

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

ITTO

PROJECT DOCUMENT

TITLE	UTILIZATION OF LESSER USED WOOD SPECIES IN GUYANA
SERIAL NUMBER	PD 344/05 Rev.2 (I)
COMMITTEE	FOREST INDUSTRY
SUBMITTED BY	GOVERNMENT OF GUYANA
ORIGINAL	ENGLISH

SUMMARY

Over the past decade total forest production in Guyana ranged from 275,000-574,000 cubic meters per annum with a decreasing trend over the past seven years. It has also been emphasized that Guyana should commence targeting other tree species in order to maximize the forest resource coupled with reducing pressure on the few current exploited species.

This project will contribute to increasing the overall contribution of the forest sector to the national economy by improving the awareness and use of lesser used species.

The project will focus on gathering technological information on lesser used species; more promotion of current and potential lesser used species and training in processing techniques of these species.

While the whole nation will benefit, key beneficiaries would be individuals and groups involved in the forestry sector.

EXECUTING AGENCY	GUYANA FORESTRY COMMISSION	
DURATION	12 MONTHS	
APPROXIMATE STARTING DATE	UPON APPROVAL	
PROPOSED BUDGET AND OTHER FUNDING SOURCES	Source	Contribution in US\$
	ITTO	95,040
	Gov't of Guyana	36,885
	TOTAL	131,925

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Acronyms

DFID- Department of International Development
CPEC- Caribbean Regional HRD Program for Economic Competitiveness (CIDA funded)
ECTF- Edinborough Center of Tropical Forest
EPA – Environmental Protection Agency
FAO- Food and Agriculture Organization of the United Nations
FPA- Forest Products Association
GFC - Guyana Forestry Commission
GDP- Gross Domestic Product
GSA- Guyana School of Agriculture
LUS – Lesser Used Species
NDS- National Development Strategy
NFP- National Forest Plan
NGO- Non-Governmental Organization
NREAC- Natural Resources and Environment Advisory Committee
PROFOR- Programme for Forests
RIL- Reduced Impact Logging
SDP- Social Development Programme
TGP- Tropenbos Guyana Programme
UG- University of Guyana
WWF- World Wildlife Fund for Nature

Part I: Context

1. Origin

Many tropical lumber producing countries over the past few decades have recognized that there needs to be a change in how their forest resources are utilized. Harvesting is too often restricted to a few species and the resulting ‘creaming off’ usually puts pressure on the maintenance of the integrity of the forest resources.

History of markets targeted dictates which species are considered most valuable and inevitably other unknown or lesser used species get sidelined mainly due to the fact that so little is known about these species to market them appropriately.

Guyana which is nestled on the north-eastern shoulder of South America has a large area (16.5 million hectares) of unfragmented tropical forest. It’s location in the Guiana Shield, which is considered one of the four remaining intact tropical forest systems in the world makes it an important consideration for its conservation practices (including sustainable utilisation of resources).

Guyana’s 13.6 million hectares of commercial forest represents about 83 percent of the total forested area. The Guyana Forestry Commission is the regulatory agency that has the vested responsibility of managing this forest estate.

Commercial forest exploitation in Guyana has been recorded to have started since around 1624 but logging has traditionally and continues to focus on just a few of the over 1000 tree species which occur in Guyana.

Over the past decade total forest production ranged from 275,000-574,000 cubic meters per annum with a decreasing trend over the past seven years (Appendix 7). The forest sector currently contributes about 3.4 percent of the nation’s Gross Domestic Product (exclusive of secondary processing) (Appendix 8).

Guyana has and will always cater to a low volume market. The high species diversity of Guyana’s forest coupled with the relative small sizes and very slow growth rates of most of our commercial species makes a high volume product virtually impossible when compared with other tropical forest regions such as South East Asia, where the famous Dipterocarp species can produce larger volumes. It therefore has been suggested that Guyana should focus on specialty or niche markets for to fulfillment of the goal of maximization of forest yield and subsequent economic gains. It has also been emphasized that Guyana should commence targeting other tree species in order to reduce pressure on the current exploited species.

The ITTO Diagnostic Mission to Guyana in 2003 conducted a strategic assessment of the forest sector and indicated that further ITTO project support would be valuable in

assisting the industry to restructure and assist Guyana with marketing of its forest products which would include the development of Guyana's lesser known and used species.

The Guyana Forestry Commission initiated some work in 2003 with the promotion of six lesser used species (Appendix 6) following an ITTO meeting in 2002 in Brazil on developing a database of lesser used species. At that meeting, 17 species of trees was presented from Guyana.

2. Sectoral Policies

The Government of Guyana fully recognizes the importance of the forest and the concept of forest management and the protection of the forest ecosystems are insured by law.

The Guyana Forestry Commission (GFC) was created in 1979 out of the pre-cursor Forestry Department which had its origins in 1925. The GFC is responsible for management and administration of Guyana's State Forest and is also responsible for advising the responsible Minister and making submissions on issues relating to forest policy, laws and regulations.

The President of Guyana has ultimate authority for Forestry (and the Environment and Natural Resources), though the Minister for Fisheries, Crops and Livestock is currently assigned responsibility for Forestry.

There are two statutory bodies that are responsible for coordination of developments in the natural resources sectors;

- a. Cabinet Sub-Committee on Natural Resources and Environment. This Committee discusses related matters which require policy decisions prior to presentation to full Cabinet
- b. Natural Resources and Environment Advisory Committee (NREAC) which includes the Heads of all the Natural Resources Agencies including, the Guyana Forestry Commission, Guyana Geology and Mines Commission, Guyana Lands and Surveys Commission, Environmental Protection Agency and Guyana Hydrometeorology Division, Guyana Energy Agency and Institute of the Applied Science and Technology.

The work of the Guyana Forestry Commission is guided by the Forest legislation, National Forest Policy and associated draft National Forest Plan.

Legislation

Since the adoption of a National Forest Policy statement in 1997, the GFC has been working on new legislation. The old legislation was devised since 1953. The

consultation processes have been tedious. However, the final set of concerns by the sector has been addressed and the Cabinet Sub-committee on Natural Resources approved of the modifications made to the draft Forest Bill. The Bill is has been approved by Cabinet and will soon be tabled in Parliament.

National Forest Policy and National Forest Plan

A National Forest Policy Statement was approved in 1997 and since then a draft National Forest Plan (NFP) was prepared specifically for taking forward the prescriptions of the Policy. No official policy statement was published since 1953. The overall objective of the National Forest Policy statement is '*conservation, protection, management and utilisation of the nation's forest resources, while ensuring that the productive capacity of the forests for both goods and services is maintained or enhanced*'. The NFP provides the framework and identifies programmes and activities that must be accomplished to ensure implementation of the Policy and compliance with the law. It is divided into ten programmes - National Forest Programme, Forest Zoning and Classification, Forest Resource Planning and Allocation, Forest Operation and Monitoring, Forest Industry Investment, Forest Products Marketing, Forest Research, Forest Sector Information, Forest Sector education and Training and Social Development programme. GFC recently (June 2004) received German funding (GTZ) to review and update the Forest Policy and Plan, through a stakeholder consultation process.

Codes of Practice for Timber and Non-Timber Forest Products Harvesting

The GFC has developed a Code for timber harvesting which applies to all larger logging operations. The Code advises concessionaires of the benefits to be gained from strategic planning and control of operations. Standards that govern road building, corduroys over swamps, skid trails, log markets, bridges and culverts, chemical use, biodiversity, occupational health and safety are discussed in the Code. The GFC has also developed a Draft Code of Practice for Non-Timber Forest Products harvesting - Kufa (*Clusia spp*) and Nibbi (*Heteropsis spp*), Manicole Palm (*Euterpe spp*). The Mangrove Code of Practice is still in the preliminary stages. Social issues are an integral part of the Codes which have all been developed through consultations with operators, communities and other stakeholders

Environmental Protection Agency

The Environmental Protection Agency (EPA) was established in 1996 and provides for the management, protection and improvement of the environment, the prevention or control of pollution, the assessment of impact of economic development on the environment and the sustainable use of natural resources. The GFC and EPA have a Memorandum of Understanding which allows for cooperation in assessment and monitoring of Environmental Impact Assessments. In recent years, forest concessionaires are now required to submit an EIA prior to commencing operation.

National Development Strategy

The National Development Strategy (NDS) sets out priorities for our nation's economic and social development for the next decade. The draft document - which is made up six volumes - contains careful technical analysis of problems and future prospects in all sectors of the economy and in areas of social concern. It presents us with an opportunity to work together to prepare Guyana for the challenges of the next century.

The draft NDS is a result of over 300 hours of meetings by 23 "technical working groups" consisting of over 200 Guyanese. These efforts were co-ordinated by the Ministry of Finance, but the contributors came from a wide cross-section of organisations including the private sector, government agencies, non-government agencies, and the University of Guyana. The Carter Center assisted the Ministry of Finance with the overall co-ordination of the exercise.

NDS stressed that the basic principle of Guyana's development must not threaten the integrity of the environment and amongst its objectives include, *'to increase the economic benefits which Guyana derives from its forests and associated natural resources'*.

Some of the actions include:

- a. Through the development of fiscal measures, financially viable local markets will be developed for Guyana's timber and timber products, with emphasis being placed on utilization of lesser used species
- b. The marketing of lesser uses species will be optimized through research and development to identify appropriate processing technologies at various stages of the supply chain.

Forest Products Association

The Forest Products Association (FPA) is a non-governmental organization formed by the forest industry in 1944 to promote and develop the interests of the forest sector. Its mission is *'to contribute to forest industry development and enhance competitiveness and growth of the forestry sector through advocacy, training, dissemination of technical, trade and other information, provision of accessible technical and business support services, by promoting sustainable practices and by networking with local, regional and international agencies'*.

3. Programmes and Operational Activities

Past and current Programmes/Projects which been oriented to the development of the country's forest sector include:

The Guyana Forestry Commission(GFC) Support Project(1995-2002: Funded by the UK Department of International Development (DFID), the purpose was to enable the GFC to effectively fulfill functions in support of sustainable, ecologically sound and socially integrated forest management systems. The main goal was to provide support for the optimization of economic and environmental goods and services from Guyana's forests for the benefit of all communities. Some of the project outputs included: strengthening of the GFC structure and functioning, revision of the national forest policy and legislation, strengthening of GFC's procedures and capabilities, improved forest information systems and capacity building through forestry related training.

Social Development Programme: The forest policy recognizes the important social benefits that derive from the forests and requires that the GFC manages the forest resource to maximise benefits for hinterland communities and for all Guyanese. As a result a Social Development Programme (SDP) was initiated in March 2000 and involves very close collaboration with key government agencies. The objective of the SDP is to contribute to the effective realization of social responsibilities, satisfaction of social needs and attainment of social benefits by stakeholders in the forestry sector. As an extension to this programme there is a Participatory Forest Management programme, funded by the Food and Agriculture Organisation (FAO) that commenced in June 2003 and involves extensive training and capacity building of forestry officers, governmental officials and village councils. The training is intended to improve the management skills/approach of these officials in the managing of communities.

Natural Resources Management Project (1998-2003): This project focused on improving information capacity to assist decision making for natural resources management. Funding was provided by the German Government under the German Technical Assistance Programme (GTZ).

Tropenbos Guyana Programme (TGP)(1989-2001): – The Tropenbos-Guyana Programme, a major contributor to forest research for over 12 years, concluded its activities in Guyana December 2001. Through its research, TGP played a supportive role in Guyana's forest policy and management and biodiversity policy. Tropenbos had also a relatively strong capacity building component with several Masters and PhD level students passing thorough the Programme. Additionally, work on Reduced Impact Logging (RIL) done by Tropenbos has been well received and ITTO has provided funds to help set up a vocational school for training in RIL techniques. The TGP was carried out in partnership with a number of institutions and agencies locally and internationally. Core funding was provided by the Tropenbos Foundation of the Netherlands. The Programme has produced a number of publications some of which are available from the Guyana Forestry Commission.

A Sustainable Management Model in the Iwokrama Rain Forest: (1999-) Funded by ITTO (PD010/97 Rev. 1[F]), the objective of the project is to design, plan and initiate the commercial management of half of the Iwokrama Forest for multiple products and services, and integrate research, training and demonstrations into these operations, in order to improve the practices in Guyana and elsewhere. A Government of Guyana

initiative of 1989, Iwokrama aims to illustrate Guyana's commitment to the global agenda of conservation and sustainable development of the world's remaining forest resources. Iwokrama Development concession represents 2.7% of allocated State Forest (ie 360,000 hectares). The Iwokrama Reserve is composed of A Wilderness Preserve and A Sustainable Utilisation Area which are approximately equal in size. The vision of Iwokrama is to serve as a model which will showcase conservation and developmental activities (including timber harvesting), working in tandem for long lasting ecological, economic and social benefits for Guyana and the world at large.

Guianas Sustainable Forest Resources Management Project: 2002- This project aims at maintaining the integrity of the different forest ecosystems of the Guianas so that they may sustain their ecological functions and processes while supporting the region's socio-economic development. The four project components are: sustainable forest management; gold mining pollution abatement; protected areas effective management; regional integration, collaboration and networking. Funding for this project is provided by the World Wildlife Fund for Nature (WWF)

Training in Reduced Impact Logging in Guyana: 2002- . Funded by ITTO (PD068/01 Rev. 2 [I]), the specific objective of this project is to strengthen the national capacity to deliver training in practical forest operational and managerial skills and knowledge to personnel at all levels of the forest sector by means of establishing an on-site RIL training programme. The project includes the following major activities: the design of the training programme in consultation with stakeholders, the development of demonstration models of good RIL practices, the establishment of the training facility, the training of trainers and other personnel in RIL, and the establishment of a long-term plan to ensure the sustainability of the project

Canadian International Development Agency: funding was provided funding towards the execution of a national forest inventory.

Forest Certification Process: The certification process in Guyana began in 2000 with technical support of UNDP-Programme for Forests (PROFOR) - PROFOR Phase I. An Interim Working Group (IWG) comprising a balanced representation of stakeholders from social, environmental, economic and institutional interests was formed with one of the main tasks being to choose a certification option for Guyana. Later in 2001 the IWG voted to start the development of a national standard based on the Forest Stewardship Council (FSC) Principles and Criteria. It was also agreed that the possibility of other international endorsements of the standard at a later stage should be an option (Forest Certification 2001). To date an active NGO, the Guyana National Initiative on Forest Certification (GNIFC) has been established as a legally recognised body under the Friendly Societies Act and is taking the process forward. World Wildlife Fund (WWF) is providing core funds for GNIFC at this stage. Additional funding from USAID enabled the GNIFC to field test the 2nd Draft Standard which has now produced a 3rd Draft Standard in July 2003. Future directions of GNIFC include the finalization of the National Standard after which Forest Stewardship Council endorsement would be sought.

Edinburgh Centre for Tropical Forests (ECTF): A collaborative programme, which began in 1993, between the ECTF and the Barama Timber Company saw the set up of a number of Permanent Sample Plots (PSPs) which focused on post logging incremental growth and mortality, logging damage to the residual stand, canopy gap size, operational efficiency and silviculture. At least five years of data has been collected and used in a Pilot study to predict yield using the 'Growth and Yield' model, SYMFOR. Unfortunately, Barama is no longer working in the particular area of the concession area and there are no immediate plans by the company to continue remeasuring the plots.

Guyana Protected Areas System (GPAS): This project will assist the Government of Guyana to set up a system of protected areas in Guyana. The Environmental Protection Agency is the implementing agency and will coordinate the overall program. Two local organizations will be the lead agencies for the two pilot protected areas: Conservation International-Guyana in the Kanuku Mountains and the Guyana Marine Turtle Conservation Society in Shell Beach.

The forestry sector has participated in the development of the Amazon Co-operation Treaty (ACT) 'Criteria and Indicators for the Sustainability of the Amazon Forest'. The ACT criteria and indicators, together with those produced by CIFOR and ITTO have been reviewed by the GFC during the preparation of the National Forest Plan. Actions required by the sector have been identified for all appropriate indicators and these have been incorporated into the Plan.

Guyana is also a signatory to the CITES (1973), UN Framework Convention on Climate Change (1992), UN Convention on Biological Diversity (1992), "Forest Principles" (1992), relevant chapters of Agenda 21 (UNCED, 1992) and the ITTA (1994).

The GFC is involved in a number of other activities to promote more involvement and participation in the forestry sector. These are:

- Educational outreach programmes to Amerindian and hinterland communities;
- Support for the University of Guyana to run a Diploma, Degree and Master programme in Forestry
- Support to the Guyana School of Agriculture, Certificate in Forestry Programme
- Sponsorship of five Amerindian students annually to pursue a certificate in forestry;
- Outreach programmes to secondary schools, educating students about all aspects of forestry and the environment

Part II: The Project

1. Project Objectives

1.1 Development Objective

To increase the contribution of the forest sector to the national economy of Guyana from sustainably managed forest resources.

1.2 Specific Objective

To enhance knowledge and use of lesser used species of woods utilized in the forest industry of Guyana

2. Project Justification

2.1 Problems to be addressed

Guyana has witnessed a decreasing trend in forest production over the past seven years (Appendix 7). Production figures show that potential of the forest is not being maximized. Of the 20 cubic meter/hectare allowable cut, a recent study (GFC 2004) has shown that an average of 5.02 cubic metres per hectare¹ is currently being harvested.

The forest sector's contribution to the Gross Domestic Product (GDP) (Appendix 8) has also been steadily low and this is a source of concern for the Government as the forestry sector has the potential to contribute much more to the current GDP.

This level of performance have attributed to several factors including:

- Poor information about markets and trends worldwide
- Lack of skills in processing industry
- Underdeveloped infrastructure
- Little emphasis on value added processing
- Low level of efficiency in sawmilling
- Inaccessibility of capital for re-investments including re-tooling
- Lack of trained personnel at all levels in forestry (including management)
- Forests have low production potential (due to the ecology)
- Investments in transportation and energy infrastructure has fallen behind

Several studies (Appendix 3) done over the past few years have recommended that Guyana begins to concentrate on harvesting and marketing lesser used species in order to improve the state of the industry. Promotion of our lesser used species is also emphasized in our 1997 National Forest Policy.

Traditionally, a few select species have been the focus of exploitation Guyana's forest industry and this has been largely due to ability to secure markets for these products

¹ The findings from the GFC 2004 report showed that range of reported yield from the forest was 1.83-11.75 cubic metres per hectare per annum for period 1998-2003

coupled with more acquired knowledge about these species. There is little knowledge available on what is considered to be 'lesser used' species of wood in Guyana and therefore the industry has been reluctant to utilize and market these. (See Problem Tree-Appendix 1).

Although Guyana has over 1000 species of trees, only about 32 species are currently harvested with about 12 of these being more extensively exploited (see Appendix 5).

An additional problem is that the industry, with a few exceptions, have poor grasp of conversion technology and value added processing in general.

In order to improve sector performance, both the issues of exploiting more species and improving conversion technology has to be addressed. As pointed out in Burclaff (2001), the challenge may have less to do with the introduction of new species and nearly all with the capacity to process them and add value.

2.2 Intended situation after Project completion

The key area that this project is intended to tackle is the building of awareness and knowledge of lesser used species. It is also expected that the capacity building aspect of the project would not only improve the processing techniques for these species but also improve the quality of the product. The latter will also help to build confidence in use of these species as processing techniques can vary from species to species based on factors such as density, presence of latex, silica and so forth. Additionally, the Government expects the contribution of the forestry sector to national GDP to improve. This project is expected to contribute to this longer term goal.

2.3 Project strategy

This project will build on work already started by the Guyana Forestry Commission on the promotion of six lesser used species in Guyana and also link with a project recently approved by the ITTO on '*Strengthening the capacity to market exports of forest products from Guyana*'. The latter project, whose primary output is the establishment of a Timber Marketing Council (See Appendix 4), has as one of its outputs, a market research report looking at the demand patterns and prices for lesser used species in addition to the product specific applicability. The soon to be established Marketing Council would also play a key role in assisting this project.

The general process for selection of lesser used species looks at four key criteria -

- Species distribution- should be well distributed in Guyana
- Species availability- can only be promoted if sufficient quantities exist
- Species accessibility- should be accessible or will impact production
- Timber production - focus on species that are harvested at low volumes

Other considerations would include species applicability to current and potential market demands.

Guyana also presented a list of 17 lesser used species in 2002 at an ITTO meeting held in Brazil to develop a database of lesser uses timber species. Species from this list with insufficient information will be targeted in this project in addition to some other species that will be selected using criteria presented above.

2.4 Target beneficiaries

The main direct target beneficiaries would be the:

- **Forest industry (includes producers and manufacturers):** The forest producers and manufacturers will benefit immensely from an increased range of species to choose from. It is hoped that the industry would be receptive to training in processing of these species. It is also hoped that with this empowerment that the industry would be able to develop better marketing strategies that will assist the development of the sector on the whole.
- **Local communities:** A more vibrant sector could result in more employment for communities. Local communities have been involved in the forestry, whether subsistence or commercial, from time immemorial, and are increasingly becoming employers rather than employees. Greater knowledge and training about lesser used species will promote the utilization of forest products in a viable manner and could have long lasting social benefits for communities.
- **National Benefits:** from the Government's standpoint, it is imperative that the industry starts maximizing the use of the forest and increase its contribution to the GFP.
- **Academic forestry programmes:** Increased knowledge would be beneficial to the University of Guyana and Guyana School of Agriculture's forestry programmes. This project should also provide the motivation for the University to do research on lesser used species.

2.5 Technical and scientific aspects

While there is some information on lesser used species in Guyana, much is lacking. This project will draw on the technical expertise of wood technology laboratories abroad as Guyana lacks wood technology research facilities. Contact has been made with the USDA Forest Service Products Laboratory in USA and there is an option to work with other labs including the SilvoLab in Le Guyane.

In terms of processing techniques, local expertise will be targeted. Some of this work will also be 'learning by doing' as some of these species have not been processed anywhere else.

In terms of promotional work, the staff of the GFC will implement this aspect.

2.6 Economic aspects

Although it would be difficult to quantify, this project is of immense economic importance. In the age where the industry is under pressure to become certified in order to gain market access, and where one economic principle speaks of maximizing the benefits from the forest management unit, and stresses on efficient use of the forest resources, the industry has to step out of the box and start to look at alternative ways of utilizing our forest resource.

One economic benefit to producers harvesting lesser used species; providing markets are sourced; would be their ability to maximize the yield from the forests, which should translate to profits. As seen in the recent analysis done for period 1998-2003 (GFC 2004), it is obvious that producers are not maximizing the use of the forest by harvesting on average 5 cubic metres where the allowable cut is 20 cubic meters per hectare. Concessionaires have permanent costs such as the acreage fees, operational and administrative costs and therefore harvesting and selling a wider range of species should translate to economic returns on a business that is frequently lamented as being difficult to make profits due to the high operational costs.

The Guyana Forestry Commission would also gain as increased volumes extracted from the forest would translate to increased royalties which in the larger scheme of things would increase the forestry contribution the national economy.

It should be noted that there would be initial costs related to marketing and promotion of these species since the local and especially the international markets have traditionally focused on the well known species as seen in Appendix 5. The Marketing Council is expected to provide key support in this area.

It is also important to link the use of lesser used species with value added production as this would be a major route to increasing forest sector contribution to the national economy. It is hoped that this project could contribute to an increase in GDP by 2008-2009.

2.7 Environmental aspects

This project is aimed at promoting sustainable forest management of our forest resources. While the Guyana Forestry Commission has a sound monitoring system based on comprehensive Codes of Practice, the industry has focused too long on harvesting a few species and hence is not maximizing the use of the forest. Inherent in this is the sustainability aspect of these species and thus the sustainability of the timber industry.

2.8 Social aspects

It is hoped that increased knowledge and training would translate into an upturn of businesses and result in increased employment. As more local communities become involved in commercial forestry activities it is hoped that social benefits are translated as well.

2.9 Risks

Developmental Objective

Assumption 1: International demand for tropical forest products continues.

It is probably not likely that tropical timbers from natural forests will be able to compete in bulk markets with timber and wood products derived from temperate, mainly plantation forests. However, there will always be niche demands for tropical timbers and it is these markets that have to be targeted and maintained.

Assumption 2: National forestry policy and strategy continue to support sustainable development of forest products

The government's commitment to sustainable forest management is evident in several places and is well articulated in the overall objective of the 1997 National Forest Policy which is: "the conservation, protection, management and utilisation of the nation's forest resources, while ensuring that the productive capacity of the forests for both goods and services is maintained or enhanced". The Forest Policy also focuses under the Section on 'Marketing and Promotion' that the 'marketing of lesser-used species shall be optimised through research and development to identify appropriate processing technologies at various stages..'

Specific Objective

Assumption 1: Relevant ministries, agencies, NGOs and forest sector continue to work together to improve the industry

It has been stated earlier that the Government, through its policies and strategies, the GFC – as the executing agency of the proposed project – and the industry representative body have spoken in one voice of the need for improvements in the industry. The industry has voiced more aggressively in recent years the need for some body, similar to the former Timber Marketing Board (1974-1980), to assist with marketing of timber products in Guyana. The establishment of the Marketing Council has been seen as a positive move in attaining such a goal.

Assumption 2: Consumer countries are willing to buy lesser used species

It is hoped with more acquired knowledge and better marketing of the lesser used species, consumers would be encouraged to buy these species. Consumers would only be convinced to buy these species if their uses are explicitly demonstrated as most tend to go with the 'safe' species, ie species traditionally utilised.

Assumption 3: Local industry willing to market and buy lesser used species

The most suitable way to reduce pressure on currently popular timber species is to expand the use of the resource base by utilising more species. The local industry over the past 50 years has basically continued to focus on a few species and have displayed reluctance to venture in to utilising the less familiar species. One reason is the difficulty with attracting the markets, but equally important is the lack of understanding of the potential uses of these species and therefore the inability to market them. It is hoped with

more acquired knowledge and better marketing of the lesser used species that the local industry will see the value of marketing and purchasing such species.

Output 1: Awareness and use of lesser used species increased

Assumption 1: Willingness of forest sector to utilize and market lesser used species

Many producers have been apprehensive to utilize LUS due to lack of understanding of how some should be harvested and processed such as those species with high silica that would require some specific interventions. It is expected that the increased information on these species would encourage more marketing and use of these species.

Assumption 2: Marketing council is successfully established

The establishment of the Marketing Council will play a key role in assisting this project. This is also hinged on the Marketing Council collaborating on research work relating to demand patterns and prices for LUS and product-specific applicability of LUS as outlined as an activity in previous proposal submitted to ITTO on 'Strengthening the capacity to effectively market exports of forest products from Guyana'.

Output 2: Wood processing techniques used by industry improved

Assumption 1: Industry receptive to training

The industry has from time to time lamented that more training is needed in areas such as sawmilling and processing in general. It is hoped that when training is offered the industry will get on board as it can only serve to improve the industry as a whole.

Output 3: Technological properties of a selected set of lesser used species analysed

Assumption 1: Laboratory availability to conduct tests

Contact will be made with several labs and best option chosen. It is important that labs are willing to collaborate on this project. (Two wood technology labs have been contacted- USA and Le Guyane. It would be preferable to utilise the lab in Le Guyane since they would have more experience with woods of the Guianas)

3. Outputs

Specific Objective: To enhance knowledge and use of lesser used species of woods utilized in the forest industry of Guyana

Output 1. Technological properties (physical and mechanical) of a selected set of lesser used species analyzed

Output 2. Awareness and use of lesser used species increased

Output 3. Wood processing techniques used by local industry for lesser used species improved

4. Activities

Outputs	Activities
1. Technological properties (physical and mechanical) of lesser used species analysed	1.1 Conduct literature review on lesser used species (that have been determined to have similar properties to current used species)
	1.2 Contact relevant laboratory to conduct analyses (already being investigated- Silvolab- French Guiana and USDA Wood Laboratory, USA)
	1.3 Select species and organize for wood to be cut and sent to laboratory
	1.4 Conduct analysis on lesser used species
2. Awareness and use of lesser used species increased	2.1 Produce booklet and brochures on lesser used species for distribution
	2.2 Produce sample boards displays with the lesser used species
	2.3 Conduct seminars/workshops with forest sector (including University of Guyana) to enhance awareness of the lesser used species
	2.4 Establish link with Marketing Council to promote trade in lesser used species.
3. Wood processing techniques used by local industry for lesser used species improved	3.1 Recruit expert for training for the local industry
	3.2 Produce manuals for training
	3.3. Identify persons for training
	3.4 Identify and procure wood and equipment needed for training
	3.5 Execute training on processing techniques

5. Logical Framework

Project Elements	Indicators	Means of Verification	Assumptions
<p>DEVELOPMENT OBJECTIVE To increase contribution of the forest sector to the national economy of Guyana from sustainably managed forest resources.</p>	<ul style="list-style-type: none"> • Increase in forestry sector contribution to Gross Domestic Product by 2008 • Value of wood based forest products exports to US\$ 50m/yr by 2008 	<ul style="list-style-type: none"> • Bank of Guyana statistics reports • Guyana Forestry Commission (GFC) market reports and fact sheets • GFC Forest Resource Management and Monitoring Divisions' annual reports 	<ul style="list-style-type: none"> • International demand for tropical forest products continues • National forestry policy and strategy continue to support sustainable development of forest products
<p>SPECIFIC OBJECTIVE To enhance knowledge and use of lesser used species of woods utilized in the forest industry of Guyana</p>	<ul style="list-style-type: none"> • Increase in production of wood products made from lesser used species 	<ul style="list-style-type: none"> • GFC market and annual reports • Reports from relevant government ministries (Ministry with responsibility for Forestry, Ministry of Industry and Tourism, Ministry of Foreign Trade) 	<ul style="list-style-type: none"> • Relevant government ministries, agencies, NGOs and the forest sector industry continue to work together improve the industry • Consumer countries willing buy lesser used species • Local industry willing to market and buy lesser used species
<p>OUTPUTS 1. Technological properties of a selected set of lesser used species analyzed</p>	<ul style="list-style-type: none"> • Lab report written and information disseminated 	<ul style="list-style-type: none"> • Laboratory reports • Brochures on lesser used species with technological information 	<ul style="list-style-type: none"> • Laboratory is available to conduct test
<p>2. Awareness and use of lesser used species increased</p>	<ul style="list-style-type: none"> • Positive results from market report questionnaires on awareness and use of lesser used species • Production figures show increase in use of lesser used species • Link with Marketing Council established 	<ul style="list-style-type: none"> • Lesser used species brochures and promotional material • Reports from workshops including attendance list • GFC market and annual reports (including questionnaire results) • Forest Products Association (FPA) annual reports 	<ul style="list-style-type: none"> • Willingness of forest sector to utilize and market lesser used species • Marketing council is successfully established

		<ul style="list-style-type: none"> Marketing Council's reports 	
3. Wood processing techniques used by industry improved	<ul style="list-style-type: none"> Improved wood products 	<ul style="list-style-type: none"> Training reports 	<ul style="list-style-type: none"> Industry receptive to training
ACTIVITIES 1.1 Conduct literature review on LUS 1.2 Contact relevant laboratory to conduct analyses (already being investigated- Silvolab- French Guiana and USDA Wood Laboratory, USA) 1.3 Select species and organise for wood to be cut and sent to laboratory 1.4. Conduct analysis on lesser used species (French Guyana or USDA)	INPUTS GFC- Office facilities (computers, library) ; staff (30 days) GFC- Office facilities (computers, internet etc), staff (14 days) GFC- Transportation, office facilities, staff (20 days) GFC- Office facilities, postage of material etc (3 days) ITTO- Lab analysis (approximately 7 months)		
2.1 Produce booklet and brochures on lesser used species for distribution 2.2 Produce sample boards displays with the lesser used species 2.3 Conduct seminars/workshops with forest sector (including University of Guyana) to enhance awareness of the lesser used species 2.4 Establish link with Marketing Council to promote trade in lesser used species	GFC- Office facilities- computers, scanners, consumables etc; Staff (30 days) ITTO- Layout design, printing, publication (2 months) GFC- Office facilities, Staff (30 days) ITTO- Consumables GFC- Staff (20 days), transportation, equipment (eg powerpoint projector, laptop etc), consumables ITTO- 3 –one day-regional workshops (publicity, facilities, meals, accommodation, transportation, facilitators)- GFC- staff (5 days but ongoing contact), consumables, office facilities		
3.1 Recruit expert for training for the local industry 3.2 Produce manuals for training 3.3 Identify persons for training 3.4 Identify and procure wood and equipment needed for training 3.5 Execute training on processing techniques	GFC- Office facilities, publicity, consumables, staff (10 days) ITTO- specialist trainer (30 days) GFC- Printing manuals, consumables, staff (14 days with trainer) GFC- Office facilities, staff (2 days) GFC- transportation, office facilities, staff (20 days), GFC- office facilities, equipment, staff (20 days) ITTO- Training (publicity, facilities, meals, accommodation, transportation), specialist trainer (9 days)		

6. Workplan

OUTPUTS/ACTIVITIES	1 YEAR											
	1	2	3	4	5	6	7	8	9	10	11	12
Output 1: Technological properties of lesser used species analysed												
1.1 Conduct literature review on lesser used species												
1.2 Contact relevant laboratory to conduct analyses												
1.3 Select species and organise wood to be cut and sent to laboratory												
1.4 Conduct analyses on species (lab												
Output 2: Awareness and use of lesser used species increased												
2.1 Produce booklets and brochures on lesser used species for distribution												
2.2 Produce sample board displays with the lesser used species												
2.3 Conduct seminars/workshops with the forest sector												
2.4 Establish link with the Marketing Council to promote trade in lesser used species												
Output 3: Wood processing techniques used by local industry for lesser used species improved												
3.1 Recruit expert for training for local industry												
3.2 Produce manuals for training												
3.3 Identify persons for training												
3.4 Identify and procure wood and equipment needed for training												
3.5 Execute training												

Project Budget by Source

1. ITTO

	<i>Budget Components</i>	Total cost
10	Project Personnel	9,000
20	Sub-contracts	50,000
30	Duty Travel	9,000
40	Capital Items	4,000
50	Consumable Items	2,000
60	Miscellaneous	4,000
	Sub-total	78,000 (A)
80	81. Monitoring and Evaluation	10,000 (B)
	82. Programme Support Cost (5.5%)	6,045
	ITTO TOTAL	94,045

2. Executing Agency (Guyana Forestry Commission)

	<i>Budget Components</i>	Total cost
10	Project Personnel	9,700
20	Sub-contracts	1,000
30	Duty Travel	2,000
40	Capital Items	1,000
50	Consumable Items	6,200
60	Miscellaneous	2,000
	Sub-total	21,900
	Executing Agency Management Cost (15% of Overall budget by Activity ie 15% 99,990)	14,985
70		
	Executing Agency TOTAL	36,885

Consolidated yearly budget by source

	<i>Budget Components</i>	Total cost	ITTO	GFC
10	Project Personnel			
	11. National consultant (Training etc.)		6,300	
	Other (Training etc)		2,700	9,700
	19. Component Total	18,200	9,000	9,200
20	Sub-contracts			
	21. Publications printing		10,000	1,000
	22. Wood analysis		40,000	
	29. Component total	51,000	50,000	1,000
30	Duty Travel			
	32. Local Travel		5,000	2,000
	33. Daily Subsistence Allowance		4,000	
	39. Component Total	11,500	9,000	2,000
40	Capital Items			
	41. Workshop facilities		4,000	
	43. Equipment			1,000
	49. Component Total	5,000	4,000	1,000
50	Consumable Items			
	51. Raw materials		2000	5000
	56. Office Supplies			1200
	59. Component Total	8,200	2,000	6,200
60	Miscellaneous			
	63. Contingencies (includes postage)		4,000	2,000
	69. Component Total	6,000	4,000	2,000
	SUBTOTAL 1	99,900 (A)	78,000	21,900
70	Executing Agency Management Cost (15% of Overall Budget by Activity ie 95,900)			
	79. Component Total			14,985
	SUBTOTAL 2	14,985		14,985
80	ITTO Administration, Monitoring & Evaluation			
	81. Monitoring & Evaluation	10,000 (B)	10,000	
	82. Programme Support Costs (8% of A+B)	7,040	7,040	
	SUBTOTAL 3	17,040	17,040	
100	GRAND TOTAL	131,925	95,040	36,885

Part 111: Operational Arrangements

8. Management Structure

The Guyana Forestry Commission will be the sole executing and implementing institution for this project.

9. Monitoring, Reporting and Evaluation

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, market 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. The project will be subject to an *ex-post* evaluation by ITTO. GFC will also evaluate the project in accordance with Guyana technical cooperation guidelines.

10. Future Operation and Maintenance

The GFC has already initiated work on this but needs support to execute the core activities described in this project. The Guyana Forestry Commission has to continue work on lesser used species after the project life (if approved), through the Marketing Council, in collaboration with the forest producers and manufacturers. What this project is important for is to build our knowledge of the species, increase awareness and build capacity especially in the area of processing techniques.

Part 1V: The Tropical Timber Framework

1. Compliance with ITTA 1994 Objectives

This project proposal is fully consistent and closely related to several of the objectives set out in Article 1 of the International Tropical Timber Agreement 1994.

This project will touch on several issues including continued promotion of sustainable use of Guyana's forest resources, knowledge acquisition on our lesser used species, capacity building for the forestry sector, marketing and information dissemination.

In particular, the following objectives of ITTA would be linked to this project:

- (c) To contribute to the process of sustainable development
- (d) To enhance the capacity of members to implement a strategy for achieving exports for tropical timber and timber products from sustainably managed sources
- (f) To promote and support research and development with the view to improving forest management and efficiency of wood utilisation as well as increasing the capacity to conserve and enhance other forest values in timber producing tropical forests
- (i) To promote increased and further processing of tropical timber from sustainable sources in producing member countries with a view to promoting their industrialization and thereby increasing their employment opportunities and export earnings
- (k) To improve marketing and distribution of tropical timber exports from sustainably managed sources
- (l) To encourage members to develop national policies aimed at sustainable utilisation and conservation of timber producing forests and their genetic resources and at maintaining the ecological balance in the regions concerned, in the context of tropical timber trade
- (m) To promote the access to, and transfer, technologies and technical cooperation to implement the objectives of this agreement
- (n) To encourage information-sharing on the international timber market

2. Compliance with ITTO Action Plan

This proposal takes into account the priorities and guidelines established in the ITTO Yokohama Action Plan (2002-2006). It fits well within the Action Plan Goals of 'Forest Industry' and more specifically:

Goal 1: Promote increased and further processing of tropical timber from sustainable sources

Action 2: Study and promote policies and other measures to increase timber industry competitiveness

Action 5: Encourage members to assist them:

- Formulate research and development proposals which assist with the piloting and commercialization of new processing and manufacturing technologies
- Organize workshops/seminars on use of new/and or improved techniques and technology
- Undertake sectorwide training needs analyses, development of training strategies, training facilities and course curricula; preparation of training manuals, and delivery of training courses\

Goal 2: Improve industry's efficiency of processing and utilization of tropical timber from sustainable sources.

Action 2: Facilitate and encourage demonstration projects addressing increased production and utilization efficiency, and competitiveness of the tropical timber industry.

Action 6: Promote development of marketing, production and commercial skills in the forest industry.

Action 7: Promote increased awareness and utilisation of existing information on wood properties and end use requirements.

Action 8: Encourage members and assist them, where appropriate

- Undertake research into wood properties and end use requirements, paying particular attention to the properties and availability of lesser used species and timber plantation species and the potential markets for them.

Annex A- Profile of the Executing Agency

The expertise of the Executing Agency

The Guyana Forestry Commission (GFC) is a semi- autonomous organisation formed in 1979 as a successor to the Forest Department. The GFC is legally mandated to manage and control the utilisation of the State's forest ensuring optimum use and sustained yield of forest produce and the maintenance and improvement of the environment. The GFC also advises the Government the implementation of the National Forest Policy;

Structure of the Guyana Forestry Commission

The GFC's mandate is effected by a network of five (5) Divisions:

- *Planning and Research Development Division:* Responsible for the implementation of the National Forest Plan, facilitating investment in the sector, conducting studies of sector issues and market/ product promotion. The Division also generates and disseminates information through ecological, socio- economic and technological research for forest managers and policy makers to promote the sustainable utilization and conservation of the tropical rain forest of Guyana
- *Forest Resources Management Division:* Responsible for 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, preparing operational guidelines for forest management planning, evaluating management and operational plans, prescribing standards for forest management and providing support for forestry extensions. A Herbarium is available for public use and has a collection of wood samples and plant specimens.
- *Forest Monitoring Division:* Responsible for the enforcement of forest laws and regulations, monitoring and control of environmental and social impact of operations within the state forest estate and collection of revenue.
- *Finance Division:* Responsible for managing the financial resources of the Commission. A Management Information Systemss (MIS) Unit is under this Division.
- *Human Resources Division:* Responsible for staff management, development and implementation of human resource policies and procedures, education, training, including in – service training and liaison with relevant teaching and training institutions. A Library is available for public use and is stocked with research findings and journals on issues on the local and international arenas.

In addition, there is an Internal Audit Unit.

The mission of the GFC is 'to provide excellence in forestry management services to our stakeholders through the application of professional skills to contribute to our nation's development'.

The Infrastructure of the Executing Agency

The GFC has a main headquarters building in Demerara, with Divisional offices in Berbice and Essequibo. In addition to these central Division offices, 19 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. The GFC has a fleet of vehicles and boats. Library and herbarium facilities are available to the staff and public.

Budget (US\$)

	2001	2002	2003
Personnel	500,000	585,000	565,000
Subsistence	65,500	80,000	96,500
Capital Items	35,000	77,000	186,000
Consumables	310,000	391,500	425,000
Other	55,000	55,000	104,000
Total	965,500	1,188,500	1,376,500

(1US\$=G\$200)

Personnel

- no of staff with post graduate degrees 6
- no of staff with graduate degrees 11
- no of middle level technicians 26
- no of administrative personnel 10
- total no of personnel in the forestry related fields 153

Current projects at the Guyana Forestry Commission (not ITTO)

- Forest sector training project - CIDA funded (under the Caribbean Regional HRD Programme for Economic Competitiveness (CPEC)
- Training in Participatory Forest Management- FAO funded
- Short term capacity building for developing and implementing good forest practices in the forest sector- WWF funded
 - *Development of a Strategic Plan for the Forest Products Association (FPA)*
 - *Consultations with stakeholder groups on forest issues*
 - *Enhancement of the membership of the FPA*
 - *Forest research (4 research projects on Timber waste management, Sustainable management of Wallaba forests, Commercial utilisation of Ite*

palm for Tibisiri (an NTFP production, Establishment of a system of Permanent Sample plots for Guyana)

- *MSc students' support*

- Supporting the National Forest Policy and Plan Revision- GTZ funded

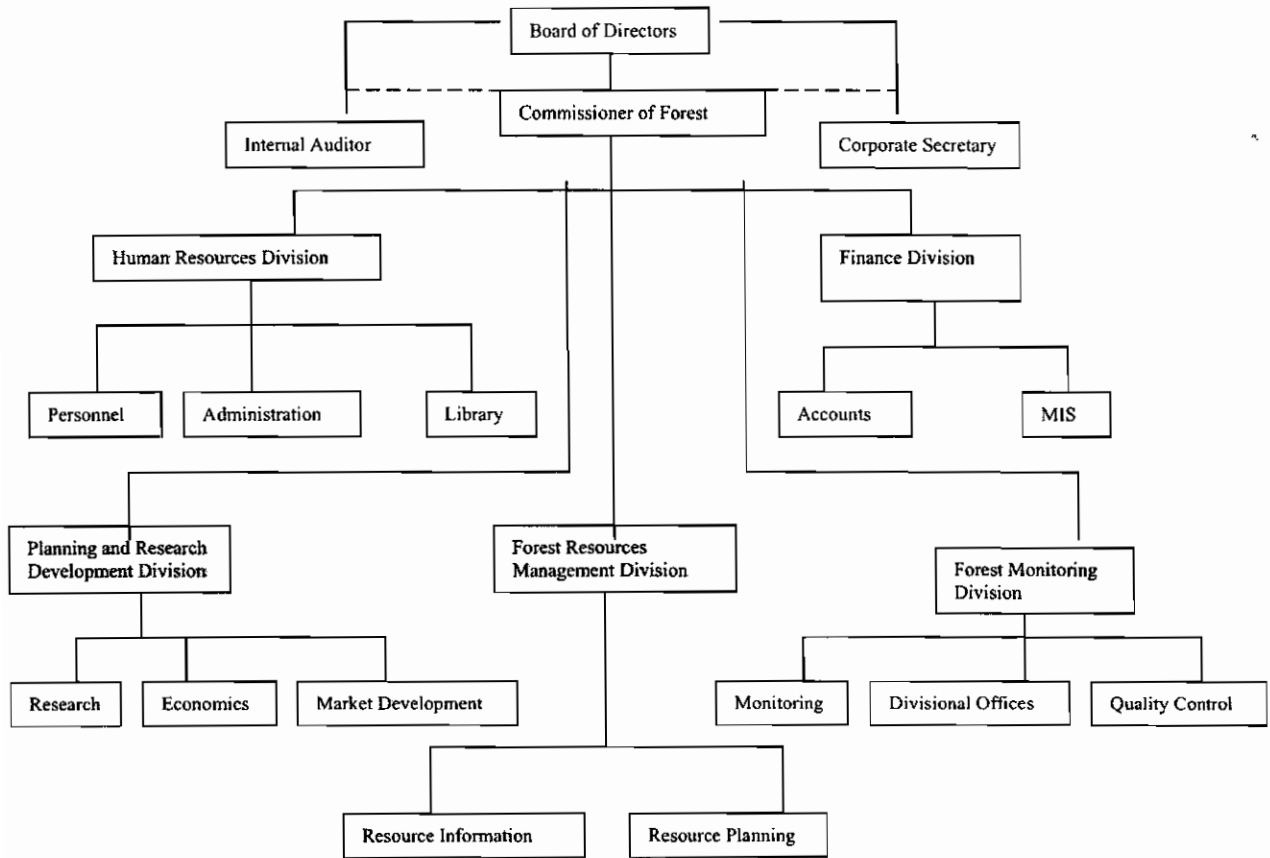
Others in recent past

- Sensitizing the stakeholders on forest certification- PROFOR/UDNP
- Institutional strengthening of GFC, contribution to FTC, facilitating staff attendance to conferences -DFID
- Assistance to GFC re attendance at conferences eg Latin American and Caribbean Forestry Conferences- FAO
- Small and medium scale forest enterprises in Guyana- discussion paper- IIED funded (International Institute for Environment and Development)

Previous projects submitted to ITTO by Guyana are:

- FUNDED: A Sustainable Management Model in the Iwokrama Rain Forest {ITTO 10/97 Rev. 1
- NOT FUNDED: Forest Industry Training Project (1997)
- NOT FUNDED: Design and Implementation of an Information System within the GFC (1997)
- FUNDED: Training in Reduced Impact Logging in Guyana. (PD068/01 Re 2)- An extension to this training project has also been approved
- APPROVED: Strengthening capacity to effectively market exports of forest products from Guyana

Organogram of the Guyana Forestry Commission



Annex B- Curricula vitae of key staff

JAMES SINGH

NAME 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, Center 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

RELEVANT WORK OVER THE PAST THREE YEARS

- 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.
- 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 sub-committees.
- Attendance at overseas meetings/seminars/conferences on behalf of the GFC and the Government of Guyana (Forestry and Natural Resource issues).
- Providing support to the Guyana Forestry educational and training facilities (Forestry Training Centre; University of Guyana; Guyana School of Agriculture)

RAQUEL THOMAS

NAME Raquel Thomas (Ms)
DATE OF BIRTH September 25, 1969
COUNTRY OF BIRTH Guyana
NATIONALITY Guyanese

EDUCATION

Degree	Name / Specialization	Institution	Year
BSc	Biology (Chemistry Minor)	University of Guyana	1991
Diploma of Imperial College	Tropical Forest Ecology	Imperial College ,University of London	1999
PhD	Tropical Forest Ecology	Imperial College ,University of London	1999

EMPLOYMENT RECORD

2003-present Head, Planning and Research Development Division., Guyana Forestry Commission
2001 - 2003 Head, Forest Research Unit, Guyana Forestry Commission
1999 – 2001 Post-Doctoral Research Fellow, Iwokrama
1995-1999 Researcher, Tropenbos Guyana- Programme
1993-1995 Assistant Public Relations Officer, Public Relations Dept, University of Guyana (UG)
1992-1993 Research Assistant, Public Relations Department, UG

RELEVANT WORK OVER THE PAST THREE YEARS

Some major duties include:

- Managing the finance, administration and human resources of the Forest Research Unit and Planning and Research Development Division (including workplan preparation and implementation)
- Identifying relevant research and studies for funding by International Agencies and for publication (including proposal preparation).
- Coordination of forest research projects
- Maintaining accessible records of research and promoting the application of research findings by the sector
- Collaborating with national and international research agencies, and representing GFC at national and international meetings
- Conducting training in tree identification
- Supervising the dissemination of information to the sector.
- Developing and maintaining relationships with national and international institutions.
- Promoting the public image and profile of the GFC.

MOHINDRA CHAND

NAME Mohindra Chand (Mr)
DATE OF BIRTH October 28, 1978
COUNTRY OF BIRTH Guyana
NATIONALITY Guyanese

EDUCATION

Degree/certificates	Name / Specialization	Institution	Year
Post graduate certificate	Professional Management	University of the West Indies (Dist. Learning)	2001
BSc	Forestry	University of Guyana	2000
Diploma	Forestry	University of Guyana	1997

EMPLOYMENT RECORD

2003 – present Deputy Commissioner of Forest, Guyana Forestry Commission
2002 – 2003 Assistant Commissioner of Forest, Guyana Forestry Commission
2001 – 2002 Divisional Forests Officer, Guyana Forestry Commission
2000 – 2001 Monitoring Inspector, Guyana Forestry Commission

RELEVANT WORK OVER THE PAST THREE YEARS

Some major duties include:

- Preparing work plans and budgets for the Department and monitoring implementation.
- Overseeing the preparation of Manuals of Procedure for the Department.
- Developing and implementing systems and procedures for the enforcement of forest laws and regulations.
- Supervising a programme of outreach activities to forest communities.
- Developing and implementing a national programme of monitoring of forest operations to ensure compliance with the Commission standards and with the requirements of forest management plans and operational plans.
- Advising the Commission on matters related to forest monitoring with reference to current practices, the National Forest Policy, Legislations etc.
- Ensuring that all forest operations and forest industry operations within the Division are inspected and registered as required by legislation.
- Assisting with implementation of the Social Development Programme

TASREEF KHAN

NAME Tasreef Khan (Mr)
DATE OF BIRTH May 28, 1974
COUNTRY OF BIRTH Guyana
NATIONALITY Guyanese

EDUCATION

Degree	Name / Specialization	Institution	Year
Certificate	Professional Development	University of the West Indies, St Augustine	2001
BSc	Forestry	University of Guyana	2000
Diploma	Forestry	University of Guyana	1998

EMPLOYMENT RECORD

2004 – present Deputy Commissioner of Forests, Guyana Forestry Commission (GFC)
2003-2004 Deputy Commissioner of Forests (Acting), GFC
2002-2004 Assistant Commissioner of Forests , GFC
2001-2002 Assistant Commissioner of Forests (Acting) , GFC
2001 Forest Resources Planning Officer, GFC
2000-2001 Inventory Officer

RELEVANT WORK OVER THE PAST THREE YEARS

- Preparing workplans and budgets for the Forest Resources Management Division and monitoring implementation
- Overseeing the preparation of standards for all forest operations and procedures for monitoring compliance with the standards
- Overseeing the development and maintenance of a forest resource information system
- Developing plans for forest resource classification and allocation
- Supporting and monitoring the preparation of forest management plans and operational plans for permit areas
- Ensuring that social issues are addressed in resource allocation, management planning and preparation of operational standards
- Providing advice and making recommendations on forest research strategies and procedures

ANNA MOHASE

NAME Anna Mohase (Ms.)
DATE OF BIRTH November 17, 1980
COUNTRY OF BIRTH Suriname
NATIONALITY Guyanese

EDUCATION

Degree	Name / Specialization	Institution	Year
BSc	Management	University of Guyana	2002

EMPLOYMENT RECORD

2003 – present Market Development Officer, Guyana Forestry Commission
2002 - 2003 Customer Service Representative, National Bank of Industry and Commerce
1999 - 2000 Teacher, Krishna’s College of Business

RELEVANT WORK OVER THE PAST THREE YEARS

- 2003 – present**
- Compiling information on market prices and volumes in quarterly reports.
 - Providing a market information service to the forest sector.
 - Conducting surveys and studies to improve knowledge and understanding of market trends and issues and to inform forest policy processes.
 - Assisting with the development of strategies for the market promotion of forest products including work on lesser used species
 - Assisting with the development and implementation of forest product grading rules and standards.
 - Administering procedures for the control and recording of forest product exports.
 - Establishing contacts with other forest product institutions to promote the exchange of market information.
 - Contributing to consultations and discussions on issues of interest to the sector and stakeholders.
 - Conducting relevant training in wood identification

Terms of Reference

1. Title: Project Coordinator

Experience: The Project Coordinator should have at least 5 years experience in project management. Forestry experience will be an asset.

Main Duties:

1. Supervising implementation of project activities including budget allocation
2. Supervising project implementation staff
3. Reporting on progress of project to ITTO

2. Title: Specialist in Wood Processing techniques

Experience: The specialist should have a minimum of 5 years of hands on experience in the relevant field. He/she should have good knowledge of the technology relating to wood processing and experience with working with several species of local woods. He/she should have experience in training.

Duties:

1. Develop curriculum and schedule for training programme
2. Prepare training manuals in collaboration with GFC staff
3. Identify necessary equipment and consumables needed for training programme
4. Assist with arrangements for training programme
5. Facilitate stakeholder training sessions
6. Develop an appropriate assessment and award scheme for candidates on the training programme
7. Prepare a report on outcome of training programme with recommendations of future needs

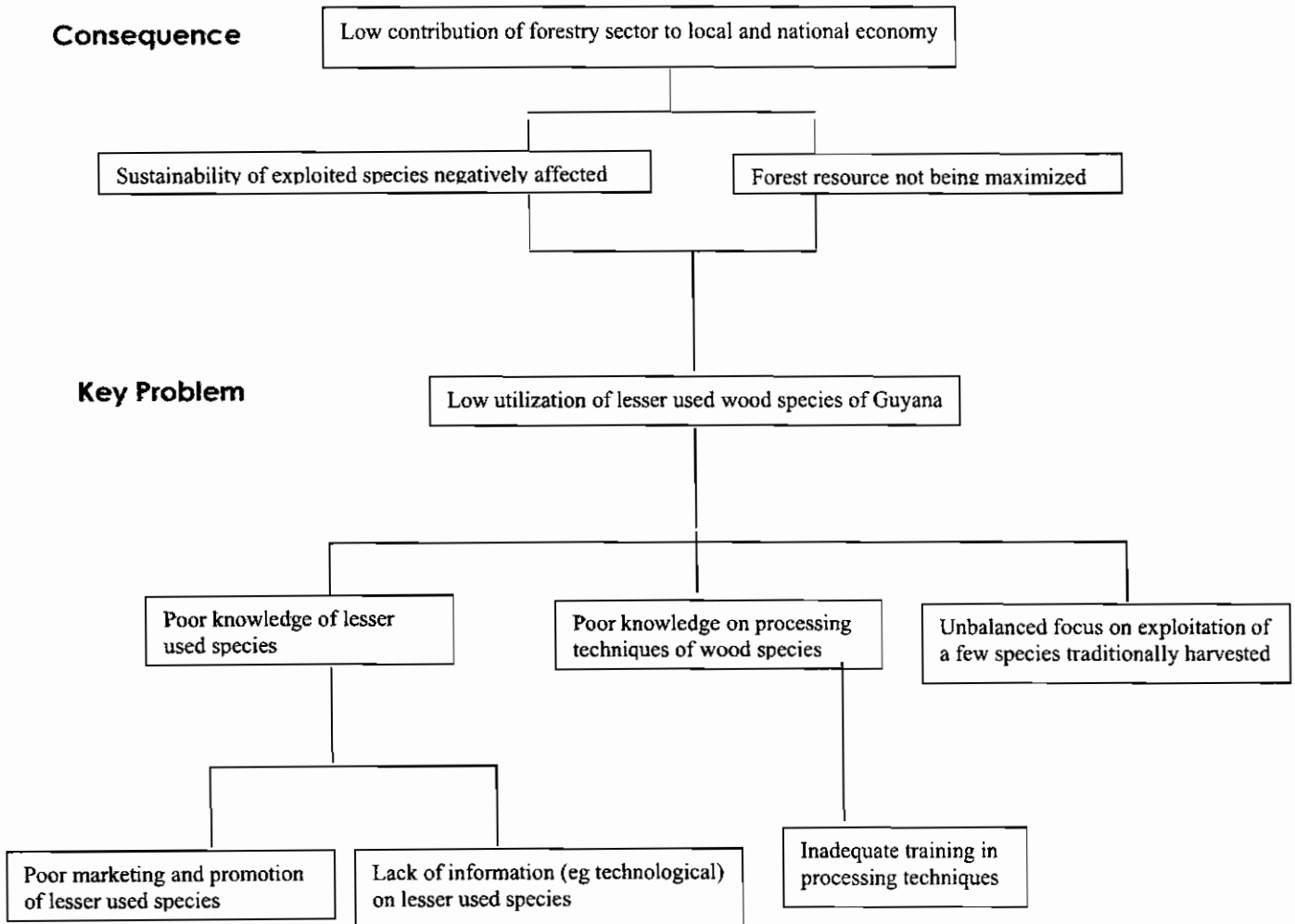
Annex C- Changes made to the Proposal

Changes are highlighted in blue in the document

Recommendation	How recommendation was addressed
1. More information is desirable on the process and criteria for selecting the lesser used species which the project will work on.	Information is provided under Section 2.3- Project Strategy
2. Information should be provided on expected effects of increased use of lesser used species on forest management costs and revenues, on processing costs and on marketing costs and sales prices.	Information is provided under Section 2.6- Economic Aspects
3. More information on the Marketing Council should be provided, composition, competence, funding etc.	Additional information on the Marketing Council is provided in Appendix 4 In relation to the Panel's concern about continuation of activities of this project, GFC will continue to invest in the utilization of the LUS and will also rely on the Marketing Council to assist with promotion of these species.
4. Risk mitigation should be more effectively elaborated.	Additional information provided under Section 2.9 Risks
5. The project coordinator should be mentioned specifically.	The designated project coordinator is Mr James Singh, Commissioner of Forests (see Terms of Reference- pg 36). Other key staff at the Commission will assist in implementing the activities. (see Annex B) It is noted that that the panel has expressed concern about the staff being allowed enough time to spend on implementation of this project. Funded projects are always included as part of GFC's work plan activities and it should be noted that work on Lesser Used Species has been part of our work plan since 2003.

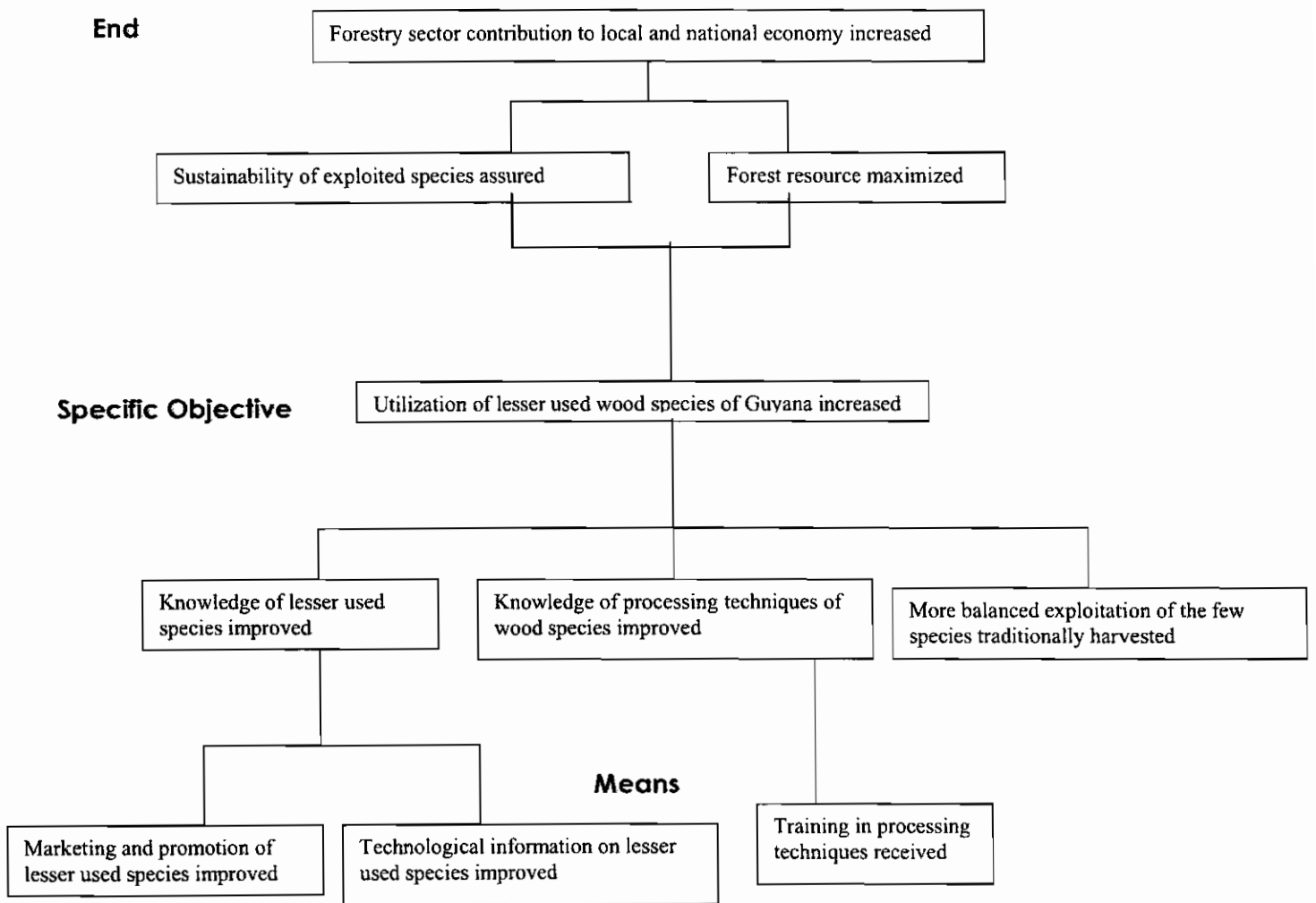
Appendix 1

Problem Tree



Appendix 2

Objective Tree



Appendix 3

References

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Appendix 4

Information on Project submitted to ITTO on 'Strengthening the capacity to effectively market exports of forest products from Guyana'

The project will contribute to reversing the recent decline in value of forest products from Guyana. It is intended that increasing the capacity of Guyana to market its forest products, in conjunction with the commitment of the Government of Guyana to improved forest management, will increase the forest sector's contribution to the national economy from sustainably managed resources.

The main output from the project will be the establishment of an independent and representative Forest Products Marketing Council. This body will subsequently coordinate and develop marketing of all forest products from Guyana. In addition, the project will deliver critical marketing strategy and intelligence reports in two key areas, develop a web-site dedicated to promoting Guyana's forest products, develop a database of international business contacts and conduct an international marketing training programme for managers and directors in the sector.

Specific Objective: To strengthen the capacity to effectively market exports of forest products from Guyana.

- Output 1: Forest Products Marketing Council (FPMC) established and mandated.
- Output 2: Market research report produced on international demand, quality standards (including certification) and pricing for secondary wood products (especially high quality/low volume).
- Output 3: Market research report produced on demand patterns and prices for Lesser-Used Species (LUS) and product-specific applicability of LUS.**
 - Output 4: Internet site established for promotion of Guyanese forest products and database of international business contacts set up.
- Output 5: Training course and manual delivered on practical international marketing techniques (to include, information sources, business development, promotion, demand assessment, export/import regulations, pricing strategies, fiscal incentives, e-commerce)

The Government of Guyana will provide about 30 percent of the total budget (US\$186,546) for this project and the remainder is to be facilitated by ITTO once the budget release is approved. The GFC in the meanwhile has started preparatory work to facilitate the commencement of this project. The project will require the GFC to hire a number of consultants to execute activities including an international marketing specialist, a national marketing specialist, a legal specialist, a web design specialist and a training specialist.

A key activity of the lead consultant is the preparation a comprehensive action plan for the establishment of a Forest Products Marketing Council for Guyana which would include dealing with issues such as composition and competence.

The Marketing Council, in the future, will also take up the lead role in promotion of LUS and value added products.

Appendix 5

Principal Commercial Timber Species of Guyana

Commercial/Local Name	Scientific Name
Purpleheart	<i>Peltogyne venosa</i>
Tauroniro	<i>Humiria balsamifera</i>
Aromata	<i>Clathrotropis brachypetala</i>
Simarupa	<i>Quassia simarouba</i>
Tatabu	<i>Diplostropis purpurea</i>
Shibidan	<i>Aspidosperma album</i>
Locust	<i>Hymenaea oblongifolia</i> var. <i>davisii</i>
Wamara	<i>Swartzia leiocalycina</i>
Bulletwood	<i>Manilkara bidentata</i>
Mora	<i>Mora excelsa</i>
Kabukali	<i>Goupia glabra</i>
Greenheart	<i>Chlorocardium rodiei</i> (also called <i>Ocotea rodiaei</i>)
Crabwood	<i>Carapa guianensis</i>
Baromalli	<i>Catostemma commune</i>
Soft Wallaba	<i>Eperua falcata</i>
Ituri Wallaba	<i>Eperua grandiflora</i>

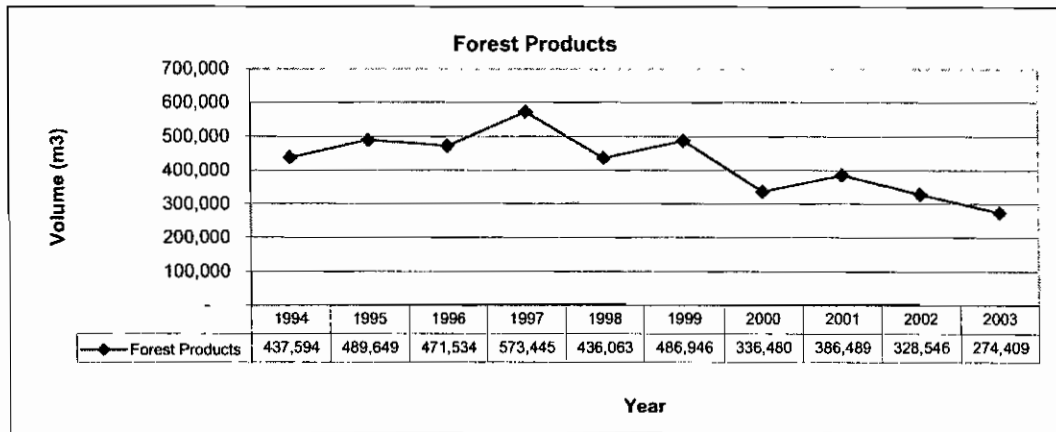
Appendix 6

Lesser used species currently being promoted by the Guyana Forestry Commission

Commercial/Local Name	Scientific Name
Suya	<i>Pouteria speciosa</i>
Limonaballi	<i>Chrysophyllum pomiferum</i>
Black Kakaralli	<i>Eschweilera sagotiana</i> / <i>E. subglandulosa</i>
Sarebabeballi	<i>Vouacaopoua macropetala</i>
Huruasa	<i>Abarema jupunba</i>
Kautaballi	<i>Licania alba</i> / <i>L. majuscula</i>

Appendix 7

Forest production 1994-2003



Appendix 8

Forestry Sector's contribution to the Gross Domestic Product (GDP) GS Million (1988 prices)

	1997	1998	1999	2000	2001	2002	2003
GDP at factor cost	5,360	5,270	5,426	5,349	5,474	5,536	5,500
Forestry Sector	264	200	226	189	195	180	183
% contribution	4.93	3.80	4.17	3.53	3.56	3.25	3.32

Note: Plywood, furniture and other value added production are not measured as part of the forest sector's contribution to GDP.
(US\$1= 191, Dec 2002)