

## INTERNATIONAL TROPICAL TIMBER COUNCIL

COMMITTEE ON FOREST INDUSTRY

Distr. GENERAL

CFI(XXII)/6 21 April 1998

Original: ENGLISH

OTTI

TWENTY-SECOND SESSION 20 - 28 May 1998 Libreville, Gabon

## ITTO PROJECT PD 108/90 REV.1 (I)

## FOREST INDUSTRY DEVELOPMENT STUDIES (PAPUA NEW GUINEA)

**EX-POST EVALUATION REPORT** 

Prepared for ITTO

by

Gaya Tunas Sdn Bhd

#### **EXECUTIVE SUMMARY**

#### 1. THE PROJECT

The Forest Industry Development Studies (FIDS) Project was conceived in line with Papua New Guinea's (PNG's) national goal and directives and the revised forest policy that aims at ensuring greater on-shore processing of timber.

The basic objectives of the project were 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 product processing possibilities, and to present these findings to the Government of Papua New Guinea (GoPNG) after an extensive exchange with government and industry's agencies.

The immediate objectives were to:

- Undertake a pre-industrial survey to determine where and how PNG can utilise
  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.

More specifically, the FIDS Project had, in its initial phase, two primary thrusts:

- To provide the GoPNG with a comprehensive recommendation for policy reform in the interests of stimulating forest industrial development and provide guidelines on the direction the forest industry structure should take in the coming years within PNG.
- To provide the GoPNG with a technical and financial model that can be used as the basis of forest industrial development.

#### 2. EVALUATION PURPOSE

This is an ex-post evaluation exercise the purpose of which is clearly stated in the following terms of reference:

- i. To assess the project contribution to the achievement of its development objective: to encourage greater onshore processing industry in the country.
- ii. To assess the achievement of the project outputs and specific objectives.
- iii. Determine the relevance, effectiveness and utilization of the various studies undertaken by the project and to assess the overall post-project situation.
- iv. To evaluate the impact and relevance of the project, particularly its impact on the forestry sector and on the development of local processing industries.

- v. To assess unexpected effects and impacts, either harmful or beneficial, and present the reasons for the occurrence.
- vi. Analyze and assess implementation efficiency, including the technical, financial and managerial aspects.
- vii. Recommend follow-up actions in order to enhance utilization of project result.
- viii. Taking into account the results of the evaluation, make an overall assessment of the project's relative success or failure; summarize the key lessons learnt; and identify and issues or problems which should be taken into account in designing and implementing similar projects on the future.
- ix. Prepare the evaluation report in accordance with the terms of reference for the Project Evaluation Report, as contained in the ITTO Manual for Project Monitoring, Review and Evaluation.
- x. Assess the project contribution to the ITTA objectives and ITTO Action Plan.

## 3. SCOPE OF EVALUATION

The main thrust of the evaluation mission as guided by the above Terms of Reference was to determine the achievements of the Project and its impact on the PNG's forestry sector as a whole. This was to be done through discussions with the relevant people at the Forest Authority (FA). FA being the implementing agency and representatives of the trade. There was no intention to meet the representatives of the land-owners as it might be difficult to determine the correct persons who would be fully aware of the Project and at the same time would be capable of giving assessments on behalf of all land-owners, the impact of the Project on land-owners.

Discussions took place in Port Moresby:

On Tuesday, March 17, 1998 and Thursday 19 March 1998

Officers of PNGFA namely:

Mr. Dike Kari

Mr. Johnson Mantu\*

Mr. Peter MacRea

Mr. Allan Ross

Mr. Niels D. Hove

Mr. Martin Golman\*

Mr. Andrew Tagamasu

\* Participated at Tuesday meeting only.

On Wednesday, March 18, 1998 with

Mr. Jim Belford, Secretary, Forest Industries Association

Mr. Terry H. Sakaki, Open Bay Timber, Pty Ltd.

On Thursday, 19 March, 1998 (afternoon) with

Mr. Sashi Menon of Cakara Alam Pty Ltd.

Discussions centered around the check-list of ex-post project evaluation provided for in the "ITTO Manual for Project Monitoring, Review and Evaluation". A minimum of fresh data was collected as all the essential information was already supplied by the ITTO Secretariat. The main purpose was to take note of the feedback from the people responsible for the proper implementation of the Project and those who stood to benefit from it.

The evaluation team also enquired on the circumstances prevailing and developments leading up to the completion of the Report for a better understanding of its effectiveness (or lack of it).

## 4. CONCLUSIONS OF THE EVALUATIONS

What would appear to be a valuable contribution to the PNG forest-sector the outcome of the Project fell short of expectation owing to an unfortunate mix of circumstances. The Project could not be faulted on design as its objectives covered a wide range of long- and short-term benefits of which emphasis was made on the principle of equity to all parties especially the landowners. It fitted into the framework of ITTA objectives and ITTO Action Plan very well.

The pressure to meet with the aspirations for change by the new Minister of Forests had perhaps caused a loss of focus resulting in a managerial lapse on the part of the Project implementors.

i

On the other hand little opportunity was apparently given, in terms of authority and responsibility, to PNGFA counterparts to ensure that proper project monitoring and control system was in place and would be enforced. This was further compounded by placing the Project Leader in the government position which enabled him to carry out both implementation and supervision of the Project.

#### 5. RECOMMENDATIONS

Having learned from the experience of this Project one would assume that several points of recommendations might be in order. But it must be realised that this was a unique case of a well designed Project that was affected by a sudden change of masters and situations. It would not be advisable to pick out any lesson from the shortfalls of this Project for purposes of designing future projects because the same shortfalls would probably be minimal if there was no sudden change of leadership in the Ministry of Forests or if the Project was managed by a different set of

project team who would be more inclined to adhere closely to the Project Terms of Reference (but at the risk of wrath).

The only valid recommendation that one could perhaps make out of these rather unusual circumstances is that for projects which by their nature are vulnerable to major political interventions ITTO may like to draw a lesson out of this case by ensuring that an especially tight system of monitoring, control and review be established. If necessary this work could be done by an independent third party.

Obviously no follow-up action are recommended as the Project has been shelved for several years now and has since been superceded by two other related studies.

## EX-POST EVALUATION OF ITTO PROJECT PD 108/90 Rev. 1 (I) "FOREST INDUSTRY DEVELOPMENT STUDIES" (PAPUA NEW GUINEA)

Prepared by

GAYA TUNAS SDN BHD

for

INTERNATIONAL TROPICAL TIMBER ORGANISATION YOKOHAMA, JAPAN

19 APRIL 1998

#### EX-POST EVALUATION OF ITTO PROJECT PD 108/90 REV. 1 (I) "Forest Industry Development Studies, Papua New Guinea."

#### 1. THE PROJECT

The Forest Industry Development Studies (FIDS) Project was conceived in line with Papua New Guinea's (PNG's) national goal and directives and the revised forest policy that aims at ensuring greater on-shore processing of timber.

The basic objectives of the project were 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 product processing possibilities, and to present these findings to the Government of Papua New Guinea (GoPNG) after an extensive exchange with government and industry's agencies.

The immediate objectives were to:

- Undertake a pre-industrial survey to determine where and how PNG can utilise
  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.
- More specifically, the FIDS Project had, in its initial phase, two primary thrusts:
- To provide the GoPNG with a comprehensive recommendation for policy reform in the interests of stimulating forest industrial development and provide guidelines on the direction the forest industry structure should take in the coming years within PNG.
- To provide the GoPNG with a technical and financial model that can be used as the basis of forest industrial development.

## 1.1 Project Rationale and Background

The World Bank led a review of the PNG forestry sector in early 1989 under the auspices of the Tropical Forestry Action Plan (TFAP). In February 1990, it presented its final report to the GoPNG, where it outlined many proposed projects for external funding to assist GoPNG to properly manage the conservation and utilisation of its forest resources. For PNG, the programme is now known as the National Forestry and Conservation Action Programme (NFCAP).

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

Presently the natural resources of PNG are exploited mostly For the export of raw logs – there are currently about 10 sawmills of varying sizes condition and production capability, one plywood mill and one chipmill in PNG as compared to about 84 log exporters. Nearly 98% of the 1992 log exports were controlled by non-PNG interests, and about 86% of all log exports were controlled by just one affiliated commercial group.

There was suggestion that the PNG processing sector is not internationally competitive, with high internal costs, a volatile tenure system and the diverse nature of the forest resource being contributory factors.

This situation required a more systematic study as it may indeed be related to the decline of processing capability since 1979 when the forest policy was changed to encourage log exports.

#### 1.2 Outputs

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;
- 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.

#### 1.3 Work Plan and Costs

The Project was planned to cost US\$535,000 of which ITTO's contribution would be US\$475,000. The final expenditure was US\$573,410. The Project was to last for 18 months but was extended to a further period of nine months (July 1992 to April 1994.

The initial action would be to recruit a Forest Industries Specialist who would then work with the Department of Forests in preparing the Project Work Plan.

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

#### 1.4 ITTO Context

The project is in accordance with Article 1 of the International Tropical Timber Agreement, 1983, and it relates particularly to objective (e). It was submitted to the ITTO as a result of a project concept which was presented to the Sixth Session of the Permanent Committee on Forest Industry during the Eighth Session of the International Tropical Timber Council Meeting held in Bali, Indonesia for the 16-23 May, 1990. PNG 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 ITTO under Article 23, paragraph 5 (a) and paragraph 6 (a) and (b), and fits in with ITTO Action Plan under 2.4 Forest Industry (Goal 1) which relates to objectives (c), (d), (f), (k) and (m) of Article 1 of the ITTA 1994.

## 2. EVALUATION SCOPE AND FOCUS

This ex-post evaluation exercise is carried out at the request of the ITTO Secretariat which acted on the request of the Permanent Committee on Forest Industry in compliance with Council Decision 7 (XXI) reached at the 21<sup>st</sup> Session of ITTC last December in Yokohama.

Details of the Terms of Reference for this ex-post evaluation work appear in Appendix I. Owing to a slight delay on the part of the Forest Authority of PNG in accepting the evaluation mission the discussions would only begin on Tuesday 17<sup>th</sup> March and lasted until Thursday 19<sup>th</sup> March 1998. The Mission members were Baharuddin Haji Ghazali and Sazali Husni of Gaya Tunas Sdn Bhd.

## 3. EVALUATION METHODOLOGY

The main thrust of the evaluation mission as guided by the above Terms of Reference was to determine the achievements of the Project and its impact on the PNG's forestry sector as a whole. This was to be done through discussions with the relevant people at the Forest Authority (FA). FA being the implementing agency and representatives of the trade. There was no intention to meet the representatives of the land-owners as it might be difficult to determine the correct persons who would be fully aware of the Project and at the same time would be capable of giving assessments on behalf of all land-owners, the impact of the Project on land-owners.

Discussions took place in Port Moresby:

On Tuesday, March 17, 1998 and Thursday 19 March 1998

Officers of PNGFA namely:

Mr. Dike Kari

Mr. Johnson Mantu\*

Mr. Peter MacRea

Mr. Allan Ross

Mr. Niels D. Hove

Mr. Martin Golman\*

Mr. Andrew Tagamasu

\* Participated at Tuesday meeting only.

On Wednesday, March 18, 1998 with

Mr. Jim Belford, Secretary, Forest Industries Association

Mr. Terry H. Sakaki, Open Bay Timber, Pty Ltd.

On Thursday, 19 March, 1998 (afternoon) with

Mr. Sashi Menon of Cakara Alam Pty Ltd.

Discussions centered around the check-list of ex-post project evaluation provided for in the "ITTO Manual for Project Monitoring, Review and Evaluation". A minimum of fresh data was collected as all the essential information was already supplied by the ITTO Secretariat. The main purpose was to take note of the feedback from the people responsible for the proper implementation of the Project and those who stood to benefit from it.

The evaluation team also enquired on the circumstances prevailing and developments leading up to the completion of the Report for a better understanding of its effectiveness (or lack of it).

The remaining part of the work involved studying of the various documents including the Report itself, the Inception Report, Draft Project Document, the (two) Completion Reports, the latest (1995) Annual Report of PNGFA, etc.

There was also a brief discussion with Dr. Douglas Pattie, Project Manager, Forest Industry, ITTO who handled the FIDS Project Steering Committee Meetings.

## 4. FINDINGS AND LESSONS LEARNED

There was no doubt that the team of FIDS consultants (of GWY Consultants International Ltd and Nawitha Resource Consultants) had prepared a comprehensive batch of reports by way of

- a core report which crystallizes salient points of each of the FIDS subsector technical field reports, and
- ii. six separate working documents providing the technical details and analyses based on field studies. They provide the detailed supporting information for the final report.

An initial assessment of the FIDS Reports was made, with reference as well, to the Completion Report prepared by PNGFA dated July 1994 (See Appendix 2). It was clear that based on what was presented and what was stated in the Completion Report of July 1994, one could only give positive remarks about the Project performance.

However, the test of the pudding is in the eating. How much of the recommendations could be followed up and what was the impact of the Project on the forest sector?

The outcome of the discussions with PNGFA and the industry representatives presented the evaluators with a picture that broadly differed from the initial evaluation that appears in Appendix 2. The Completion Report dated 6<sup>th</sup> October 1994 was in fact a more candid statement that brought to light problems related to the acceptance of the Project Report. It was reflective of the mood and sentiment of the people that the evaluators met. The feedback from these persons on the Project was largely negative indicating a general sense of disappointment. An outline of the feedbacks will follow, but to be fair to the Project it must be stressed that to an extent the timing of its implementation was rather unfortunate as PNG Ministry of Forests was in a major state of flux that saw:

- A new Forest Act coming into effect (25<sup>th</sup> June, 1992);
- The department of Forests and the Forest Industries Council integrated into a new National Forest Service under the direction of a National Forest Authority which was under the administration of a yet to be appointed National Forest Board;
- A change of Minister of Forests
- Major policy changes under review vis-à-vis the forest revenue and finance structure of the forest sector:
- A significant re-organisation under-way in the area of timber acquisition, allocation and harvesting administration, and:
- Major policy changes considered vis-à-vis the export of raw logs

The Project consultants viewed this as a timely opportunity to bring forth ideas for the changes by getting invaluable guidance from the new Minister. The Project Leader (consultant) was actually appointed as the General Manager of the newly formed PNGFA. This probably stressed the confidence and high expectation that the Minister of Forestry had on the Project. Unfortunately what could have worked so well for PNG forestry turned out to be the reverse. It was apparent that in the effort to meet the Minister's deadline for a new policy (which was scheduled to be put into effect eight months before the completion date of the Project) the Project provided inputs for the new policy without adequate consultation with the PNGFA, the industry and the landowners.

The passage of the report and its recommendations to GoPNG was facilitated by the fact that the Project Leader was also the General Manager of the FA.

The common criticisms expressed were that the Project Consultants did not hold adequate consultations or did not accept views contrary to their thinking in preparing their final reports and recommendations. Related to this were also remarks on the lack of depth on certain issues due to the dearth of knowledge on

the local cultural values and situations. The FA counterparts played a minimal role in the Project studies, the Project management restricted themselves to discussing at the "higher level" ignoring possible contributions from the field.

Other points of dispute included the proposed revenue system which was considered inappropriate for PNG situation and described as "esoteric", (understood only by those specialised in the field, not by the rest of the people). There were also apparently many errors in the financial calculations. The cost of processing was claimed to be poorly done.

Some of the proposals such as a common marketing front among the log exporters and processors were rather impractical and revealed the lack of thorough understanding of the situation in the trade.

The Project was considered a success in the context of efficiency of implementation but fell short in the area of managerial soundness as it ignored the very fabric of the project development objective of encouraging local processing of timber by failing to get down towards resolving the socio-economic difficulties on the ground. In this sense the impact on the Forestry Sector was minimal and what could have been otherwise valuable work was largely shelved.

This is re-affirmed by the fact that since the Project completion, two other related projects have been launched and are now near completion:

- A Study on landowner benefits (Consultants: Groome-Poyry); and
- Studies on cost of production and processing policies (Consultants: Fortech)

The August 94 report perhaps gave a crowning judgement on the Project in para 3.0 TARGET BENEFICIARIES INVOLVEMENT.

"A weakness of the project was that the consultants failed to adequately consult with officers of the Forest Authority and closeted themselves away. As a result, the project assumed a secretive culture which acted as a constraint on the subsequent value of the project.

In particular, because the consultants failed to consult properly and were insensitive to the situation and needs of existing forestry personnel and programmes, they provided a disruption to the cohesiveness of the whole NFCAP programme. Their behaviour also caused considerable duplication of effort, at a time when the NFCAP programme and the Forest Authority were under considerable pressure to deliver, and were substantially underresourced."

## And 4.0 PROJECT IMPLEMENTATION AND RESULTS

"With respect to the main purpose of the study; to address the question of whether a forest industrial policy should be pursued and if so, in what form, the study had a number of shortcomings, including:

- It did not provide a clear comparison of the financial and economic consequences for Papua New Guinea of domestic processing as compared to log exporting. Work conducted internally within the PNG Forest Authority suggests strongly that domestic processing may be financially viable for the industry, but would only happen under the condition of low wood prices, subsidised by the Government (through the loss of log export taxes) and/or the customary forest owners (through low log payouts). This last point flies in the face of the Government's NFCAP programme (of which this project was a part) which has one of it's central aims ensuring that landowners get a fair share of the value of their resource.
- It did not provide industry with the detailed financial evaluations of various domestic processing options which industry had been led to expect. What was required is a detailed and objective financial evaluation of at least sawmilling, rotary veneer production, plywood manufacture and medium density fibreboard production at log input scales of say 50,000 m³, 100,000 m³ and 200,000 m³ per annum.

An important part of this evaluation should have been an assessment of the industry's "ability to pay" for wood, given assessed costs and current market prices and future prospects.

 It did not provide any evaluation of the employment consequences of domestic processing, either by estimating the number of extra jobs which would be created, or by analysing how many of the additional jobs could be undertaken by PNG Nationals given currently available skill levels.

It is acknowledged however, that the consultants were placed under considerable pressure to provide the new Forests Minister with "instant" policy advice to meet this hectic agenda for change. This was a major factor in some of the original project objectives and outputs not being fully addressed."

## 5. CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Conclusions

What would appear to be a valuable contribution to the PNG forest-sector the outcome of the Project fell short of expectation owing to an unfortunate mix of circumstances. The Project could not be faulted on design as its objectives covered a wide range of long- and short-term benefits of which emphasis was made on the principle of equity to all parties especially the landowners. It fitted into the framework of ITTA objectives and ITTO Action Plan very well.

The pressure to meet with the aspirations for change by the new Minister of Forests had perhaps caused a loss of focus resulting in a managerial lapse on the part of the Project implementors.

On the other hand little opportunity was apparently given, in terms of authority and responsibility, to PNGFA counterparts to ensure that proper project monitoring and control system was in place and would be enforced. This was further compounded by placing the Project Leader in the government position which enabled him to carry out both implementation and supervision of the Project.

#### 5.2 Recommendations

Having learned from the experience of this Project one would assume that several points of recommendations might be in order. But it must be realised that this was a unique case of a well designed Project that was affected by a sudden change of masters and situations. It would not be advisable to pick out any lesson from the shortfalls of this Project for purposes of designing future projects because the same shortfalls would probably be minimal if there was no sudden change of leadership in the Ministry of Forests or if the Project was managed by a different set of project team who would be more inclined to adhere closely to the Project Terms of Reference (but at the risk of wrath).

The only valid recommendation that one could perhaps make out of these rather unusual circumstances is that for projects which by their nature are vulnerable to major political interventions ITTO may like to draw a lesson out of this case by ensuring that an especially tight system of monitoring, control and review be established. If necessary this work could be done by an independent third party.

Obviously no follow-up action are recommended as the Project has been shelved for several years now and has since been superceded by two other related studies.

# Terms of Reference for the Ex-Post Evaluation of ITTO Project PD 108/90 Rev. 1 (I) Forest Industry Development Studies

#### I. Background

This 2-year project implemented forest industry development studies with a view to assess the possibilities of increasing socio-economic benefits through establishing appropriate forest industries in Papua New Guinea. The specific objectives of the project were to

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

The Forest Industry Development Studies accomplished these two primary goals by providing the PNG Government with a comprehensive recommendation for policy reform in the interests of stimulating forest industrial development and by providing guidelines on the direction that the forest industry structure should take in the coming years. Further, the study has provided the Government with a technical and financial model that can be used as the basis for sustainable forest industry development.

The document prepared under the project include:

- i. six separate working documents providing technical details and analyses based on field studies of:
  - sector background working papers and a forest sector review;
  - case studies of the industrial processing sector;
  - a review and projection study of harvesting and transportation systems;
  - a study of financial and economic incentives in the management of PNG's forest resources;
  - a domestic market study; and
  - an international market study
- a core report containing sailent points of each of the technical reports listed under
   (i) and a brief analysis on the socio-economic impact of the proposed strategy for forest development for use by decision makers in drafting and/or confirming forest policy and national forestry development guidelines.

At project completion, the Forest Authority of Papua New Guinea considered that the project had set the pacs and served as the base for wide reforms in the allocation and management of PNG's forest resources. Reported key achievements in this respect were:

Recommendation of a new revenue system; Introduction of a new timber allocation and management process based on sustained yield; Guidelines on wood processing options in PNG.

## II. Terms of Reference for Evaluation of Work

- i. To assess the project contribution to the achievement of its development objective: to encourage greater onshore processing industry in the country.
- ii. To assess the achievement of the project outputs and specific objectives.
- iii. Determine the relevance, effectiveness and utilization of the various studies undertaken by the project and to assess the overall post-project situation.
- iv. To evaluate the impact and relevance of the project, particularly its impact on the forestry sector and on the development of local processing industries.
- v. To assess unexpected effects and impacts, either harmful or beneficial, and present the reasons for the occurrence.
- vi. Analyze and assess implementation efficiency, including the technical, financial and managerial aspects.
- vii. Recommend follow-up actions in order to enhance utilization of project result.
- viii. Taking into account the results of the evaluation, make an overall assessment of the project's relative success or failure; summarize the key lessons learnt; and identify and issues or problems which should be taken into account in designing and implementing similar projects on the future.
- ix. Prepare the evaluation report in accordance with the terms of reference for the Project Evaluation Report, as contained in the ITTO Manual for Project Monitoring, Review and Evaluation.
- x. Assess the project contribution to the ITTA objectives and ITTO Action Plan.

The evaluation work shall be conducted in such way as to allow answering the questions identified in the ex-post evaluation checklist provided in the ITTO Manual for Project Monitoring, Review and Evaluation (page 23).

## II. Proposed Work Schedule

23 February – 6 March 1998

Meeting of the consultant and project personnel in PNG Forest Authority headquarters for briefing and

comprehensive discussions on project

implementation and results, as well as agreeing and preparing the work plan in further detail. Visits and discussions with project cooperators, beneficiaries

and other relevant parties.

9 February – 20 March 1998 Review of project information and results and

preparation of draft final report.

20 March 1998 Submission of draft final report to both ITTO and

PNG Forest Authority for comments and

suggestions.

4 April 1998 ITTO's approval of draft evaluation report.

11 April 1998 Submission of final report to ITTO.

2 - 29 May 1998 Presentation of the report at the Twenty Second

Session of the ITTO Committee on Forest Industry

(Libreville, Gabon).

## Terminal Evaluation of Forest Industry Projects

Title: PD 108/90 Rev. 1 (I) Forest Industry Development Studies (Papua New Guinea)

Duration: Planned - 24 months / Actual - 33 months

ITTO Budget: \$475,000

Executing Agency: PNG Forest Authority

Objectives:	Y/N	Assessment:
To encourage greater onshore processing industry.	Yes	Outputs achieved specific objectives by providing the government with
	Yes	comprehensive recommendations for policy reform in the interests of stimulating forest industrial development.
2. 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	Yes	Provision of guidelines on the direction that the forest industry structure should take in coming year.
3. To evaluate the economic worth of the current processing industries and recommend improvements and/or integration	Yes	3. Sufficient recommendations provided to the government on a technical and financial model that can be used as the basis for sustainable forest industry development
Outputs:	Y/N	Assessment:
List scope and type of small scale, medium and large scale industries. Integrate desired PNG industries, based on sector report of industries in Asia-Pacific region and Europe.	Yes	1. Correct linkage between the activities and output documents and a core report. Project elements and activities were sufficient to provide sectoral background working papers, a forest sector review; case studies of the industrial processing sector; a review and projection study of harvesting and transportation systems; a study of financial and economic incentives in the management of PNG's forest resources; a domestic market study; and an international market study.
<ol> <li>Reports on socio-economic and environment feasibility of establishing timber processing industries (sawmilling, wood-based panel, chipping and pulping plants for export production). Assessment and recommendations on resource basis; markets and marketing strategies, and manufacturing.</li> </ol>	Yes	Expected outputs were achieved as documents provided strategy for forest development for use by decision makers in drafting and confirming forest policy and national forestry development guidelines.
Relevance of Project:	H/M/L	Comments:
<ol> <li>Project served as base for wide reforms in allocation and management of PNG's forest resources.</li> </ol>	High	Recommendations of new revenue system; introduction of new timber allocation and management process; and guidelines on wood processing options
Unanticipated Effects or Outputs:  1. Project supported implementation of PNG government funded follow-up work on appropriate issues	P/N Positive	Comments:  1. New Forestry Law passed into law by PNG legislature affecting provision of initial stumpage appraisal and collection system; development of review and evaluation system to help new investment in forest industrial sector; and the design and implementation of an electronic data processing (EDP) system that will cover the activities of stumpage calculation, stumpage billing, stumpage collection and stumpage distribution.
Project assisted in preparation of new approved and funded ITTO project proposal to carry out a feasibility study for the establishment of a forest products marketing organization.	Positive	Project is currently operational in the Division of Economic Intelligence and Market Information