sound Sandalwood extension program with due respect to younger generation developed
- 3.3 Use of particular Sandalwood products targeting one specific social groups in provincial level established
- 3.4 One set extra-curriculum activities for students relating to Sandalwood resource development in collaboration with at least 2 concerned authorities designed
- 3.5 At least one local/provincial and national events organized/participated for exchanging of information on Sandalwood resource development and conservation

3.1.2 Activities

Activities for Output 1:

- 1.1 To widely disseminate the newly adopted provincial and district regulations and secure communities' rights to utilize Sandalwood trees occupying private/community lands
- 1.2 To review and simplify existing procedures for obtaining Sandalwood utilization permit
- 1.3 To identify and award respectful recognition to local leaders actively involved in Sandalwood resource development and conservation
- 1.4 To facilitate local communities for model management practice and small scale bussines (Sandalwood village)

Activities for Output 2:

- 2.1 To establish a model Sandalwood nursery for production of quality planting materials and plantation for demonstration and training of local communities
- 2.2 To establish a simple model of Sandalwood processing for purpose of value-adding generation and training
- 2.3 To produce and disseminate technical manuals on various aspects of Sandalwood plantation development
- 2.4 To train local communities on efficient techniques for nursery and plantation development as well as for Sandalwood processing and small-scale bussiness planning To analyze Sandalwood market structure and develop an effective marketing strategy

Calrification to develop Sandalwood nursery

Activities for Output 3:

- 3.1 To produce and widely disseminate publications on Sandalwood resource development

- 3.2 To develop a sound Sandalwood extension program with due respect to younger generation
- 3.3 To promote use of particular Sandalwood products targeting specific social groups
- 3.4 To design an extra-curriculum activities for students relating to Sandalwood resource development in collaboration with concerned authorities
- 3.5 To organize local, regional and national events for exchanging of information on Sandalwood resource development and conservation

Sub Activities relating to local communities

- 3.5.1 *Intiate a discussion forum to foster communication within the sandalwood farmers/ community***
- 3.5.2 *Exchange information among farmers regarding sandalwood market/benefit of Sandalwood plantation***
- 3.5.3 *Comparative study mainly for farmers/community leader***

3.2 Implementation approaches and methods

The approach taken by the project team to improve local participation in sustaining sandalwood resource can be outlined as follows:

- i. Implement/aply newly regulations of sandalwood management in term of property rights, resource conservation, harvesting, marketing and wood administration.
- ii. Review and identify requirements existing procedures for obtaining Sandalwood utilization permit and procedures for obtaining soft loan from local banks to support Sandalwood resource
- iii. Initiate respectful recognition to local leaders actively involved in Sandalwood resource development and conservation
- iv. Public dialogue/consultaion among relevant stakeholders in provincial and district levelThe result of consultation will be used as recommendation for the government.
- v. Development of model Sandalwood nursery and plantation for demonstration and training of local communities
- vi. Training on Sandalwood processing for purpose of value-adding generation in four target districts (Alor, East Flores, Timor Tengah Selatan , and East Sumba).
- vii. Formulate Technical manuals on various aspects of Sandalwood plantation development
- viii. Improve the awareness of the institutions responsible for sandalwood resource, mainly in the pilot districts. The local communities group will be get extension particularly young generation in resource cultivation, intensive plantation, and sustainable harvesting.
- ix. Improve public awareness on sustainable sandalwood management; Develop Sandalwood extension program with due respect to younger generation; And develop curriculum of sandalwood management for student

3.3 Workplan

Output / Activities	Responsibility	Year											
		1 st Year				2 nd Year				3 th Year			
		I	II	III	VI	I	II	III	IV	I	II	III	IV
Output 1.1 Appropriate incentives for local communities to develop and manage Sandalwood plantations is applied													
Activity 1.1. To widely disseminate the newly adopted provincial and district regulations and secure communities' rights to utilize Sandalwood trees occupying private/community lands	PMU, Forestry Service, Consultant, Local government												
Activity 1.2 To review and simplify existing procedures for obtaining Sandalwood utilization permit	PMU, Forestry service And local government												

Output / Activities	Responsibility	Year											
		1 st Year				2 nd Year				3 th Year			
		I	II	III	VI	I	II	III	IV	I	II	III	IV
<u>Activity 1.3</u> To identify and award respectful recognition to local leaders actively involved in Sandalwood resource development and conservation	Forestry service, Consultant Local government and relevant stakeholders												
<u>Activity 1.4</u> To facilitate local communities in small scale sandalwood bussines (Sandalwood village)	MoF,Forestry service												
Output 2. Local capacity on skills for proper Sandalwood plantation development and management enhanced													
<u>Activity 2.1</u> To establish a model Sandalwood nursery and plantation for demonstration and training of local communities	Forestry service, international expert												

Output / Activities	Responsibility	Year											
		1 st Year				2 nd Year				3 rd Year			
		I	II	III	VI	I	II	III	IV	I	II	III	IV
<u>Activity 2.2</u> To establish a simple model of Sandalwood processing for purpose of value-adding generation and training	Forestry service, Consultant Local NGO and communities												
<u>Activity 2.3</u> To produce and disseminate technical manuals on various aspects of Sandalwood plantation development	Forestry service, Consultant Local NGO and communities												
<u>Activity 2.4</u> To train local communities on efficient techniques for nursery and plantation development as well as for Sandalwood processing and small-scale bussiness planning	Forestry service, Consultant Local NGO and communities												
Output 3. Adequate awareness program on Sandalwood resource development formulated and operationalized													

Output / Activities	Responsibility	Year											
		1 st Year				2 nd Year				3 rd Year			
		I	II	III	VI	I	II	III	IV	I	II	III	IV
Activity 3.5 To organize local, regional and national events for exchanging of information on Sandalwood resource development and conservation	Forestry Service, local government and local NGO												
PSC meeting	PMU												

3.4.1 MASTER BUDGET

Output/Activity 1	Quarter 2	Budget Component 3	Inputs 4		Unit 5	Quantity		Unit Cost 8	ITTO Contribution				GoI Contribution				Grand Total 17
						ITTO 6	GOI 7		Year 1 9	Year 2 10	Year 3 11	Total 12	Year 1 13	Year 2 14	Year 3 15	Total 16	
Output 1: Appropriate incentives for local communities to develop and manage Sandalwood plantations is applied Activity 1.1.: To widely disseminate the newly adopted provincial and district regulations and secure communities' rights to utilize Sandalwood trees occupying private/community lands	Q1-Q4, Y1	31.3 32.2 33 63	a.	DSA Trainer	MD	64,00	-	90,00	5.760,00	-	-	5.760,00	-	-	-	-	5.760,00
				Airticket (local)	Trip	8,00	-	250,00	2.000,00	-	-	2.000,00	-	-	-	-	2.000,00
				local transport	Package	2,00	-	1.500,00	3.000,00	-	-	3.000,00	-	-	-	-	3.000,00
				FGD	Package	2,00	-	2.000,00	4.000,00	-	-	4.000,00	-	-	-	-	4.000,00
				Sub-total Activity 1.1								18.760,00	-	-	18.760,00	-	-
Activity 1.2: To review and simplify existing procedures for obtaining Sandalwood utilization permit	Q2-Q3, Y1	16 31.2 32.2 33 61	a.	National Consultant (NC)	MM	2,00	-	2.000,00	4.000,00	-	-	4.000,00	-	-	-	-	4.000,00
				DSA, NC	MD	40,00	-	90,00	3.600,00	-	-	3.600,00	-	-	-	-	3.600,00
				Airticket	Trip	4,00	-	500,00	2.000,00	-	-	2.000,00	-	-	-	-	2.000,00
				local transport	Package	1,00	-	1.500,00	1.500,00	-	-	1.500,00	-	-	-	-	1.500,00
				Meeting (2 times)	Package	2,00	-	2.000,00	4.000,00	-	-	4.000,00	-	-	-	-	4.000,00
Sub-total Activity 1.2								15.100,00	-	-	15.100,00	-	-	-	-	15.100,00	
Activity 1.3: To identify and award respectful recognition to local leaders actively involved in Sandalwood resource development and conservation	Q4, Y1 Q1, Q4, Y2 Q1, Y3	62 52 61	a.	Publication	Package	3,00	-	3.000,00	3.000,00	3.000,00	3.000,00	9.000,00	-	-	-	-	9.000,00
				rewards	Package	1,00	-	4.000,00	1.350,00	1.350,00	1.300,00	4.000,00	-	-	-	-	4.000,00
				Meeting (2 times)	Package	2,00	-	900,00	600,00	600,00	600,00	1.800,00	-	-	-	-	1.800,00

Sub-total Activity 1.3									4.950,00	4.950,00	4.900,00	14.800,00	-	-	-	-	14.800,00	
Activity 1.4: To facilitate local communities in small scale sandalwood bussines (Sandalwood village)	Q1-Q2, Y2 Q1-Q2, Y3	16	a.	National Consultant (NC)	MM	2,00	-	1.500,00	-	1.500,00	1.500,00	3.000,00	-	-	-	-	3.000,00	
		31.2		DSA, NC	MD	20,00	-	-	-	-	-	1.600,00	-	-	-	-	1.600,00	
		32.2	b.	Airticket	Trip	-	-	80,00	-	800,00	800,00	2.000,00	-	-	-	-	2.000,00	
		33	c.	local transport		4,00	-	500,00	-	1.000,00	1.000,00	1.000,00	-	-	-	-	1.000,00	
		51	d.	Raw Material	Package	2,00	-	500,00	-	500,00	500,00	3.000,00	-	-	-	-	3.000,00	
		61	e.	Meeting	Package	1,00	-	3.000,00	-	1.500,00	1.500,00	3.000,00	-	-	-	-	3.000,00	
			f.		Package	2,00	-	1.500,00	-	1.500,00	1.500,00	3.000,00	-	-	-	-	3.000,00	
Sub-total Activity 1.4									-	6.800,00	6.800,00	13.600,00	-	-	-	-	13.600,00	
Total Output 1									38.810,00	11.750,00	11.700,00	62.260,00	-	-	-	-	62.260,00	
Output 2: Local capacity on skills for proper Sandalwood plantation development and management enhanced																		
Activity 2.1: To establish a model Sandalwood nursery and plantation for demonstration and training of local communities	Q3-Q4, Y1 Q1-Q2, Y2	66	a.	Demplot nursery and plantation	Package	1,00	-	12.000,00	6.000,00	6.000,00	-	12.000,00	-	-	-	-	12.000,00	
-						-	-	-	-	-	-	-	-	-	-	-	-	
Sub-total Activity 2.1									6.000,00	6.000,00	-	12.000,00	-	-	-	-	12.000,00	
Activity 2.2: To establish a simple model of Sandalwood processing for purpose of value-adding generation and training	Q3-Q4, Y2	16	a.	National Consultant (NC)	MM	2,00	-	1.500,00	-	3.000,00	-	3.000,00	-	-	-	-	3.000,00	
		31.2		DSA, NC	MD	20,00	-	-	-	-	-	1.800,00	-	-	-	-	1.800,00	
		32.2	b.	Airticket	Trip	-	-	90,00	-	1.800,00	-	2.000,00	-	-	-	-	2.000,00	
		31.4	c.	DSA, Trainees	MD	4,00	-	500,00	-	2.000,00	-	12.000,00	-	-	-	-	12.000,00	
		33	d.	Local transport		240,00	-	50,00	-	12.000,00	-	-	-	1.000,00	-	-	-	1.000,00
		51	e.	Raw Material	Package	1,00	-	1.000,00	-	1.000,00	-	-	-	1.000,00	-	-	-	1.000,00

					Package	1,00	-	1.000,00		1.000,00	-	-	-	-	-	-
						-	-	-		-	-	-	-	-	-	-
Sub-total Activity 2.2										20.800,00		20.800,00				20.800,00
Activity 2.3: To produce and disseminate technical manuals on various aspects of Sandalwood plantation development	Q3-Q4, Y1	15	a.	International Consultant DSA, IC	MM	1,00	-	10.000,00	10.000,00	-	-	10.000,00	-	-	-	10.000,00
		31.1			MD	25,00	-	-	-	-	-	3.000,00	-	-	-	3.000,00
		32.1	b.	Airticket IC	Trip		-	120,00	3.000,00	-	-	1.000,00	-	-	-	1.000,00
		32.2	c.	Airticket	Trip	1,00	-	1.000,00	1.000,00	-	-	3.000,00	-	-	-	3.000,00
		33	f	Air ticket	Trip	6,00	-	500,00	3.000,00	-	-	1.000,00	-	-	-	1.000,00
		62	g	Local transport	Package	1,00	-	1.000,00	1.000,00	-	-	1.500,00	-	-	-	1.500,00
			h	Publications	Package	1,00	-	1.500,00	1.500,00	-	-	-	-	-	-	-
Sub-total Activity 2.3									19.500,00			19.500,00				19.500,00
Activity 2.4: To train local communities on efficient techniques for nursery and plantation development as well as for Sandalwood processing and small-scale bussiness planning	Q1-Q4, Y2	31.3	a.	DSA, Trainer	MD	350,00	-	30,00	-	10.500,00	-	10.500,00	-	-	-	10.500,00
		32.2		Airticket	MD	16,00	-	500,00	-	8.000,00	-	8.000,00	-	-	-	8.000,00
		31.6	b.	resources person		8,00	-	150,00	-	1.200,00	-	1.200,00	-	-	-	1.200,00
		31.4	c.	DSA, Trainees	MD	240,00	-	50,00	-	12.000,00	-	12.000,00	-	-	-	12.000,00
		33	d	Local transport	Package	4,00	-	1.000,00	-	4.000,00	-	4.000,00	-	-	-	4.000,00
		53	e	Consumable	Package	8,00	-	600,00	-	4.800,00	-	4.800,00	-	-	-	4.800,00
Sub-total Activity 2.4										40.500,00		40.500,00				40.500,00
Total Output 2									25.500,00	67.300,00		92.800,00				92.800,00
Output 3: Adequate awareness program on Sandalwood resource development formulated and operationalized																
Activity 3.1: To produce and widely disseminate	Q1-Q2, Y3	62	a.	Publication and dissemination	package	1,00	-	10.000,00	-	10.000,00	-	10.000,00	-	-	-	10.000,00

publications on Sandalwood resource development						-	-	-	-	-	-	-	-	-	-	-
Sub-total Activity 3.1											10.000,00	10.000,00				10.000,00
Activity 3.2: To develop a sound Sandalwood extension program with due respect to younger generation	Q2, Y3	16	a.	National Consultant (NC)	MM	2,00	-	1.500,00	-	-	3.000,00	3.000,00	-	-	-	3.000,00
		31.2		DSA, NC	MD	20,00	-	-	-	-	1.800,00	1.800,00	-	-	-	1.800,00
		32.2	b.	Airticket	Trip		-	90,00	-	-	1.800,00	2.000,00	-	-	-	2.000,00
		31.4	c.	DSA, Trainees	MD	4,00	-	500,00	-	-	2.000,00	24.000,00	-	-	-	24.000,00
		33	d.	Local transport		480,00	-	50,00	-	-	24.000,00	4.000,00	-	-	-	4.000,00
		53	e.	Consumables	Package	4,00	-	1.000,00	-	-	4.000,00	1.000,00	-	-	-	1.000,00
			f.		Package	2,00	-	500,00	-	-	1.000,00	-	-	-	-	
Sub-total Activity 3.2											35.800,00	35.800,00				35.800,00
Activity 3.3: To promote use of particular Sandalwood products targeting specific social groups	Q3, Y3	53	a.	Consumables	Package	2,00	-	500,00	-	-	1.000,00	1.000,00	-	-	-	1.000,00
		31.6		resources person	MD	10,00	-	150,00	-	-	1.500,00	1.500,00	-	-	-	1.500,00
		61	b.	Meeting (2 times)			-	2.000,00	-	-	1.500,00	4.000,00	-	-	-	4.000,00
			c.		package	2,00	-	-	-	-	4.000,00	-	-	-	-	-
Sub-total Activity 3.3											6.500,00	6.500,00				6.500,00
Activity 3.4: To design an extra-curriculum activities for students relating to Sandalwood resource development	Q3-Q4, Y3	16	a.	National Consultant (NC)	MM	2,00	-	1.500,00	-	-	3.000,00	3.000,00	-	-	-	3.000,00
		31.2		DSA, National Consultant	MD	25,00	-	90,00	-	-	2.250,00	2.250,00	-	-	-	2.250,00
		32.2	b.	Airticket	Trip		-	-	-	-	2.000,00	2.000,00	-	-	-	2.000,00
		33	c.	Local transport		4,00	-	500,00	-	-	2.000,00	1.000,00	-	-	-	1.000,00
		61	d.	Meeting (2 times)	Package	1,00	-	1.000,00	-	-	1.000,00	5.000,00	-	-	-	5.000,00
		64	e.	Training	Package	2,00	-	2.500,00	-	-	5.000,00	3.000,00	-	-	-	3.000,00
			f.		package	1,00	-	3.000,00	-	-	3.000,00	-	-	-	-	
Sub-total Activity 3.4											16.250,00	16.250,00				16.250,00
Activity 3.5: To organize local, regional and	Q4, Y1															

		69	M	PSC meetings	Meeting	3,00	-	2.000,00	2.000,00	2.000,00	2.000,00	6.000,00	-	-	-	-	6.000,00
			n	Meeting preparation	Meeting package	2,500	2,00	5.000,00	-	-	-	5.000,00	-	-	-	-	5.000,00
		65	O	Financial auditing	Yearly	3,00	-	1.500,00	1.500,00	1.500,00	1.500,00	4.500,00	-	-	-	-	4.500,00
		54	o	Office space	month	-											36.000,00
							36,00	1.000,00		-	-		12.000,00	12.000,00	12.000,00	36.000,00	
Total Non-activity based									93.100,00	69.500,00	69.500,00	227.100,00	39.500,00	32.900,00	33.400,00	105.300,00	337.400,00
Grand Total Project Costs									162.410,00	148.550,00	184.750,00	495.710,00	39.500,00	32.900,00	28.400,00	100.800,00	596.510,0000
ITTO Monitoring and Review												18.000,00					18.000,00
ITTO Ex-post Evaluation												15.000,00					15.000,00
ITTO Programme Support (12 %)												63,445,20					63.445+9,20
																	-
												592.155,20					100.800,00
																	692.955,20

3.4.2 ITTO Yearly Budget

Category	Description	Total	Year 1	Year 2	Year 3
10	Personnel				
11	Project Coordinator	72.000,00	24.000,00	24.000,00	24.000,00
12	Field Coordinator	36.000,00	12.000,00	12.000,00	12.000,00
13	Secretary	18.000,00	6.000,00	6.000,00	6.000,00
14	Finance	21.600,00	7.200,00	7.200,00	7.200,00
15	International Consultant	10.000,00	10.000,00	-	-
16	National Consultant	16.000,00	5.000,00	4.500,00	6.500,00
19	Sub total	173.600,00	64.200,00	53.700,00	55.700,00
20	Sub contracts				
29	Sub total	-	-	-	-
30	Duty Travel				
31	Daily Subsistence Allowance				
	31.1. DSA International Consultant	2.000,00	2.000,00	-	-
	31.2. DSA National consultants	10.050,00	3.600,00	2.600,00	3.850,00
	31.3. DSA Trainer	15.840,00	5.760,00	10.080,00	-
	31.4. DSA Trainees	46.540,00	-	23.270,00	23.270,00
	31.5. DSA PMU	16.200,00	5.400,00	5.400,00	5.400,00
	31.6. DSA, resource person	2.700,00	-	1.200,00	1.500,00
32	Air ticket				
	32.1. Air ticket International Consultant	1.500,00	1.500,00	-	-
	32.2. Air ticket	53.980,00	20.000,00	20.000,00	13.980,00
33	Local Transport	20.100,00	6.700,00	6.700,00	6.700,00
39	Sub total	168.910,00	44.960,00	69.250,00	54.700,00
40	Capital Items				
41	Rent car	15.000,00	15.000,00	-	-
42	Desktop/PC Computer	1.000,00	1.000,00	-	-
43	Printer	600,00	600,00	-	-
44	Office Equipment	1.800,00	600,00	600,00	600,00
49	Sub total	18.400,00	17.200,00	600,00	600,00
50	Consumables items				
51	Raw Material	4.000,00	-	2.500,00	1.500,00
52	Reward	4.000,00	1.350,00	1.350,00	1.300,00
53	Consumables / Office Supplies				

		14.000,00	2.400,00	7.200,00	4.400,00
54	Office space	-			
59	Sub total	22.000,00	3.750,00	11.050,00	7.200,00
60	Miscellaneous				
61	Meeting/preparation	23.800,00	9.600,00	2.100,00	11.100,00
62	Publication and dissemination	20.500,00	4.500,00	3.000,00	13.000,00
63	FGD	4.000,00	4.000,00	-	-
64	Training	3.000,00	-	-	3.000,00
65	Financial Audit	4.500,00	1.500,00	1.500,00	1.500,00
66	<u>Demplot nursery and plantation (*)</u>	<u>12.000,00</u>	<u>6.000,00</u>	<u>6.000,00</u>	<u>-</u>
67	Workshop	10.000,00	5.000,00	-	5.000,00
68	Comparative Study	30.000,00	-	-	30.000,00
69	PSC Meeting	6.000,00	2.000,00	2.000,00	2.000,00
69	Sub total	112.800,00	32.600,00	14.600,00	65.600,00
70	Total Project	495.710,00	151.210,00	154.430,00	189.550,00
80	National management cost	-	(See executing agency budget)		
90	Project monitoring and administration				
91	ITTO monitoring & review	18.000,00			
92	ITTO ex-post evaluation	15.000,00			
95	ITTO Programme support (70 + 91 +92) x 12%	63.445,20			
100	Total Project Monitoring and Administration	96,445,20			
	GRAND TOTAL (70 + 100)	592.155,20			

***Provision for the establishment of a model Sandalwood nursery; (for the production 12,000 seedling of Sandalwood)**

Activities	Details	Budget (USD)
1. Collecting and germinating sandalwood seed	<ul style="list-style-type: none"> Purchasing Sandalwood seed (6-10 kg) Equipment for germination laborer 	1,500 USD
2. Preparing nursery for Sandalwood seedling	<ul style="list-style-type: none"> Preparing media and plastic bag Preparing host plants Transplanting of seedling and potting on polybag in nursery Handling pest and disease Equipment for shading of seedling laborer 	3,500 USD

Activities	Details	Budget (USD)
Preparing for out planting in Demplot (Seedling are ready for planting when the height is about 20-25 cm , usually taking approximately 6-8 months)	<ul style="list-style-type: none"> • Establish long-term host plants in the field (demplot) • Field planting • Handling pest and disease • Weeding 	1,000 USD
<i>Total for developing nursery in first year</i>		6,000 USD
<i>Total budget for developing nursery in project duration (2 x 6,000 USD)</i>		12,000 USD

3.4.2 Consolidated Yearly Budget

Category	Description	Total	Year 1	Year 2	Year 3
10	Personnel				
11	Project Coordinator	72.000,00	24.000,00	24.000,00	24.000,00
12	Field Coordinator	36.000,00	12.000,00	12.000,00	12.000,00
13	Secretary	18.000,00	6.000,00	6.000,00	6.000,00
14	Finance	21.600,00	7.200,00	7.200,00	7.200,00
15	International Consultant	10.000,00	10.000,00	-	-
16	National Consultant	16.000,00	5.000,00	4.500,00	6.500,00
19	Sub total	173.600,00	64.200,00	53.700,00	55.700,00
20	Sub contracts				
21		-	-	-	-
22		-	-	-	-
29	Sub total	-	-	-	-
30	Duty Travel				
31	Daily Subsistence Allowance				
	31.1. DSA International Consultant	2.000,00	2.000,00	-	-
	31.2. DSA National consultants	10.050,00	3.600,00	2.600,00	3.850,00
	31.3. DSA Trainer	15.840,00	5.760,00	10.080,00	-
	31.4. DSA Trainees	46.540,00	-	23.270,00	23.270,00
	31.5. DSA PMU	32.400,00	10.800,00	10.800,00	10.800,00
	31.6. DSA, resource person	2.700,00	-	1.200,00	1.500,00
32	Air ticket				
	32.1. Air ticket International Consultant	1.500,00	1.500,00	-	-
	32.2. Air ticket	89.980,00	32.000,00	32.000,00	25.980,00
33	Local Transport	23.600,00	7.900,00	7.900,00	7.900,00
39	Sub total	224.710,00	63.560,00	87.850,00	73.300,00
40	Capital Items				
41	Rent car	15.000,00	15.000,00	-	-
42	Desktop/PC Computer	2.500,00	2.500,00	-	-
43	Printer	1.200,00	1.200,00	-	-
44	Office Equipment	2.700,00	900,00	900,00	900,00
49	Sub total	21.400,00	19.600,00	900,00	900,00
50	Consumables items				

51	Raw Material	4.000,00	-	2.500,00	1.500,00
52	Reward	4.000,00	1.350,00	1.350,00	1.300,00
53	Consumables / Office Supplies	20.000,00	4.800,00	9.200,00	6.400,00
54	Office space	36.000,00	12.000,00	12.000,00	12.000,00
59	Sub total	64.000,00	17.750,00	15.050,00	21.200,00
60	Miscellaneous				
61	Meeting	22.800,00	4.600,00	2.100,00	11.100,00
62	Publication and dessimation	20.500,00	4.500,00	3.000,00	13.000,00
63	FGD	4.000,00	4.000,00	-	-
64	Training	3.000,00	-	-	3.000,00
65	Financial Audit	4.500,00	1.500,00	1.500,00	1.500,00
66	Demplot nursery and plantation	12.000,00	6.000,00	6.000,00	-
67	Workshop	10.000,00	5.000,00	-	5.000,00
68	Comparative Study	30.000,00	-	-	30.000,00
69	PSC Meeting	6.000,00	2.000,00	2.000,00	2.000,00
69	Sub total	112.800,00	32.600,00	14.600,00	65.600,00
70	Total Project	596.510,00	156.210,00	154.430,00	189.550,00
80	National management cost	-	(See executing agency budget)		
90	Project monitoring and administration				
91	ITTO monitoring & review	18.000,00			
92	ITTO ex-post evaluation	15.000,00			
95	ITTO Programme support (70 + 91 +92) x 12%	63.445,20			
100	Total Project Monitoring and Administration	96.445,20			
	GRAND TOTAL (70 + 100)	692.955,20			

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3.4.4 Executing Agency Yearly Budget (Gol)

Category	Description	Total	Year 1	Year 2	Year 3
10	Personnel				
		-	-	-	-
19	Sub total	-	-	-	-
20	Sub contracts				
21	Sub contracts with	-	-	-	-
24	Sub contracts with	-	-	-	-
29	Sub total	-	-	-	-
30	Duty Travel				
31	Daily Subsistance Allowance	16.200,00	5.400,00	5.400,00	5.400,00
32	Air ticket	36.000,00	12.000,00	12.000,00	12.000,00
33	Local Transport	3.600,00	1.200,00	1.200,00	1.200,00
39	Sub total	55.800,00	18.600,00	18.600,00	18.600,00
40	Capital Items				
41	Laptop	1.000,00	1.000,00	-	-
42	Desktop	500,00	500,00	-	-
	printer	600,00	600,00	-	-
	Office equipment	900,00	300,00	300,00	300,00
49	Sub total	3.000,00	2.400,00	300,00	300,00
50	Consumables items				
52	Office Supplies	6.000,00	2.000,00	2.000,00	2.000,00
54	Office Space	36.000,00	12.000,00	12.000,00	12.000,00
59	Sub total	42.000,00	14.000,00	14.000,00	14.000,00
60	Miscellaneous				
66		-	-	-	-
69	Sub total	-	-	-	-
70	Total Project	100.800,00	35.000,00	32.900,00	32.900,00
80	National management cost	-	(See executing agency budget)		
	GRAND TOTAL (70 + 100)	100.800,00			

3.5 Assumptions, risks, sustainability.

3.5.1 Assumptions and risks

Anticipated potential risks that will affect its implementation include mitigating measures are:

Tbel 1. Internal Risk

No	Potential Risk	Mitigating measures/anticipated by
1.	Organizational structure and decision makers (counterparts) in Executing and Implementing Agency changed	<ul style="list-style-type: none"> - The project structure in this project is the first model applied for an ITTO project. A sharing of responsibility is developed by involving counterpart from the central and local government (provincial and district levels) - Intensive coordination between Executing and Implementing Agencies, using the proper technical approach by considering local culture
2.	Data and information on sandalwood management is still spread in the province and districts, needing intensive access especially to districts to acquire it	<ul style="list-style-type: none"> - Synergized program activities with other international cooperation related to sandalwood in the ENT province such as the GEF and ACIAR projects - Implement intensive coordination with local governments, provincial as well as target districts, always involving local experts
2.	Lack of knowledge and skill of the procedure for project administration, project report, project monitoring and evaluation based on new regulation of Ministry of Finance	(a) Improve coordination between Executing and Implementing Agency of the Project (b) Develop internal meeting to explain/describe new regulation related to international cooperation project administration and monitoring

Tabel 2. External Risk

No	Potential Risk	Mitigating measures/anticipated by
1.	<p>Political and policy changes in the institutional system;</p> <ul style="list-style-type: none"> • Low commitment from Local Legislative (DPRD) to manage forest resources in a sustainable manner. • Not all stakeholders accept the decision making process. 	<ul style="list-style-type: none"> • Local communities, NGOs and related interested parties prevented the future changes on the formulated policy and economic mechanism that does not give fair benefit to local communities • Special approach for them through consultation and participatory way.
2.	Local government of target districts and communities are not committed in supporting sustainable management of sandalwood in ENT	<ul style="list-style-type: none"> • Include the Head of Forestry Service in four target districts as members of project steering committee and appoint reliable key persons in districts with available time to be involved in project activities in the field • Using the proper technical approach by considering local culture to regain the community motivation to plant sandalwood. Each district in ENT has a different local community character
3.	Sandalwood resources development is disturbed by ecological condition such as forest and land fire, climate changes, and pest and disease attacking the natural nursery.	Control improved, planting will be located in the appropriate areas. Prevention of pest and diseases as well as fire should be done properly. The project should provide extension

		programs to the local community regarding these matters. And the project worked together with Forestry Research Institute in Kupang
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3.5.2. Sustainability

To maintain the sustainability of the project, the local Government at provincial level (PEMDA) has showed its strong commitment to increase local community livelihood through planting sandalwood that require immediate actions by all district governments and related stakeholders in ENT Province. This commitment has been reflected through the allocation of budget programme within APBD (local government budget) for seed preparation, procurement and the establishment of nurseries. This program has been growing through the involvement of community leaders, in particular religious leaders.

As the project will only be implemented for 3 years, while the rotation of plantation is at least 40 years, hence continuity activities to maintain nursery and plantation will be done by Forestry Service of East Nusa Tenggara Province. Subsidy from the government of East Nusa Tenggara to the Sandalwood plantation and the farmers to acquire seedling is around 1 billion rupiahs per year

the Master Plan for Sandalwood Development in East Nusa Tenggara Province, which was made with the support of the ITTO project team is used as guidance for coordinated actions in order to return East Nusa Tenggara as a sandalwood province by 2030. ITTO is one of the partners highlighted in the Master Plan.

The Directorate General of Forest Production Utilization as Executing Agency of the Ministry of Forestry is planning to continue allocating sufficient funds to finance activities on continued dissemination of information and trainings on forest product administration of sandalwood (*Tata Usaha kayu cendana dari NTT*) for Head of villages based on the new regulation P. 30/Menhut-II/2012. The Directorate General of Watershed Management and Forest Land Rehabilitation, Ministry of Forestry, is also financing programs largely focused on the technical aspects of nursery and planting sandalwood for communities (*Kebun Bibit Rakyat*) and program in Community Forest (*Hutan Kemasyarakatan*).

It will continuously monitor and measure to get actual data for updating standing stock the resource data by forestry service district collaboration with University of Nusa Cendana Kupang.

4. IMPLEMENTATION ARRANGEMENT

4.1 Organization structure and stakeholder involvement mechanisms

4.1.1 Executing Agency and partners

The Executing Agency of the project will be the **Directorate of Forest Revenues and Forest Product Distribution, Ministry of Forestry** which will assume all the responsible for its coordination and implementing of the activities. the Collaborating Agency is Forestry Service East Nusa Tenggara Province and partners will be the Technical Implementing Unit in Kupang such as Forestry Research Institute Kupang (*Balai Penelitian Kupang*), Unit of Watershed Management Kupang (*Balai Pengelolaan DAS*) and Unit for Forestry Education and Training Kupang (*Balai Diklat kehutanant*) and also Local University (*Universitas Cendana*).

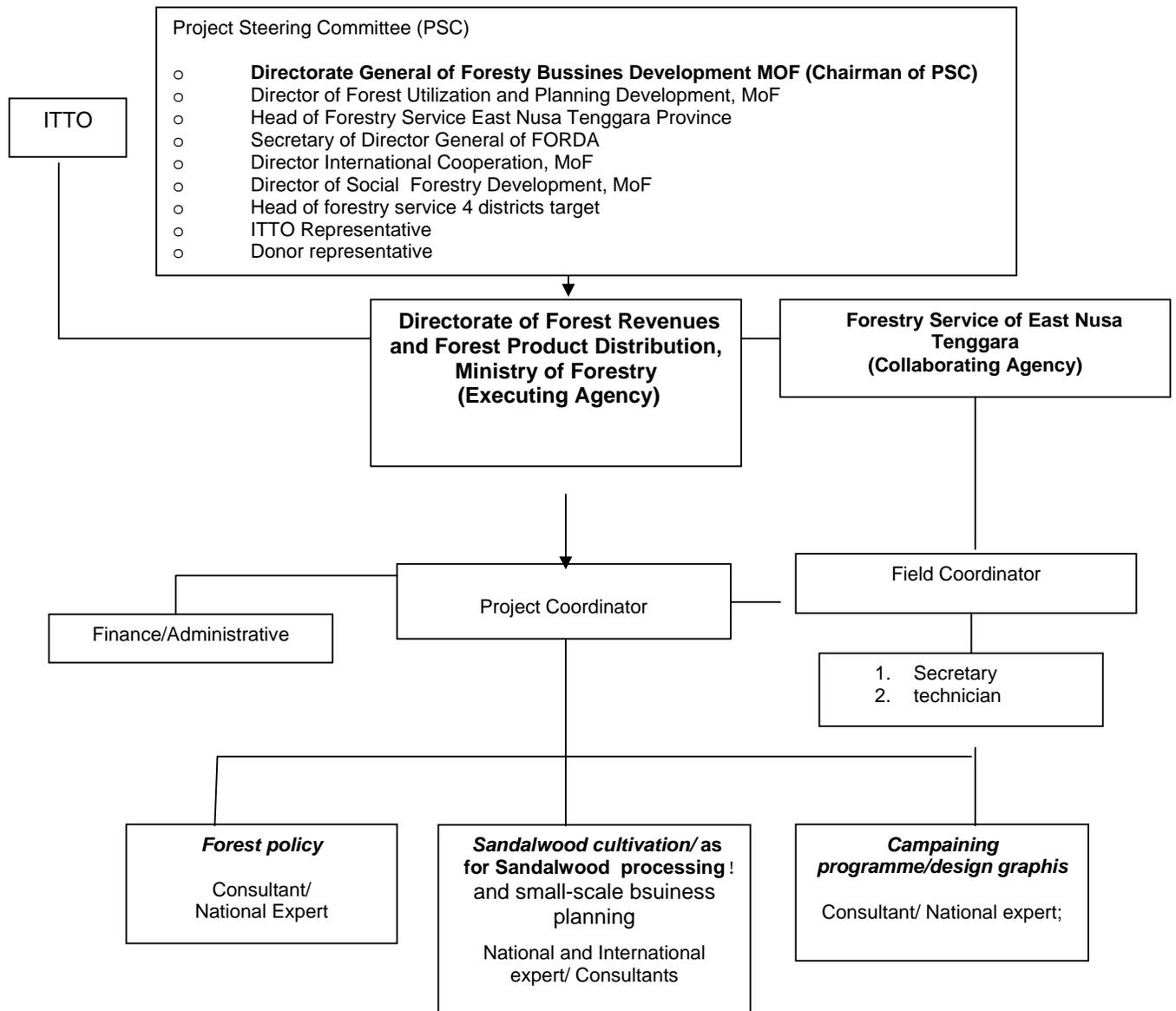
Under approval ITTO, The Executing Agency will appoint the **Project Management Unit (PMU)** which shall be responsible for its coordination and implementation of the activities and responsible for managing ITTO funds in accordance with the Project Document for the duration of the Project approved by ITTO and EA. The PMU will be lead by a Project Coordinator who will be overall in charge of the project implementation including budget arrangement. Professional staff will be assigned for the project coordinator. The project coordinator will report to the Executing Agency as well as to ITTO in consultation with the Steering Committee accordingly for the implementation of the project activity. All the expenditures/expenses of the project will be reported and document/goods/services handed over to EA by PMU through Minutes of Hand Over or BAST (Berita Acara Serah Terima)

Executing Agency also will work together with some experts/consultants, provincial and district government, forestry service of three districts level, communities group, local NGO, university or other relevant institution to implement some activities in the field. If necessary, the other activities will be implemented through sub-contracts with local NGO for efficiency. Training activities will involve local communities, and local government in Kapuas Hulu and District and West Kalimantan province. In the implementation of the activities will involve local NGOs to facilitate communication between the government (local government and the national park authority) and local communities. Key project personnel in the implementation of the project provided by Executing Agency briefly presented with their main roles and responsibilities in Annex 2.

4.1.2 Project management team

ITTO Project management Team will be consist of Project and field coordinator, administration staffs (secretary and finance staff) as well as consultant/experts. Professional person who has qualification needed as in Term of Reference will be assigned as the project coordinator. He/she will be in charge the overall of the project implementation. The project coordinator will report to the Executing Agency as well as to ITTO in consultation with the Steering Committee. The field project and field coordinator will work together with coordinator to implement activities in the field. Project coordinator have the responsibility for the planning of the day to day project activities and project management. He/she will be assisted by field coordinator secretary and finance staffs. Term of reference of project and field coordinator and administration staff is attached in Annex III.

The management structure of the project is presented in the following



4.1.3 Project steering committee

The Project Steering Committee (PSC) consist of relevant policy makers from national, provincial and district level , academics, and communities representatives appointed by The Minister of Forestry, the ITO representative and donor representative. The duty of PSC are (a) approve program and budgets of the various activities within the framework of the project approved by ITTO (b) conduct annual reviews and evaluation of the project implementation (c) Approve progress report before submission to ITTO and GOI. The PSC will be chaired by the the Director General of Forest Utilization.

Detail arrangement of key stakeholders in this project set out as follows:

4.1.4 Stakeholder involvement mechanism

- a) The role of the Executing Agency (DG of Forest Utilization) are :
 - Maintain coordination among relevant parties in implementing project objective and activities
 - Coordinate and consulting with ITTO upon the project development
 - Responsible for the project activities and giving support to project coordinator for Executing the project.
 - Monitor project fund based on project proposal and approval by ITTO and project agreement in accordance with ITTO guidelines and procedure as well as prevailed the government regulation
 - Provision of counter budget of GOI to support the project activities together with EA include appoint personnel to work in the project
 - Prepare and submitting project report to ITTO
- b) The role of three Local Government of ENT are :
 - Facilitate executing agency on preparing the data and information related to sandalwood resource
 - Support EA in implementing project activities
 - Participation in developing management plan
 - Involvement in training activities
 - Monitor and evaluate the activities in the field
 - Participate in the PSC meeting of the project
- c) The role of target districts:
 - Support EA and CA in implementing project activities
 - Assist CA in implementing activities of utilization of sandalwood at the field level
- d) The role of Universities/ Research institute includes:
 - Contribution to the research activities on all sandalwood aspect
 - Sharing information regarding implementation of research result
- e) The role of local communities :
 - Involving in the activities related to community based protected area managment
 - Participation in training, extension and improving awarenes activities mainly for communities in target villages
 - Participation in developing Sandalwood nursery/plantation model
 - Execution of entrepreneurship activities

4.2 Reporting, review, monitoring and evaluation

4.2.1 Project Progress Report.

The first project progress report will be given to ITTO 6 months after project start-up or at least 4 months before the date of the monitoring visitis (or Steering Committee meetings) and 2 months before every Council Sessions.

4.2.2. Project Completion Report

This will be submitted within three months after Project Completion.

4.2.3. Project Technical Reports.

Project Technical Reports will be prepared for activities where technical results are expected, i.e. the achievements of the Project Outputs.

4.2.4. Monitoring, Review and Steering Committee's Visits.

A Steering Committee will be established, to be appointed by the Minister of Forestry upon proposal from the executing agency. The Steering Committee meeting will be held annually or as necessary. ITTO monitoring visits, if considered still necessary, will be arranged after the achievement of the respective outputs according to the Workplan.

ITTO will conduct a monitoring visit in accordance with ITTO schedule. Monitoring/Review mission by ITTO may be conducted once time. Monitoring of the Project may also be conducted by the Executing Agency. Project evaluation will follow ITTO Manual for project monitoring, review and evaluation.

4.2.5. Evaluation

Evaluation will be conducted during the last quarter before completion of the Project.

4.3 Dissemination and mainstreaming of project learning

4.3.1 Dissemination of project results

The results of the project will be disseminated through various strategy such as public consultation, workshop, internet, documents dissemination, and writing article in the ITTO newsletter.

4.3.2 Mainstreaming project learning

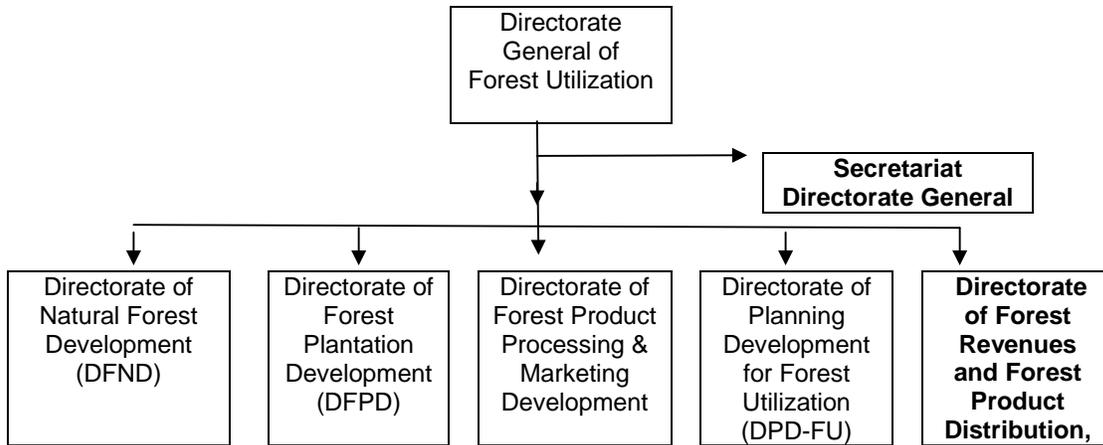
This project will provide a lesson learn on concrete action for the sustainable management of sandalwood resources and governing forest sustainably. Local community around the forest depend heavily on forest for their livelihoods and they have traditionally managed forest, participation of local people, as the key tool for the effective management of natural resources. Local government has a role in facilitating forest conservation and utilization both technical and administrative aspect. Strengthening legal and policy framework and institutional arrangements to facilitate the sustainable participation of local communities is essential to the success of sustainable forest management. Lesson learned from improvement and implementation of local regulations will be useful for mainstreaming national policies in sustainable natural resource

ANNEX 1

PROFILES OF THE EXECUTING AGENCY

1. The Directorate General of Forest Utilization , the Ministry of Forestry of the Republic of Indonesia

The Directorate General of Forest Utilization is responsible for forest utilization activities in Production Forest on a sustainable basis, and has functions in providing regulations, services and controls for all aspects related to forest utilization. It consists of five directorates and one secretariat of the directorate general. The Organization Structure as follows:



The DG main task is to provide rule and regulation, policy, planning, standard operation and technical assistance for the management and development of all type production forest. In order to ensure sustainability of the project activities, the technical Directorate of Forest Revenues and Forest Product Distribution management will always be consulted. **Executing Agency for this Project is under the responsibility of Directorate General of Forest Utilization**

INFRASTRUCTURE

Regarding the infrastructure, The Directorate of Forest Revenues and Forest Product Distribution prepared to carry the project. The office is already connected to a 2 Mbps bandwidth of Internet connection and all staff has each personal computer.

BUDGET

Within the last three years, the budget of the **Directorate of General of Forest Utilization** is as follows:

Activities	2010 (USD)	2011 (USD)	2012 (USD)
Operational and Maintenance Cost	286,619	292,425	276,222
Publication	158,388	159,589	87,687
Planning Programs	1,169,368	1,301,831	1,058,431
Training Programs	142,811	104,692	64,976
TOTAL	1,757,186	1,858,536	1,487,316

Note: USD 1 = IDR 10,500

PERSONNEL

The personnel within the **Directorate of Forest Revenues and Forest Product Distribution**, is described as the following:

With Postgraduate Degrees	12
With Graduate Degrees	15
Middle-level Technicians	10
Administrative Personnel	12
TOTAL PERSONNEL	49

2. Forestry Service of East Nusa Tenggara

The collaborating agency will be the Forestry Service of Nusa Tenggara Province. This Forestry Service is responsible for setting up policy, monitoring of timber and non timber forest product management as well as for coordinating and supervising of forest management and enforcing forest development policies in provincial level. This Forestry service has enough experiences in establishment of collaboration with national and international agencies

Infrastructure of the Executing Agency

The East Nusa Tenggara Forestry service has 3 Division: Forest Production utilization, Land Use Planning and Administration. It also has forest district offices across East Nusa Tenggara

Budget

The budget of East Nusa Tenggara Province is as follows:

Activities	2003 (USD)	2004 (USD)	2005 (USD)
Personnel	14,920	16,670	8,870
Duty travel	86,770	89,160	95,870
Capital	402,030	19,900	14,050
Consumable items	129,400	229,670	220,200
Miscellaneous	3,840	5,450	49,900

Personnel

Staff members of East Nusa Tenggara Provincial Forest Service consist of personnel, university degrees in various fields (59 persons), high school graduated and others (221 persons).

3. The Forest Governance Learning Group (FGLG)

FGLG is an informal alliance of in-country groups and international partners currently active in eight African and three Asian countries including Indonesia. FGLG Indonesia aim as a leverage to improve governance of natural resource (forestry) in Indonesia. The FGLG Indonesia is working together with Ministry of forestry to support the good forest governance.

The overall aim of the FGLG in Indonesia is to support key actors to implement good forest governance at organisational, community, district and national levels. In general terms, the FGLG aims to:

- Exchange and spread learning about workable approaches to good forest governance
- Make measurable progress in improving practice within government and in relationships among other actors (other government departments, local government, private sector, NGOs)

- Build long-term capacity of leaders to tackle rapid change, complexity and uncertainties in the forestry sector
- Provide materials, tools, and guidance on implementing good forest governance

Earlier phases of the FGLG in Indonesia have concentrated on 'change from within': building the capacity of members, particularly mid-level professionals within the Ministry of Forestry, to tackle forest governance by providing a safe space for discussion of politically contentious forestry issues and a series of focused training and action events. These events have included workshops on institutional change within the Ministry of Forestry and the forestry sector, on approaches to change in governance, on conflict management, on writing to produce articles for the popular press, and on creative communications beyond written media. Members of the FGLG have applied these lessons in their own spheres of work in forestry within the Ministry (formulation of workable policy and governance) and on the ground in the districts (actual implementation of policy and governance).

**ANNEX II.TASKS AND RESPONSIBILITIES OF KEY EXPERTS PROVIDED
BY THE EXECUTING AGENCY**

The list table below is the key project personnel provided by the Executing Agency presented with their main roles and responsibilities in the implementation of the project.

No	Name	Professional education	Position	Experience relevant to the project	Task in the project
1.	Ir. Listya Kusumawardhani	Master degree	Director	International experience in forest conservation and forest utilization	Responsible as Executing Agency
2.	Ir. Ben Polomaing	Bachelor degree (S1)	Head of Forestry service of East Nusa Tenggara	experience in Sandalwood management and administration	Involve in implementing the activities

Project Formulator :

1. Yani Septiani
2. Elizabeth Lukas

ANNEX III

TERM OF REFERENCE OF COORDINATOR/FIELD COORDINATOR AND PROJECT STAFFS

1. Project Coordinator

Qualification:

As a Team/Project Coordinator the incumbent should have graduate qualification in forest management science, natural resource management, and at least 5-year experience in forest product trade, certification and training. Having experience in conducting FGDs and Workshops as well as training with Forestry Stakeholders. Have deep knowledge about Sandalwood management. Having experience working with community forest management

Minimum Requirements:

- Team Leadership experience essential
- Understanding of Forest community management and policy in national and local level
- Familiar with community forest management activities in eastern part of Indonesia
- Good knowledge of the Sustainable Forest Management and community training
- Fluency in English

Responsibilities:

- To organize the meeting for executing the project, including to develop work plan, and to coordinate expert meeting
- To monitor and to evaluate project execution, program and budget implementation
- To coordinate with other institutional concerned
- To make report to ITTO
- To make report to the Executing Agency
- Period of assignment will be 2 (two) years

Duration: 36 months.

Location: Jakarta and Kupang

2. Field Coordinator

The field coordinator must hold expertise and knowledge in forest policy and relevant field, at least 3 years working in qualified relevant bodies.

Qualification: Hold at least bachelor degree and 3-5 years experience in forest policy/management. Good understanding in English both oral and written. Sufficient knowledge in situation of in east part of Indonesia.

Responsibilities: the field coordinator will be responsible (1) To work together with coordinator particularly in field activities aspect (2) to implement the activities programme related to managing sandalwood resource both in local level (3) to contribute input and recommendation in implementing project activities (3) to prepare a technical/activity report. The technical report and documentation could be presented in the project meeting.

Site/Location : Kupang

3. Position: Financial/administration staff

Qualification and Experience:

Having background in financial works for at least 2 years; ability to speak and write in English, Familiar with ITTO auditing system.

Responsibilities:

Assisting Project Coordinator in project financial matters, evaluate and record the budget related the program execution. Prepare progress report.

Duration of employment: 36 months

Location: Kupang

4. Position: Secretary

Qualification and Experience:

Having background in secretarial works at least 2 years, able to speak and write in English, familiar with ITTO project documentation and reporting system.

Responsibilities:

Assist the Project Coordinator on day to day administration activities, filling document, preparing data and draft report outline. Prepare progress report.

Duration of Employment: 36 months

Location: Jakarta

ANNEX IV. TERM OF REFERENCE NATIONAL/INTERNATIONAL CONSULTANTS

Name/position	Term of Reference	Duration of Employment	Qualification ,time and payment
1. National Consultant	<p><u>Position:</u> The National expert/consultant will be assigned to achieve output 1 Activities 1.2 of the project. The expert must have expertise and knowledge in community forest/institution and policy framework non timber forest product , and she/he should have access/network to the relevant stakeholders in district and ENT province ,and at least 3 years working in relevant field.</p> <p><u>Responsibilities:</u> the expert will be responsible (1) Assess and review related to utilization of Sandalwood resource in community land (2) Conduct discussions with key decision makers and relevant stakeholders in the process of consultation (3) Prepare a result report within the period of assignment. The report and documentation must be presented in project meeting</p>	1 months	<p><u>Qualification ,time and payment:</u> Hold at least Master degree and 3-5 years experience in field above. Good understanding in English both oral and written. Sufficient knowledge in situation of eastern part of Indonesia. Expert will carry out the activity within the time as allocated by the project. Rate of payment is US\$ 2,000-2,500 per month</p>
2. National Consultant	<p><u>Position:</u>The national consultant/facilitators will be assigned to achieve output 1. Activity 1.4 The expert must be hold expertise and knowledge in forestry programme, forest economy/marketing at least 3 years working in qualified relevant bodies.</p> <p><u>Responsibilities:</u> the expert will be responsible(1) to develop small scale business model/concept for Sandalwood farmers (2) to contribute input and involve</p>	1 - 3 months	<p><u>Qualification:</u> Hold at least bachelor or Master degree and 3-5 years experience in forest economy, community forest. Good understanding in English both oral and written. Sufficient knowledge on situation of eastern part of Indonesia. Rate of payment is US\$ 2,500- 2,000 per package</p>

	in implementing process (3) to prepare a technical report is within the period of assignment. The technical report and documentation must be presented in the project meeting.		
3. National Consultant	<p>Position: The national consultant will be assigned to achieve output 2. Activity 2.2 The expert must have expertise and knowledge in forest industry and relevant field. At least 3 years working in qualified relevant field.</p> <p>Responsibilities: the expert will be responsible (1) to asses simple model of Sandalwood processing for purposes of value-adding generation and training (2) to contribute input in formulate strategy and involve in implementing process (3) to prepare a technical report is within the period of assignment. The technical report and documentation must be presented in the project meeting.</p>	1-3 months	<p>Qualification, time and payment: Hold at least Master degree and 3-5 years experience in field above. Good understanding in English both oral and written. Sufficient knowledge in situation of eastern art of Indonesia. Expert will carry out the activity within the time as allocated by the project. Rate of payment is US\$ 2,000-2,500 per month</p>
4. International Consultant	<p>Position: The national consultant will be assigned to achieve output 2 Activity 2.3 The expert must be hold expertise and knowledge on Sandalwood cultivation technique for communities; 3 years working in qualified relevant bodies. And have experience to train local communities in Asian countries</p> <p>Responsibilities: the expert will be responsible (1) To prepare training material for on various aspect of Sandalwood plantaion (2) to arrange consultation and meeting key stakeholders in district and village level of the process of consultation (3) to prepare a technical report is within</p>	1-3 months	<p>Qualification: Hold at least Master degree and 3-5 years experience in Sandalwood cultivatin training for communities in Indonesia or relevant countries. Good understanding in English both oral and written. Sufficient knowledge in situation of Indonesia.</p>

	the period of assignment. The technical report and documentation must be presented in the project meeting.		
5. National Consultant	<p>Position: The national consultant will be assigned to achieve output 3 Activity 3.2. The expert must hold expertise and knowledge in forestry training and campaign; at least 3 years working in qualified relevant bodies.</p> <p>Responsibilities: the expert will be responsible (1) To prepare the extension material for communities (2) to compile and map of the all data and involve in consultation process (3) to prepare a technical report is within the assignment. The technical report and documentation must be presented in the project meeting.</p>	1-3 months	<p>Qualification: Hold at least Master degree and 3-5 years experience on forest non timber forest product management/relevant field. Good understanding in English both oral and written. Sufficient knowledge in situation of in east part of Indonesia.</p>
6. National Consultant	<p>Position: The national consultant will be assigned to achieve output 3. Activity 3.4. The expert must hold expertise and knowledge in forestry education and relevant field at least 3 years working in qualified relevant bodies.</p> <p>Responsibilities: the expert will be responsible (1) to prepare the curriculum material for student/young generation (2) to compile and collect of the all data and involve in consultation process with education bodies (3) to prepare a technical report is within the assignment. The technical report and documentation must be presented in the project meeting</p>	1-3 months	<p>Qualification: Hold at least Master degree and 3-5 years experience on forestry training and education. Good understanding in English both oral and written. Sufficient knowledge in situation of in east part of Indonesia.</p>

**ANNEX V: RESPONSES TO REVIEWER COMMENTS/RECOMMENDATIONS
47TH EXPERT PANEL**

No.	Reviewer Comments/Recommendations*	Amendment(s) made	Page
<u>General Comment</u>			
1.	<p>The Panel further noted the effort taken by the proponent in addressing the comments and specific recommendations made by the Panel at its Forty-sixth Meeting that had resulted in the improvement of the proposal including the stakeholder analysis, problem analysis and logical framework matrix. However, the Panel noted that the proposal could benefit from a better map showing the project sites as well as further elaboration on the expected benefits of local communities and the institutional set-up. With regard to the budget, the Panel pointed out that justification was not provided for the provision allocated for the establishment of a model Sandalwood nursery. In addition, the Panel felt that its previous concern over increasing project activities relating to local communities was insufficiently addressed in the revised proposal.</p>	<p>Proposal has been improved based on Recommendation of 47-th expert panel</p>	
<u>Specific Recommendation</u>			
1.	<p>Provide a better map clearly showing the location of four target Districts in East Nusa Tenggara Province;</p>	<p>Map has been improved</p>	<p>10</p>
2.	<p>Further elaborate the expected short and long-term benefits to be generated from Sandalwood plantations</p>	<p>Short and long term benefit has been improved</p>	<p>14-15</p>
3.	<p>Further improve Section 2.1.1 (Institutional set-up and organizational issues) by elaborating the expected cooperation with two international institutions in East Nusa Tenggara Province;</p>	<p>Institutional set-up and organizational Issues has been modified and improved</p>	<p>16</p>
4.	<p>Justify the provision allocated for the establishment of a model Sandalwood nursery;</p>	<p>Provision of Sandalwood nursery has been justified</p>	<p>43</p>

No.	Reviewer Comments/Recommendations*	Amendment(s) made	Page
<u>General Comment</u>			
5.	Consider increasing project activities relating to local communities while scaling down other components without increasing the ITTO budget; and	Additional activities relating to local communities has been increased in Sub activities for Output 3, without increasing the ITTO budget	29
6.	Include an annex that shows the recommendations of the 47th Expert Panel and the respective modifications in tabular form. Modifications should also be highlighted (<u>bold and underline</u>) in the text.	Modification of this proposal has been highlighted ; See Annex 5	62-63