INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT PROPOSAL

| TITLE: | STRENGTHENING THE PERFORMANCE OF THE WOOD PROCESSING SECTOR IN GUYANA, THROUGH BUILDING LOCAL CAPACITY AND THE ENHANCING NATIONAL SYSTEMS THAT PROMOTE FOREST PRODUCTS TRADE AND SUSTAINABLE UTILIZATION OF FOREST RESOURCES |
|--------------------|--|
| SERIAL NUMBER: | PD 687/13 <u>Rev.1</u> (I) |
| COMMITTEE: | FOREST INDUSTRY |
| SUBMITTED BY: | GOVERNMENT OF GUYANA |
| ORIGINAL LANGUAGE: | ENGLISH |

SUMMARY:

The world is has become more aware and is promoting sustainable utilization of forest resources because of its role in mitigating against the impacts of climate change, hence there is the need to promote greater efficiency and address problems along the entire value chain of forest resource utilization, so as to ensure that the users of the resource achieve maximum benefit.

The Guyana Forestry Sector, through Guyana Forestry Commission has come a long way in charting a course for the sector's development. Over the past 10 years, the sector has, by and large, concentrated on primary production, with very little emphasis on downstream value-adding. This has been due, in large measure, to the lack of industry capacity to move down the value adding chain. A comprehensive and integrated programme for the wood processing sector of Guyana is essential for the efficient and sustainable utilization of forest resources.

The Government of Guyana has embarked on a Low-Carbon Development Strategy (LCDS), where it is promoting increased processing and value-added production from its forest resources as the means to obtain greater benefits from utilization of the nation's forest resources, and at the same time reduce deforestation and forest degradation. This focus of the Government is detailed in many policy documents produced by the Government of Guyana namely: The Low Carbon Development Strategy, Forest Act of 2009, National Forest Policy Statement of 2011 and National; Forest Plan of 2011 and is enhanced through the development of a Code of Practice for Wood Processing (Sawmills and Lumberyards) under a GFC/ITTO project: PD 513/08 (Rev.1 (I), titled "*Enhancing the capacity of the wood processing sector to improve efficiency and add value in Guyana*"

Guyana's wood processing sector's capacity to produce quality products needs strengthening, for increased efficiency and sustainable utilization of forest resources to be achieved. Enhanced capacity building and supporting policies along the industry value chain will encourage more efficient economic and sustainable utilization of the forest resource, thereby reducing wastage, pressure on the environment, whilst maximizing the market potential of Guyana's wood products.

This project will serve to build the capacity of stakeholders (Management, Operators and Regulators) within the sector to improve sustainability, efficiency and competitiveness, and enhance the national system for inspection and certification that will facilitate local sale and export of lumber.

| SOURCES OF FINANCE: Source in US\$ | ITTO <u>250,068</u> | BUDGET AND PROPOSED SOURCES OF FINANCE: | Source | Contribution in US\$ |
|---|---------------------|--|--------|-------------------------|
| | | | | |
| | | | | |
| ITTO <u>250,068</u> Government of Guyana <u>98,625</u> | | | TOTAL | <mark>348,693</mark> |

Contents

| PROJECT BRIEF | ii |
|---|--|
| LIST OF ABBREVIATIONS AND ACRONYMS | vii |
| MAP OF PROJECT AREA | viii |
| PART 1. PROJECT CONTEXT. 1.1 ORIGIN. 1.2 RELEVANCE. 1.2.1 Conformity with ITTO's objectives and priorities. | 1 2 2 |
| 1.2.2 Relevance to the submitting country's policies 1.3 TARGET AREA 1.3.1 Geographic location 1.3.2 Social, cultural, economic and environmental aspects 1.4 EXPECTED OUTCOMES AT PROJECT COMPLETION | 7 7 7 |
| PART 2. PROJECT RATIONALE AND OBJECTIVES 2.1 RATIONALE 2.1.1 Institutional set-up and organizational issues 2.1.2 Stakeholder analysis 2.1.3 Problem analysis 2.1.4 Logical framework matrix 2.2 OBJECTIVES 2.2.1 Development objective and impact indicators 2.2.2 Specific objective and outcome indicators | 10 10 11 13 15 16 17 |
| PART 3. DESCRIPTION OF PROJECT INTERVENTIONS. 3.1 OUTPUTS AND ACTIVITIES | 18 18 18 18 20 |
| 3.4 BUDGET | 24 24 31 32 33 34 |
| 3.5.2 Sustainability PART 4. IMPLEMENTATION ARRANGEMENTS | 35 37 |
| 4.1 ORGANIZATION STRUCTURE AND STAKEHOLDER INVOLVEMENT MECHANISMS | 37 38 38 38 39 40 40 40 |
| ANNEX 1. PROFILES OF THE EXECUTING AND COLLABORATING AGENCIES | 41 |
| ANNEX 2: TASKS AND RESPONSIBILITIES OF KEY EXPERTS PROVIDED BY THE EXECUTING AGENCY | 44 |
| ANNEX 3: TERMS OF REFERENCE OF PERSONNEL AND CONSULTANTS AND SUB-CONTRACTS FUNDED BY ITTO | |
| ANNEX 4: ASSESSMENT AND RECOMMENDATIONS BY THE 45 TH EXPERT PANEL | |

PROJECT BRIEF

<u>Project Title:</u> Strengthening the performance of the wood processing sector in Guyana, through building local capacity and enhancing the national systems that promote forest products trade and sustainable utilization of forest resources.

Existing situation and the problems

The need for increased efficiency and sustainable utilization of forest resources through a viable and competitive wood processing sector in Guyana has been recognised in several strategic documents, such as the National Competitiveness Strategy (NCS), National Forest Policy Statement, National Forest Plan and the Low Carbon Development Strategy (LCDS).

These documents also identify the need to address the pressing issues of capacity building at various level of the supply chain to ensure effective and efficient utilisation of the country's forest resources. However the main focus as of the end of 2011 was on sustainable forest management practices for concessionaires based on the Code of Practice for Timber Harvesting. There is now the need for training in areas of business management, manufacturing and marketing.

The Guyana Forestry Commission (GFC) in collaboration with the International Tropical Timber Organisation (ITTO) has recently developed a Code of Practice for Wood Processing Operations (Sawmill and Lumberyards) and has commenced the process of introducing this Code through the development of training manuals and conducting training workshops for stakeholders of the wood processing sector. This has resulted in improved recovery of value and increased competitiveness for wood processing operations whose personnel were exposed to training and are conforming to the practices prescribed in the Code.

However this improved competitiveness could not have been realised throughout the entire sector because the sector size as of June 2012 consisted of 182 sawmills and 200 lumberyards, and employed 5,140 persons. The stakeholders of the sector have identified the following problems that need to be addressed in order to further improve the competitiveness of the nation's primary wood processing sector:

- I. Low level of competency of personnel at levels of management, supervisory and operations, resulting in poor quality products and inefficient processing and drying operations,
- **II.** Improving the domestic and international trade in lumber through:
 - a) Educating and sensitizing operators within the sector on how to efficiently use wood and make informed decision when purchasing lumber,
 - **b)** Reviewing Guyana's national Timber Grading rules and establishing dimensional standards for construction lumber that are in keeping with the National Building Codes,
 - c) Enhancing the National system for the inspection and certification of lumber for both local and export markets, and
 - d) Improving the enforcement of regulations for the lumber trade.
- **III.** Differentiating between lumber for construction use and for value-added operations to promote more efficient utilization of lumber locally.
 - a) Certifying construction lumber to quality and dimensional standards, and
 - b) Sale of lumber for value-added operation in random lengths and widths (no need for certification.

Development and Specific objectives:

Development Objective: To contribute to the enhancement of the efficiency and competitiveness of Guyana's wood processing sector as a means for sustainable utilization of timber resources and national development by:

- Increasing the conversion of logs to lumber by 10% within the sector and
- Increasing employment within the sector by 10% through the project's implementation.

Specific Objective: To strengthen the performance of the wood processing sector through building local capacity and enhancing national systems that will promote and facilitate efficient trade and utilization of lumber for both local and export markets by:

- Increasing the mean average primary processing recovery of lumber from logs (currently at around 30%) to at least 50%. and
- Increasing market share both domestically and internationally.

Beneficiaries, Expected Outcomes and the Main Outputs

Beneficiaries:

Guyana's Economy and Environment: This project aims at developing an efficient and competitive wood processing sector that will make more efficient and sustainable utilization of the nation's forest resources by; increasing the forestry sector's contribution to GDP and thereby impact positively on sustainable economic development.

Sawmill/Lumberyard Owners and Operators: Training and Capacity building activities will result in producers/manufacturers being able to more efficiently process timber, to produce lumber of a higher standard and quality, at a higher recovery and lower cost per unit.

Exporters/Traders of lumber and Consumers/Users of wood in value-added and construction sector: Personnel will be more aware and sensitized about how to use wood efficiently, and thereby assist them in making more informed purchasing decisions. Marketing and promotional information will also be strategically placed at point of purchase to further assist this process. A National system for trade in lumber will support fairness in the trade of lumber.

Government Officials (GFC, EPA and Labour): The project will result in the value wood processing sub sector of the forestry industry operating in a more structured and efficient manner. As such, the implementation of policy and the targeting of goals for the forest sector will be executed in a more effective way and in keeping with the mandate of the organization. Staff from Government agencies will be part of the capacity building and training exercise and as such will be better able to achieve their mandate.

Expected Outcomes

The intended immediate effect of the project will be a more sustainable and competitive forest industry sector in Guyana which is better managed and therefore better able to utilize forest resources efficiently along the industry value chain. This would be facilitated through the training and capacity building activities of the project which would result in producers/manufacturers being able to more efficiently process timber to consistently produce lumber of a higher standard and quality, at higher recovery rates and at a lower cost per unit. Consumers/users of value-added wood and those in the building and construction sector will also be sensitized about the efficient use of wood, and hence will be able to make more informed wood purchasing decisions.

The long term effect after project completion will see Guyana's economy and the environment benefiting from more efficient and sustainable utilization of the nation's forest resources, and thereby increase the forestry sector's contribution to Guyana's economy and sustainable economic development. The outcomes of the project would assist Guyana's wood processing sub sector of the forestry industry to operate in a more structured and efficient manner. This will assist in the effective implementation of policy, and the targeting of goals for the forest sector will also be executed in a more effective way and in keeping with the policies of the Government.

The outcomes as related to the results/outputs of this project are:

- I. <u>The wood processing sector has increased its contribution to Guyana's economy through</u> increased employment by 10%, and improved quality of products for markets evidenced through a 3% increase in forest sector revenue.
- II. <u>A National system for local and international trade in lumber will ensure fairness in the trade</u> of lumber and promote the efficient use of wood that will be evidenced by attaining a recovery of 50%.
- III. Wood processing operations are more competitive and better able to confirm to regulatory requirements showing a 5% increase in forest operations licenses issued.
- IV. <u>Regulatory agencies are better equipped to exercise their mandate in relation to the wood</u> processing sector.

Main Outputs

- I. Trained personnel operating within wood processing operations (Management/Supervisors, Operators, and Regulators).
- II. Report on a National system for local and export trade of lumber that support fairness.
- III. Reviewed Timber Grading rules, and quality/dimensional standards for lumber to be used in the building and construction sector,
- IV. Increase awareness for persons using lumber (Contractors, Architect, Value-Added Operations)

Project Implementation

The Guyana Forestry Commission will be the sole executing and implementing institution for this project. However, a Project Steering Committee will be established to oversee the project that will include the following members:

- Guyana Forestry Commission
- International Tropical Timber Organization
- Forest Products Association
- The Guyana Manufacturers & Services Association
- Main Donors

Key sector agencies: The Guyana Forestry Commission, Forest Products Association, Guyana Manufacturers & Services Association, Guyana Association of Professional Engineers, Forestry Training Centre Incorporated and the Forest Product Development and Marketing Council will contribute to the implementation of this project through the Technical Committees which are already set up for inputs, communication and networking with these key industry bodies. Project results, findings and deliverables will be shared with these bodies through meetings and their members will be involved in all of the consultation and training activities of the Project.

Sustainability of project's results

The results of this project will be sustained through the following actions:

- I. The operation of National system for local and export trade of lumber will be maintained by the GFC because this activity falls within the mandate of the Commission. The Quality Control and Licensing Unit of the Forest Monitoring Division (FMD) currently implements this function. The GFC will continue to provide finance for the execution of the continuing activities under this project, as part of its Annual Work programme and budget. These will include staff cost, office space, and additional resources.
- II. Continued information on wood for purchasers/users of wood would be maintained through point of sale posters and other information source and activities, because this activity falls within the mandate of the FPDMC. The FPDMC will work closely with the GFC to develop and disseminate information through established network and communication mechanism.
- III. Through the FTCI, continuous training will be delivered to the sector. Training manuals have been established for the subject areas required and these will be used to conduct competency training for personnel within the sector. With the CoP for sawmilling and lumberyards expected to be made mandatory in 2013, persons operating within the wood processing sector will have to implement the requirements of the CoP, hence the need for continuous training.

The political will is also in place to undertake this project. Therefore, there is no reason to believe that these activities will not continue after project funding, for the results and outcomes of this project constitute major developmental targets that are proposed in the National Competitiveness Strategy (NCS) and the Low Carbon Development Strategy (LCDS).

Key assumptions and risks and how these risks will be mitigated.

The following are the risks, proposed mitigation measures and assumptions.

Risk 1: Decline in demand for Guyana's lumber on local and export market.

<u>Mitigation Measures</u>: The Guyana Forestry Commission will continue to work with the key sector agencies to build and facilitate market information and market access for and between local producers/manufacturers and buyers/users.

Assumption 1: International demand for tropical lumber continues.

The demand for legally verified tropical lumber will continue to strengthen because of their unique and valued characteristics, and higher prices will support improvement in quality of products.

Assumption 2: Local demand for tropical lumber continues.

Increased efficiency within the wood processing sector coupled with better knowledge about the use of wood, will result in improved quality at a competitive price for lumber that can compete with substitutes on the local market.

<u>Risk 2: Personnel whom have been trained discontinue working within the sector or are not allowed</u> to implement knowledge gained in operating.

<u>Mitigation Measures</u>: The management of wood processing operations would be provided training so that they are better able to understand the requirements for an efficient operation and the value of skilled operators in such an operation.

<u>Assumption 1:</u> Management/Owner/Operators will value and implement knowledge gained from training. Management/Owner understands the value of trained operator/personnel and compensate them adequately so that they continue to work with the company, and allows the personnel/operator to implement the knowledge gained.

<u>Risk 3: Stakeholders do not accept and conform to standards/practices established in the National</u> system for trade of lumber.

<u>Mitigation Measures</u>: The stakeholders and their representative organization will be involved from the outset of the project and during every activity in the implementation phase, so that there is greater ownership of the objectives and results.

<u>Assumption 1</u>: Greater awareness would have impacted on their decision making process. The active involvement of representative organizations at the management level of the project, and the individual stakeholders in the activities, will result in buy-in to the project objectives and results.

Risk 4: Consumers/user will not use wood in keeping with established practices.

<u>Mitigation Measures</u>: The implementation of the National system of inspection and certification of lumber for local and export trade of lumber, coupled with additional guidance information provided through point of purchase posters, will facilitate more informed decision by consumers/users.

Assumption 1: Greater awareness by consumers/users resulting in better decisions.

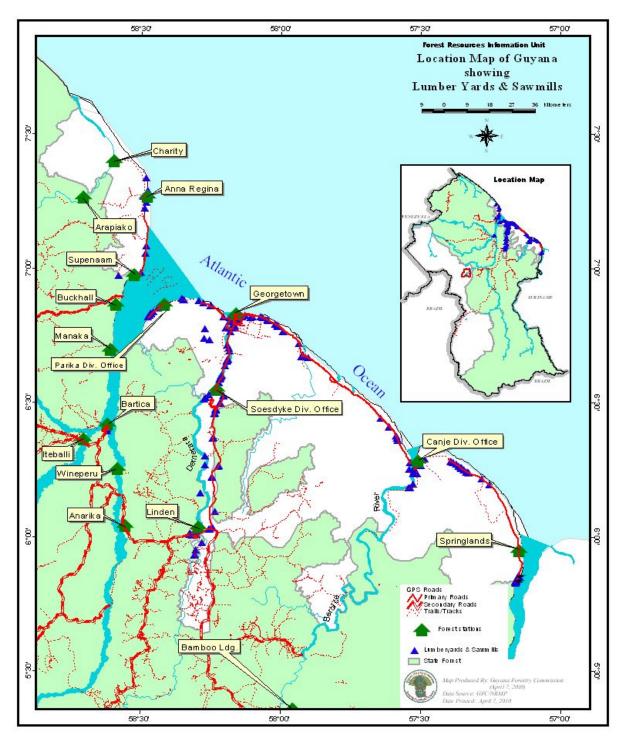
The availability of information at point of sale and quality products approved through the national system will result in consumers making more informed decisions in keeping with established practices.

| | <u> Total Budget = US\$ 348,693 (ITTO – US\$ 250,068 and GFC – US\$ 98,625)</u> | | | | | |
|----|---|----------------------|---------------------|--|--|--|
| | Budget Components | ІТТО | GFC | | | |
| 10 | Project Personnel | 45,000 | 24,000 | | | |
| 30 | Duty Travel | <mark>22,875</mark> | <mark>21,625</mark> | | | |
| 50 | Consumable Items | 120,400 | | | | |
| 60 | Miscellaneous (Audit cost) | | 5,000 | | | |
| 70 | Executing Agency Management Cost (24 months) | | <u>48,000</u> | | | |
| | Subtotal 1 | <mark>188,275</mark> | <mark>98,625</mark> | | | |
| 80 | ITTO Administration, Monitoring & Evaluation | | | | | |
| | 81. Monitoring & Review (effective estimation) | 20,000 | | | | |
| | 82.Evaluation Costs (effective estimation) | 15,000 | | | | |
| | Subtotal 2 | <mark>223,275</mark> | | | | |
| | 83. Programme Support Costs (12% of subtotal 2) | <mark>26,793</mark> | | | | |
| | TOTAL | <mark>250,068</mark> | <mark>98,625</mark> | | | |

<u>Budget</u> amount requested from ITTO, the contribution of the executing agency.

LIST OF ABBREVIATIONS AND ACRONYMS

| CoP | Code of Practice | |
|----------|--|--|
| EPA | Environmental Protection Agency | |
| EU-FLEGT | European Union Forest Law Enforcement Governance and Trade Programme | |
| FPA | Forest Products Association | |
| FPDMC | Forest Products Development and Marketing Council | |
| FTCI | Forestry Training Centre Incorporated | |
| GAPE | Guyana Association of Professional Engineers | |
| GFC | Guyana Forestry Commission | |
| GMSA | Guyana Manufacturers and Services Association | |
| GoG | Government of Guyana | |
| IDE | Industry Development and Efficiency | |
| ΙΤΤΟ | International Tropical Timber Organization | |
| LCDS | Low Carbon Development Strategy | |
| NCS | National Competitiveness Strategy | |
| NFP | National Forest Plan | |
| NFPS | National Forest Policy Statement | |
| RIL | Reduced Impact Logging | |
| SFM | Sustainable Forest Management | |



MAP OF PROJECT AREA

Map showing location of stationary sawmills and lumberyards. Mobile sawmills and sawpits that utilize chainsaws in production of lumber are found on concessions.

PART 1. PROJECT CONTEXT

1.1 Origin

Sustainable development, by definition implies a management and utilization ethos which aims to utilize a nation's natural resources for socio-economic development without limiting the ability of future generations to similarly benefit from these natural assets. Achieving sustainable development in the forest products sector therefore involves sustainable, efficient and effective use of the nation's forest resources. The reported average recovery rate in Guyana's sawmills ranges between 30 and 40%. This compares with more than 60% in some tropical timber producing countries such as Malaysia.

This need for increased efficiency and sustainable utilization of forest resources through a viable and competitive wood processing sector in Guyana has been recognized in several strategic documents, such as the National Competitiveness Strategy (NCS), National Forest Policy Statement, National Forest Plan and the Low Carbon Development Strategy (LCDS).

These documents identify the need to address the pressing issues of capacity building at various level of the supply chain, to ensure effective and efficient utilization of the country's forest resources. However, the main focus as at the end of 2011 was on promoting sustainable forest management practices to concessionaires based on the Code of Practice for Timber Harvesting. There is the need now for training in areas of forest processing, overall forest operations management, and the Code of Practice for Wood Processing.

During the period April 2010 to April 2012, the Guyana Forestry Commission (GFC) collaborated with the International Tropical Timber Organization (ITTO) in implementing Project #: PD 513/08 (Rev.1 (I), titled "Enhancing the capacity of the wood processing sector to improve efficiency and add value in Guyana". The deliverables of this project were: a Code of Practice for Wood Processing Operations (Sawmill and Lumberyards), <u>a Capacity Building Strategic Plan for the sector, a Document identifying relevant</u> Policies that are needed to support improvement within the sector, Training manuals for Managers/Supervisors/Operators and the establishment of a Community Wood Processing Facility to be used for training and serve as a model for other associations/communities to follow. The Capacity Building Strategic Plan will draw on the training needs analysis completed under Project PD 513/08 Rev. 1 (I), that would have informed the development of training modules/manuals under this phase of the project as well. This will be used in the execution of actual training exercises.

The outcomes from this project has resulted in improved recovery of value and increased competitiveness for wood processing operations whose personnel were exposed to training and are conforming to the practices prescribed in the Code. However, the average recovery rate in Guyana's sawmills continues to ranges between 30 and 40% as compared to more than 60% in some tropical timber producing countries such as Malaysia. This improvement in competitiveness achieved by some companies within the industry could not be experienced throughout the sector for the primary wood processing sector of Guyana because of the industry's size. As of June 2012, the industry consisted of 182 sawmills and 200 lumberyards, and employs some 5,140 persons.

During the implementation phase, stakeholders of the sector identified the following problems that need to be addressed to facilitate a competitive primary wood processing sector.

- I. The number one problem identified is the low level of competency of personnel operating at management levels, supervisory and operations, which results in poor decision making and inefficient operation.
- **II.** Poor quality products and inefficiencies in processing and drying operations which results in: wastage, higher cost of production and reduced competitiveness when compared to substitute products.
- **III.** The following needs to be done to regularize the trade of lumber.
 - a) The users need to be educated/sensitized on how to efficiently use wood and make informed decision when purchasing lumber
 - **b)** Review of the national Timber Grading rules
 - c) Dimension Standards, which are aligned to building codes need to be developed to guide users
 - d) Establishment of National system for the inspection and certification of lumber for local and export market.
 - e) Stronger enforcement of regulations for trade of lumber

- **IV.** Lumber for construction use and for value-added operations need to be differentiating to promote more efficient utilization of lumber locally.
 - a) Certifying construction lumber to quality and dimensional standards, and
 - **b)** Sale of lumber for value-added operation in random lengths and widths (no need for certification).

This project will serve as a continuation or phase 2 to the completed project: "*Enhancing the capacity of the wood processing sector to improve efficiency and add value in Guyana*", and at the same time, seek to address the issues identified by the stakeholders. It also seeks to address strategic directives that have been established for the Forest Industry sector in the National Competitiveness Strategy (NCS), National Forest Policy Statement, National Forest Plan and the Low Carbon Development Strategy (LCDS).

1.2 Relevance

1.2.1 Conformity with ITTO's objectives and priorities

The objectives of the International Tropical Timber Agreement, 2006 are to promote the expansion and diversification of international trade in tropical timber from sustainably managed and legally harvested forests and to promote the sustainable management of tropical timber producing forests. This proposed project is central to that goal and cross-cuts most of the mechanisms (or specific objectives) of the ITTO [especially relating to objectives (a), (b), (c), (d), (i), and (k) of Article 1 of the ITTA, 2006]:

(a) <u>Providing an effective framework for consultation, international cooperation and policy</u> <u>development among all members with regard to all relevant aspects of the world timber</u> <u>economy</u>;

The project will allow for greater sharing of information on trade and trade practices, by product, region, and other related aspects. This will auger well in the promotion of non-discriminatory trade practices from Guyana's perspective. The project will enable for consultations to take place to lead to this outcome and to ultimately result in an effective system for trade in lumber that can be shared within the industry sector in Guyana.

(b) <u>Providing a forum for consultation to promote non-discriminatory timber trade practices;</u>

This project will enable more informed engagement with national stakeholders in the forest sector and across related sectors such as the building/construction and trade sectors, as training and consultations will allow for discussion on forest products, the relation to the economy and planning for overall development, to be based on a strengthened and advanced framework. It will lead to spinoff development in allowing for better informed policies to be crafted, and planning for the future development of the forest industry sector to be done in a more informed and strategic manner. This will also allow for future cooperation, both from the perspective of trade and forest sector development in terms of sustainability, to be advanced.

(c) <u>Contributing to sustainable development and to poverty alleviation</u>

This project will facilitate increased competitiveness and profitability within the wood processing sector through the reduction of waste and improved quality and recovery. This will result in having to harvest lesser trees to attain current lumber volume, and increase in revenue and poverty alleviation for communities/associations involved in wood processing.

(d) <u>Enhancing the capacity of members to implement strategies for achieving exports of tropical</u> <u>timber and timber products from sustainably managed sources.</u>

This project will enhance the competency of personnel within the wood processing sector and at the same time, define the quality parameters for products. This will provide the means by which the sector can better compete in both local and export markets.

(i) <u>Promoting increased and further processing of tropical timber from sustainable sources in producer member countries, with a view to promoting their industrialization and thereby increasing their employment opportunities and export earnings;</u>

It is expected that with increased competitiveness and profitability, the sector will move towards increasing the volume of timber processed and thereby increase their employment opportunities and export earnings.

(k) <u>Improving marketing and distribution of tropical timber and timber product exports from</u> <u>sustainably managed and legally harvested sources and which are legally traded, including</u> <u>promoting consumer awareness.</u>

By defining the quality parameters for products based on use, educating/sensitizing users about wood and making available information at point of sale, the sector will improve its market access and gain willing consumers for their products.

The current ITTO Action Plan (2008-2011) identifies five Thematic Areas/Programs one of which is Industry Development and Efficiency (IDE) which is specifically concerned with the development and promotion of further processing and the manufacture and export of higher added-value products.

Industry Development and Efficiency

This project seeks to establish an efficient and competitive forest industry in Guyana, which will link sustainably managed forests and international markets for forest products. Increasing the competency of personnel working in the sector, and improving market access through more informed consumers, will promote investment in the industrialization of the sector and employment opportunities, and the contribution of forests to social and economic development would be increased and poverty alleviation and economic development will be enhanced.

Two expected outcomes are identified under this thematic programme, and the actions to be addressed in this project are as follows:

| | Actions by ITTO | | Possible actions by members | | |
|---|--|---|--|--|--|
| Expected outcome 1: Increased production and further processing of tropical timber and other forest products from sustainably managed and legally harvested sources | | | | | |
| в | Study and promote policies and other measures to increase forest industry competitiveness | Develop forest industry sector planning | | | |
| С | Promote studies, illustrate best practice and build capacity to increase supplies of legally traded timber in international markets | с | Develop policies and implementation capacities to increase supplies of legally traded timber | | |
| | Expected outcome 2: Increased efficiency in harvesting, processing and utilization of tropical timber from sustainably managed and legally harvested sources | | | | |
| A | Assess and update the impact of previous work on increasing utilization efficiency, including the reduction of losses and waste throughout the production chain | а | Encourage and support improved utilization efficiency, the increased use of wood residues, and recycling | | |

TDE Monitoring Protocol

The Project will contribute directly to the specific and general objective, deliverables and intended results, of the Thematic Programmes deliverables. This link is explained though the following main Thematic Programme deliverables:

General Objectives:

 Increased production and further processing of tropical timber products from sustainably managed and legally harvested sources.

The project will facilitate increased competitiveness and profitability within the wood processing sector, hence encouraging companies to expand and improve operations. The sector will move towards increasing its volume of processed lumber away from the export of logs.

• <u>Increased efficiency in harvesting, processing and utilization of tropical timber from sustainably</u> <u>managed and legally harvested sources.</u>

The project will target greater awareness for consumers on how to use wood, with the objective of increasing market access. This will create a demand for quality lumber, which will induce more processing and increase efficiency to meet the requirements of markets.

Specific objectives:

- <u>Develop forest industry sector planning</u> through the training of personnel operating in the sector, create consumer awareness of how to use lumber and the establishment of a National System to regulate the trade of lumber. These results of these activities will form the infrastructure for the development of an effective wood processing sector and facilitate more effective planning.
- Develop policies and implementation capacities to increase supplies of legally traded timber. The training of personnel within the sector on the CoP will increase recovery and quality of products, and at the same time, the sensitization of consumers will create the demand for products. Monitoring activities of the national system will ensure that there is integrity in the trading process, which will induce increased demand and supply of lumber.
- <u>Encourage and support improved utilization efficiency, the increased use of wood residues, and</u> <u>recycling</u> through the training of personnel operating in the sector to achieve greater recovery and efficiency, and create consumer awareness of how to use lumber to reduce wastage.

More specifically, the project will comply with the Thematic Programme Outputs as follows:

Specific Objective: To strengthen the performance of the wood processing sector through building local capacity and enhancing national system that will promote and facilitate efficient trade and utilization of lumber for local and export markets.

| Output | Output Indicators | Target Value | Means of verification |
|--|---|--|---|
| Output 1: Trained personnel operating within wood processing operations. (Management, Supervisors, Operators, and Regulators). | Number of persons that have been trained. | At least 200 persons (Management, Supervisors, Operators and Regulators for Sawmill and Lumberyards) from the sector trained | Training reports |
| Output 2: Report on a National system for local and export trade of lumber that is supported through a reviewed Guyana Timber Grading rules, and quality/dimensional standards for lumber to be used in the construction sector. | Report on a National system for local and export trade of lumber Quality/dimensional standards | Completed and approved report on a National system for local and export trade of lumber Relevant Quality/dimensional standards determined and completed. | Completed and approved report Completed and approved standards. |
| Output 3: Increased awareness for persons using lumber (Contractors, Architect, Value- Added Operations) | Number of participants at the workshops. Point of sale posters and purchasing information. | 80 persons (Contractors, Architect, Value-Added Operations) sensitized on efficient and effective use of wood for purpose. 3 Point of sale posters and purchasing information. | Workshops reports Availability of point of sale posters |

1.2.2 Relevance to the submitting country's policies

The Government of Guyana has embarked on a national programme that aims to continue to protect and maintain its forest resources, and sustainably manage and utilize the nation's natural resources for socioeconomic development without limiting the ability of future generations to similarly benefit from these natural assets. Achieving sustainable development in the forest products sector therefore involves efficient and effective use of the nation's forest resources.

Forestry legislations have been drafted to address, inter alia, conservation and protection, sustainable utilisation of the forest estate. Some of these that have been approved by parliament and are directly related to forestry are:

- a) The Guyana National Forest Policy Statement (NFPS) of 2011 which recognises that:
 - 1. the resources of the forests are the patrimony of all citizens of the country, and
 - 2. there is increased attention being paid by the public to the environmental and social aspects of forestry, and to the importance of managing the multi-faceted resources of the nation's forests in a sustainable manner.

The Policy highlights the importance of a level of control over all harvesting activities, sufficient to provide adequate protection of biodiversity and to ensure sustainable production. One specific objective in relation to wood processing is to promote the sustainable and efficient forest activities which utilize the broad range of forest resources and contribute to national development while allowing fair returns to local and foreign entrepreneurs and investors

b) The <u>Guyana Draft National Forest Plan (NFP) of 2011</u> provides the framework and identifies programmes and activities that must be accomplished to ensure implementation of the policy and compliance with the law. The National Forest Plan is divided into ten programmes which follow the key areas of action identified in the forest policy.

<u>Section 4. Forest industry</u> of the National Forest Plan aims to promote the growth of an efficient and competitive forest industry, optimize the benefits from sustainable harvesting, conversion and further processing of forest resources for national markets, and competing effectively in international markets.

c) <u>Guyana's Low Carbon Development Strategy (LCDS)</u> provides the framework for the development of Guyana towards a low carbon economy.

<u>Under section 3. Creating a low-carbon economy - Sustainably managing the forestry and mining sectors.</u> The Government's policy is to support companies operating in Guyana to generate substantially more value from the finite area of the forest where sustainable forest harvesting is appropriate. As much as \$300 million more in annual value could be realized from a shift to integrated primary and secondary processing and more efficient extraction within the existing stringent limits on logging.

These strategies as outlined in the various policy documents, make a strong case for greater emphasis to be placed on developing the competitiveness of wood processing sector, with a focus on: reduced deforestation, improved recovery, reducing waste, increasing the sector's contribution to GDP, reducing the export of logs, increasing job creation and improving competitiveness and profitability of wood processing operations

The Forest Sector's contribution to GDP over the past years had been relatively stable at the 2.5% to 4.5% mark, and is expected to remain that way for 2012. Employment data for the Forestry Sector for 2011 was largely on par with 2010, and is also expected to remain stable in 2012.

Table showing Employment estimates for the Forestry Sector for 2010 and 2011

| Activity | 2010 | 2011 |
|---------------------------------|--------|--------|
| Logging | 12,785 | 12,852 |
| Sawmilling | 3,514 | 3,680 |
| Timber Dealership (Lumberyards) | 1,412 | 1,460 |
| Plywood and Veneer | 418 | 275 |

| Manicole Palm | 639 | 530 |
|---------------|--------|--------|
| Other* | 3,375 | 3,005 |
| Total | 22,143 | 21,954 |

This project proposal directly supports the National Forest Policy Statement and the National Forest Plan that specifically identify policies, strategies and activities to support the development of the forest Industry sector.

The National Forest Policy Statement (1997) outlines the following:

| Policies | Strategy |
|--|--|
| 2. Industry Viability | 2. Industry Viability |
| (c) The principles of production efficiency and productivity, enhancing recovery rates through improved processing techniques, promoting down-stream industry development and increasing the production line of value-added products shall be developed and applied as a priority | (b) New technologies for the economic utilisation of timber to broaden and diversify the range of species available, to minimise waste, and to maximise the returns from the conversion of felled trees, shall be encouraged and utilised so long as the sustainability and integrity of the forests are not compromised. |
| 4. Processing | 4. Processing |
| (a) Efforts shall be made to encourage greater utilisation of logs in downstream activity. | (c) The Guyana Forestry Commission shall develop criteria and regulations for the use of all processing operations (including portable, static/ band mills). |
| | (e) Incentives shall be considered and provided where appropriate to encourage secondary and tertiary processing at these centres. |
| | (f) Existing Timber Grading Rules shall be revised, updated and expanded to incorporate other forest products |

Additionally, the National Forest Plan outlines the following:

| NFP 510 | Forest industry investment |
|---------|--|
| 514 | Development of standards and regulations for primary processing facilities including portable mills. |
| 515 | Implementation of procedures for licensing of industry operations. |
| NFP 610 | Grading rules for timber and non-timber products |
| 611 | Use of standard nomenclature, sizes and specifications for forest products. |
| 612 | Review and development of domestic and international timber grading rules. |
| 613 | Implementation of grading rules and standards through training and publicity. |
| NFP 910 | Forest sector education and training |
| 911 | Promotion of training and capacity building by the forest industry. |
| 912 | Provision of vocational training courses for the sector. |

This activity will complement the efforts that have been taken by the Government so far, through the establishment of the Forest Products Development and Marketing Council which establishes the institutional framework for market development and support. This project will further complement these efforts and advance the progress in strengthening marketing and trade in Guyana wood products.

This Project activity will also comply with other Policies, Laws and Strategic Initiatives that are being undertaken in Guyana. Among these are:

- Forest Act of 2009.
- Guyana Legality Assurance System (March 2011).
- Exploratory dialogue on a Voluntary Partnership Agreement (VPA) under the European Union Forest Law Enforcement Governance and Trade Programme (FLEGT).
- National Competitiveness Strategy (NCS) of Guyana.

1.3 Target Area 1.3.1 Geographic location

Guyana, the only English speaking country in South America, is located on the Atlantic seaboard of northeastern South America. It extends 800 km south from latitude 8° N on the Atlantic coast to latitude 1° N, and some 480 km east to west between longitudes 57° and 61° W. It has an area of about 215,000 km² and a population of approximately 750,000. Tropical high forests cover some 16.4 million ha or about 76% of the total land area.

State forests administered by the Guyana Forestry Commission (GFC) account for about 13.6 million ha (63% of the land area).

Access for commercial timber removal on State Forests is controlled by the GFC through the allocation of temporary concessions and permits as follows:

- Timber Sales Agreement (TSA) covers concessions of more than 24,000 hectares and is allocated for a period of more than 20 years.
- Wood Cutting License (WCL) is issued for 3 to 10 years, and covers forests of between 8,000 and 24,000 hectares.
- State Forest Permissions (SFP) are given for two years and cover areas of less than 8,000 hectares. SFPs are generally issued to individual small-scale operators and community-based associations.
- State Forest Exploratory Permits (SFEPs), which are issued for survey and feasibility purposes.

Primary processing of logs occurs at 2 levels: Sawpits – resulting in the production of chainsawn lumber and Sawmills – resulting in mill-cut lumber. Sawpits are found within small forest concession (SFP's) issued to Associations/Communities and sawmills are operated by large concessions or companies that purchase logs from concessionaires. Sawmill are located on the banks of the main rivers and on the main roads coming out of the interior of Guyana (See map of project area).

The three main regions are: Essequibo, Demerara and Berbice. Located within the regions are the various processing facilities. These are largely located along the coastal part of the region and are at centralised points. Produce coming out of forest locations, that is, from chain saw operations and saw pit operations in the forest also come to these processing facilities. The region with the largest number of processing facilities is Essequibo, and this is followed by Demerara then Berbice. Within these regions are various sub districts/towns. In Essequibo some of the main districts are Anna Regina, Charity, Parika, Manaka and Buckhall; in Demerara are Soesdyke and Georgetown; and in Berbice are Springsland and Canjie.

1.3.2 Social, cultural, economic and environmental aspects

From a social and cultural perspective, forestry and forest production have historically, and will continue to play a significant part of the way of life of communities and rural livelihoods. The forests have been used for both subsistence and commercial purposes and this has continued over the years.

In addition to State Forests, a portion of the forests are under titled Amerindian lands. Land titles were issued to Amerindians in 1976 onwards and currently, approximately 13% of the total land area of the country is under titled Amerindian land. Community forestry in Guyana constitutes a significant aspect of the forest sector, and there are 69 community organisations that are issued approximately 350,000 hectares of State Forest and employ close to 2,000 persons.

The training of personnel and the establishment of a national system to facilitate trade of lumber will provide the opportunity for these communities to improve their livelihood sustainably, through the

generation quality and greater volume of products from improved recovery from logs, and the national system will ensure integrity and fairness in selling their products on local market. The communities will be better prepared to process their logs into lumber and generate more employment and value from their allocated resources, rather than selling the logs.

From an economic perspective, the forest sector continues to be a key commercial sector in Guyana. This is reflected in an average employment level of 20,000 persons, and a contribution to Gross Domestic Product of 3% to 4% by primary products, and an estimated contribution of between 5% to 8% for manufactured wood products. Approximately one half of total timber volume production is currently exported from Guyana; the most common destinations are Asia (in particular for logs), Europe (especially sawn wood to UK), Caribbean and North America.

From an economic perspective, the Government of Guyana has earmarked the forestry sector, with emphasis on processing of lumber as one of the primary areas for development, because of the potential in relation to employment generation and the available markets. The activities of this project will greatly enhance the potential of the wood processing sector to achieve the Government's mandate/vision of increasing employment within the sector, maximizing the value from natural resources and increase contribution to GDP.

From an environmental perspective, the forests in Guyana cover some 18 million hectares. This is largely intact forest with only half of the 12.9 million of the State Forest Estate being allocated as of June 2012, for sustainable production purposes. A recently completed national level assessment of deforestation and forest degradation in Guyana concluded that the average rate of deforestation in Guyana is between 0.03% to 0.06%. This confirms that Guyana is a high forest cover, low deforestation rate country.

With the wood processing sector operating at an average recovery of about 35- 40% of log volume, it is anticipated that with the improvement in the skills of operators, there will be an increase in recovery from logs, and waste generation will be significantly reduced. The expected outcome is less pressure on the forest to achieve required volume – harvesting of fewer trees.

The implementation of a national system for local and international trade in lumber, coupled with a better understanding by consumers on the benefits and how to use lumber efficiently, will ensure better decisions, proper use of wood, and reduce waste when using wood at a national level, and promote consumers' confidence in using wood in construction resulting in more eco-friendly buildings being constructed.

1.4 Expected outcomes at project completion

The Project targets three main Outputs: Trained personnel operating within wood processing operations; a National system for local and export trade of lumber; and increased awareness for persons using lumber, and it is expected that with the realization of these outputs, the following outcomes will be achieved.

- V. The wood processing sector has increased its contribution to Guyana's economy through increased employment by 10%, and improved quality of products for markets evidenced through a 3% increase in forest sector revenue.
- VI. <u>A National system for local and international trade in lumber will ensure fairness in the trade</u> of lumber and promote the efficient use of wood that will be evidenced by attaining a recovery of 50%.
- VII. Wood processing operations are more competitive and better able to confirm to regulatory requirements showing a 5% increase in forest operations licenses issued.
- VIII. <u>Regulatory agencies are better equipped to exercise their mandate in relation to the wood</u> processing sector.

Although these expected outcome are directly related to the outputs and activities of this project, other long term benefits would also be realized by the following beneficiaries:

Guyana's Economy and Environment: This proposal is aimed at developing an efficient and competitive wood processing sector that will influence sustainable utilization of the forest resources, facilitate increased contribution of the forestry sector to GDP and positively impact on sustainable economic development.

Sawmill/Lumberyard Owners and Operators: Training and Capacity building activities will result in producers/manufacturers being able to more efficiently process timber to produce lumber of a higher standard and quality, at a higher recovery and lower cost per unit.

Exporters/Traders of lumber and Consumers/Users of wood in value-added and construction sector: Personnel will be more aware and sensitized about the use of wood and hence will be able to make more informed decisions when making purchases. A National system for trade in lumber will support fairness in the trade of lumber.

Government Officials (GFC, EPA and Labour): The project will result in the wood processing sub sector of the forestry industry operating in a more structured and efficient manner. As such, the implementation of policy and the targeting of goals for the forest sector will be executed in a more effective way and in keeping with the mandate of the organization. Staff from Government agencies will benefit from capacity building and training exercise and as such will be better able to execute their mandate.

PART 2. PROJECT RATIONALE AND OBJECTIVES

2.1 Rationale

The ITTO recognizes that effective forest industries provide a crucial link between sustainably managed forests and international markets for forest products, and seeks to advance this idea through the promotion of investment in the industrialization of producer member countries, thereby increasing their technical capabilities and employment opportunities, and ultimately increasing the contribution of forestry related activities to social and economic development.

There is a need to promote increased and further processing of tropical timber from sustainably managed and legally harvested forests, and to improve the efficiency by which such timber is processed and utilized, for these activities can result in maximizing the returns from timber resources and at the same time, reduce the pressure on the forest to achieve the required volume of product – harvesting less trees.

Activities focused on improving the competitiveness and efficiency of the wood processing sector can have a tremendous impact on the promotion of increased and further processing of timber, and on the manufacturing and exports of higher added-value products, which will ensure that the forestry sector's contribution to economic development and poverty alleviation is enhanced. These activities have the potential to generate greater employment and increased revenue for small-scale and community-based forest enterprises.

2.1.1 Institutional set-up and organizational issues

The **Guyana Forestry Commission (GFC)** was created in 1979 out of the pre-existing Forest Department that had its origins in 1925. The GFC is responsible for advising the responsible Minister and making submissions on issues relating to forest policy, forestry laws and regulations. The Commission is also responsible for administration and management of all State forestland. The work of the Commission is guided by a National Forest Plan that has been developed to address the forest policy. The Commission also develops and monitors standards for forest sector operations, develops and implements forest protection and conservation strategies, oversees forest research, and provides support and guidance to forestry education and training.

Guyana has been placing over the past five years, increasing emphasis on ensuring that forests are managed in a manner that ensures sustainability and legality. This focus is reflected in the work plan of the GFC, specifically in the work plan in planning, forest resources management as well as forest monitoring. The Planning Division, in addition to local initiatives, has been working with ITTO and other international bodies to strengthen forest activities in keeping with international and regional FLEGT and Independent Forest Monitoring initiatives.

A major part of the work plan of the Forest Monitoring Division focuses on monitoring the chain of custody of forest produce which includes managing the log tracking system and associated documentation involved with wood processing. The Quality Control and Licensing Unit of the Forest Monitoring Division (FMD) currently implements this function in relation to forest industry (wood processing) and this unit also oversees the operation of a National system for local and export trade of lumber.

The **Forest Producers Association (FPA)** is an NGO formed in 1944 by the forest industry to promote and develop the interests of the forest sector and to collaborate on activities such as training, information sharing, public awareness and institutional development. Membership is open to all individuals or companies engaged in any aspect of the business of forest products and it currently has over 60 members. The Association does not receive a subvention from any source and relies on membership fees to conduct its business. This being so, the only paid members of staff it employs are an executive director and a personal secretary. The association is a member of the Private Sector Commission.

The **Guyana Manufacturing & Services Association Ltd (GMSA)** was founded in 1963 as the Guyana Light Employers Association and re-registered in 1967 as the Guyana Manufacturers' Association. In 2005, the Association formally changed its name to the Guyana Manufacturing and Services Association Limited (GMSA) in recognition to the growing services sub-sector. GMSA has established itself as the organization recognized by private firms and Guyana's government as the body for consultation on matters regarding Guyana's manufacturing sector and more recently the country's growing services sub-sector. GMSA works

with sub-sector firms to help members find, or gain access to, new markets or to conduct research or feasibility studies which may advance members' businesses and/or the manufacturing industry as a whole. The sub-sector committees are: agro-processing; textiles and sewn goods; printing and packaging; construction and engineering; chemicals and pharmaceuticals; minerals and related industries; forestry and wood products; services.

The **Forest Products Development and Marketing Council (FPDMC)** was established in 2008 to provide market advisory services to the forest sector. The Council is currently being funded by the Government and is managed by a Board of Directors made up of private sector and Government representatives.

The **Forestry Training Centre Inc. (FTCI)** is a corporate entity that was established in 2003 to provide vocational training on Reduced Impact Logging (RIL). This centre is managed by a Board consisting of the GFC, FPA and the Tropical forest Foundation. The centre has since then broadened its focus to include training in forest inventory and forest management (implementing the CoP for Timber Harvesting), and is expecting to commence training in the subject areas relating to wood processing, specifically the recently established CoP for Wood Processing Operations (Sawmills and Lumberyards.

There are various gaps that have been identified for the establishment of an efficient and competitive wood processing sector in Guyana. These are summarised below:

- <u>Guyana Forestry Commission</u>: there is currently a gap that includes both capacity and coordination in relation to the implementation of the CoP for Wood Processing Operations (Sawmills and Lumberyards) within the wood processing sector. The GFC in the past years has been focusing on ensuring that forest operations are efficient and effective through the implementation of the CoP for Timber Harvesting. In keeping with its mandate, the GFC now seeks to extend its focus to ensure that the wood processing sector becomes more efficient and effective in facilitating and promoting sustainable development of Guyana's forest resources. The Project aims at address this gap.
- <u>Forest Producers Association and Guyana Manufacturers & Service Association:</u> these associations are the business entities or private sector representatives for the wood processing sector. Their focus is on maintaining a competitive business; however their main concern is the low skill level of personnel available to operate within the entities. They see unskilled persons operation within their operations as the main reason for their uncompetitiveness, followed by a lack of knowledge in relation to purchasing and utilization of wood. This Project aims at addressing these concerns.
- <u>Forest Products Development and Marketing Council</u>: this Agency currently experiences limitations in being able to provide comprehensive and detailed market advisory service to stakeholders. The absence of relevant standards and an effective system for inspection and certification of lumber makes it difficult to provide reliable and relevant market advisory service to the industry and other stakeholders. The Project aims to address this gap and facilitate easier market access and trade for Guyana's lumber.
- <u>Forestry Training Centre Inc. (FTCI)</u>: This institution was set up with the objective of ensuring that there is a cadre of skilled personnel available for companies operation throughout the forestry/wood processing sector. It has been able to create some impact in the area of forest management and is now looking to expand into the wood processing sector. This project provides the opportunity for this institution to establish the critical need for training and be recognised as the institution that will be providing the training for the future.
- The prevailing situation as it relates to Government policies and developmental focus detailed in the NFPS, NFP, LCDS and NCS. This project will have a tremendous impact on the strategies and goals in relation to wood processing highlighted in these documents.

2.1.2 Stakeholder analysis

The main stakeholder groups that will be involved in this project are: the GFC, FPDMC, FTCI, FPA, Sawmillers, Lumberyard operators, Builders/contractors, Value-added producers, Timber exporters, Forest concessioners, EPA and national entities such as the Ministry of Labour. These stakeholders will have varying levels of involvements which is largely informed by them being primary, secondary, or tertiary stakeholders.

The primary stakeholders are the GFC, Sawmillers, Lumberyard operators, Builder/Contractors, Value-added producers and Timber exporters. The lack of knowledge in relation to: the practices detailed in the CoP for Wood Processing Operations; the efficient use of wood in building and value-added operations; inadequate standards to guide the trade of lumber and an ineffective system for inspection and certification of lumber have been a challenge that has been expressed by this group of stakeholders. These concerns were identified during the execution of the GFC/ITTO project PD 513/08 (Rev.1 (I), titled "*Enhancing the capacity of the wood processing sector to improve efficiency and add value in Guyana*" and the recently completed EU Diagnostic Study of Guyana's forest monitoring and legality systems. As such, there has been an expressed willingness to participate in the project that is expected to result in the improvement of the wood processing sector.

The main secondary stakeholders and tertiary stakeholders are the FPA, FTCI, FPDMC, Forest Concessioners, EPA, Ministry of Labour and the Ministry of Finance. These groups currently face the challenge of limitation in the execution of their mandate as it relates to the wood processing sector and hence have also expressed their willingness to be a part of this project through several forums.

The table below presents a detailed breakdown of the various stakeholder groups and the characteristics, problems/interest/ needs, potentials and involvement in the project.

| Stakeholder Group | Characteristics | Problems, Needs, Interests | Potentials | Involvement in Project |
|--|-----------------------------|---|--|---------------------------|
| Primary Stakeholders | | | | |
| GFC | Regulatory agency | Capacity, resources and limitations in execution of mandate | Improved capacity and execution of mandate | Executing agency |
| Sawmillers Wood Unskilled operators and lack of knowledge of market requirements. | | Competent operators and established product requirements | Direct beneficiary | |
| Lumber storage Unskilled operators and operators & marketing lack of knowledge of market requirements. | | Competent operators and established product requirements | Direct beneficiary | |
| Builders, Contractors | | | Effective decisions and improved marketing | Direct beneficiary |
| Value-added producers | | | Effective decisions and improved marketing | Direct beneficiary |
| Timber Marketing Knowledge of wood exporters species, integrity of market | | Improved marketing | Direct beneficiary | |
| Secondary Stakeholders | | | 5 | |
| FPA and GMSA | Representative organisation | Being able to adequately represent its membership. | Opportunities for representation and information sharing | Supporting role |
| Forest concessioners | | | Improved marketing, increase market access | Indirect beneficiary |
| FPDMC | Industry advisory Body | limitations in execution of mandate Trade and Market advisory Service | Improved capacity and execution of mandate | Indirect Beneficiary |

| Stakeholder Group | Characteristics | Problems, Needs, Interests | Potentials | Involvement in Project |
|----------------------------|---------------------------|---|--|---------------------------|
| FTCI | Industry training body | limitations in execution of mandate of training | Improved capacity and execution of mandate | Indirect Beneficiary |
| Ministry of Labour, EPA | Regulatory agencies | Limitations in execution of mandate | Improved capacity and execution of mandate | Indirect Beneficiary |
| | | Tertiary Stakeholders | | |
| Ministry of Finance | Govt ministry | Need to increase revenue and facilitate development | Increase revenue and employment generation | Supporting role |

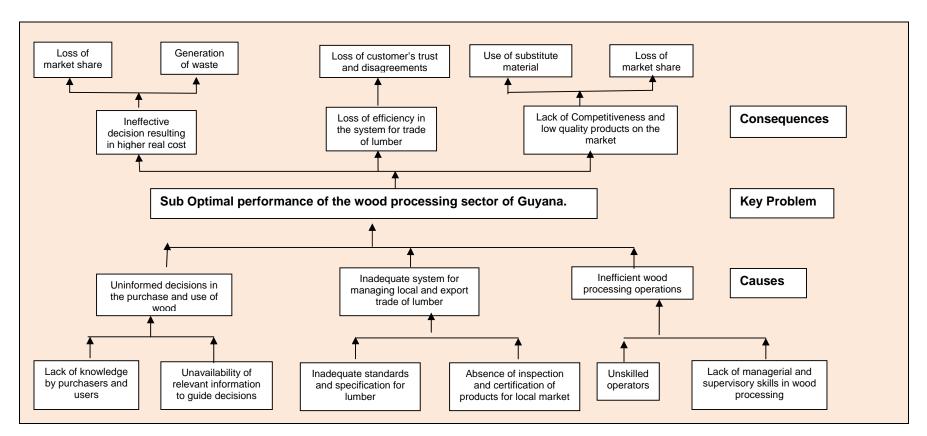
2.1.3 Problem analysis

The Government of Guyana has outlined in various policy documents its intention to pursue development in a low carbon pathway, and has determined that reducing log export, more processing of logs locally and promoting value-adding operations within the forestry sector are critical for ensuring sustainable management and utilization of Guyana's forest resources.

To address this change in focus, the wood processing sector will have to improve its competitiveness through improved recovery (average recovery rate in Guyana's sawmills ranges between 30 and 40% which compares to 60% in some tropical timber producing countries), reduce waste and improvement in the quality of products so as to meet market/customer requirement and at a reduced cost/competitive price.

The diagram below summarises the key problem that this proposal seeks to address is that of <u>Sub Optimal</u> <u>performance of the wood processing sector of Guyana</u> and identifies the main causes and the effect on the performance of the wood processing sector. In addressing the three key causes, it is expected that the wood processing sector of Guyana will be improved, and the expected outcome identified in 1.4 will be achieved. The causes and the consequences are as follows:

I. Inefficiency of wood processing operations: Efficiency level and competitiveness of processing operation is very low because of the skill level of both Mangers/Supervisors and Operators. This result in the generation of waste and high priced, low quality products being sold on the market. The consequence is a loss of market share and consumers opting to use substitute products instead of wood.

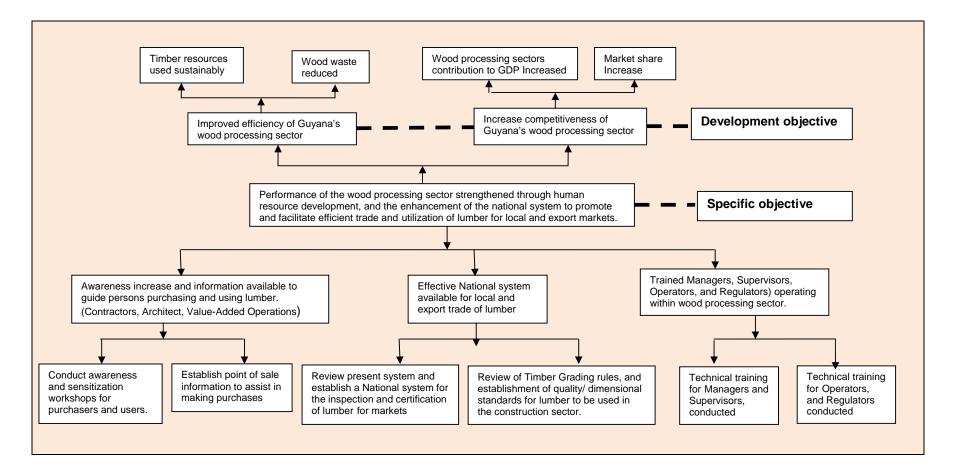


- II. Inadequate system for regulating local and export trade of lumber: The present system being used to conduct sale of wood products especially on the local market is inadequate for its does not provide assurance to the customer of quality, hence there is a loss of trust and disagreements. The standards and specifications to use in the sale of lumber are inadequate and are not being used, for there is no inspection and certification of lumber on the local market.
- III. Uninformed decisions when purchasing and using wood/lumber: When purchasing wood/lumber, customers are guided by past experiences or information handed down. Majority of the times, these decisions are not the most effective, hence it can result in higher real cost to the customer because of wastage generated during utilization and customer moving to substitute products because they believe that using wood will be more costly. The result is loss of market share.

2.1.4 Logical framework matrix

| Project Elements | Indicators | Means of Verification | Assumptions |
|---|---|---|--|
| DEVELOPMENT OBJECTIVE To contribute to the enhancement of the efficiency and competitiveness of Guyana's wood processing sector as a means for sustainable utilization of timber resources and national development | Increase in export revenue for the forest sector by 3%. Increase employment by 10% (200) persons within the sector following project implementation. | Guyana Forestry Commission – Forest Sector statistics. Bank of Guyana Statistics | Local and International demand for tropical lumber continues |
| SPECIFIC OBJECTIVE To strengthen the performance of the wood processing sector through building local capacity and enhancing national system that will promote and facilitate efficient trade and utilization of lumber for local and export markets. | Average primary processing recovery of lumber from logs throughout the sector is at least 50%. Increase in market share for construction lumber and lumber for value adding operations | Guyana Forestry Commission – Forest Sector statistics. Feedback information | Management/Owners will value and implement knowledge gained from training Stakeholders conform to the practices established in the National system for trade of lumber. |
| OUTPUTS1.Trained personnel operating within wood processing operations. (Management, Supervisors, Operators, and Regulators). | 200 persons (Management, Supervisors, Operators and Regulators for Sawmill and Lumberyards) from the sector trained | Training reports | Management, Supervisors, Operators and Regulators make themselves available for training. |
| 2. Report on a National system for local and export trade of lumber that is supported through a reviewed Guyana Timber Grading rules, and quality/dimensional standards for lumber to be used in the construction sector. | Report on a National system for local and export trade of lumber. <u>Quality/dimensional standards for</u> <u>lumber for the construction sector</u> | Completed and approved report Completed and approved standards. | • Stakeholders will agree on the National system and standards for trade of lumber |
| Increase awareness for persons using lumber (Contractors, Architect, Value-Added Operations) | 80 persons (Contractors, Architect, Value-Added Operations) sensitized on efficient and effective use of wood for purpose. Point of sale posters and purchasing information in all lumberyards | Workshops reports Availability of point of sale posters | • Contractors, Architect, Value-Added Operators make themselves available for workshops. |

2.2 Objectives



2.2.1 Development objective and impact indicators

To contribute to the enhancement of the efficiency and competitiveness of Guyana's wood processing sector as a means for sustainable utilization of timber resources and national development

Indicators:

- I. Increased in the conversion of logs to lumber by 10% within the sector
- II. Increase employment within the sector by 10% following project implementation.

2.2.2 Specific objective and outcome indicators

To strengthen the performance of the wood processing sector through building local capacity and enhancing national system that will promote and facilitate efficient trade and utilization of lumber for local and export markets.

Indicators:

- I. Mean average primary processing recovery of lumber from logs throughout the sector is at least 50%.
- II. Increase in market share for Guyana's forest products.

PART 3. DESCRIPTION OF PROJECT INTERVENTIONS

3.1 Outputs and activities 3.1.1 Outputs

<u>Output 1:</u> Trained personnel operating within wood processing operations. (Management, Supervisors, Operators, and Regulators).

Indicators:

I. At least 200 persons (Management, Supervisors, Operators and Regulators for Sawmill and Lumberyards) from the sector trained

<u>Output 2:</u> Report on a National system for local and export trade of lumber that is supported through a reviewed Guyana Timber Grading rules, and quality/dimensional standards for lumber to be used in the construction sector.

Indicators:

- I. Completed and approved report on a National system for local and export trade of lumber
- II. Quality/dimensional standards

<u>Output 3:</u> Awareness increase for persons using lumber (Contractors, Architect, Value-Added Operations)

Indicators:

- I. 80 persons (Contractors, Architect, Value-Added Operations) sensitized on efficient and effective use of wood for purpose.
- II. Point of sale posters and purchasing information.

3.1.2 Activities

For Output 1:

This output will be facilitated through the Capacity Building Strategic Plan for the sector and the Training manuals for Managers/Supervisors/Operators that were developed as deliverables of the previous ITTO project #: PD 513/08 (Rev.1 (I) implemented from April 2010 to April 2012. The Capacity Building Strategic Plan will draw on the training needs analysis completed under Project PD 513/08 Rev. 1 (I), that would have informed the development of training modules/manuals under this phase of the project as well. This will be used in the execution of actual training exercises.

1.1 Training for Managers/Supervisors

This activity will focus on training at least one person within the majority of sawmill operations who is involved in making decisions on a daily basis. The subject areas will be relevant areas of the CoP for Wood Processing (Sawmills and Lumberyards), costing, marketing, regulations, etc. Five (5) whole day training sessions will be held in different locations

1.2 <u>Training for sawmills operators</u>

This activity will focus on training at least one person within the majority of sawmill operations who is involved in operating the head-rigs within the operation. The subject areas will be relevant areas of the CoP for Wood Processing (Sawmills and Lumberyards), costing for poor practices, etc. Five (5) training sessions lasting for two days will be held in different locations. Time will be set aside for practical training during the sessions.

1.3 <u>Training for lumberyard operators</u>

This activity will focus on training at least one person within the majority of lumberyard operations who is involved in making decisions on a daily basis. The subject areas will be relevant areas of the CoP for Wood Processing (Sawmills and Lumberyards), cost for poor practices, regulations, etc. Five (5) whole day training sessions will be held in different locations. Time will be set aside for practical training during the sessions.

1.4 <u>Training for Regulators</u>

This activity will focus on training and discussion between personnel from the regulatory agencies (GFC, EPA. Ministry of Labour, Public Health Department) on relevant regulations in relation to sawmill and lumberyard operations. The subject areas will be relevant areas of the CoP for Wood Processing (Sawmills and Lumberyards) and laws/regulations. Three (3) training sessions lasting for two days will be held in different locations. Time will be set aside for practical training during the sessions.

For Output 2:

2.1 <u>Review of present system for trade of lumber</u>

This activity will focus on a review of the management and operation framework that can have an effect on trade and marketing of lumber, so as to make recommendation on improvements and changes to improve the effectiveness of the system, and promote more effective and efficient use of lumber. This activity will be conducted in close collaboration with the **Forest Monitoring Division (FMD)** of the GFC

2.2 <u>Report with recommendations for National system for the inspection and certification of</u> <u>lumber for local and export market.</u>

The consultant will prepare a draft report on a national system for the inspection and certification of lumber for local and export markets based on findings from the review process and requirements for trading lumber on export market. This activity will be conducted in close collaboration with the **Forest Monitoring Division** (FMD) of the GFC.

2.3 <u>Present finding to stakeholders for feedback</u>

Based on the findings from the review process of the present system for trade of lumber, three (3) workshops will be conducted with stakeholders to discuss the finding(s) and make recommendations for a national system for inspection and certification of lumber. Feedback from the sessions will be incorporated into the final report. This activity will be conducted in close collaboration with the **Forest Monitoring Division (FMD)** of the GFC.

For Output 3:

3.1 <u>Workshop for construction sector (Contractors, Architects, etc.)</u>,

Three (3) workshops will be conducted for potential users of wood from the building and construction sector to discuss quality/dimensional requirements/specification for lumber, efficient use of wood to reduce cost and increase profitability and the system for inspection and certification of lumber.

3.2 <u>Upgrade the Timber Grading System by reviewing the Timber Grading rules, and establishing</u> <u>guality/dimensional standards for lumber to be used in the construction sector. (Aligned to</u> <u>building code)</u>

The consultant will review the Guyana Timber Grading Rules and develop relevant quality/dimension standards for construction lumber in keeping with established requirements for use of wood in the building/construction sector and to promote fairness in sale of construction lumber. The requirements to be specified in these standards will be discussed at 3 workshops for stakeholders (activity 3.1) to obtain feedback and used to finalize these documents. This activity will be conducted in close collaboration with the Forest Monitoring Division (FMD) of the GFC.

3.3 <u>Workshops for value-added sector (Furniture, Windows, Doors, spindles, etc.)</u>

Three (3) workshops will be conducted for potential users of wood from the value-added sector to discuss quality/dimensional requirements/specification for lumber, efficient use of wood to reduce cost and increase profitability, and the system for inspection and certification of lumber.

3.4 <u>Workshop with Wood Processors to present and discuss feedback from construction and value-added sector.</u>

Three (3) workshops will be conducted for sawmills and lumberyards personnel to discuss quality/dimensional requirements/specification for lumber, efficient use of wood to reduce cost and increase profitability, and the system for inspection and certification of lumber.

3.5 Final report with recommendations on consultancy.

The consultant will prepare a report which will form the basis of further actions for the improvement of trade in lumber for local and export markets.

3.6 <u>Design and print posters to facilitate users making more informed decision when purchasing</u> <u>lumber. (For distribution to lumberyards)</u>

Based on all the knowledge derived in earlier activities this activity will concentrate on designing and printing three (3) Point of Sale Poster which will facilitate purchasers making more informed decisions when purchasing lumber. These posters will be distributed to entities involved in the sale of lumbers to be posted for public viewing and information.

3.2 Implementation approaches and methods

Important stakeholders input to the implementation of this project will be solicited through their participation at the technical committee level which would be charged with overseeing the implementation of project activities.

The project activities will involve collaboration between stakeholder groups directly or indirectly involved in the processing, use and trade of lumber in Guyana. Using a participatory approach, discussions will be hosted with interested groups at workshops and awareness sessions, to arrive at consensus decisions in relation to processing and trade of lumber and overall management of the wood processing sector.

Training will also be provided to key stakeholder groups to improve their competency in relation to the requirements of the CoP for Wood Processing and in accordance with the training manuals developed in the prior project. Training sessions will involve classroom sessions, practical demonstrations, reference information and stakeholder participation, targeting Mangers, Supervisors, Operators and Regulators of the wood processing sector.

Areas of focus for various groups are:

| a) | Managers/Supervisors: | Cost and profitability; marketing and production; quali- | ty; |
|----|-----------------------|--|------|
| | | records & document management; OS&H leg | jal, |
| | | environmental & social requirements; etc. | |
| b) | <u>Operators</u> | Properties of wood; Sawing patterns; OS&H quality a standards; equipment and maintenance; etc. | nd |

c) <u>Regulators</u> <u>Records & document management; OS&H; legal,</u> environmental & social reguirements; etc.

Discussion and awareness sessions will be conducted with purchasers/users of lumber to enable them to make more informed decisions. These sessions will be supplemented with additional information at point of sale in lumberyards.

The national system for inspection and certification will be developed by the consultant taking into consideration the present system in relation to documented process and implementation status, and identifying gaps when compared to other countries or effectiveness in achieving its overall goal. Based on findings, an improved system will be proposed to stakeholders during consultations/discussions to obtain feedback and the system will be finalized.

The major stakeholders to be involved in discussions during this process are:

| a) | <u>Forest Monitoring</u> <u>Division (GFC)</u> | Because of their involvement in monitoring the operations of sawmills and lumberyards and their regulatory function in facilitating the sale of lumber. They are responsible for inspection and grading of lumber. |
|----|---|---|
| b) | Architect/Contractors | Because of their involvement in using lumber in the construction sector. |
| c) | Sawmills/Lumberyards | Because of their involvement in production and sale of lumber for the construction sector. |
| d) | Ministry of Housing | Because of their involvement I the implementation of the Guyana Building Code within the construction sector. |

3.3 Work plan

| 0 | auto and Activitico | Deenensible Derty | | | | | | | | | | S | Sche | dule | (in n | nont | hs) | | | | | | | | | |
|----------|---|--|-----|--------|-----|-------|-------|--------|-------|------|---|----|------|------|-------|------|-----|----|----|----|----|----|----|----|----|----|
| Outp | outs and Activities | Responsible Party | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| : 1: Tra | ined personnel operating within wood p | processing operations. | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.0 | Contracting of Wood Processing and Training consultant. | Project Coordinator | | | | | - | | | | | | | | | | | | | | | | | | | |
| 1.1 | Training for Managers/Supervisors | Wood Processing and Training consultant | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.2 | Training for sawmills operators | Wood Processing and Training consultant | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.3 | Training for lumberyard operators | Wood Processing and Training consultant | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.4 | Training for GFC inspectors | Wood Processing and Training consultant | | | | | | | | | | | | | | | | | | | | | | | | |
| Out | out 2: National system established to im | prove efficiency in local t | rad | e of l | umb | er an | d fac | ilitat | e exp | ort. | | | | | | | | | | | | - | | | | |
| 2.0 | Contracting of Building/Construction Consultant | Project Coordinator | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.1 | Review of present system for trade of lumber | Building Construction Consultant | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | Report on National system for the inspection and certification of lumber for local and export market. | Building/Construction Consultant | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.3 | Present report finding to stakeholders for feedback | Building/Construction Consultant | | | | | | | | | | | | | | | | | | | | | | | | |

| Output | s and Activities | Responsible Party | | | | | | | | | | S | che | dule | (in n | nont | hs) | | | | | | | | | |
|---------------|---|---|-----|-------|-------|-------|------|-------|--------|------|---|----|-----|------|-------|------|-----|----|----|----|----|----|----|----|----|----|
| Calpu | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| <u>Output</u> | 3: Increase awareness for persons us | ing lumber (Contractors, A | Arc | hitec | t, Va | lue-A | ddec | l Ope | eratio | ons) | | | | | | | | | | | | | | | | |
| 3.0 | Contracting of Wood Technologist | Project Coordinator | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.1 | Workshop for construction sector (Contractors, Architects, etc.) | Wood Technologist | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.2 | Upgrade the Timber Grading System by reviewing the Timber Grading rules, and establishing quality/ dimensional standards for lumber to be used in the construction sector. (Aligned to building code) | Building/Construction Consultant | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.3 | Workshops for value-added sector (Furniture, Windows, Doors, spindles, etc.) | Wood Technologist | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.4 | Workshop with Wood Processors to present and discuss feedback from construction and value-added sector. | Wood Technologist | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.5 | Design and print posters to facilitate users making more informed decision when purchasing lumber. (For distribution to lumberyards) | Wood Technologist and Project coordinator | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.6 | Final report with recommendations on consultancy. | Wood Technologist | | | | | | | | | | | | | | | | | | | | | | | | |

3.4 <u>Budget</u> 3.4.1 <u>Master Budget Schedule</u>

| Outputs and | | Budget | | | | Unit | Source | | Year | | | Cost (US\$) |) |
|--------------|----------------------------------|--------------|-------------------------------|---------------|---------|---------------|----------|----|--------|--------|-------|----------------|-------|
| Activities | Description | Component | Budget Component | Quantity | Units | Costs US\$ | (I or E) | | Year 1 | Year 2 | ІТТО | Exec Agency | Total |
| Output 1: Tr | rained personnel operating withi | n wood proce | ssing operations. | | | | | | | | | | |
| | | | Project Personnel - Project | | Perso | | | | | | | | |
| | Project Coordination | 11.1 | Coordinator | 1 | n-Mth | 1,000 | (E) | Y1 | 1000 | | | 1000 | 1000 |
| | | | Project Personnel - Wood | | | | | | | | | | |
| | One Wood Processing and | | Processing and Training | | _ | | | | | | | | |
| | Training Consultant | 13.1 | Consultant | 8 | Days | 300 | (I) | Y1 | 2400 | | 2400 | | 2400 |
| 1.1 Training | Local Transport - Wood | | Duty Travel Local Transport - | | | | | | | | | | |
| for | Processing and Training | 22.4 | Wood Processing and | 450.05 | Tring | 20 | (5) | VA | 24.05 | | | 24.05 | 24.05 |
| Managers/ | Consultant Consumables Office | 33.1 | Training Consultant | <u>156.25</u> | Trips | <u>20</u> | (E) | Y1 | 3125 | | | 3125 | 3125 |
| Supervisors | Supplies - to support | | | | Event- | | | | | | | | |
| | Training workshops. | 50 | Consumables Office Supplies | 5 | Day | 2,500 | (1) | Y1 | 12500 | | 12500 | | 12500 |
| | | 00 | National Management Cost - | Ŭ | Day | 2,000 | (1) | | 12000 | | 12000 | | 12000 |
| | | | Executing Agency | | Activit | | | | | | | | |
| | Executing Agency Mgt Cost | 71 | Management Cost | 2 | y -Mth | 2,000 | (E) | Y1 | 4000 | | | 4000 | 4000 |
| | | | | | | | | | 23025 | | 14900 | 8125 | 23025 |
| | | | Project Personnel - Project | | Perso | | | | | | | | |
| | Project Coordination | 11.1 | Coordinator | 2 | n-Mth | 1,000 | (E) | Y1 | 2000 | | | 2000 | 2000 |
| | | | Project Personnel - Wood | | | | | | | | | | |
| | One Wood Processing and | | Processing and Training | | | | | | | | | | |
| | Training Consultant | 13.1 | Consultant | 15 | Days | 300 | (I) | Y1 | 4500 | | 4500 | | 4500 |
| 1.2 Training | Local Transport - Wood | | Duty Travel Local Transport - | | | | | | | | | | |
| for sawmills | Processing and Training | 00.4 | Wood Processing and | 0405 | Tuine | 20 | | MA | 0050 | | | 0050 | 0050 |
| operators | Consultant Consumables Office | 33.1 | Training Consultant | <u>312.5</u> | Trips | <u>20</u> | (E) | Y1 | 6250 | | | 6250 | 6250 |
| | Supplies - to support | | | | Event- | | | | | | | | |
| | Training workshops. | 50 | Consumables Office Supplies | 10 | Day | 2,500 | (1) | Y1 | 25000 | | 25000 | | 25000 |
| | | | National Management Cost - | 10 | Duy | 2,000 | \'/ | | 20000 | | 20000 | | 20000 |
| | | | Executing Agency | | Activit | | | | | | | | |
| | Executing Agency Mgt Cost | 71 | Management Cost | 1 | y -Mth | 2,000 | (E) | Y1 | 2000 | | | 2000 | 2000 |
| | | | | | | | | | 39750 | | 29500 | 10250 | 39750 |

| Outputs and | | Budget | | | | Source | | Year | | | Cost (US\$) | | |
|--------------------|--|-----------|--|---------------|----------|-----------------|------------------|-----------------|-------------------|--------|-------------|-------------------|-------------------|
| Activities | Description | Component | Budget Component | Quantity | Units | Costs US\$ | (I or E) | | Year 1 | Year 2 | ΙΤΤΟ | Exec Agency | Total |
| | | | Project Personnel - Project | | Perso | 4 000 | | | 4000 | | | 4000 | 4000 |
| | Project Coordination | 11.1 | Coordinator | 1 | n-Mth | 1,000 | (E) | Y1 | 1000 | | | 1000 | 1000 |
| | | | Project Personnel - Wood | | | | | | | | | | |
| 4 o T · · · | One Wood Processing and | 10.1 | Processing and Training | _ | D | 000 | <i>(</i>)) | | 0400 | | 04.00 | | 0400 |
| 1.3 Training | Training Consultant | 13.1 | Consultant | 7 | Days | 300 | (I) | Y1 | 2100 | | 2100 | | 2100 |
| for | Local Transport - Wood | | Duty Travel Local Transport - | | | | | | | | | | |
| lumberyard | Processing and Training | 00.4 | Wood Processing and | | - | 00 | | | 0405 | | | 0405 | 0405 |
| operators | Consultant | 33.1 | Training Consultant | <u>156.25</u> | Trips | <mark>20</mark> | <mark>(E)</mark> | <mark>Y1</mark> | <mark>3125</mark> | | | <mark>3125</mark> | <mark>3125</mark> |
| | Consumables Office | | | | F | | | | | | | | |
| | Supplies - to support | 50 | Canaumahlas Office Cumplice | _ | Event- | 0.500 | | VA | 40500 | | 40500 | | 40500 |
| | Training workshops. | 50 | Consumables Office Supplies | 5 | Day | 2,500 | (I) | Y1 | 12500 | | 12500 | | 12500 |
| | | | National Management Cost - | | A | | | | | | | | |
| | Evenuting Agency Mat Cost | 74 | Executing Agency | | Activit | 2 000 | (_) | VA | 2000 | | | 2000 | 2000 |
| | Executing Agency Mgt Cost | 71 | Management Cost | 1 | y -Mth | 2,000 | (E) | Y1 | 2000 20725 | | 14600 | 2000 6125 | 2000 |
| | | | Drain at Dara ann al Drain at | | Danaa | | | | 20725 | | 14000 | 0120 | <u>20725</u> |
| | Draiget Coordination | | Project Personnel - Project Coordinator | | Perso | 1 000 | | Y1 | 1000 | | | 1000 | 1000 |
| | Project Coordination | 11.1 | Project Personnel - Wood | 1 | n-Mth | 1,000 | (E) | Ϋ́Ι | 1000 | | | 1000 | 1000 |
| | One Wood Processing and | | | | | | | | | | | | |
| 1.4 Training | One Wood Processing and Training Consultant | 13.1 | Processing and Training Consultant | 10 | Dava | 300 | (1) | Y1 | 3000 | | 3000 | | 3000 |
| for | | 13.1 | Duty Travel Local Transport - | 10 | Days | 300 | (1) | TI | 3000 | | 3000 | | 3000 |
| regulators | Local Transport - Wood | | Wood Processing and | | | | | | | | | | |
| (GFC, EPA, | Technologist | 33.1 | Training Consultant | 187.5 | Trips | 20 | (E) | Y1 | 3750 | | | 3750 | 3750 |
| Labor, | Consumables Office | 55.1 | | 107.5 | пра | 20 | (Ľ) | | 5750 | | | 5750 | 5750 |
| inspectors) | Supplies - to support | | | | Event- | | | | | | | | |
| | Training workshops. | 50 | Consumables Office Supplies | 6 | Day | 2,500 | (I) | Y1 | 15000 | | 15000 | | 15000 |
| | | | National Management Cost - | 0 | Duy | 2,000 | (1) | | 10000 | | 10000 | | 10000 |
| | | | Executing Agency | | Activit | | | | | | | | |
| | Executing Agency Mgt Cost | 71 | Management Cost | 1 | y -Mth | 2,000 | (E) | Y1 | 2000 | | | 2000 | 2000 |
| | | | | | , | _, | (_/ | | 24750 | | 18000 | 6750 | 24750 |

| Outputs and | | Budget | | | | Unit | Source | | Year | | | Cost (US\$) | |
|---|--|-----------------|---|----------------|-------------------|---------------|----------|----------------|--------|--------|-------|----------------|-------|
| Activities | Description | Component | Budget Component | Quantity | Units | Costs US\$ | (I or E) | | Year 1 | Year 2 | ΙΤΤΟ | Exec Agency | Total |
| Output 2: N | ational system established for lo | cal trade of lu | | 1 | r | T | 1 | | | | | | |
| 2.1 Review | Project Coordination | 11.1 | Project Personnel - Project Coordinator | 2 | Perso n-Mth | 1,000 | (E) | Y1 | 2000 | | | 2000 | 2000 |
| of present system for trade of | One International Building/Construction | | Project Personnel - International Building/Construction | | | | | | | | | | |
| lumber | Consultant | 14.1 | Consultant | <u>13.7143</u> | Days | <u>350</u> | (I) | Y1 | 4800 | | 4800 | | 4800 |
| | Daily Subsistence Allowance for International Consultant | 31.2 | Duty Travel - Daily Subsistence Allowance | <u>16</u> | Days | <u>87.5</u> | (I) | Y1 | 1400 | | 1400 | | 1400 |
| | Flight for International Travel for International Consultant | 32.2 | Duty Travel - International Travel | 1 | Flight | 3,000 | (1) | Y1 | 3000 | | 3000 | | 3000 |
| | Local Transport - International Consultant | 33.2 | Duty Travel Local Transport - International Consultant | <u>50</u> | Trips | 20 | (I) | Y1 | 1000 | | 1000 | | 1000 |
| | Consumables Office Supplies - to support meetings, consultations | 50 | Consumables Office Supplies | 10 | Event- Dav | 240 | (1) | Y1 | 2400 | | 2400 | | 2400 |
| | Executing Agency Mgt Cost | 71 | National Management Cost - Executing Agency Management Cost | 2 | Activit y -Mth | 2,000 | (E) | Y1 | 4000 | | | 4000 | 4000 |
| | | | | | | | | | 18600 | | 12600 | 6000 | 18600 |
| 2.2 Report on a | Project Coordination | 11.1 | Project Personnel - Project Coordinator | 2 | Perso n-Mth | 1,000 | (E) | Y2 | | 2000 | | 2000 | 2000 |
| National system for the | One International Building/Construction Consultant | 14.1 | Project Personnel - International Building/Construction Consultant | 13.7143 | Days | 350 | (I) | Y1 & Y2 | 2400 | 2400 | 4800 | | 4800 |
| inspection and certification of lumber | Daily Subsistence Allowance for International Consultant | 31.2 | Duty Travel - Daily Subsistence Allowance | 16 | Days | 87.5 | (1) | Y1 & Y2 | 700 | 700 | 1400 | | 1400 |
| for local and export market. | Flight for International Travel for International Consultant | 32.2 | Duty Travel - International Travel | 1 | Flight | 3,000 | (I) | YY1 & Y2 | 3000 | | 3000 | | 3000 |
| | Local Transport - International Consultant | 33.2 | Duty Travel Local Transport - International Consultant | <u>50</u> | Trips | <u>20</u> | (I) | Y1 & Y2 | 500 | 500 | 1000 | | 1000 |

| Outputs and | | Budget | | | | Unit | Source | | Year | | | Cost (US\$) |) |
|------------------------------------|--|-----------|---|------------|-------------------|---------------|----------|---------|--------|--------|-------|----------------|--------------|
| Activities | Description | Component | Budget Component | Quantity | Units | Costs US\$ | (I or E) | | Year 1 | Year 2 | ΙΤΤΟ | Exec Agency | Total |
| | Consumables Office Supplies - to support meetings, workshops, | | | | Event- | | | Y1 & | | | | | |
| | consultations | 50 | Consumables Office Supplies | 10 | Day | 300 | (I) | Y2 | 1500 | 1500 | 3000 | | 3000 |
| | Executing Agency Mgt Cost | 71 | National Management Cost - Executing Agency Management Cost | 2 | Activit y -Mth | 2,000 | (E) | Y2 | | 4000 | | 4000 | 4000 |
| | | | | _ | <i>y</i> | _, | (=) | | 8100 | 11100 | 13200 | 6000 | 19200 |
| | Project Coordination | 11.1 | Project Personnel - Project Coordinator | 1 | Perso n-Mth | 1,000 | (E) | Y1 | 1000 | | 13200 | 1000 | 1000 |
| 2.3 Present | One International Building/Construction Consultant | 14.1 | Project Personnel - International Building/Construction Consultant | 6.8572 | Days | <u>350</u> | (1) | Y1 | 2400 | | 2400 | | 2400 |
| finding to stakeholder s for | Daily Subsistence Allowance for International Consultant | 31.2 | Duty Travel - Daily Subsistence Allowance | 8 | Days | 87.5 | | Y1 | 700 | | 700 | | 700 |
| feedback | Local Transport - International Consultant | 33.2 | Duty Travel Local Transport - International Consultant | <u>100</u> | Trips | <u>20</u> | (I) | Y1 | 2000 | | 2000 | | 2000 |
| | Consumables Office Supplies - to support meetings, workshops, consultations | 50 | Consumables Office Supplies | 3 | Event- Day | 2,500 | (I) | Y1 | 7500 | | 7500 | | 7500 |
| | Executing Agency Mgt Cost | 71 | National Management Cost - Executing Agency Management Cost | 1 | Activit y -Mth | 2,000 | (E) | Y1 | 2000 | | | 2000 | 2000 |
| | | | | | | | | | 15600 | | 12600 | 3000 | <u>15600</u> |

| Outputs and | _ | Budget | | | | Unit | Source | | Year | | | Cost (US\$) | |
|----------------------------------|---------------------------------|---------------|-----------------------------------|--------------------|------------|---------------|-----------|------|--------|--------|-------|----------------|--------------|
| Activities | Description | Component | Budget Component | Quantity | Units | Costs US\$ | (I or E) | | Year 1 | Year 2 | ІТТО | Exec Agency | Total |
| Output 3: In | crease awareness for persons u | sing lumber (| Contractors, Architect, Value-Add | ed Operatio | | 1 | T | | | | | | |
| 3.1 | | | Project Personnel - Project | | Perso | | <i></i> . | | | | | | |
| Workshops | Project Coordination | 11.1 | Coordinator | 1 | n-Mth | 1,000 | (E) | Y1 | 1000 | | | 1000 | 1000 |
| for | _ | | Project Personnel - Wood | | _ | | | | | | | | |
| constructio | One Wood Technologist | 13.2 | Technologist | 5 | Days | 300 | (I) | Y1 | 1500 | | 1500 | | 1500 |
| n sector | Local Transport - Wood | a a 4 | Duty Travel Local Transport - | | - . | | (=) | | | | | | |
| (Contractor | Technologist | 33.1 | Wood Technologist | <mark>93.75</mark> | Trips | <u>20</u> | (E) | Y1 | 1875 | | | 1875 | 1875 |
| S, | Consumables Office | | | | | | | | | | | | |
| Architects, | Supplies - to support | | | | Event- | | (1) | | | | | | |
| etc.) | Training workshops. | 50 | Consumables Office Supplies | 3 | Day | 2,500 | (I) | Y1 | 7500 | | 7500 | | 7500 |
| , | | | National Management Cost - | | | | | | | | | | |
| | | | Executing Agency | | Activit | 0.000 | | | 0000 | | | | |
| | Executing Agency Mgt Cost | 71 | Management Cost | 1 | y -Mth | 2,000 | (E) | Y1 | 2000 | | | 2000 | 2000 |
| | | | | | | | | | 13875 | | 9000 | 4875 | <u>13875</u> |
| 3.2 | | | Project Personnel - Project | | Perso | | <i></i> . | Y1 | | | | | |
| Upgrade | Project Coordination | 11.1 | Coordinator | 3 | n-Mth | 1,000 | (E) | &Y2 | 1,000 | 2000 | | 3000 | 3000 |
| the Timber | | | Project Personnel - | | | | | | | | | | |
| Grading | One International | | International | | | | | | | | | | |
| System by | Building/Construction | | Building/Construction | | | | | Y1 & | | | | | |
| reviewing | Consultant | 14.1 | Consultant | <u>34.2857</u> | Days | <u>350</u> | (I) | Y2 | 6000 | 6000 | 12000 | | 12000 |
| the Timber | Daily Subsistence Allowance | | Duty Travel - Daily Subsistence | | | | | Y1 & | | | | | |
| Grading | for International Consultant | 31.2 | Allowance | 40 | Davs | 87.5 | (1) | Y2 | 1800 | 1700 | 3500 | | 3500 |
| rules, and | | 01.2 | | | Duyo | 01.0 | (1) | 12 | 1000 | 1700 | 0000 | | 0000 |
| <u>establishin</u> g quality/ | Flight for International Travel | | Duty Travel - International | | | | | | | | | | |
| dimensiona | for International Consultant | 32.2 | Travel | 1 | Flight | 3,000 | (I) | Y2 | | 3000 | 3000 | | 3000 |
| l standards | Local Transport - International | | Duty Travel Local Transport - | | | | | Y1 & | | | | | |
| for lumber | Consultant | 33.2 | International Consultant | 50 | Trips | 20 | (I) | Y2 | 500 | 500 | 1000 | | 1000 |
| to be used | Consumables Office Supplies | | | | | | | | | | | | |
| in the | - to support meetings, | | | | Event- | | | Y1 & | | | | | |
| constructio | workshops, consultations | 50 | Consumables Office Supplies | 25 | Day | 200 | (I) | Y2 | 2000 | 3000 | 5000 | | 5000 |
| n sector. | | | | | | | | | | | | | |
| (Aligned to | | | National Management Cost - | | | | | | | | | | |
| building | | | Executing Agency Management | | Activit | | | | | | | | |
| <u>code)</u> | Executing Agency Mgt Cost | 71 | Cost | 3 | y -Mth | 2,000 | (E) | Y2 | | 6000 | | 6000 | 6000 |
| | | | | | | | | | 11,300 | 22200 | 24500 | 9000 | <u>33500</u> |

| Outputs and | | Budget | | | | Unit | Source | | Year | | | Cost (US\$) | |
|--|--|-------------------|---|--------------|-------------------|---------------|------------------|-----------------|-------------------|--------------------|-------------------|----------------|-------------------|
| Activities | Description | Component | Budget Component | Quantity | Units | Costs US\$ | (I or E) | | Year 1 | Year 2 | ΙΤΤΟ | Exec Agency | Total |
| 3.3 | Project Coordination | 11.1 | Project Personnel - Project Coordinator | 2 | Perso n-Mth | 2,000 | (E) | Y1 | 2,000 | | | 2,000 | 2,000 |
| Workshops for value- added | One Wood Technologist | <u>13.2</u> | Project Personnel - Wood Technologist | 5 | Days | 300 | (I) | Y1 | 1500 | | 1500 | | 1500 |
| sector (Furniture. | Local Transport - Wood Technologist | <u>33.1</u> | Duty Travel Local Transport - Wood Technologist | <u>93.75</u> | Trips | <u>20</u> | (E) | Y1 | 1875 | | | 1875 | 1875 |
| Windows, Doors, spindles, | Consumables Office Supplies - to support Training workshops. | 50 | Consumables Office Supplies | 3 | Event- Day | 2,500 | (1) | Y1 | 7500 | | 7500 | | 7500 |
| etc.) | Executing Agency Mgt Cost | 71 | National Management Cost - Executing Agency Management Cost | 2 | Activit y -Mth | 2,000 | (E) | Y1 | 4000 | | | 4000 | 4000 |
| | | | <u> </u> | | | | | | 16,875 | | 9000 | 7875 | 16,875 |
| 3.4 | Project Coordination | 11.1 | Project Personnel - Project Coordinator | 2 | Perso n-Day | 2,000 | (E) | Y2 | | 2,000 | | 2,000 | 2,000 |
| Workshop with Wood Processors | One Wood Technologist | 13.2 | Project Personnel - Wood Technologist | 5 | Days | 300 | (I) | Y2 | | 1500 | 1500 | | 1500 |
| to present and discuss | Duty Travel – International Consultant | <mark>33.2</mark> | Duty Travel – International Consultant | <u>93.75</u> | Trips | <u>20</u> | <mark>(I)</mark> | <mark>Y1</mark> | <mark>1875</mark> | | <mark>1875</mark> | | <mark>1875</mark> |
| feedback from constructio n and | Consumables Office Supplies - to support Training workshops. | 50 | Consumables Office Supplies | 3 | Event- Day | 2,500 | (I) | Y2 | | 7500 | 7500 | | 7500 |
| value- added sector. | Executing Agency Mgt Cost | 71 | National Management Cost - Executing Agency Management Cost | 2 | Activit y -Mth | 2,000 | (E) | Y2 | | 4000 | | 4000 | 4000 |
| | | | | | | | | | <mark>1875</mark> | <mark>15000</mark> | 10875 | 6000 | <u>16,875</u> |

| Outputs and | | Budget | | | Unit | Source | | Year | | | Cost (US\$) | | |
|------------------|------------------------------------|-----------|-------------------------------|--------------|---------------|---------------|--------------|----------------------|---------------------|----------------------|---------------------|----------------------|--------------|
| Activities | Description | Component | Budget Component | Quantity | Units | Costs US\$ | (I or E) | | Year 1 | Year 2 | ІТТО | Exec Agency | Total |
| 3.5 Design | | | Project Personnel - Project | | Perso | | | | | | | | |
| and print | Project Coordination | 11.1 | Coordinator | 4 | n-Mth | 1,000 | (E) | Y2 | | 4000 | | 4000 | 4000 |
| posters to | | | Project Personnel - Wood | | _ | | | | | | | | |
| facilitate | One Wood Technologist | 13.2 | Technologist | 5 | Days | 300 | (I) | Y2 | | 1500 | 1500 | | 1500 |
| users | Local Transport - Wood | | Duty Travel Local Transport - | | _ . | | (-) | | | ~~ | | | |
| making | Technologist | 33.1 | Wood Technologist | <u>31.25</u> | Trips | <u>20</u> | (E) | Y2 | | <mark>625</mark> | | 625 | 625 |
| more | Consumables Office | | | | Destan | | | | | | | | |
| informed | Supplies - to support design | 50 | Canaumahlas Office Supplies | | Poster | 20 | <i>(</i>) | Vo | | 10000 | 10000 | | 10000 |
| decision | and printing of posters | 50 | Consumables Office Supplies | 600 | S | 20 | (I) | Y2 | | 12000 | 12000 | | 12000 |
| when | | | | | | | | | | | | | |
| purchasing | | | | | | | | | | | | | |
| lumber. | | | | | | | | | | | | | |
| (For | | | | | | | | | | | | | |
| distribution | | | National Management Cost - | | | | | | | | | | |
| to lumberyard | | | Executing Agency | | Activit | | | | | | | | |
| s) | Executing Agency Mgt Cost | 71 | Management Cost | 4 | y -Mth | 2,000 | (E) | Y2 | | 8000 | | 8000 | 8000 |
| - 0) | Excerting rigeries higt ever | , , | Management eeet | | y ivitii | 2,000 | (=) | 12 | | | | | |
| | | | | | | | | | | 26125 | 13500 | 12625 | <u>26125</u> |
| 3.6 Prepare | | | Project Personnel - Project | | Perso | | | | | | | | |
| final report | Project Coordination | 11.1 | Coordinator | 2 | n-Mth | 1,000 | (E) | Y2 | | 2000 | | 2000 | 2000 |
| with | | | Project Personnel - Wood | | _ | | | | | | | | |
| recommend | One Wood Technologist | 13.2 | Technologist | 10 | Days | 300 | (I) | Y2 | | 3000 | 3000 | | 3000 |
| ations on | Local Transport - Wood | 00.4 | Duty Travel Local Transport - | | T | | | NO | | 4000 | | 1000 | 4000 |
| consultancy | Technologist Consumables Office | 33.1 | Wood Technologist | <u>50</u> | Trips | <u>20</u> | (E) | Y2 | | 1000 | | 1000 | 1000 |
| | | 50 | Consumables Office Supplies | 10 | Event- Dav | 300 | (1) | Y2 | | 3000 | 3000 | | 3000 |
| | Supplies - to support report. | 50 | National Management Cost - | 10 | Day | 300 | (1) | 12 | | 3000 | 3000 | | 3000 |
| | | | Executing Agency | | Activit | | | | | | | | |
| | Executing Agency Mgt Cost | 71 | Management Cost | 2 | y -Mth | 2,000 | (E) | Y2 | | 4000 | | 4000 | 4000 |
| | | | | 2 | y ivitii | 2,000 | (⊏) | 12 | | 13000 | 6000 | 7000 | 13000 |
| | | | · | | | | | | | | | | |
| | TOTAL | | | | | | | <mark>194,475</mark> | <mark>87,425</mark> | <mark>188,275</mark> | <mark>93,625</mark> | <mark>281,900</mark> | |

3.4.2 Consolidated Budget by Component

| | Budget Components | Input/ Description | Unit Cost (US\$) | TOTAL (US\$) | YEAR 1 (US\$) | YEAR 2 (US\$) |
|------------|--|---------------------------|---------------------|----------------------|---------------------|--------------------|
| 10. | Project Personnel | | | | | |
| 11.1. | Project Coordinator | 24 months | 1000 | 24,000 | 12,000 | 12,000 |
| 13. | National Consultants | | | | | |
| | National Wood Processing and Training Consultant | 40 Days | 300 | 12,000 | 12,000 | |
| 13.2. | National Wood Technologist | 30 Days | 300 | 9,000 | 3,000 | 6,000 |
| 14.1. | International Building/Construction Consultant | <u>68.57 Days</u> | <u>350</u> | 24,000 | <u>15,600</u> | <u>8,400</u> |
| 19. | Component Total | | | 69,000 | 42,600 | 26,400 |
| 30. | Duty Travel | | | | | |
| 31. | Daily Subsistence Allowance | | | | | |
| 31.2 | International Consultant | <u>80 Days</u> | <u>87.5</u> | 7,000 | 4,600 | 2,400 |
| 32. | International Travel | | | | | |
| 32.2 | International Consultant | 3 flights | 3,000 | 9,000 | 6,000 | 3,000 |
| 33. | Local Transport Costs | | | | | |
| 33.1 | National Consultants | <u>1081.25</u> trips | <u>20</u> | <u>21,625</u> | <u>20,000</u> | <mark>1,625</mark> |
| 33.2 | International Consultant | <mark>343.75 trips</mark> | <u>20</u> | <u>6,875</u> | <u>5,875</u> | 1,000 |
| 39. | Component Total | | | 44,500 | <mark>36,475</mark> | <mark>8,025</mark> |
| 50. | Consumable Items | | | | | |
| 51. | Raw materials | 38 | 2,000 | 76,000 | 60,000 | 16,000 |
| 54. | Office Supplies | 44.4 | 1,000 | 44,400 | 33,400 | 11,000 |
| 59. | Component Total | | | 120,400 | 93,400 | 27,000 |
| 60. | Miscellaneous | | | | | |
| 62. | Audit Cost | 1 | 5,000 | 5,000 | | 5,000 |
| 69. | Component Total | | | 5,000 | | 5,000 |
| 70. | National Management Costs | | | | | |
| 71. | Executing Agency Management Costs | 24 months | <u>2,000</u> | <u>48,000</u> | <u>24,000</u> | <u>24,000</u> |
| 79. | Component Total | | | <u>48,000</u> | <u>24,000</u> | <u>24,000</u> |
| SUB | TOTAL | | | <u>286,900</u> | <u>196,475</u> | <u>90,425</u> |
| 80. | Project Monitoring and Administration | | | | | |
| 81. | ITTO Monitoring & Review Costs | | | 20,000 | | |
| 82. | ITTO Evaluation Costs | | | 15,000 | | |
| <u>83.</u> | ITTO Program Support Cost (12% of Funds Requested from ITTO) | | | <mark>26,793</mark> | | |
| 90 | Component Total | | | | | |
| 89. | | | | 61,793 | | |
| GRA | ND TOTAL | | | <mark>348,693</mark> | | |

| | Budget Components | Input/ Description | Unit Cost (US\$) | TOTAL (US\$) | YEAR 1 (US\$) | YEAR 2 (US\$) |
|------------|--|-----------------------|---------------------|----------------------|----------------------|---------------------|
| 10. | Project Personnel | | | | | |
| 13. | National Consultants | | | | | |
| | National Wood Processing and Training Consultant | 40 days | 300 | 12,000 | 12,000 | |
| 13.2. | National Wood Technologist | 30 days | 300 | 9,000 | 3,000 | 6,000 |
| 14.1. | International Building/Construction Consultant | 68.57 days | 350 | 24,000 | 15,600 | 8,400 |
| 19. | Component Total | | | 45,000 | 30,600 | 14,400 |
| 30. | Duty Travel | | | | | |
| 31. | Daily Subsistence Allowance | | | | | |
| 31.2 | International Consultant | <u>80 days</u> | <u>87.5</u> | 7,000 | <u>4,600</u> | <u>2,400</u> |
| 32. | International Travel | | | | | |
| 32.2 | International Consultant | 3 Flights | 3,000 | 9,000 | 6,000 | 3,000 |
| 33. | Local Transport Costs | | | | | |
| 33.2 | International Consultant | 343.75 trips | <mark>20</mark> | <mark>6,875</mark> | <mark>5,875</mark> | <mark>1,000</mark> |
| 39. | Component Total | | | <mark>22,875</mark> | <mark>16,475</mark> | <mark>6,400</mark> |
| 50. | Consumable Items | | | | | |
| 51. | Raw materials | 38 | 2,000 | 76,000 | 60,000 | 16,000 |
| 54. | Office Supplies | 44.4 | 1,000 | 44,400 | 33,400 | 11,000 |
| 59. | Component Total | | | 120,400 | 93,400 | 27,000 |
| | SUBTOTA | L 1 | | <mark>188,275</mark> | <mark>140,475</mark> | <mark>47,800</mark> |
| 80. | Project Monitoring and Administration | | | | | |
| 81. | ITTO Monitoring & Review Costs | | | 20,000 | | |
| 82. | ITTO Evaluation Costs | | | 15,000 | | |
| | Subtotal | 2 | | <mark>223,275</mark> | | |
| <u>83.</u> | ITTO Program Support Cost (12% of Funds Requested from ITTO) | _ | | <mark>26,793</mark> | | |
| 89. | Component Total | | - | 61,793 | | |
| | GRAND TO | | • | 250,068 | | |

3.4.3 ITTO Budget by Component

| | Budget Components | Input/ Description | Unit Cost (US\$) | TOTAL (US\$) | YEAR 1 (US\$) | YEAR 2 (US\$) |
|-------|--------------------------------------|--------------------------------|---------------------|---------------------|---------------------|---------------------|
| 10. | Project Personnel | | | | | |
| 11.1. | Project Coordinator | 24 months | <u>1000</u> | <u>24,000</u> | <u>12,000</u> | <u>12,000</u> |
| 19. | Component Total | | | <u>24,000</u> | 12,000 | 12,000 |
| 30. | Duty Travel | | | | | |
| 33. | Local Transport Costs | | | | | |
| 33.1 | National Consultants | <u>1081.25</u> <u>trips</u> | <u>20</u> | <mark>21,625</mark> | <mark>20,000</mark> | <mark>1,625</mark> |
| 39. | Component Total | | | <mark>21,625</mark> | <mark>20,000</mark> | <mark>1,625</mark> |
| 60. | Miscellaneous | | | | | |
| 62. | Audit Cost | 1 | 5,000 | 5,000 | | 5,000 |
| 69. | Component Total | | | 5,000 | | 5,000 |
| 70. | National Management Costs | | | | | |
| 71. | Executing Agency Management Costs | 24 months | <u>2,000</u> | <u>48,000</u> | <u>24,000</u> | <u>24,000</u> |
| 79. | Component Total | | | <u>48,000</u> | <u>24,000</u> | <u>24,000</u> |
| SUB | TOTAL | | | <mark>98,625</mark> | <mark>56,000</mark> | <mark>42,625</mark> |
| | uting Agency/Host ernment Cost | | | <u>98,625</u> | <u>56,000</u> | <mark>42,625</mark> |

3.4.4 Executing Agency Budget by Component

Materialising the Contributions of Other Partners to the Project (Private Sector)

The contribution of the other partners will include that of the private sector. This will be realised through the following means that will be through in kind contribution:

- 1. <u>Dissemination of Information on Outputs of the Project including the Timber Grading system,</u> <u>training workshop, etc. This will be materialised through at least 5 session held with</u> <u>stakeholder constituency groups.</u>
- 2. <u>Participation in training sessions, meetings, workshops and other engagements through the project</u>. This will be materialised through the involvement of over 100 private sector participants throughout the project.
- 3. Use of a Private Sector forest operation facility to be used as site location for demonstration and training.
- 4. <u>Providing technical review and feedback mechanism on main outputs of the project including</u> <u>Timber Grading Rules Book, Reports on training, and meeting summaries.</u>

Budget allocation for major activities

The following table summarize budget allocation for project major activities: i.e. Skills training, Establishing national system for local trade of lumber, Awareness and sensitization workshops for users of lumber and Point of sale information.

| Activities | <u>Budget</u> |
|---|----------------|
| Skills training | <u>108,250</u> |
| Establishing national system for local trade of lumber | <u>86,900</u> |
| Awareness and sensitization workshops for users of lumber | <u>60,625</u> |
| Point of sale information | <u>26,125</u> |
| Total | 281,900 |

Breakdown Table of Raw Materials and Office Supplies

Raw Materials

The ITTO budget for this sub head is US\$ 76,000. Raw Materials comprise of venue rental, rental of facilities for the meetings and workshops such as computer and projector, microphone system, chairs, tables and food and accommodation for participants since many sessions will be out of central town accommodation is required, water, meals and snacks. 38 such sessions will be conducted over the project period.

Venue rental and facilities rental budget are required to execute the training sessions. Each session will be conducted at a particular venue which attracts a cost and also a number a small equipment are required to be rented to execute the sessions, a cost is attached for these small equipment and accessories to the venue such as furniture, computer, projector, micro phone system etc. These are important to enable the successful conduct of the training sessions and hence successful completion of the project outputs.

| Raw Materials Sub Head | Input/Description | Unit Cost Approx. (US\$) | Total Cost (US\$) |
|----------------------------|-------------------|--------------------------|-------------------|
| | | | |
| Venue Rental | 38 Sessions | 200 | 7,600 |
| Facilities Rental | 38 Sessions | 600 | 22,800 |
| Food & Accommodation | 38 Sessions | 800 | 22,800 |
| Subsistence, Snacks, Water | 38 Sessions | 300 | 22,800 |
| Total (US\$) | | | 76,000 |

Office Supplies

The ITTO budget for this sub head is US\$ 44,400. Office supplies comprise of stationery and office supplies, photocopying, printing and publication, binding, workshop packages for all the sessions planned and designing and printing posters for point of sale. 200 copies of 3 different posters will be done and distributed to all lumberyards.

| Office Supplies Sub Head | Input/Description | Unit Cost Approx. (US\$) | Total Cost (US\$) |
|--|-------------------|--------------------------|-------------------|
| | | | |
| Stationery & Office Supplies | 2000 Units | 10 | 20,000 |
| Workshop Packages (Printing, Binding & Copying) | 1240 Units | 10 | 12,400 |
| Designing and printing of poster for point of sale | 600 units | 20 | 12,000 |
| Total (US\$) | | | 44,400 |

3.5 <u>Assumptions, risks, sustainability</u> 3.5.1 <u>Assumptions and risks</u>

The following are the risks, proposed mitigation measures and assumptions.

Risk 1: Decline in demand for Guyana's lumber on local and export market.

<u>Mitigation Measures</u>: The Guyana Forestry Commission will continue to work with the key sector agencies to build and facilitate market information and market access for and between local producers/manufacturers and buyers/users.

Assumption 1: International demand for tropical lumber continues.

The demand for legally verified tropical lumber will continue to strengthen because of their unique and valued characteristics and higher prices will support improvement in quality of products.

Assumption 2: Local demand for tropical lumber continues.

Increased efficiency within the wood processing sector coupled with better knowledge about the use of wood will result in improved quality at a competitive price for lumber that can compete with substitutes for use on the local market.

<u>Risk 2: Personnel whom have been trained discontinue working within the sector or are not allowed</u> to implement knowledge gained in operating.

<u>Mitigation Measures</u>: The management of wood processing operations would be provided with training so that they are better able to understand what are the requirements for an efficient operation, and the value of skilled operators in such an operation.

<u>Assumption 1:</u> Management/Owner/Operators will value and implement knowledge gained from training.

Management/Owner understands the value of trained operator/personnel and compensates them adequately so that they continue to work with the company, and allows the personnel/operator to implement knowledge gained.

<u>Risk 3: Stakeholders do not accept and conform to standards/practices established in the National</u> system for trade of lumber.

<u>Mitigation Measures</u>: The stakeholders and their representative organisation will be involved from the outset of the project and during every activity in the implementation phase, so that there is greater ownership of the objectives and results.

Assumption 1: Greater awareness would have impacted on their decision making process

The active involvement of representative organizations at the management level of the project, and the individual stakeholders in the activities will result in buy-in to the project objectives and results.

Risk 4: Consumers/user will not use wood in keeping with established practices.

<u>Mitigation Measures</u>: The implementation of the National system of inspection and certification of lumber for local and export trade of lumber, coupled with additional guidance information provided through point of purchase posters will facilitate more informed decision by consumers/users.

Assumption 1: Greater awareness by consumers/users resulting in better decisions.

The availability of information at point of sale and quality products approved through the national system will result in consumers making more informed decisions in keeping with established practices.

3.5.2 Sustainability

The results of this project will be sustained through the following actions:

- I. The operation of National system for local and export trade of lumber will be maintained by the GFC because this activity falls within the mandate of the Commission. The Quality Control and Licensing Unit of the Forest Monitoring Division (FMD) currently implements this function. The GFC will continue to provide finance for the execution of the continuing activities under this project, as part of its Annual Work programme and budget. These will include staff cost, office space, and additional resources.
- II. Continued provision of information on wood for purchasers/users of wood would be maintained through point of sale posters and other information source and activities because this activity falls within the mandate of the FPDMC. The FPDMC will work closely with the GFC to develop and disseminate information through established network and communication mechanisms.
- III. Through the FTCI, continuous training will be executed for the sector. Training manuals have been developed for the subject areas required and these will be used to conduct competency training for personnel within the sector. With the CoP for sawmilling and lumberyards expected to be made mandatory in 2013, persons operating within the wood processing sector will have to implement the requirements of the CoP, hence the need for continuous training.

The political will is also in place to undertake this project. There is therefore no reason to believe that these activities will not continue after project funding, as the results and outcomes of this project constitute major developmental targets the Government has proposed in the National Competitiveness Strategy (NCS) and the Low Carbon Development Strategy (LCDS).

PART 4. IMPLEMENTATION ARRANGEMENTS

4.1 Organization structure and stakeholder involvement mechanisms 4.1.1. Executing agency and partners

The Guyana Forestry Commission's mission is "To provide excellence in forestry management services to our stakeholders through the application of professional skills to contribute to our nation's development." It is the Government Agency that is responsible for the management of Guyana's forest resources in accordance with the Reviewed National Forest Policy, which was approved by Cabinet in 2011.

<u>Budget</u>

| <u>Budget (US\$)</u> | | | | | | |
|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Budget Component | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Personnel | 715,000 | 720,000 | 730,000 | 740,000 | 745,000 | 750,000 |
| Subsistence | 195,000 | 200,000 | 215,000 | 220,000 | 226,500 | 234,000 |
| Capital Items | 215,000 | 220,000 | 235,000 | 240,000 | 246,000 | 252,000 |
| Consumables | 570,000 | 575,000 | 590,000 | 600,500 | 610,000 | 618,000 |
| Other | 180,000 | 185,000 | 200,000 | 205,000 | 211,000 | 220,000 |
| Total | 1,875,000 | 1,900,000 | 1,970,000 | 2,005,500 | 2,038,500 | 2,074,000 |

(1US\$=G\$200)

Personnel

| Skill Levels | Number of Staff |
|---|-----------------|
| Technical Staff with Post Graduate Degrees | 18 |
| Technical Staff with Graduate Degrees, Diploma and Certificates | 230 |
| Non Technical Staff with Post Graduate Degrees | 10 |
| Non Technical Staff with Graduate Degrees, Diploma and Certificates | 65 |

The main project personnel and partners are:

- 1. Guyana Forestry Commission
- 2. Forest Products Association
- 3. Guyana Manufacturers and Service Association
- 4. Forest Products Development and Marketing Council

The role of the GFC as the executing agency will be as follows:

- Oversee and coordinate the implementation of all project activities.
- Develop the Yearly Plan of Operation and Work Plan for the Project
- Seek No objection for relevant aspects of the project implementation.
- Coordinate the close off audit and reporting for the project.
- Execute project reporting.
- Coordinate procurement efforts needed under the project.
- Update the ITTO On Line Monitoring System
- Liaise with key stakeholders identified in the stakeholder analysis for consultations, coordination of stakeholder inputs, and feedback.
- Develop and execute a communication mechanism for the project.
- Integrate the results and deliverables of the project into the work plan of the GFC.

The role of the other key partner will be as follows:

- Serve as the stakeholder forum for dialogue with the main groups that are part of the Marketing Council: Forestry Training Centre Inc., Forest Products Association, GFC, and the Guyana Manufacturers and Services Association.
- Provide feedback and inputs at all stages in the implementation of the project's activities.
- Liaise with other stakeholder groups to gather support for project activities and feedback information.
- Support the GFC in promoting the objectives and activities of this project.

4.1.2. Project management team

The Project Management Team will be as follows:

- 1. Jowala Somai Project Coordinator, GFC
- 2. Kenny David Assistant Commissioner, GFC
- 3. Anna Mohase Marketing Specialist
- 4. Theresa Madray Market Intelligence (FPDMC))
- 5. Laura Singh Product Development Specialist (FPDMC)
- 6. International Building/Construction Consultant
- 7. National Wood Processing and Training Consultant
- 8. National Wood Technologist

4.1.3. Project steering committee

The Guyana Forestry Commission will be the sole executing and implementing institution for this project. However, a Project Steering Committee will be established to oversee the project that will include the following members:

- Guyana Forestry Commission
- International Tropical Timber Organization
- Forest Products Association
- The Guyana Manufacturers & Services association
- Main Donors

The roles and functions of the Steering Committee are as follows:

- 1. Provide strategic guidance on the management and implementation of all activities under the Project.
- 2. Support the development of deliverables identified to be done under the project.
- 3. Receive and review Project Progress report and Completion report on the Project.
- 4. Provide a communication mechanism between the GFC and the ITTO.

4.1.4. Stakeholder involvement mechanisms

Key sector agencies: The Guyana Forestry Commission, Forest Products Association, Guyana Manufacturers & Services Association, Guyana Association of Professional Engineers, Forestry Training Centre Incorporated and the Forest Product Development and Marketing Council will contribute to the implementation of this project through the Technical Committees which are already set up for inputs, communication and networking with these key industry bodies. Project results, findings and deliverables will be shared with these bodies through meetings and their members will be involved in all of the consultation and training activities of the Project.

Stakeholders (as identified in section 2.1.2) will be directly involved and engaged with through a series of regional workshops at the outset and towards the conclusion of the project. In addition, training and awareness sessions will also be conducted for stakeholders as well as GFC staff.

The following mechanism will be employed in this project to allow for appropriate stakeholder involvement:

- Two of the main partners of the Project are FPDMC and FTCI. The main industry bodies (Forest Products Association and the Guyana manufacturers and Services Association) are part of this Council and will thus be involved during project implementation to guide and information this process.
- Stakeholders will be involved at the level of the Project Steering Committee to give strategic level inputs to the Project.
- Through stakeholder consultations sessions over the project implementation, there will be a mechanism of inputs and feedback by stakeholders.
- Through the already established technical sub committees, the GFC and the industry bodies, will discuss and give inputs on the Project activities.
- Communication and training materials will be circulated to main stakeholder groups for further sensitization on the Project activities.

4.2 Reporting, review, monitoring and evaluation

GFC will work with ITTO to establish an appropriate monitoring schedule and ensure that results of such periodic assessments are linked to further development of the project.

Bi-annual (mid-year and end-of-year) progress reports will be prepared and submitted to ITTO at mutually agreed dates. These financial and operational progress reports will be submitted to GFC for analysis and approval; if approved, GFC will forward them to ITTO.

In addition, assessment reports, workshop reports, and other similar documents will be printed and made available to ITTO and other interested parties as appropriate. This will facilitate the national monitoring process and increase interactions with stakeholders and assist in developing and maintaining support for the project.

The project completion report will be completed and submitted to ITTO and GFC within 3 months of project completion.

The project will be subject to monitoring by ITTO representatives. The project will also be subject to GFC monitoring on behalf of the Government of Guyana. ITTO will monitor project outputs (reports etc) during the project which, once satisfactory, should remove the need for mid-term review.

Stakeholders will be able to make input at the level of the Steering Committee and Consultation Committee. All results and outputs of the project will be made available to Stakeholders though implementation (in the case of stakeholders which are beneficiaries, such as communities in the training exercises), and at the end of the project as appropriate.

Below is a schedule for reporting and other arrangements for the Monitoring and Stakeholder Participation processes:

Reporting and Monitoring Process

- Monthly Project Management meetings
- Half Yearly Project Steering Committee Meetings or as determined by ITTO
- · Periodic updates as required by ITTO in the On Line Monitoring System
- Semi Annual Progress Reports (February and August)
- End of Project Completion Report
- Main Technical Report from Project

4.3 Dissemination and mainstreaming of project learning 4.3.1 Dissemination of project results

The mechanisms for dissemination of project results will be via meetings, workshops and training/sensitization sessions, and through the use of ITTO and GFC websites and local media.

Summary of outcome of Project Steering Committee and Technical Committee Meetings, and semiannual progress report and updates on ITTO's on line monitoring system will provide the major stakeholders with information on implementation progress of project's activities.

Training sessions, consultation and workshops will be used to receive feedback and also provide information of project results and activities to stakeholder. Necessary material that can be used for reference will also be distributed at these sessions.

The ITTO and GFC websites will also be used to disseminate any project result that is felt will be beneficially to stakeholders nationally as well as globally.

Where an output is considered to be significant and can benefit other forest communities, the Forest Sector Information Report of GFC, Forest Update Newsletter, etc. will be used to disseminate the results.

4.3.2. Mainstreaming project learning

The project will benefit primary, secondary and tertiary stakeholders as described in section 2.1.2 and therefore will have a wider value to the country as a whole. Awareness of project outcomes will be achieved through the following media (see section 4.3.1).

More specifically, the project learning will be mainstreamed through the following means:

- The activities under this project will be continued in implementation, as part of the GFC, FPDMC and FTCI annual work plan.
- The infrastructures for the management of Guyana's forestry sector would have been strengthened through stakeholders' participation and contribution towards the implementation of this project.
- The monitoring mechanism for forest products would have been strengthened and expanded to incorporate the new features which are geared towards making it more effective at local and international level.
- Experiences learned will be shared with ITTO and other bodies at Council sessions and other opportunities.

ANNEX 1. PROFILES OF THE EXECUTING AND COLLABORATING AGENCIES

The Guyana Forestry Commission started as a Department of Forestry under the Ministry of Agriculture and Natural Resources in 1925; in 1979 through an Act of Parliament the Guyana Forestry Commission (GFC) was formed. While still being part of the government system it is considered semi- autonomous and thus its day to day activities are independent. Activities relating to the forestry sector started as early as in 1925 and these functions were absorbed by the GFC when it was formed in 1979.

The main activities of the Guyana Forestry Commission are:

- a. Promote sustainable and efficient activities which utilize the broad range of forest resources and contribute to national development.
- b. Conduct surveys and inventories and making recommendations on forest dynamics and silviculture.
- c. Prescribing standards for forest management and provide support for forestry extensions.
- d. Planning and allocation of forest concessions.
- e. Monitoring of forest concessions to ensure, all legislative, social and environmental regulations and procedures are adhered to.
- f. Preparing operational guidelines for forest management and operational plans
- g. Responsible for overseeing community forest activities, and the activities of the Forest Products Marketing Council of Guyana and the Forestry Training Centre Inc.

The Guyana Forestry Commission is self financing, meaning that it generates its own income through collection of royalties, fees and export commission. Fees relate to income from licensing and lease fees and are sufficient to cover the operational activities of the Commission, which is payment of salaries, administrative and operational expenses and purchase of capital items.

The GFC is mandated by law to:

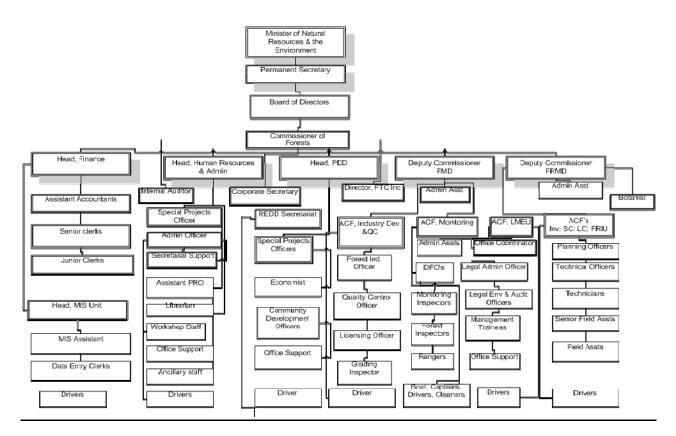
- Advise the Government on, and implement the National Forest Policy;
- Be responsible for the management and control of the utilization of the forests to ensure an optimum yield of forest produce and the maintenance or improvement of the environment.

The GFC is governed by a Board of Directors appointed by the President. The Commissioner of Forests is the Chief Executive Officer and an ex-officio member of this Board.

The GFC is structured with the following Divisions to address its policy mandate:

- 1. Planning and Development: responsible for the co-ordination and preparation of forest sector plans and reports and GFC reports and publications, for conducting special studies, for providing a drafting project proposals to donor agencies and for implementing projects.
- 2. Forest Resources Management Division: responsible for, inter alia, data collection on national forest resource, conducting surveys and inventories, researching and making recommendations on forest dynamics and silviculture, planning and recommending the allocation of concession areas.
- 3. Forest Monitoring Division: responsible for the enforcement of Forest Laws and regulations, monitoring and control of environmental and social impacts of operations within the forest estate and collection of revenue.
- 4. Human Resources Division: responsible for staff management and development, production and implementation of Human resources policies and procedures, education, training, including in-service training and liaison with relevant teaching and training institutions.
- 5. Finance Division: responsible for financial and board matters.

The GFC is also equipped with a library, which provides library services to staff at the GFC and to the public.



The GFC has a main headquarters building in Demerara, with Divisional offices in Berbice and Essequibo. In addition to these central Division offices, 26 field stations are distributed throughout the country. All stations are equipped with radio/telephone communication equipment for easy exchange of information across the entire country. The Divisional offices are all computerized, and there is access to key databases via this medium. The head office has accommodation for consultants working on projects. These facilities are strategically located for training, but the infrastructure needs to be renovated. The GFC has a fleet of road and field vehicles.

Infrastructure

The Forest Products Marketing and Development Council and the Forestry Training Centre Inc. will also support this project. The GFC's Forest Monitoring Department (FMD) Unit will be the key mean through which contact is made with the appropriate stakeholders, through the GFC's 26 forest stations, contact will be made with stakeholders in this process.

Staffing

The total existing staff compliment of the GFC is approximately 323 full time staff comprising a mixture of technical forestry experts and non technical support staff. Technical staffs are both at the senior, middle, and lower level management and also forest technicians. The technical skills of the Commission is very diverse comprising of wood technologist, inventory and mapping specialist, project managers, botanist, forest planners, geographical information systems specialist (GIS), surveyors, cartographer, forest technicians, rangers, monitoring officers, and environmentalist among others. The non technical support or administrative staffs are also very diverse comprising, accountants, computer programmers, marketing specialists, economist, statistician, human resources specialists, management personnel, and legal and public relations officers. Most of the senior and middle level staff has at least an under-graduate degree. The table presents the breakdown of full time staff.

The Staff possess a blend of skills and most have the necessary qualification and experience for their job responsibilities. Below shows the skill levels for the technical and non technical staff.

| Skill Levels | Number of Staff |
|---|-----------------|
| Technical Staff with Post Graduate Degrees | 18 |
| Technical Staff with Graduate Degrees, Diploma and Certificates | 230 |
| Non Technical Staff with Post Graduate Degrees | 10 |
| Non Technical Staff with Graduate Degrees, Diploma and Certificates | 65 |

Budget (US\$)

| Budget Component | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Personnel | 715,000 | 720,000 | 730,000 | 740,000 | 745,000 | 750,000 |
| Subsistence | 195,000 | 200,000 | 215,000 | 220,000 | 226,500 | 234,000 |
| Capital Items | 215,000 | 220,000 | 235,000 | 240,000 | 246,000 | 252,000 |
| Consumables | 570,000 | 575,000 | 590,000 | 600,500 | 610,000 | 618,000 |
| Other | 180,000 | 185,000 | 200,000 | 205,000 | 211,000 | 220,000 |
| Total | 1,875,000 | 1,900,000 | 1,970,000 | 2,005,500 | 2,038,500 | 2,074,000 |

(1US\$=G\$200)

Tasks and responsibilities of the Responsible Agencies are:

The GFC will:

- Oversee and coordinate the implementation of all project activities.
- Develop the Yearly Plan of Operation and Work Plan for the Project
- Seek No objection for relevant aspects of the project implementation.
- Coordinate the close off audit and reporting for the project.
- Execute project reporting.
- Coordinate procurement efforts needed under the project.
- Update the ITTO On Line Monitoring System
- Liaise with key stakeholders identified in the stakeholder analysis for consultations, coordination of stakeholder inputs, and feedback.
- Develop and execute a communication mechanism for the project.
- Integrate the results and deliverables of the project into the work plan of the GFC.

The Marketing Council and the Forestry Training Centre Incorporated will:

- Serve as the stakeholder forum for dialogue with the main groups that are part of the Marketing Council: Forest Products Association, GFC, and the Guyana Manufacturers and Services Association.
- Provide feedback and inputs at all stages in the implementation of the project's activities.
- Liaise with other stakeholder groups to gather support for project activities and feedback information.
- Support the GFC in promoting the objectives and activities of this project.

ANNEX 2: TASKS AND RESPONSIBILITIES OF KEY EXPERTS PROVIDED BY THE EXECUTING AGENCY

Curricula vitae of personnel provided by executing agency

JAMES SINGH

| <u>Name</u> | James Nirmal Singh |
|--------------------|--------------------|
| Date of birth | September 6, 1962 |
| Country of birth | Guyana |
| Nationality | Guyanese |

EDUCATION

| Degree | Name / Specialization | Institution | Year |
|--------|----------------------------|-----------------------------------|------|
| BSc | Biology (Chemistry Minor) | University of Guyana | 1986 |
| MSc | Forest Products Technology | University of Andes, Venezuela | 1991 |
| MBA | General Management | University of West Indies | 2004 |

EMPLOYMENT RECORD

| 1999-present | Commissioner of Forest, Guyana Forestry Commission |
|--------------|---|
| 1998-1999 | Deputy Commissioner of Forests, Guyana Forestry Commission (GFC) |
| 1997-1998 | Manager, Centre for Biological Diversity, University of Guyana (UG) |
| 1996-1997 | Forester, Iwokrama International Centre, Guyana |
| 1991-1996 | Head, Forestry Unit, UG |
| 1991-1993 | Lecturer I, Forestry Unit ,UG |
| 1986-1991 | Assistant Lecturer, UG |

- 1 Overall management of the Guyana Forestry Commission to promote the achievement of yearly work plans and greater cooperation and collaboration with the forestry sector/industry. Overall coordination of all Forestry donor funded projects.
- 2 Assisting in the formulation of appropriate policies to encourage development and growth in the forestry sector of Guyana. This involves participation in several Governmental Boards and subcommittees.
- 3 Attendance at overseas meetings/seminars/conferences on behalf of the GFC and the Government of Guyana (Forestry and Natural Resource issues).
- 4 Providing support to the Guyana Forestry educational and training facilities (Forestry Training Centre; University of Guyana; Guyana School of Agriculture)

EDWARD GOBERHDAN

| <u>Name</u> | Edward Goberdhan (Mr.) |
|--------------------|------------------------|
| Date of birth | September 15, 1974 |
| Country of birth | Guyana |
| Nationality | Guyanese |

EDUCATION

| Degree | Name / Specialization | Institution | Year |
|--------|-------------------------|--|------|
| MBA | Business Mgt. | Edinburgh Business School | 2008 |
| FCCA | Accountancy and Finance | Association of Certified Chartered Accountant | 2002 |
| BSc | Accountancy | University of Guyana | 1996 |

EMPLOYMENT RECORD

2001 to Present Head of Finance Division, Guyana Forestry Commission

2000 - 2001 Financial Analyst, Banks DIH Ltd

- 1. Coordinate revenue collection of the Guyana Forestry Commission
- 2. Prepare budgets and reports for the GFC
- 3. Prepare financial and management accounts of the GFC
- 4. Establish and monitor effective and efficient accounting standards and practices within the Finance Division of the GFC
- 5. Coordinate the Management Information Systems Unit within the GFC
- 6. Coordinate information flow and database management within the GFC
- 7. Prepare and manage project accounts and budget for externally funded projects of the GFC
- 8. Prepare GFC final account for external audit

JOWALA SOMAI

| Name | Jowala Persaud Somai | | |
|--------------------|---------------------------|----------------------|------|
| Date of birth | January 08, 1962 | | |
| Country of birth | Guyana | | |
| <u>Nationality</u> | Guyanese | | |
| F | | | |
| EDUCATION | | | |
| Degree | Name / Specialization | Institution | Year |
| BSc | Biology (Chemistry Minor) | University of Guyana | 1987 |
| | | | |

EMPLOYMENT RECORD

| 2010-present | Project Officer, Guyana Forestry Commission |
|--------------|---|
| 2009-2010 | Quality Assurance and Research Manager, Edward B. Beharry Co. Ltd |
| 2008-2009 | Head of Unit – CRA Secretariat/ Executive Secretary –CRA, Caribbean Rice Association (CRA). |
| 2005-2008 | Programme Monitoring and Evaluation Officer –CRA, Caribbean Rice Association (CRA). |
| 1998-2005 | HEAD – Management System Department, Guyana National Bureau of Standards (GNBS) |
| 1993-1998 | Team leader/ Internal Quality Auditor, Master Precision Tool and Die. |
| 1989-1993 | Technical Officer 2. Guyana National Bureau of Standards (GNBS) |

- 1. Develop, implement and monitor projects
 - Develop project proposals
 - Coordinate and monitor project implementation activities.
 - Prepare reports on project implementation and status.
- 2. Coordinate the quality assurance and research activities related to production of various products.
 - Coordinate activities related to regulatory and ISO 9001 certification compliance.
 - Manage the testing and research activities undertaken by the laboratory
- 3. Manage the operations of the CRA secretariat to address the objectives of the association as detailed in its Article of Association and implement policies developed by Board of Directors.
 - Coordinate with National CRA chapters to facilitate cross-border investment and promote other activities with the objective of improving the competitiveness of the Caribbean rice sector
 - Identify and develop projects with the objective of making CRA sustainable
 - Coordinated and prepared a Standardized Monitoring and Reporting system for the EC/CARIFORUM rice programme (12 quarterly and 3 annual reports on the project)

ANNA MOHASE

| <u>Name</u> | Anna Mohase (Ms) |
|--------------------|-------------------|
| Date of birth | November 17, 1980 |
| Country of birth | Suriname |
| <u>Nationality</u> | Guyanese |

EDUCATION

| Name / Specialization | Institution | Year |
|------------------------|---|---|
| Project Management | University of the West Indies | 2010 |
| Development Studies | University of Guyana | 2008 |
| Supervisory Management | Caribbean Institute for Quality (QIC) | 2008 |
| Management | University of Guyana | 2002 |
| | Project Management Development Studies Supervisory Management | Project ManagementUniversity of the West IndiesDevelopment StudiesUniversity of GuyanaSupervisory ManagementCaribbean Institute for Quality (QIC) |

EMPLOYMENT RECORD

2007 to present Special Projects Officer, Planning and Development Division, GFC

2003 - 2005 Market Intelligence and Research Officer, Forest Products Marketing Council of Guyana, Inc.

2003-2005 Market Development Officer, Planning and Development Division, GFC

- 1. Conduct market surveys and industry assessments identifying key areas of concern for industry development
- 2. Planning, development and implementation of all project activities;
- 3. Preparation of project reports, evaluations and other project documentation, including yearly and quarterly work-plans, budgets, annual project reports, and other preparation for tripartite review meetings;
- 4. Assist with routine systematic monitoring and evaluation activities (e.g., monthly project meetings)
- 5. Drafting project proposals and other documents for donor support for projects.
- 6. Assist in drafting Terms of Reference and logistical arrangements for meetings, workshops, consultancies
- 7. Management of resources under project activities
- 8. Information dissemination to sister agencies, NGOs, and the general public
- 9. Providing administrative support to Head of Department.
- 10. Research and Development in areas of trade and marketing
- 11. Providing assistance in areas of Climate Change, primarily in a supportive capacity.

KENNY DAVID

| Name | Kenny David (Mr) |
|--------------------|-------------------|
| Date of birth | December 13, 1977 |
| Country of birth | Guyana |
| <u>Nationality</u> | Guyanese |

EDUCATION

| Degree | Name / Specialization | Institution | Year |
|--------|------------------------|-------------------------------|------|
| MSC | Natural Resources Mgt. | University of the West Indies | 2005 |
| BSc | Environmental Studies | University of Guyana | 2001 |

EMPLOYMENT RECORD

| 2009 to present | Assistant Commissioner, Forest Monitoring Division, GFC | |
|-----------------|---|--|
| 2006 - 2009 | Project Officer, Forest Monitoring Division, GFC | |
| 2003-2005 | Teacher, Private Academic Institution | |

- 1. Ensuring Division staff are trained and equipped to carry out their functions.
- 2. Providing a quality control service by monitoring compliance with grading requirements.
- 3. Providing extension training and advice on forest product grading to industry.
- 4. Preparing export Reports
- 5. Consulting periodically with Customs and with shipping companies to ensure all export shipments are accurately recorded and correctly processed.
- 6. Conducting inspections of forest products and issuing certificates as appropriate.
- 7. Submitting monthly inspection reports.
- 8. Ensuring all operations are carried out to a high standard and according to procedures.
- 9. Carrying out regular inspections of ports to ensure forest product exports have the correct documentation.
- 10. Assisting with the development and implementation of forest product exports.
- 11. Overseeing the development and implementation of the Code of Practice for Processing operations.
- 12. Performing reconciliation of wood products inputs and wood processing sales at processing operations.
- 13. Formulating additional procedures/guidelines to promote forest industry development
- 14. Conducting training and outreach activities with GFC staff and stakeholders in wood processing standards (including Code of Practice), processing and export documentation, timber grading and reporting requirements.

THERESA MADRAY

| Date of birth: | 14 th March, 1978 |
|----------------|--|
| Nationality: | Guyanese |
| Employment: | Marketing & Promotions Officer (FPDMC) |

Education:

| Institution (Date from - Date to) | Degree(s)/ Diploma(s) obtained: |
|--|---|
| Australian Institute of Business Administration (2011- 2012) | Currently pursuing studies in Masters in Business Administration (MBA) |
| Guyana Forestry Commission – Timber Grading Course – (May 2009) | Certificate in Timber Grading Course |
| University of Guyana (Sept 2005 - May 2008) | Degree in Business Management |
| University of Guyana (Sept 2003 - May 2005) | Diploma in Marketing |
| University of Guyana (IDCE) (Oct 01 - Mar 02) | Certificate in Marketing |

Employment:

| Employment | Designation |
|--|--------------------------------------|
| Forest Products & Marketing Council (FPMC) – 2006 - 2008 | Marketing & Administrative Assistant |
| Forest Products Development & Marketing Council of Guyana (FPDMC) – 2009 to present | Marketing & Promotions Officer |

List of Duties/Responsibilities

- Contribution to the development of the FPDMC Strategic & Business plans particularly in the area of marketing and promotion of Guyana's forest products.
- Preparation of monthly market intelligence reports for distribution in the timber industry by drawing on the market intelligence activities of organisations such as the GFC and other agencies.
- Conduct market analyses and market intelligence research aimed at keeping the industry stakeholders informed and equipped with latest information
- Work closely with the FPDMC/GFC to provide guidance to potential exporters and buyers on species, production capacity, quality control etc.
- Conduct promotional activities/events to promote Guyana's wood products locally and internationally.
- Assist in conducting initial and thereafter periodic assessments of the industry's readiness capacity to meet global challenges and enhance its competitiveness.
- Assist in the preparation of the project proposals and reports as required.
- Assist in the general administrative functions of the FPDMC.

LAURA SINGH

| Date of birth: | 14 th August, 1974 |
|----------------|--|
| Nationality: | Guyanese |
| Employment: | Industry and Product Development Officer (FPDMC) |

Education:

| Institution (Date from - Date to) | Degree(s)/ Diploma(s) obtained: |
|--|--|
| Arthur Lok Jack Graduate School of Business (UWI) (August 2011) | Certificate- Project Management for non-project management professionals |
| Guyana National Bureau of Standards (November 2010) | Certificate - Training on Regulatory Impact Assessment (RIA) and Good Regulatory Practices (GRP) |
| University of Guyana (2007- 2009) | Degree In Forestry |
| Forestry Training Center (Jan 2007) | Certificate – Reduced Impact Logging |
| University of Guyana (2005-2007) | Diploma in Forestry |
| Cyril Potter College of Education (1994-1997) | Trained Grade One Class One Teachers' Certificate |

Employment:

| Employment | Designation |
|--|--|
| Forest Products Development & Marketing Council of Guyana (FPDMC) – 2009 to present | Industry and Product Development Officer |
| Ministry of Education – 1994 - 2004 | Assistant Mistress/ Trained Graduate Teacher |

List of Duties/Responsibilities

The Industry and Product Development Officer, under the direct supervision of the Executive Director, will be responsible for carrying out the following functions:

- a) Contribute towards the development of the Council's Strategic and Business Plans particularly in the area of industry and product development
- b) Conduct an initial and thereafter periodic assessments of the industry's readiness and capacity to meet global challenges and enhance its competitiveness
- c) Guide and assist the industry in improving wood products quality, including understanding and meeting international standards and specifications, customer service, quality control, kiln drying, dressing of wood, and storage and packaging for export
- d) Work with producers to improve existing product lines to meet national and international standards
- e) Ensure that adequate training, especially in timber grading and quality control, is provided to the industry
- f) Guiding and assisting the industry in developing new products from the wide range of commercial species available within the nation's forests, including lesser used species
- g) Work closely with the Council's marketing department to provide guidance to potential buyers on species, production capacity, quality control, etc.
- h) Assist in the preparation of project proposals and reports as required

ANNEX 3: TERMS OF REFERENCE OF PERSONNEL AND CONSULTANTS AND SUB-CONTRACTS FUNDED BY ITTO

Function: Consultant

Title: International Building/Construction Consultant

Experience: The consultant will have a minimum of 10 years work experience in building and construction sector, with qualification in an appropriate field. S/he will have specific knowledge about using tropical timber/limber in the construction sector and its relevance to an appropriate National Building Code and dimensional standards. S/he will ideally have experience with ITTO projects and have lived and worked in one or more developing countries.

Duties

- 1. Conduct a review of the present system for inspection, certification and trade of lumber for both local and export markets.
- 2. Conduct a review of the requirement for export of lumber (EU-FLEGT and US-Lacey Act)
- 3. Prepare report on gap assessment making recommendations for the establishment of a national system that will meet the requirement of both local and export markets.
- 4. Lead the process of improved data collection including protocols
- 5. Present findings and recommendations to stakeholders for feedback and comments.
- 6. Review Guyana Timber Grading Rules to align to market conditions, produce Revision.
- 7. Develop relevant dimensional standards which are aligned to the Guyana Building Code and facilitate greater market access and fairness in trade of lumber.
- 8. Finalize a report detailing the requirements and methodology for a National System for inspection and certification of lumber.

Function: Consultant

Title: National Wood Processing and Training Consultant

Experience: The consultant will have a minimum of 5 years experience in wood processing covering both sawmilling and lumberyard operations, with a degree in an appropriate field. S/he will have been actively involved in implementing the practices detailed in the Code of Practices for Wood Processing (Sawmills and Lumberyards). S/he will ideally have experience with ITTO projects.

Duties

- 1. Conduct a review of the requirement of the Code of Practices for Wood Processing (Sawmills and Lumberyards).
- 2. Prepare four (4) presentations for Managers/Supervisors of Sawmills and Lumberyards, Sawmill Operators, Lumberyard Operators and Sawmills and Lumberyard Regulatory personnel.
- 3. Conduct training for Managers/Supervisors (5 locations).
- 4. Conduct training for Sawmill Operators (5 locations).
- 5. Conduct training for Lumberyard Operators (5 locations).
- 6. Conduct training for Regulators (3 locations).
- 7. Identify information for quick reference guides for each group of stakeholders.
- 8. Prepare report on feedback and comments from training sessions.

Function: Consultant

Title: National Wood Technologist

Experience: The consultant will have a minimum of 5 years experience in marketing and trade in lumber with a degree in an appropriate field. S/he will have been closely involved in similar exercises of reviewing the market requirements for trade of lumber for the local market. S/he will ideally have experience with ITTO projects.

Duties

- 1. Review the market requirements for trade of lumber in Guyana
- 2. Prepare two (2) presentations for Construction sector and Value-added production on product requirements and use of lumber.
- 3. Conduct workshops for stakeholders of construction sector (3 locations).
- 4. Conduct training for Stakeholders of Value-added operations (3 locations).
- 5. Conduct workshop to discuss findings with Sawmill and Lumberyard Operators (3 locations).
- 6. Prepare a report consolidating the comments from the workshops and make recommendation on the way forward.
- 7. Design point of sale posters to facilitate users making more informed decision when purchasing lumber.

ANNEX 4: ASSESSMENT AND RECOMMENDATIONS BY THE 45TH EXPERT PANEL

A. Overall Assessment:

The panel noted that the proposal arises and builds on the results of the project PD 513/08 Rev.1 (I), focusing on strengthening the performance of the wood processing sector through building local capacity and enhanced national system that will promote and facilitate efficient trade and utilization of lumber. The panel recognized that some small improvements need to be made to the proposal, including the need to prolong the project duration into 24 months, and materialize the contributions of involved private sector (In kind and/or in cash)

B. Specific Recommendations:

| # | Section | Heading | Reviewer comments | Amendments made | Page # |
|---|---------|--|---|---|--------------------------|
| 1 | 1.3 | Target area | Provide a more detail map of the target areas where the proposal intends to work on, and more elaboration of the environmental aspect of these regions. Also explain on how the livelihood can be improved by this project | A more detailed map was provided on Page viii and more details provided on page 7. On Page 8, more details are provided on the environmental aspects of the three regions. More details were provided in relation to training, employment, livelihoods, waste reduction and effect on poverty reduction | Pg viii & 7 Pgs 7 & 8 |
| 2 | 1.4 | Expected outcome at project completion | Improve the expectations into more specific and achievable outcomes | Expected outcomes were revised and made more specific. | Pgs iii & 8 |
| 3 | 2.1.3 | Problem analysis | Improve problem analysis by deep explanation of the cause-and-effect relationship of the problem tree. | Relationship between the causes and consequences were described to improve problem analysis | Pgs 13 & 14 |
| 4 | 2.1.4 | Log Frame Matrix (LFM) | Clarify the indicators in the LFM into more specific attributes, such as wood products, people, employment, etc. | Indicators for Development and specific Objectives and Output 2 were revised | Pg 15 |
| 5 | 3.1.2 | Activities – For Output 1 | Revise the activities of Output 1 into a step-wise training approach (i.e. training needs analysis, training modules development, etc.) | Training needs analysis and training modules were done in the previous project #: PD 513/08 (Rev.1 (I). This will be used in the execution of the training exercises under this Phase of the project. | Pgs 10 & 18 |

| 6 | 3.1.2 | Activities – For Output 2 | Consider producing "timber grading system" rather than reviewing it. Make sure that this output is in relation with Output 3, and whenever appropriate, move to Output 3. | Output 2.4 was revised to say; "Updating timber grading system" and this output was reassigned as output 3.2 | Pgs 19 & 22 |
|----|-------|--|---|---|--|
| 7 | 3.2 | Implementation approach and methods | Improve section 3.2 by explaining in details: a) System/tools to be employed b) Specification and scope of training to be implemented, and c) How the national system for inspection and certification will be developed and implemented. | Section on Implementation Approach and Methods has been revised. More details added on systems/tools to be employed; scope of training to be implemented and how the national system will be developed and implemented. | Pgs 20 & 21 |
| 8 | 3.4.2 | Compromise and recalculate budget items 14.1, 31.2 and 33.2 | Adjust budget calculation into 24 months duration and increase ITTO programme support cost into 12%. In addition justify the cost for venue rental and facilities rental, and summarize budget allocation for its major activities, i.e. training , system development, and workshops; | Changes as proposed have been made: Duration changed to 24 months and the work plan and budget revised to show. ITTO programme support cost changed to 12%. Table showing breakdown for allocation in activities of: training, system development, and workshops established. The contribution of the private sector has been materialised. | Pgs vi, 24 to 34 Pg 33 – 34 Pgs 33-34 |
| 9 | 4.3.1 | Dissemination of projects results. | Improve the elaboration of the section 4.3.1 Dissemination of projects results. | Section on Dissemination of project results reviewed. | Pg 40 |
| 10 | Annex | Assessment and Recommendations by the 45 th Expert Panel | Include an Annex that shows the overall assessment and specific recommendations of the 45 th Expert panel and respective modification in tabular form. Modification should also be highlighted (Bold and Underline) in the text. | Shown as ANNEX 4 | Pgs 53 & 54 |