

I T T O

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

DRAFT PROJECT DOCUMENT

Title	FOREST INDUSTRY DEVELOPMENT STUDIES
Serial Number	PD 108/90 (I)
Original	ENGLISH

Prepared by	DEPARTMENT OF FOREST
Submitted by	GOVERNMENT OF PAPUA NEW GUINEA
Duration	2 YEARS
Field of Activity	FOREST INDUSTRY
Co-operating Governments	GOVERNMENT OF PAPUA NEW GUINEA
Implementing Agencies	DEPARTMENT OF FOREST
Estimated Starting Date	UPON APPROVAL, PREFERABLY IN JANUARY, 1991
Estimated Project Costs	US\$ 535,000
Financing Sources and Amount	
- ITTO Contribution	US\$ 475,000
- Government of PNG Contribution	US\$ 60,000 (IN KIND)

Signed

On behalf of ITTO

Date

On behalf of Government of Papua New Guinea

Date

FOREST INDUSTRY DEVELOPMENT STUDIES

PART I - LEGAL CONTEXT

This project proposal is in accordance with the Article 1 of the International Tropical Timber Agreement, 1983, specifically Objective (e). It is submitted to the International Tropical Timber Organization as a result of the project idea that was presented to the Sixth Session of the Permanent Committee on Forest Industry during the Eight Session of the International Tropical Timber Council Meeting held in Bali, Indonesia from the 16th - 23rd May, 1990. Papua New Guinea received encouragement from the Permanent Committee on Forest Industry (Sixth Session) to develop the project idea into a full project proposal in view of the potential contribution of the proposed studies to the development of processing industries in the country.

In addition, the project relates to the working area of the ITTO under Article 23, paragraph 5 (a) and Paragraph 6 (a) and (b).

Papua New Guinea is in the list of Producing Countries as specified under Article 2 (4) of the above Agreement. This project is to be undertaken within Papua New Guinea.

PART II - THE PROJECT

1. Objectives

A. Development Objectives

The project proposal is in line with the country's National Goals and Directive Principles and the National Department of Forest's objective to encourage greater onshore processing industry in the country.

B. Immediate Objectives

1. To undertake a pre-industrial survey to determine where and how Papua New Guinea can utilize its forest resources to its optimum use within the country.
2. To evaluate the economic worth of the current processing industries and recommend improvements and/or integration.

2. Background and Justification

The World Bank led a review of the Papua New Guinea forestry sector in early 1989 under the auspices of the Tropical Forestry Action Plan. In January, 1990, it presented its final Report to the Government of Papua New Guinea, where it outlined a number of proposal projects for external funding assistance to assist the GOPNG to properly manage the conservation and utilization of its forest resources. On this particular project, the Tropical Forestry Action Plan Report argued that important policy decisions - namely, the imposition of the log export bans to encourage domestic processing, and the location of major plantation investments should not be taken in the absence of feasibility studies for forestry investments.

Presently the natural resources of PNG are exploited mostly for export as raw logs. On the forest products export perspective, there are currently only 6 Sawmills, 1 veneer mill and 1 chipmill, compared to 32 log exporters.

It has also been argued that the processing sector in PNG is internationally uncompetitive, probably due to the high costs, which leads to low productivity on the one hand, and the diverse nature of the forest resource on the other. Then again, it could be due to the decline in processing expertise since 1979 after the adoption of the current Forest Policy, which has allowed for liberal log exports. This is now being reviewed and the GOPNG has adopted the policy of encouraging the domestic processing of an increased proportion of its forest products. The Government of Papua New Guinea needs to be assisted in its efforts to assess the possibilities of increasing socio-economic benefits through establishment of appropriate forest industries.

This project is considered important to assist the GOPNG to assess how it can encourage viable onshore processing industries within the country, taking into considerations the likely implications on the operations of the current forest industries.

3. Outputs

At present stage of development in PNG, three basic types of forest processing seem most worthy of consideration: an integrated sawing and board plant; woodchipping (for export) operations; and a pulp mill. Mobile sawmilling is also becoming popular especially in terms of relatively low environmental degradation. Rattan and culture of orchids and shitake mushroom are some of the major village based industries that has potential for development.

Outputs will therefore be in the form of:

- (a) list the scope and type of small scale (village base), medium and large scale industries;
- (b) integration of desired PNG industries, based on the sector report on industries in the region and Europe;
- (c) the calendar year that each of the above category are to be implemented in accordance with forest resource availabilities;
- (d) Reports on the socio-economic and environment feasibility of establishing timber processing industries in PNG, with special reference to sawmilling, wood-based panel, chipping and pulping plants for export production. For each industry branch the report will include assessment and recommendations on:
 - resource basis;
 - markets and marketing strategies;
 - manufacturing (site selection, technology, manpower and training, environment and social aspects, economic and financial analysis).

4. Activities

- (a) Undertake a study and report on the existing, proposed and potential small (village base), medium and large scale forest industries in PNG. This report is to include suggestions to modify the existing industries where feasible.
- (b) Conduct two interdepartmental workshops. The first is to report and discuss on the findings of the existing industries and any suggestions that would have developed during the findings. The second workshop is to enhance the report on the industrial developments and their market trends in the Asia-Pacific region and the world with the existing and proposed industrial development in PNG.
- (c) Co-ordinate an independent, in depth and critical analysis on the current problems of the forest industries, under sub-contract arrangements. The list of sub-contract requirements will include suggestions for specific remedies and recommendations about processing, and environmental and social aspects pertaining forest industrialization. An enhanced list of recommendations then is to be presented at the second interdepartmental workshop.
- (d) Carry out overseas missions to view and report on the industrial developments and their market strategies in Asia, Australia and European regions.
- (e) Prepare periodic reports to the GOPNG, ITTO and or the Funding Agencies. Termination report to include publication.
- (f) Conduct two National workshops. The first is to discuss the integrated report on the industry in view of the forest resources in the country and the industries/markets in the region and Europe. The results of the workshop will lead to phasing in of the types of industries and related market strategies into the National Forest Plan. The second session is to sum up the industry situation and its future before actual publications and terminal reporting.
- (g) Prepare the respective statements on industrial developments and their related marketing strategies for inclusion in the National Forest Plan.

5. Inputs

(A) ITTO

- Provide the external funding sought of the project proposal.
- Select the Expert on industrialization in forestry preferably of the Asia-Pacific region who would organize and execute with close collaboration with GOPNG the activities as list for this project proposal.

(B) GOPNG

Provide the internal financial contributions and all other backup facilities (listed as kind) necessary to effect this project proposal.

6. Preparation of Work Plan

The project will be a two (2) year project. The spread of its is necessary to allow for other findings, as the report on the Rapid Resource Appraisal, to be considered during the studies.

7. Framework for Effective Staff Participation

The National Counterpart is to carry out all logistic tasks of the project. The person is also required to call for cooperation from the provincial forest establishments where necessary during the period of the project.

8. Development Support Communication

The National Counterpart and the provincial departments will inform the resource owners of the purpose of the study and would seek their views on what they would want done with their forest resources.

9. Institutional Framework

The project will be based in PNG under the Department of Forest, with close coordination with the PNG Forest Research Institute and the Timber Industry Training College, both in Lae, Morobe Province, where the actual industrial study and research on wood utilization will take place.

10. Prior Obligations and Pre-requisites

The only major prior obligation is the preliminary findings of the Rapid Resource Appraisal Project which is expected by the end of 1991. The National Forest Policy (white paper) and the revised legislation would have been at finalization stages by the end of 1990.

11. Possible Future Assistance

Check the relevance of the Marketing Strategies in about year 2 of its acceptance.

PART III - SCHEDULE OF MONITORING, EVALUATION AND REPORTS

1. Monitoring Reviews

The project will be subject to periodic technical monitoring in accordance with the policies and procedures of the ITTO, the financial contributing institution or Government, and GOPNG. Quarterly reviews may be required by GOPNG.

2. Evaluations

The project will be subject to evaluation in accordance with the policies and procedures of ITTO, the financial contributing institution or Government and the GOPNG. Apart from the GOPNG requirements for such reviews to be quarterly, specific review periods of others as ITTO will be known at a late date.

3. Reports

Progress reports, at least for GOPNG will be quarterly except for the terminal report which is to be done 3 months before the project ends.

PART IV - BUDGET

1. <u>ITTO</u>	US\$
Resource/Landuse Expert - 24 m/m	240,000
Evaluation and Monitoring	15,000
Basic Data Collection	60,000
Contract Studies - 3 m/m	60,000
2x National Workshops	20,000
Overseas Study Missions	54,000
Materials	
1 x computer	7,000
2 x laptops	4,000
1 x Datashow with Overhead Projector	10,000
Others	5,000
Subtotal	475,000
2. <u>GOPNG</u>	US\$
Vehicle hires	10,000
Publication	10,000
Office Supplies	4,000
Accommodation	36,000
Subtotal	60,000
Total Project Cost (indicative)	535,000

* Expenses (wages) of the local staff components, office space will be cost on the recurrents of the GOPNG.

ITTO

INTERNATIONAL TROPICAL TIMBER ORGANIZATION

DRAFT PROJECT PROPOSAL

Title: Forest Industries Development Studies

Prepared by: Department of Forest

Submitted by: Government of Papua New Guinea

Duration: 24 months

Field of Activity: Forest Industry

Co-operating: Government of Papua New

Implementing Agencies: Department of Forest

Estimated Starting Date: September 1991

Estimated Project Costs: US\$~~547,000~~ 535,000

Financing Sources and amounts: ITTO Contribution US\$~~487,000~~ 475,000
GOPNG (in kind) US\$ 60,000

*Budget stays
as in the
unrevised document*

PART I - LEGAL CONTEXT

This project proposal is in accordance with Article 1 of the International Tropical Timber Agreement, 1983, and it relates particularly to Objective (e). It is submitted to the International Tropical Timber Organization as a result of a project concept which was presented to the Sixth Session of the Permanent Committee on Forest Industry during the Eight Session of the International Tropical Timber Council Meeting held in Bali, Indonesia from the 16th-23rd May, 1990. Papua New Guinea was encouraged by the Permanent Committee on Forest Industry (Sixth Session) to develop the project idea into a full project proposal in view of the potential contribution of the proposed studies to the development of processing industries in the country.

In addition, the project relates to the working area of the ITTO under Article 23, paragraph 5 (a) and paragraph 6 (a) and (b).

Papua New Guinea is in the list of Producing Countries as specified under Article 2 (4) of the above agreement. This project is to be undertaken in Papua New Guinea.

PART II - THE PROJECT

1. OBJECTIVES

1.1. Development Objectives

The project proposal is in line with the country's National Goals and Directive Principles and the revised forest policy which aims to ensure a greater onshore processing industry in the country.

1.2. Immediate Objectives

- to undertake a pre-industrial survey to determine where and how Papua New Guinea can utilize its forest resources to its optimum use within the country.
- to evaluate the economic worth of the current processing industries and recommend improvements and/or integration.

The basic objectives of the project will be to formulate a coherent and well-supported series of recommendations on the question of whether and how to pursue more intensive evaluation of specific forest processing possibilities, and to present these findings to GOPNG after extensive dialogue with government and industry agencies.

2. BACKGROUND AND JUSTIFICATION

The World Bank led a review of the Papua New Guinea forestry sector in early 1989 under the auspices of the Tropical Forestry Action Plan. In February, 1990, it presented its final report to the Government of Papua New Guinea, where it outlined a number of proposed projects for external funding to assist GOPNG to properly manage the conservation and utilization of its forest resources.

The TFAP report for Papua New Guinea refers to the need to study closely the economic feasibility of industries based on forest resources, prior to formulation of any major policy decisions on the sector, such as imposition of log export bans, introduction of special incentive packages, and so on.

The National Forestry Action Plan has provision for a project to undertake pre-feasibility studies for the forestry sector. These studies are intended to be broad sub-sector level analyses, made with a view to setting priorities for more in-depth investment feasibility work.

Important policy decisions relating to the imposition of the log export bans are presently being considered to encourage domestic processing. Presently the natural resources of PNG are exploited mostly for log export as raw logs - there are currently only 6 sawmills, 1 veneer mill and 1 chipmill in Papua New Guinea as compared to 32 log

exporters.

There is a suggestion that the PNG processing sector is not internationally competitive, with high internal costs, low productivity and the diverse nature of forest resource being contributory factors. This requires a more systematic study as it may indeed be due to the decline in processing expertise since 1979 when the 1979 Forest Policy encouraged log exports. Now a new policy is in place and this will encourage the domestic processing of an increased proportion of its forest products.

The Government of Papua New Guinea needs to be assisted in its efforts to assess the potential for increasing socio-economic benefits through establishment of appropriate forest industries. This will require a systematic analysis of industry performance and viability and preparation of preliminary feasibility studies of selected processing options in the light of detailed resource analysis and marketing studies. It will be valuable also to attach to this project a study and analysis of forest policy and incentive options which might better encourage a viable onshore processing industries within Papua New Guinea.

3. OUTPUTS

At the present stage of development in PNG, three basic types of forest processing seem most worthy of consideration: an integrated sawing and board plant; woodchipping (for export) operations; and possibly a medium density fiberboard plant and a pulp mill.

Mobile sawmilling is also becoming popular in many areas and many see this as more appropriate development, partly because of the potential for greater participation by landowners and partly because it is seen as more environmentally friendly. It is unlikely however that mobile mills will replace the need for large scale processing development in Papua New Guinea. Other village level industries from forests including rattan and culture of orchids and shitake mushroom are gaining momentum also and these along with mobile sawmilling will be assisted by other projects within the National Forestry Action Plan.

Outputs of this project will therefore be in the form of:-

- (i) An inventory of scope and type of small scale (village based), medium and large scale wood industries in PNG.
- (ii) Report and recommendations on a policy and incentive environment to encourage growth of the timber processing sector.
- (iii) Analysis of committed and uncommitted timber resource data, by species and locations, to suit industrial/processing development.
- (iv) Report on markets for timber processing, taking into account PNG

resources and regional demand and supply for tropical hardwood timber.

- (v) Reports indicating timing for industry development and provisional economic feasibility of selected sawmilling, wood-based panel, chipping and pulping plants in PNG for export production.

4. ACTIVITIES

The primary externally funded input to the project will be appointment of a forest industries specialist, for a period of 18 months. The expert will take major analytical responsibility for survey and evaluation of current forest industry economic performance, and will also be responsible for formulation of overall sector pre-feasibility findings. The latter task will require the specialist to supervise contract studies to be implemented under the project, and to incorporate findings from these into the main output from the project.

Specifically, the forest industries specialist will:

- (i) Complete the necessary data gathering and analysis to formulate a comprehensive report on economic performance of the current forest processing sector in PNG.
- (ii) Assist GOPNG to design and schedule inputs from contract specialists in: forest industry policy analysis; market analysis and marketing for PNG forest products (domestic and international); and selected pre-feasibility studies.
- (iii) Co-ordinate inputs from private sector forest industry organizations, and organize workshops to discuss findings and formulate recommendations on the sector. This task will be especially relevant as support for the activities of the policy analyst, who must be given access to private sector and GOPNG decision-makers in a forum allowing exchange of views.
- (iv) Co-ordinate GOPNG surveys and data compilations, in support of market analyses.
- (v) In close co-operation with GOPNG, design a framework for, and participate in the implementation of, selected pre-feasibility studies, utilizing contract inputs from industry investment analysts as required.
- (vi) Integrate the analytical outputs from the project into a major, policy oriented report on the forest industries sector of PNG. Issues papers and recommendations should be circulated widely amongst interested parties in PNG, so that the eventual presentation of views to GOPNG reflects the range of opinion and the realities of implementation of any recommended change in approach.

- (vii) Carry out needed administrative and management tasks to fully implement all elements of the project.

5. INPUTS

5.1 ITTO Contribution

- (i) Provide the external funding indicated in the Project Budget (Part IV) for contract technical assistance in the form of:
- | | |
|---------------------------------------|--------|
| - a Forest Industries Specialist | 18 m/m |
| - a Forest Industries Policy Analyst | 2 m/m |
| - a Forest Marketing Specialist | 2 m/m |
| - Specialists for Feasibility Studies | 5 m/m |
- (ii) Assistance in recruitment of specialists.

5.2 GOPNG Contribution

- (i) Provide the internal financial contribution indicated in the Project Budget (Part IV).
- (ii) Management of the Forest Industries specialist and short term technical assistance and assistance as required in implementing the various studies proposed.

6. PREPARATION OF WORK PLAN

This will be an 18 month project. The initial action will be to recruit a Forest Industries Specialist who will then work with the Department of Forests in preparing the project work plan.

This plan will identify an appropriate timing and detailed terms of reference for contract studies and will recognise opportunities arising from other relevant projects in the National Forestry Action Plan, including the report on the Rapid Resource Appraisal and the report on Forest Revenue Studies.

7. FRAMEWORK FOR EFFECTIVE STAFF PARTICIPATION

This project will require effective participation from the Department of Forest, Provincial Forestry Departments and the Forest Industry Association. A National Counterpart to the Industries Specialist will be identified and be responsible for ensuring this participation and will additionally provide logistical assistance to the project.

8. DEVELOPMENT SUPPORT COMMUNICATION

The National Counterpart and the provincial departments will be responsible for informing landowners (the resource owners) of the purpose of the project and will assist in ensuring their participation in any feasibility studies that will concern them.

9. INSTITUTIONAL FRAMEWORK

The project will be managed and administered by the Head Office of the Department of Forest, in Port Moresby. It will require close collaboration with the PNG Forest Industry Association and Provincial Forestry Departments.

10. PRIOR OBLIGATIONS AND PRE-REQUISITES

The only major prior obligation is the formal acceptance of a new Forest Act which will establish a new Forest Authority and provide a better basis for implementing the revised Forest Policy. This is expected in July 1991. It will also be to this project's advantage to have access to the preliminary findings of the Rapid Resource Appraisal to better understand the nature of the committed and uncommitted forest resources, and the report on Forest Revenue Studies which will provide a lead on economic rent. Both projects are part of the National Forest Action Plan and key results are expected to be available by December 1991.

11. POSSIBLE FUTURE ASSISTANCE

There are no requirements for future assistance envisaged.

PART III - MONITORING, EVALUATION AND REPORTING

1. MONITORING REVIEWS

The project will be subject to periodic technical monitoring in accordance with the policies and procedures of the ITTO, the financial contributing institution or Government, and the Government of Papua New Guinea. Quarterly reviews may be required by GOPNG.

2. EVALUATIONS

The project will be subject to evaluation in accordance with the policies and procedures of ITTO, the financial contributing institution or Government, and the Government of Papua New Guinea. Specific review periods other than internal quarterly monitoring exercises will be agreed when ITTO and other funding agencies' interests are known.

3. REPORTS

Quarterly progress reports will be required, except for the terminal report which is to be done 3 months before the project ends.

PART IV - BUDGET

1.	ITTO	US\$
	Technical Assistance:	
-	Forest Industries Specialist	180,000
	Forest Industries Policy Analyst	30,000
	Forest Marketing Specialist	30,000
	Specialists for Feasibility Studies	75,000
-	Travel (PNG & International)	90,000
-	Equipment and Materials	22,000
	Evaluation and Monitoring	15,000
	Data Collection and Acquisition	20,000
	Workshops and Training	20,000
	Others	5,000
	Subtotal	\$487,000

315,000

2.	GOPNG	US\$
	Vehicle hire	10,000
	Publications	10,000
	Office supplies	4,000
	Accommodation	36,000
	Subtotal	60,000

* Costs associated with local staff components, office space will be met from the recurrent GOPNG budget.

Annexes

Other Annexes
(as required)