MINISTRY OF FORESTRY
FOREST DEPARTMENT, MYANMAR

AND

COMMON FUND FOR COMMODITY (CFC)

AND

INTERNATIONAL TROPICAL TIMBER ORGINIZATION (ITTO)

Pre Project PPD 68/03 Rev.2 (I)
“Study on Utilization of Plantation Teak”

Study tour Report on value added plantation teak

Wood Products in Indonesia

July 22-28, 2009

Indonesia
Study tour on value added plantation teak wood products in Indonesia

July 22 – 28, 2009

Semarng, Solo and Yogyakarta

By

Aung Myint, Khin May Lwin, Cho Cho Win

1. Introduction

Myanmar has been endeavouring to sustain the valuable forest resources which are a pillar of national economy for a long time. It had been intended not only to protect the forest resources and natural environment but also to utilize them effectively while implementing the major tasks such as protection, sustainability, basic needs, efficiency, participation and public awareness according to Myanmar Forest Policy.

The development of wood-based industries is a fundamental to increase production and export of secondary processed wood products (SPWPs) while reducing log sales gradually. The government is taking measures to introduce the market-oriented economic system in the nation for national development. In the process, in order to contribute towards the development of the private sector as well as the perpetual existence and sustainable development of timber extraction, the Ministry of Forestry is making efforts for enabling the national entrepreneurs to run teak farming by their own.

Forest Department was implementing the pre-project, “Study on utilization of plantation teak” . The major concern of this pre-project is therefore to assess properties and processing technologies of local plantation teak, and through a regional workshop, formulate a project proposal that promotes a regional partnership to improve the efficient and diversified utilization of plantation teak in key teak producing countries in ASEAN region. 3 persons of key project staff were sponsored by the International Tropical Timber Organization (ITTO) and Common Fund for Commodity (CFC) to visit the study tour on value added wood-based industries in Indonesia. We visited Indonesia to study the wood-based industries and teak plantation in July 22 – 28, 2009.
2. **Objective**
To study the value added plantation teak products production technology in Indonesia
To learn the some latest information of wood based industries and teak plantation in Indonesia
To formulate the project proposal by using the information of Indonesia Wood Based Industries

3. **Study Group**
   U Aung Myint, Manager, Myanmar Timber Interprise
   Daw Khin May Lwin, Research Officer, Forest Industries Section, Forest Research Institute
   Daw Cho Cho Win, Research Assistant, Forest Research Institute

4. **Duration**

5. **Location**
The study tour was visited to Jakarta, Semrang, Yogayakarta and Solo in Indonesia.

6. **Study Tour Organizer**
The study tour was organized by Perum Perhutani Teak Forest and Wood Working Industry.

7. **Study Program**

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<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
<tr>
<td>22.7.09</td>
<td>Arrive to Jakarta</td>
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<tr>
<td>23.7.09</td>
<td>Jakarta to Semarang, Study Wood based industry in Semarang</td>
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<td>24.7.09</td>
<td>Study Wood based industry in Semarang, Semarang to Yogayakarta</td>
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<td>25.7.09</td>
<td>Study Teak Plantation around Yogayakarta</td>
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<td>26.7.09</td>
<td>Yogayakarta to Solo, Study Wood based industry in Solo</td>
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<td>27.7.09</td>
<td>Visit to Borobudur Temple, Yogayakarta to Jakarta</td>
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<tr>
<td>28.7.09</td>
<td>Jakarta to Yangon</td>
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8. **Discussion**
Study program consisted of five wood based industries, one in Semarang, two in Yogayakarta and two in Solo and teak plantation and log yard around Yogayakarta.
Study group discussed with managers of wood industries and forester, forest guard and community group of teak plantation for about the current situation of wood based industries, teak plantation and their technologies.

9. Observation
We learned concerning about the Perum Perhutani. Perum Perhutani is a State owned enterprise and it is responsible for management of the state forests in Java and Madura islands. It is charged both with services for social welfare and profitable operation based on business principles. To fulfill these tasks, it has to produce goods and services suitable to meet the needs of people and to actively take part in carrying out and supporting the implementation the Government’s policies and program in the field of economic and National development. Their management structure have three unit, unit I Jawa Tengah (Central Java), Unit II Jawa (East Java) and Unit III Jawa Barat & Banten (West Java). They divided into two cooperate classes, KP jata (teak) and KP rimba (non-teak). Teak Plantation covers 1.081 million ha and 0.837 million ha are suitable for clear felling. They have several plans based on forest management to achieve sustainable production, resource and environment control. A board of planning in each unit has authority to define the management plan.

We also learned about their reforestation program. Their reforestation is established in cut-over forest and unproductive areas such as bare and shrub land, or low stocked areas resulting from the failure of earlier reforestation. Annually planted 10,000ha for teak and 8000 ha for non-teak. They widely applied Taungya system. Local community people are engaged as farmers with the right of growing staple food crops and the obligation to grow forest trees. Each farmers has rights 0.25 ha of land. These system provide an additional income of about US$ 200-250/year/farmer. Perum Perhutani environment friendly performs by involving an active participation of the community surrounding the forest area by the Collaborative Forest Management with the Community (CFMC) Program. The program include and activity on plantation development either with the intercropping or ‘banjarharian’ system, planting pattern fixation, room optimizing, or other productive businesses, and since 2001 up to 2008 has involved 5,165 forested villages or approximately 95% of total forested villages in Java and Madura Islands.

Perhutani also operate wood based industries in Cepu, Brumbung and Gresik. In 2008 about 20% of company income was contribution by wood industries. All wood products are come from legally sources of raw material. Forest Stewardship Council (FCS) is as the form of an International recognition.

We visited to Perum Perhutani unit (I) Jawa Tengah KBM IK Brumbung, wood working industry and Pt Kurnia Jati Vtama Indonesia, Semarang, Central Java. KBM IK Brumbung produced furniture, especially tables and chairs. Pt Kurnia Jati Vtama is using a variety of other wood species eg. Merbau/ Kwila, Mahogany and Bengkirai. Moreover, with the evolving trends in furniture design, the company has diversified the products range by using other materials such as stainless steel, textile and iron, in combination with wooden furniture. This company is producing the flooring, garden furniture and indoor furniture.
We also visited to 6 years old teak plantation which are planted from seeds and budding. Teak plantation from budding is better condition than from seed. We found the 60 years old plantation are girdling for clear felling. Their teak plantation are girdling before 2 years of felling.
We also arrived log yard of Perum Perhutani. Community people are also participated in their plantation and log yard.
We also reached the CV. Dhadiagung, Garden Furniture, Sawmills and Wood Working Industry. It is located on the 10 km of Purwodadi to Solo Street. This company is using qualified men-power, qualified materials and modern machines. They also apply to get certificate chain of custody (COC) from FSC. Their products are exported to USA, Asia and some European countries.
We also visited to a home industry in Solo. The home industry uses not only the matured teak but also thinning poles. They saw-milled tangentially without remove sapwood and usually done air-dry. Their main product is door frame.

10. Recommendations
In Myanmar, the average annual planting rate of teak alone is about 12,000ha over the decade, 1984 to 2007. The total area of teak plantations in Myanmar covers 384,152 ha. Plantation grown teak show market promise in mass markets where they can be manufactured into a niche market products or semi-finished products such as furniture, flooring, etc. Lamination and finger jointing may offer opportunities for utilizing small dimension pieces of plantation teak. Certification is likely to become an increasingly important issue in the future. For the good quality timber and easy to assess the processing, the girdling process should be done before felling operation.

11. Conclusions
We would like to extend our appreciation to the Perum Perhutani Teak Forest and Wood Working Industry, Indonesia Forest Department for the invitation to us and fully help along the trip. We also want to thank Common Fund for Commodity (CFC) and International Tropical Timber Organization (ITTO) for supporting fund for us to study wood based industries and teak plantation in Indonesia.
Perum Perhutani unit (I) Jawa Tengah KBM IK Brumbung, wood working industry and Pt Kurnia Jati Vtama Indonesia, Semarang, Central Java.
Teak Plantation around Yogayakarta
Dhadiagung, Garden Furniture, Sawmills and Wood Working Industry, Solo