COMPLETION REPORT



Application of Production and Utilization Technologies for Rattan Sustainable Development in the ASEAN Member-Countries [PPD 51/02 Rev. 1 (I)]







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PRE-PROJECT IDENTIFICATION

Application of Production and Utilization Title:

Technologies for Rattan Sustainable Development

in the ASEAN Member Countries

ITTO PPD 51/02 Rev. 1(I) Serial Number:

Ecosystems Research and Development Bureau -**Executing Agency:**

Department of Environment and Natural

Resources (ERDB-DENR)

Government of the Philippines Host Government(s):

01 April 2003 Starting Date:

Twelve (12) months **Actual Duration**

(months): 102,464.00 ITTO **Actual Project Costs** 73,350.00 GOP

(USD):

175, 814.00 TOTAL

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PART I. EXECUTIVE SUMMARY

1. Background Information About the Project

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For several decades, timber is regarded as the only forest product of significant monetary value. However, with deforestation and conversion of forestlands into farmlands and settlement areas, the shift to nontimber forest products has become inevitable. Significantly, rattan became the chief alternative for the dwindling supply of timber.

There are about 600 species of rattan worldwide representing 13 genera, of which 10% are commercially used (Non-wood NEWS, 2001). Fifty percent of the known species are found in Indonesia making it the world's largest rattan producer. In terms of economic importance, rattan is considered second to timber in many Asian countries. The most valuable part of rattan is cane and from which furniture is its most popular product.

The Experts' Consultation held in Rome in 2000 highlighted the significance of rattan for livelihood as a primary, supplementary, and subsistence source of income of rural dwellers. Rattan collection complements farming in terms of seasonal labor and source of capital for agricultural inputs. In spite its significant economic contribution, still there are production and utilization technologies that should be disseminated to optimize its potential in expanding and diversifying the economic returns from its use.

Knowledge on taxonomy and biological aspects of some species is fragmentary. The genetic base of the species is narrowing that may ultimately lead to extinction.

Notwithstanding the low returns to gatherers, there is a need to improve planting techniques and management of rattan in degraded forests. Wide dissemination of available guidelines or information on its management to a wider base is deemed important. Furthermore, there is a need for adoption of improved technologies to reduce post-harvest losses, biological deterioration, inefficient storage and processing techniques. Introduction of a standard grading mechanism or scheme is a must. Various stakeholders such as rattan growers, raw material collectors, manufacturers, and traders aspire for an environment of policy and institutional support.

Specific Objective(s) and Outputs

Specific Objective No. 1

To conduct situational analysis of the rattan commodity and the socioeconomic, production, harvesting, processing, utilization and market dimensions of rattan in local communities and plantations in the ASEAN member-countries (AMCs).

- Output 1.1 Socioeconomics of rattan commodity in AMCs analyzed.
- Output 1.2 Relevant production, harvesting, processing, and utilization technologies in rattan development determined.
- Output 1.3 Market dimensions of rattan in local communities and plantations in AMCs.

Specific Objective No. 2

To determine the future actions needed to enhance ASEAN regional cooperation through collaborative research in rattan sustainable development.

- Output 2.1 ASEAN Regional Conference on Rattan Sustainable Development conducted.
- Output 2.2 Proceedings of the ASEAN Regional Conference on Rattan Sustainable Development produced.

Project strategy

Inception Meeting. The pre-project strategies and the team member assignments were established during the inception meeting. The project team discussed and scheduled the different activities to achieve the desired objectives of the pre-project. The key persons and focal institutions/agencies in the participating ASEAN countries were identified. Important part of the inception meeting was a clear and thorough discussion on the overview of the requirements and actions needed to assess the socioeconomic acceptability, financial and market feasibility of rattan production and utilization technologies in the ASEAN region.

During the inception meeting, strategy was conceptualized how to conduct situational analyses of the rattan commodity which included the socioeconomic, plantation development, harvesting, processing, utilization, and market dimensions of rattan in local communities among others in the ASEAN region. In addition, specific assignments and duties of each pre-project team members were specified. Thereafter, a comprehensive action plan program for the entire duration of the pre-project was developed.

<u>Member countries.</u> For the whole duration of the pre-project, the project staff worked with professional staff and concerned rattan experts in AMCs. This facilitated data gathering and assessment of updated situation of rattan commodity in the region. This activity ensured smooth collaboration and strong partnership of AMCs in the implementation of the pre-project activities.

<u>Data gathering.</u> For the Contact Persons (CPs), this activity commenced after they have signed their respective Terms of Reference (TOR) and the budget for data gathering was transferred to them. Primary data were gathered through surveys, personal interviews, group discussions and key informant interviews. Secondary data were also collected through surfing different websites and review of literatures. The focal institutions/agencies of participating AMCs also provided available data and literatures on rattan.

<u>Situational analysis of rattan commodity in AMCs.</u> This activity includes analyses on production, harvesting, processing, utilization and markets and socio-economic dimensions of rattan using benefit-cost, market trends and SWOT (strength and weaknesses, opportunities and threats) analyses. Results of this activity were presented during the Regional Conference on Sustainable Development of Rattan in Asia.

Regional Conference on Sustainable Development of Rattan in Asia. This activity was held on Jan. 22-23, 2004 in Manila, Philippines. This is the culmination of all the activities in the pre-project. Representatives or the CPs of each AMC presented their papers on the status of rattan resources in their countries.

Project planned duration and planned overall costs

The Pre-project was approved on November 2002 during the Thirty-third Sessions of the International Tropical Timber Council (ITTC). After the signing of Memorandum of Agreement (MOA) of the DENR Secretary and ITTO Executive Director, this pre-project was implemented for a period of 12 months (from April 01, 2003 to March 31, 2004).

The Pre-project operated with a total cost of USD 167,514.00. Of this amount, ITTO provided contribution of USD 94,164.00 while the remaining balance of USD 73,350.00 was committed by the Government of the Philippines (GOP) in kind equivalent contribution. The budget was released on April 01, 2003. This excludes the budget item on ITTO monitoring, evaluation and administration amounting to USD 8,300.00.

With the project timetable and available budget, all the expected outputs were achieved.

2. Project Achievements

2.1 Outputs Achieved

The expected outputs have been achieved and completed to satisfy the intended objectives based on the approved work plan of the pre-project.

The following outputs have been accomplished under Specific Objectives 1: Output 1.1 Socioeconomics of rattan commodity in the AMCs analyzed: Output 1.2 Relevant production, processing and utilization technologies in rattan development were suggested and analyzed. Output 1.3 Market dimensions of rattan in local communities and plantations in the ASEAN member countries was determined. These were achieved through the continuous coordination of the Project Staff including the Focal Persons (FPs) with the CPs and their respective institutions from the participating ASEAN countries. Upon the signing of TOR and the transfer of funds for the CPs, data gathering proceeded. Series of consultations between FPs and Project Staff were held regarding the formulation of questionnaires for data gathering to be used by the CPs and the format of country status report. Interview schedules and format of country status reports on rattan were sent to the CPs as their guide for the preparation of country report. Through interviews, the necessary information on rattan were collected.

For the smooth implementation of the project, ERDB as the executing agency involved competent technical persons as focal persons for the nine (9) participating ASEAN countries (Annex A). The eight Focal Persons (FPs) traveled to their respective country assignments from October to December 2003. The FPs conducted the following activities: (a) validated the data gathered by the CPs; (b) discussed the contents of the country report in relation to the requirements of the project; (c) looked into details of the technical aspects as required in the situational and economic analysis of rattan resources in each country; (d) gathered additional data/information; and, (e) assisted the CPs in revising the country report prior to presentation during the regional conference.

Output 2.1 under Specific Objective No. 1 The Regional Conference on Rattan Sustainable Development was conducted. This is the major activity of the pre-project and entitled "Regional Conference on Sustainable Development of Rattan in Asia," conducted on January 22-23, 2004 in Manila, Philippines. This conference is the culmination of the major activities of the pre-project. The conference discussed the latest update on rattan resources management and development in the ASEAN member countries. It was during this conference that the participants determined the appropriate research and development areas for sustainable development of rattans in the region.

The participants in the conference composed of representatives from the 9 ASEAN countries (Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Thailand and Vietnam), 6 participants from Thailand, 1 from India Dr. C. Renuka of Kerala Forest Research Institute) who also attend as a resource person, and 1 from Japan Dr. Emmanuel Ze Meka, ITTO representative. Dr. Florentino O. Tesoro. Undersecretary of DOST from the Philippines served as a resource person during the conference.

A workshop during the conference was organized to further determine the concerns/needs of the ASEAN countries on rattan production and utilization technologies to make the resource sustainable in the ASEAN member countries. After the workshops the concerns/needs was identified as follows: taxonomy, establishment of germplasm, establishment of certification and fair trade, technology transfer, promotion and protection of rattan plantation, and coordination, creation of rattan nature center for sharing/exchange of rattan information.

At the end of the conference, an agreement among the participant was made that the Philippines through ERDB would prepare a sequel full blown rattan project proposal with wider scope uniting the various concerns/needs identified during the workshop with participation again from ASEAN member countries. Upon advice of Dr. Emmanuel Ze Meka of ITTO, the sequel project should also focus on poverty alleviation in the rural communities.

ITTO Assistant Director of Forest Industry, Dr. Emmanuel Ze Meka, represented the ITTO at the end of the workshop had a dialogue with the participants where the former elaborated on the priorities and concerns of ITTO relative to rattan resource development.

Output 2.2 of Specific Objective No. 2 that is the Proceedings of the ASEAN Regional Conference on Rattan Sustainable Development. The proceedings of the Regional Conference on Rattan has been completed and being finalized for submission to ITTO. This includes all the activities done during the conference, the country reports presented by the representatives of the 9 ASEAN countries and the two technical presentations by Philippines and India.

2.2 Specific Objective(s) Achieved

Specific Objective No. 1, which is to conduct situational analysis of the rattan commodity and the socioeconomic, production, harvesting, processing, utilization and market dimensions of rattan in local communities and plantations development in the ASEAN member countries have been achieved. This was completed through various interviews, and discussions conducted involving researchers on rattan traders, manufacturers, gatherers, etc.

Specific Objective No. 2, which is to determine the future actions needed to enhance ASEAN regional cooperation through collaborative research in rattan sustainable development has also been achieved. The workshop during the Regional Conference on Sustainable Development of Rattan in Asia determined the needs and problems of the ASEAN countries as far as rattan production and utilization are concerned. The framework for rattan sustainable development was formulated based on these needs and problems. Some of the needs identified include: taxonomy. germplasm. problems certification/Fair trade, transfer of technology, transboundary issue on poaching, protection, and coordination, compilation of documents for sharing and exchange thru the creation of rattan information center.

2.3 Contribution to the Achievement of the Development Objective

The development objective of the pre-project is to assess the socio-economic acceptability, financial and market feasibility of rattan production and utilization technologies in the ASEAN member countries. Through the data gathered and the situational analysis made in rattan commodity in ASEAN countries, the different aspects involved on rattan production and utilization technologies were assessed. This is important in determining what rattan production and utilization technologies will be viable in other ASEAN countries to ensure the sustainability of rattan resources in the region.

Rattan production and technologies available in other ASEAN countries will also be made available to other ASEAN countries as collaborative efforts.

3. Target Beneficiaries Involvement

The beneficiaries, composed of stakeholders, which included research academic institutions (i.e. ERDB, FPRDI, UPLBCFNR, participating institutions of the 9 ASEAN countries) and trading entrepreneurs (gatherers, manufacturers, etc.) of the 9 ASEAN involved in the pre-project been actively have implementation. The trading entrepreneurs were interviewed and their sites were visited (plantations, processing and manufacturing sites). Outputs of the interviews were incorporated in the country status report on rattan. Research and academic institutions were directly involved in various discussions and consultations in the preparation of the country reports. Several other institutions concerning rattan were consulted (through internet) for additional data on rattan.

4. Lessons Learned

4.1 Development Issues

Aspects of project design. Originally, the pre-project design does not include CPs from ASEAN countries, however, as suggested by a technical expert, CPs were included for efficient and effective implementation of the pre-project where the cooperation of the AMCs is needed at the data gathering phase of the project

<u>Changes in intersectoral links.</u> Through this project, the participating AMCs provided the latest updates on the different production and utilization technologies needed for sustainable development of rattan. The active participation and cooperation of the CPs and their agencies made substantial contributions in implementing this pre-project.

Additional arrangement. At present, several institutions are having interest in rattan. Data on rattan, in some ASEAN countries are still inadequate. Through this project, the respective CP committed to actively participate in data gathering while at the same time, countries dialogue between the CPs and FPs through email or fax made the coordination among them effective. This situation made the collaboration efficient and CPs and FPs are easily accessible with each other

Factors affecting sustainability after completion. Elevating this pre-project into a Full Project and its approval by ITTO is necessary to proceed to actual demonstration of rattan production and utilization technologies that are initially available and those that will be developed during the implementation of the sequel project. Support from the participating ASEAN countries will be solicited for efficient implementation of the project.

4.2 Operational Lessons

<u>Project organization and management.</u> Inception and subsequent regular meetings facilitated the organization of activities and identification of appropriate personnel for effective implementation of the pre-project. Through these meetings, clear and thorough discussions on the overview of the requirements and actions needed to assess the socioeconomic acceptability, financial and market feasibility of rattan production and utilization technologies in the ASEAN region were facilitated.

<u>Project documentation.</u> The project was well documented from beginning to end. These are all supported by reports and photo documentations. Two progress reports have been submitted to ITTO by the executing agency as required in the MOA.

<u>Monitoring and evaluation.</u> Under the MOA, the pre-project was monitored and evaluated twice by ITTO for the whole duration of the pre-project.

Definition of the roles and responsibilities of the institutions involved. ERDB, the executing agency, has effectively and efficiently implemented the project activities shown in the work plan. It also provided the *in kind* contributions. FPRDI, the collaborating agency, also gave its technical support particularly in formulating the framework of the full project proposal.

Actions to be taken to avoid variations between planned and actual implementation. Following the workplan and the Yearly Plan of Operation is important for the project to be on the right track. Flexibility of the activities to achieve specific objectives is also necessary to avoid delaying of works very necessary and inclusion of CPs, although not in the approved proposal was considered, has made the implementation of the project more efficient especially during the data gathering in the ASEAN member countries.

Foreseen external factors that influenced the project implementation. Addition of the CPs from the ASEAN countries brought a positive result on the project although the identification and selection of the CPs have been delayed. Data gathering had been completed and country reports have been submitted just in time for the conference.

Barrier in language is also one factor that affected the project. Some of the country reports have been delayed because some of them are written in their native language. It took time to translate them into English with the assistance of the Philippine FPs.

For some ASEAN countries, they had not yet established the data on rattan. Thus, they needed extra time to gather from various institutions and agencies.

<u>Unforeseen external factors that influenced the project implementation.</u>
Cambodia's country report was delayed due to reorganization in the agency of the CP. The CP also was not able to present the country report during the conference because of the change in official assignments. However his Philippine focal counterpart was able to present a report based on the data gathered during the visit to Cambodia.

5. Recommendations

After the completion of the pre-project activities, it is recommended that the pre-project be upgraded into a Full Project to demonstrate and apply the rattan production and utilization technologies that are initially

available and other technologies that will be developed in the areas of plantation development, processing and manufacturing.

To be successful, the management should have mitigating measures to solve various problems/factors foreseen and unforeseen. All the activities in the implementation of the project should be flexible so that when a certain problem arises it would be easier to find solution or alternative actions toward achievement of the objectives.

As much as possible, it is necessary to follow what is contained in the work plan, yearly plan of operation, MOA, and the ITTO guidelines.

PART II. MAIN TEXT

1. Project Results

1.1 Existing situation at project completion

The Pre-project was able to collate the latest available technologies on rattan production and utilization for sustainable development in the ASEAN countries regenerated by the different ASEAN member countries that participated in the project. Nonetheless, at the project completion, it was recognized that many gaps exist which are necessary to complement the introduced technologies available at the pre-project level. This was the concern of all participating countries during the regional conference wherein priority areas of concerns were identified that are the focus of the Full Project Proposal. Other ASEAN countries are still way behind in technologies from production to utilization.

Meanwhile, the information/data generated can be used by several stakeholders dealing on rattan.

1.2 Extent to which the project Specific Objective(s) was achieved

Specific Objectives 1 and 2 have been achieved. In Specific Objective No. 1, the situational analysis and socioeconomic aspects of rattan commodity have been analyzed, relevant production, processing and utilization technologies have been determined, and the market dimension of rattan in local communities and plantations were also determined. However, this is only available from those ASEAN countries with rudimentary database on rattan because but some of them has not yet established data on rattan like Cambodia.

In Specific Objective No. 2, the ASEAN Regional Conference on Rattan Sustainable Development (Regional Conference on Sustainable Development of Rattan in Asia) was conducted in Jan. 22-23, 2003 in Manila, Philippines, and the proceedings of the said conference were produced and being finalized for submission to ITTO.

Although some activities did not commence at the same time on country-to-country basis, both Objectives were achieved within the pre-project duration.

1.3 Impact of project results

1.3.1 Sectoral programmes

The determination of the actual market situation on rattan is in support to the national government in achieving sustainable development of forest-based industries. This pre-project has promoted the importance of non-wood forest products especially rattan and has revived the needed attention for the sector.

1.3.2 Physical environment

This pre-project increased awareness on the importance of rattan as an alternative to timber that will somehow lessen the pressure on wood from the forest. It showed that the market s are available thus making rattan as viable high export potential for export.

1.3.3 Social environment

Awareness on the importance of rattan has improved the appreciation for its value as an alternative for timber and as a major source of income for the rural communities. The pre-project showed the different levels of players in the production and industry that are directly and indirectly dependent on the rattan sector. The results of this pre-project will encourage other players to venture on rattan because it is viewed to provide economic and financial returns to society and has a great role in poverty alleviation.

1.3.4 Target beneficiaries

For the research institutions, this pre-project shall provide them a country-wide database on rattan although many studies or researches still need to be conducted to support the sustainable development in utilization of rattan in the region.

For the various entrepreneurs involved in rattan industry, the availability of data on supply and demand of raw materials for the furniture and handicraft industries will help them designing marketing strategies and the direction of the industry.

1.4 Project sustainability

This pre-project shows the state of the art on rattan in the participating ASEAN region. Through this project, it has come to our knowledge that several production, processing and utilization technologies are still needed to be developed in order to uplift the rattan industry as well as

PART III. CONCLUSIONS AND RECOMMENDATIONS

1. Development Lessons

The active participation of the representatives from the ASEAN countries during the Regional Conference on Rattan has resulted to the identification of the priority needs and concerns that have to be pursued to answer the gaps needed for production and utilization technologies. These identified needs and concerns serve as the bases in the formulation of the framework for the full project proposal.

Presentation of the state of the art on rattan production and utilization during the said conference has initiated concerned parties to establish a baseline data on rattan in the ASEAN region.

Based on the results of the country reports, other ASEAN countries still need to undergo some training to develop their skills on certain fields concerning rattan development such as taxonomy, inventory procedure, germplasm establishment, technology transfer, creation of database center, among others.

2. Operational Lessons

There was a little difficulty encountered In tapping the CPs in the pre-project. Some of the institutions contacted to nominate their CPs took sometime before responding and sent the names of the CPs. However, after some follow ups they have been identified and were all active in data gathering while some technical assistance of FPs was extended particularly on the development of the country reports in all participating countries. The working arrangements of CPs and FPs enhanced regional collaboration that needs to be strengthened in the full project implementation.

Fieldwork is necessary in documenting and validating the local data gathered. It was discovered that some of the rattan entrepreneurs (gatherers, manufacturers, etc.) are still engaged in indigenous or traditional knowledge in performing production and utilization activities.

In some instances, language barrier also posed a problem which has caused the delayed submission of some of the country reports because some of the data and information gathered are originally written in their native languages. Only one country, Cambodia, was delayed in submitting the country report and the CP failed to attend the conference.

3. Recommendations for future Projects

3.1 Identification

To operationalize the identified needs and concerns in the areas of rattan production and utilization technologies, there is an imperative need to demonstrate these developed technologies in selected countries like Cambodia, Lao and Vietnam, among others.

Support and cooperation from AMCs are necessary to implement the full project so that demonstration on how to apply in field such that production and utilization technologies can be effectively implemented. Several consultations with the technical experts are necessary to identify the best measures in achieving the objectives and efficient implementation of a project.

3.2 Design

Minor modifications in the pre-project design were introduced when necessary. But primarily, the future project will be designed based on the specific objectives to be achieved by the five components to be headed by five Component Leaders (CLs).

3.3 Implementation

All activities identified and approved by ITTO to achieve specific objectives should be implemented on time in order not to delay other interconnecting activities. All activities must follow the approved plan but to a certain degree must be flexible without jeopardizing the achievement of the specific objectives of the project.

3.4 Organization

The project is to be managed by an in-house staff of the executing agency with a simple organizational structure.

3.5 Management

Just like the pre-project, a project coordinator and project leaders are to be designated to supervise, manage and coordinate all the activities during the implementation of the project.

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