

2015

# Completion Report

## ITTO-CITES Project

ITTO Work Program for 2013 On Support to ITTO-CITES Implementation for Tree Species and Trade/Market Transparency (TMT)



Development of an Information Database for the Conservation and Sustainable Use of *Gonystylus bancanus* (Ramin) and *Aquilaria malaccensis* (Karas) in Malaysia

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### IMPLEMENTING AGENCY

Forest Research Institute of Malaysia (FRIM)  
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5/1/2015



## COMPLETION REPORT

<b>Title:</b>	Development of an Information Database for the Conservation and Sustainable Use of <i>Gonystylus bancanus</i> (Ramin) and <i>Aquilaria malaccensis</i> (Karas) in Malaysia	
<b>Executing Agency:</b>	Ministry of Natural Resources and Environment Malaysia (MNRE)	
<b>Implementing Agency:</b>	Forest Research Institute of Malaysia (FRIM)	
<b>Host Government:</b>	Government of Malaysia	
<b>Starting Date:</b>	24 June 2013	
<b>Actual Duration:</b>	22 months (extended to 24 months)	
<b>Actual Activity Costs (US\$):</b>	<b>ITTO</b>	= 90,480.00
	<b>GOM (In kind)</b>	= 78,648.00
	<b>TOTAL</b>	= <b>169,128.00</b>

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## **EXECUTIVE SUMMARY**

### ***1. Activity Context, Origin and Problem to be Addressed***

In the last two years, Malaysia had successfully conducted and completed eight Activities from 2008 to 2010 under Phase 1 of the ITTO-CITES Program entitled “Ensuring International Trade in CITES-listed Timber Species is Consistent with their Sustainable Management and Conservation”. There were four implementing agencies in Malaysia entrusted to carry out all those Activities, namely, the Forest Research Institute Malaysia (FRIM); the Forestry Department Peninsular Malaysia (FDPM); the Forest Department of Sarawak (FD Sarawak); the Sarawak Forestry Corporation (SFC); and the Malaysian Timber Industry Board (MTIB). All the Activities covered various aspects of *Gonystylus bancanus* (Ramin) and to a certain extent also *Aquilaria malaccensis* (Karas). They included resource quantification, sustainable harvest, timber tracking and monitoring, DNA database development, preparation of Non-Detriment Findings (NDF) of Ramin, and population distribution mapping with the main objective to sustainably manage and conserve the Ramin and Karas species (P.S. Tong, *et al.* 2010). One of the Activities was conducted by FRIM involving the “Generation of Spatial Distribution Maps of Ramin using Hyperspectral Technology and Determination of Sustainable Level of Harvest of Ramin in Production Forests of Peninsular Malaysia”. As a continuation from the Activities, a suitable web-based database and information system is needed to be developed as a one-stop centre for information on these threatened tree species in Malaysia. Until now, there is no available dedicated website and database that have been developed for Ramin and Karas. The information database that will be developed will be known as the MyCITES which will comprise a full and complete set of information on Ramin and Karas, including the current status of their population, production and trade of their products. The MyCITES will be used as a platform to disseminate information on Ramin and Karas, including the outcomes and findings from the Activities implemented under the ITTO-CITES Program. It will also be very useful to all relevant stakeholders with regard to access of information on current sustainable management and conservation efforts taken on these species. The outcomes of this Activity could also be used as an input to generate relevant information required for the preparation of non-detriment findings (NDF), as required for species listing under CITES in Malaysia.

### ***2. Activity Objectives***

#### ***Overall objective***

The main objective of the Activity is to develop a comprehensive web-based database that can be use as a platform to disseminate information on all the Malaysian threatened tree species that have been listed in Appendix II of CITES which could be used to enhance the sustainable management and conservation practices of these species.

#### ***Specific objective***

The specific objective of this Activity is to develop a web-based database information system of Ramin and Karas (MyCITES) including the information on distributions, habitats, ecology, research and development, publication, import and export, production, management policy and practice, of this species in Malaysia for management and conservation purposes.

### ***3. Most Critical Differences between Planned and Realized Activity Implementation***

**Activity personnel:** There were no changes in personnel implementing this Activity.

**Time schedule:** There was a slight delay in getting approval for hiring the Website Developer Company due to several compulsory procedures that must be taken before the web developer can be awarded. It took about eight months from the date of the identification of the Website Developer Company until the company received an official appointment.

**Budget amendment:** The fund was adequate and has been wisely spent as scheduled. There is no request to ITTO-CITES for last budget instalment by this Activity.

### ***4. Situation prevailing after Activity Completion, as Compared to the Pre-Activity Situation including the Situation of the Target Beneficiaries, and the post-Activity Sustainability***

The main output from this Activity is the comprehensive web-based database information system of Ramin and Karas in Malaysia, the outputs could influence the research and development activity, policies and management programmes in the Ministry of Natural Resources and Environment Malaysia, particularly with regards to the following:

- a) Methods of gathering information in an organized manner for endangered species, and
- b) Information storage procedures , such as reports and publications in a more efficient information system database

They are necessary to support and enhance Sustainable Forest Management (SFM) and conservation of Ramin and Karas in Malaysia.

### ***5. Most Relevant Outcome of the Analysis of the Activity Implementation***

The successful development of the web-based database information system of Ramin and Karas will contribute towards the best practices in managing and monitoring these endangered species in Malaysia. As a one-stop centre of Malaysian CITES-listed tree species, the information database that will be known as the MyCITES will comprise a full and complete set of information on Ramin and Karas, including the current status of their population, production, trade and management practices in Malaysia.

The MyCITES will be used as a platform to disseminate information on Ramin and Karas, including the outcomes and findings of previous ITTO-CITES Activities implemented in Malaysia. The development of the MyCITES could also provide a guide for developing integrated information systems for other endangered tree species not only in Malaysia, but also in other countries. Indirectly, it could assist ITTO and CITES in monitoring the management activities of threatened tree species.

The outcomes of this Activity could also be used as an input to generate relevant information required for the preparation of non-detriment findings (NDF), as required for species listing under CITES in Malaysia.

## **6. *Lessons Learnt***

- 1) Following a very strict procedure in the appointment of the website developer company, the process of selecting the company should be carried out more quickly to ensure the website can be developed within the stipulated time.
- 2) The Activity benefited tremendously from the cooperation and participation of various stakeholders, in particular the forestry department and Malaysian Timber Industry Board. Coordination roles played by the executing agency (NRE) were very important to ensure all agencies involved in the Activity implementation participated actively,
- 3) The monthly reporting that was practiced during the implementation of the Activity helped in ensuring the planned Activity is being undertaken as scheduled,

## **7. *Recommendations***

The overall objective of the Activity has been successfully achieved in accordance with the problems raised in the Activity document, with the full involvement of stakeholders and wise use of resources to produce the outputs. It is recommended that this Activity can be continued for other endangered tree species not only in Malaysia, but also in other countries.

## 1.0 ACTIVITY IDENTIFICATION

### 1.1 Context

#### Social, economic and environment

Tropical rain forest is a unique and diverse ecosystem with abundant highly adapted fauna and flora. The tropical rain forest in Malaysia is well known with rich natural forest resources that mostly dominated by trees from the Dipterocarpaceae family. All of these forests play a very important role in sustainable development and provide a range of economic, social and environmental benefits, including essential ecosystem services such as climate change mitigation and adaptation. The total forest area in Malaysia is about 19.52 million ha as shown in Table 1. It accounted for about 59.5% of the total land area. The largest forested area is located in the state of Sarawak with about 9.24 million ha. In term of forest type, the Dry Inland forest with a total area of about 17.15 million ha occupied the largest area. Beside natural forest, there about 0.25 million ha of plantation forests mainly planted in the state of Sabah.

Malaysia is committed to managing her forests in a sustainable manner not just for economic reasons but also for maintaining environmental stability, ecological balance and achieving its social obligation. Table 2 indicated that a total of 14.5 million hectares of natural forests have been designated as the Permanent Reserve Forest (PRF) in Malaysia, which are permanently managed to ensure that the proper balance among various purposes such as production, protection, social and educational objectives will be achieved. In addition 1.98 million hectares have been allocated for protection forests in the form of national parks, wildlife sanctuaries and nature reserves. These protective areas bear testimony to Malaysia's commitment to the maintenance of suitable habitats for fauna and flora to ensure the conservation of its bio-diversity resources.

**Table 1** Distribution, area and types of forest in Malaysia (million ha)

Region	Land area	Natural Forest			Plantation forest	Total Forested land	Total Land Area (%)
		Dry inland	Swamp forest	Mangrove forest			
Pen. Malaysia	13.16	5.40	0.30	0.10	0.08	5.88	44.7
Sabah	7.37	3.83	0.12	0.34	0.11	4.40	59.7
Sarawak	12.30	7.92	1.12	0.14	0.06	9.24	75.1
Total (Malaysia)	32.83	17.15	1.54	0.58	0.25	19.52	59.5

*Source: FRA (2010) – Forest Resource Assessment for Malaysia. Report prepared by the Ministry of Natural Resources and Environment Malaysia.*

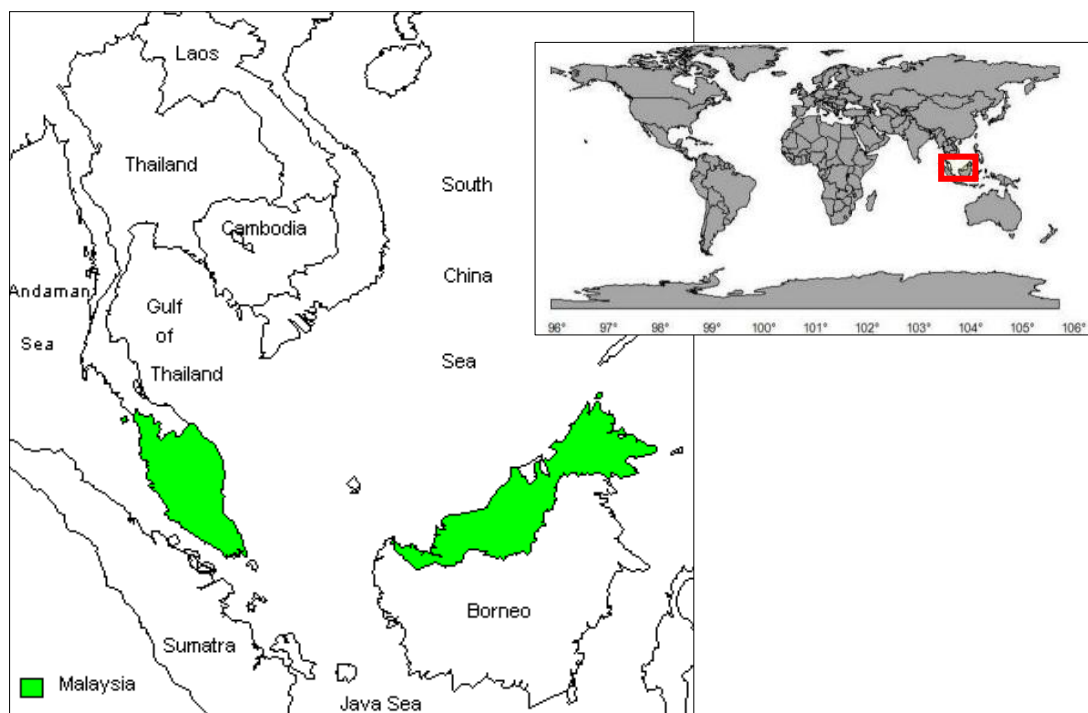
**Table 2** Permanent Reserve Forest in Malaysia 2008 (million ha)

Region	Protection forest	Production forest	Total Area under forest PRF	% of Total Land Area
Pen. Malaysia	2.00	2.81	4.81	36.6
Sabah	0.59	3.00	3.59	48.7
Sarawak	1.10	5.00	6.10	49.6
Total ( Malaysia)	3.69	10.81	14. 50	44.2

### Activity location

Malaysia has been selected as the study area for this Activity. Malaysia is a country in Southeast Asia, located partly on a peninsula of the Asian mainland and partly on the northern third of the island of Borneo (Figure 1). West (Peninsular) Malaysia shares a border with Thailand, is connected by a causeway and a bridge to the island state of Singapore, and has coastlines on the South China Sea and the Straits of Malacca. East Malaysia (Borneo) shares borders with Brunei and Indonesia. Malaysia has a total landmass of 329,847 square kilometres. Approximate location of these regions is given below.

- ✓ Peninsular : 6° 45' and 1 °20' N latitudes and 99° 40'and 104° 20' E longitudes
- ✓ Sabah : 4° 00' to 7°00' N latitudes and 115° 20' and 119° 20' E longitudes
- ✓ Sarawak : 0° 50' and 5° 00' N latitudes and 109° 35' and 115° 40' E longitudes



**Figure 2.1** Location of Malaysia on the Globe



The climate of Malaysia is typical of the humid tropics and is characterised by year-round high temperature and seasonal heavy rain. Temperature ranges from 26<sup>o</sup> C to 32<sup>o</sup> C and rainfall ranges from 2000 mm to 4000 mm per annum. The rainfall is very high due to the influence of both north-east monsoon and the south-west monsoon. Malaysia has been endowed with vast amount of natural resources including luxuriant tropical forest which is one of the most diverse and complex ecosystems of the world.

### **Relevant national and regional policies and programmes**

In Malaysia, the National Forestry Policy 1978 laid a firm foundation for the development of the forestry sector. It was revised in 1993 in recognition of the role of forests in providing a multiplicity of goods and services. The revised policy has had direct impacts on the management of forests through the establishment of the Permanent Forest Reserve (PFR), large-scale forest plantations, and importation of logs, greater incentives for downstream processing, promoting the utilization of lesser-known species and small-diameter logs, and manufacturing of value-added products. The National Forestry Policy 1978 and the National Forestry Act 1984 provide Malaysia with a strong policy framework and laws to support sustainable forest management. Both the national policy and act provide a sufficient basis for the protection against harmful activities, promote establishment of wildlife parks and reserves, and reduce activities that may cause detrimental impacts on the environment.

Malaysia is one of 180 party that are joined CITES since 20th July 1977, however entry into force on 18th January 1978. By joining this CITES Convention, Malaysia are agreed to follow and implement all the regulations enacted by CITES regarding to international trade of flora and fauna species covered by the Convention listed in Appendix I, II and III. There are 27 species from *Aquilaria* genus and 40 species from *Gonystylus* genus that are listed in CITES where all these species are listed in Appendix II. From listed species, five species from *Aquilaria* genus including *Aquilaria malaccensis* and 28 species from *Gonystylus* genus including *Gonystylus bancanus* can be found in Malaysia. Act 686 on International Trade in Endangered Species of 2008 or shortly known as INTESA was implement in Malaysia with the aim to control the international trade the species of flora and fauna listed in CITES and to ensure that Malaysia fulfil their responsibilities as one of the Party who joined CITES Convention. This Act contains six Division of 55 Section. INTESA have been approved by the Parliament of Malaysia and was gazetted on 14 February 2008. In Act 686, two regulations have been gazetted started on 28 December 2008. These regulations include:

- i. Permit, Certificate, Registration and Fees
- ii. Conservation Centre

However, INTESA became effective implementation in Malaysia beginning on July 1, 2010. Among 17 flora species (Scheduled Species) in Third Schedule of Act 686 that must be control for international trade, there are four Malaysia wood species subject to control according to CITES including:

- i. *Aquilaria spp.* (Karas) – effected since 2001
- ii. *Gonystylus spp.* (Ramin) – effected since 1995
- iii. *Gyrinops spp.* – effected since 2005
- iv. *Podocarpus neriifolius* (Podo) - effected since 80's (not commercially significant)

In Malaysia, Ministry of Natural Resources and Environment (NRE) have been appointed as Scientific Authority that responsible for advising the Management Authority on non-detriment findings and other scientific aspects of implementation and monitoring of national trade. Meanwhile, Management Authority are responsible to ensure the trade such as import, export and re-export any specimen or products for flora and fauna species listed in CITES to abide the CITES's procedures. For timber and timber-product including Karas and Ramin, there are two government bodies that are appointed as Management Authority Party which is Malaysian Timber Industry Board (MTIB) and Sarawak Forestry Department. MTIB are responsible for manage the timber and timber product located in Peninsular Malaysia and Sabah, while Sarawak are managed by Sarawak Forestry Department. With this appointment, all entrepreneur of timber and timber-based products that are listed in CITES must apply for a permit or certificate for the import, export and re-export from Management Authority.

## **1.2 Origin and Problem to be addressed**

The main objective of the previous Activities that had been conducted in Malaysia from 2008 to 2010 under Phase 1 of the ITTO-CITES Program was to further enhance the conservation and sustainable management of the Malaysian threatened tree species that have been listed in Appendix II of CITES. To ensure that all the results obtained from the previous Activities be accessible to interested stakeholders, a standard information database which could gather all relevant information regarding threatened tree species must be developed. To date, outputs derived from the implementation of the ITTO-CITES Activities are being compiled in a form of reports that were disseminated through the ITTO website: [www.itto.int/cites\\_programme](http://www.itto.int/cites_programme) for the purpose of information sharing. From the Activity conducted by FRIM on the "Generation of Spatial Distribution maps of Ramin using Hyperspectral Technology and Determination of Sustainable Level of Harvest of Ramin in Production Forests of Peninsular Malaysia", Ramin population had been successfully mapped using hyperspectral technology (F. Mohd Azahari, *et al.* 2011). This information is important to be shared with stakeholders, especially those involved in the management and monitoring of Ramin species in Malaysia. Apart from the information on population distributions, it is also important that the status of habitats and ecology, research and development, management, production, and import and export of Ramin products be properly kept and shared to ensure that the species is managed sustainably.

To date, there is still no information database and website developed for the purpose of gathering all of this important information. Accordingly, the main objective of this Activity is to develop a comprehensive web-based information database that contains not only all the relevant information on Ramin, but also that of Karas which could be used to enhance the sustainable management and conservation practices of these species. The outcomes of this Activity could also be used as an input to generate relevant information required for the preparation of non-detriment findings (NDF), as required for species listing under CITES in Malaysia.

## **2.0 ACTIVITY OBJECTIVES AND IMPLEMENTATION STRATEGY**

The main objective of the Activity is to develop a comprehensive information centre that can be use as a platform to disseminate information on all the Malaysian threatened tree species that have been listed in Appendix II of CITES which could be used to enhance the sustainable management and conservation practices of these species.

## 2.1 Objectives

The specific objective of this Activity is to develop a web-based database information system of Ramin and Karas (MyCITES) including the information on distributions, habitats, ecology, research and development, publication, import and export, production, management policy and practice, of this species in Malaysia for management and conservation purposes. In this regard, the expected outputs of the Activity are as follows:

- Output 1 : Information on Ramin and Karas distributions in Malaysia.
- Output 2 : Information on research and development on Ramin and Karas in Malaysia.
- Output 3 : Information on timber trading and production of Ramin and Karas in Malaysia.
- Output 4 : Information on Malaysia's policy and management practices of Ramin and Karas in Malaysia.
- Output 5 : A comprehensive web-based database information system of Ramin and Karas in Malaysia.

## 2.2 Implementation Strategy

During the starting period of the Activity, a project team members were identified within the scientists in FRIM based on their expertise and knowledge on the subject of interest. Upon formation of the team, the first task undertaken by the team was to review the Activity elements, conduct relevant literature reviews, propose Activity operational framework and detail work plan. Initial consultation with the relevant stakeholders in particular the forestry department was also undertaken to ensure their continuous support during implementation of the Activity.

The initial stages of the Activity implementation focused on the collection of secondary data including digital and hard copy of report, journal, working paper, newspaper and book that relevant to any activity on Ramin and Karas in Malaysia. All of the secondary data will be collected and keep in standard data format. Subsequently, a collection of new field data for assessment the existence of Ramin and Karas in the selected Forest Reserve in Malaysia were gathered. Field assessment was done by using manpower from FRIM and occasionally with support from the forestry department staff. The Activity was hired local experts in website and database development to ensure the smooth implementation of the Activity. The implementation strategies applied for each of the activity are described as below:

**Output 1 : Information on Ramin and Karas distributions in Malaysia**

- Strategy** : - Several series of field survey have been carried out to verify the existence of this two species in their natural habitat based on record from FRIM's Herbarium and other studies. The field survey also carried out to get their population density in different Forest Reserve (FR)
- The mapping of the species population was restricted only on FR level due to security factor. The more detailed mapping (individual

standing tree population) were not advised to be exposed to public as this will give exact information on where the tree are located especially for *Aquilaria malaccensis* species which are hunted for having high market value.

**Output 2 : Information on research and development related to Ramin and Karas species in Malaysia**

- Strategy** :-
- Collecting all research records from related agencies by accessing their library and meet person in charge
  - Access online publisher databases where the author publish their journals, articles, proceedings and etc.
  - The main focus of this project only cover publications related to Malaysia, however the publications from other countries also listed for references to our local researchers
  -

**Output 3 : Information on timber trading and production of Ramin and Karas in Malaysia**

- Strategy** :-
- Seek for assistance from other related agencies such as Forestry Department of Peninsular Malaysia (FDPM) and Malaysian Timber Industry Board (MTIB) to provide the data such as statistic of import and export, production of Ramin and Karas.

**Output 4 : Information on Malaysia's policy and management practices of Ramin and Karas**

- Strategy** :-
- Attending related workshops and courses such as cultivation method to get the proper information on the correct way to manage the species. Apart from that, attending the courses provided an opportunity to meet and established cooperation with participants that comes from various backgrounds such as researches, planters and businessman that involved the same field.

**Output 5 : A comprehensive web-based information system of Ramin and Karas in Malaysia**

- Strategy** :-
- Cooperate with FRIM's ICT officers to decide the requirement that need to follow in developing the web before appoint an experienced web developer to develop MyCITES
  - Attend training regarding web development to improve the knowledge

In term of management structure, the Activity was implemented by FRIM. A Project Steering Committee (PSC) at the Ministry of Natural Resources and Environment (NRE) was established to govern the implementation of the project. The PSC provided guidance

on matters pertaining to the implementation of the Activity and ensure that the Activity is directed towards achieving its intended goals. At the same time, a Technical Working Committee was also established to give advice on technical matters and facilitate the data collection and analysis.

The progress of the Activity was monitored through the PSC. Annual progress reports were submitted to the PSC for consideration. The Senior Director of the Forestry and Environment Division in FRIM who acted as the Project Coordinator was responsible for the preparation of the reports. Short monthly progress reports were prepared and submitted to the PSC and a final report was prepared by FRIM within two months of Activity completion for submission to ITTO. At the same time, the progress of the Activity was also monitored through Project Evaluation Meeting (PEM) conducted internally in FRIM on half yearly basis.

### 2.3 Assumptions and risks

Generally, there is no potential risk that may seriously affect the implementation of this Activity. Relatively low risk is anticipated in executing the Activity as it involved only the development of a web-based database information system in Malaysia to enable information dissemination and sharing. The Activity was hired local experts in website and database development to ensure the smooth implementation of the Activity.

## 3.0 ACTIVITY PERFORMANCE (Activity elements planned and implemented)

### 3.1 Performance of each Activity

Activity	Percentage Executed	Original Planned Completion Date	Actual Completion Date
<b>Activity 1.1</b> Data collection on non-spatial information of Ramin and Karas in Malaysia	100%	Jan 2014	April 2014
<b>Activity 1.2</b> Mapping the distribution of Ramin and Karas population in Malaysia	100%	July 2014	December 2014
<b>Activity 2.1</b> Gathering information on research and development related to Ramin and Karas species in Malaysia	100%	November 2013	April 2014

<b>Activity 2.2</b> Collection of relevant information and publications related to the Ramin and Karas issues in Malaysia	100%	July 2014	Completed as scheduled
<b>Activity 3.1</b> Gathering information on Ramin and Karas production in Malaysia	100%	July 2014	Completed as scheduled
<b>Activity 3.2</b> Gathering information on import and export of Ramin and Karas products in Malaysia	100%	July 2014	November 2014
<b>Activity 4.1</b> Gathering information on Malaysia's policy in managing threatened tree species	100%	August 2014	November 2014
<b>Activity 4.2</b> Gathering information on management practices of Ramin and Karas	100%	October 2014	Completed as scheduled
<b>Activity 5.1</b> Development of a comprehensive web-based information system of Ramin and Karas in Malaysia	100%	February 2015	May 2015
<b>Activity 5.2</b> Testing and running the developed website and database	100%	March 2015	May 2015

### 3.2 Outputs Achievement

Outputs / Activities	Achievements
<p><b>Activity 1.1</b> Data collection on non-spatial information of Ramin and Karas in Malaysia</p>	<ul style="list-style-type: none"> <li>Baseline information for this activity including ecology, phenology, and habitat has been completed. All the information has been gather from FRIM herbarium, books, journal and report from various research institutes. All of this non-spatial information has been validated and verified to make sure the information is correct before it can be stored and published in MyCITES database.</li> </ul>
<p><b>Activity 1.2</b> Mapping the distribution of Ramin and Karas population in Malaysia</p>	<ul style="list-style-type: none"> <li>Several test sites have been identified to verify the population of Ramin and Karas to represent the distribution pattern of Ramin and Karas in Malaysia. The verification activity has been conducted from Sept-Dec 2014.</li> <li>The selection of verification site is based on FRIM herbarium information and other published record of Ramin and Karas distributions. Until May 2015, we have identified 42 location of Ramin and 87 locations of Karas in their original habitat which cover various forest types such as forest reserve, conservation forest, protected forest, national park, recreational forest and wildlife sanctuary. To secure the location of Ramin and Karas, only location of center point of the forest will be display in MyCITES.</li> </ul>
<p><b>Activity 2.1</b> Gathering information on research and development related to Ramin and Karas species in Malaysia</p>	<ul style="list-style-type: none"> <li>This activity has been completed with compilation of research and development activity by researchers from FRIM, Forestry Department Sarawak and Sarawak Forestry Corporation and university.</li> </ul>
<p><b>Activity 2.2</b> Collection of relevant information and publications related to the</p>	<ul style="list-style-type: none"> <li>Some of publications used different terms to classify the types of their publications/ writing. Hence we had standardized the types</li> </ul>

<p>Ramin and Karas issues in Malaysia</p>	<p>of publications according to Review, Bulletin, Proceeding, Journal, Report, Thesis and Book.</p> <ul style="list-style-type: none"> <li>The main focus of this project only cover publications related to Malaysia, however the publications from other countries also listed for references to our local researchers.</li> </ul> <p>The publications compiled until May 2016:</p> <p>Karas : Total (315):</p> <ul style="list-style-type: none"> <li>Malaysia publication (189) , other country (126)</li> <li>Proceeding(103), Journal (92), Review paper (11), Report (29), Books (23), Bulletin (16), Thesis (27)</li> </ul> <p>Ramin: Total (224):</p> <ul style="list-style-type: none"> <li>Malaysia publication (95), other country (129)</li> <li>Proceeding(64), Journal (67), Review paper (14), Report (36), Books (10), Bulletin (19), Poster (2) Thesis (12)</li> </ul>
<p><b>Activity 3.1</b> Gathering information on Ramin and Karas production in Malaysia</p>	<ul style="list-style-type: none"> <li>All products that can be produced from this two species have been listed</li> <li>The website also included the production of Agarwood by other countries as references and to give new idea to diversify the products for overseas market demand</li> </ul>
<p><b>Activity 3.2</b> Gathering information on import and export of Ramin and Karas products in Malaysia</p>	<ul style="list-style-type: none"> <li>Import and export data on Ramin and Karas obtained from MTIB. MTIB provided the complete import and export data from year 2012 – 2014. However, they do not have complete data for year 2011 and below.</li> <li>List of local planters and companies involved in trading of Ramin and Karas are listed.</li> </ul>
<p><b>Activity 4.1</b></p>	<p>This activity cover topics below:</p>



<p>Gathering information on Malaysia's policy in managing threatened tree species</p>	<ul style="list-style-type: none"> <li>• Relation between CITES and Malaysia</li> <li>• Appendices in CITES</li> <li>• Act 686 (INTESA)</li> <li>• Management Authority</li> <li>• Permit &amp; Certification Application Guidelines</li> </ul>
<p><b>Activity 4.2</b> Gathering information on management practices of Ramin and Karas</p>	<p>Below are the topics covered in this part for Ramin:</p> <ul style="list-style-type: none"> <li>• PSF management system</li> <li>• Harvesting system</li> <li>• Transporting methods</li> </ul> <ul style="list-style-type: none"> <li>• Due to the fact that Karas are depleting in their original habitat and uncontrolled exploitation on it, plantations have been introduced to cater the demands for Karas-based products in international markets especially for Arabic countries, Taiwan, Hong Kong, Japan, Korea and China. The Karas plantations are successfully implemented in Malaysia with the support of a number of factors, including the help of agencies such as FRIM and MTIB that provide courses and guidance to the planters regarding Karas cultivation, the result of their research on how to treat the disease that often effected the Karas tree in plantation and the finding of the inoculation techniques that can speed up the formation of the resin.</li> <li>• In addition, Karas can adapt the environment in the plantations (outside the forest, which is their natural habitat) make it suitable to be planted. Therefore, the management for Karas discussed topics related to their management in plantation while the management in the forest are excluded. Below are the topics covered for Karas: <ul style="list-style-type: none"> <li>• <i>Aquilaria</i> plantation</li> <li>• Pest control and crop disease</li> <li>• Inoculation</li> </ul> </li> </ul>

<p><b>Activity 5.1</b> Development of a comprehensive web-based information system of Ramin and Karas in Malaysia</p>	<ul style="list-style-type: none"> <li>• After several discussions with FRIM’s ICT team and evaluation made at each proposal and quotations, the tender for developing MyCITES was given to Hasrimy Technologies Sdn Bhd. Initially, all the data as well as overview of the interface that are required by MyCITES are given to web developer. Once the first draft produced, the web interface and contents were improved after receiving comments from related officers. MyCITES are using:  Operating Server : Window Server Interface : PHP Database : Microsoft SQL Web Server : IIS</li> </ul>
<p><b>Activity 5.2</b> Testing and running the developed website and database</p>	<ul style="list-style-type: none"> <li>• MyCITES website and database has been tested and improve based on the comment from the team.</li> </ul>

### 3.3 Total Amount of Expenditures and Analysis

In term of expenditure, ITTO has disbursed a total of USD 44,975.04 on July 2013 as a first instalment and USD 23,124.32 on 24 December 2014 as a second instalment to undertake this Activity that has been approved under the ITTO-CITES Program. The funding was received by the Forest Research Institute Malaysia on behalf of the Government of Malaysia. Forest Research Institute Malaysia being the implementing agency would manage the account for all the activities carried out. The overall expenditure is in line with the original work plan activities with the balance of allocation is about USD 1,500.47 as of 30 June 2015. (The last payment of USD 22,380.64 is not being request from ITTO by this Activity). Details on the overall Cash Flow and Financial Statements of this Activity are as in Annexes 1& 2. The Government of Malaysia contributions for the same period are as reflected in the overall Cash Flow and Financial Statements as in Annexes 3 & 4.

## 4.0 ACTIVITY OUTCOME, TARGET BENEFICIARIES INVOLVEMENT

### 4.1 Achievement of specific objectives

The objective of this Activity is to develop a web-based database information system for two species; *Gonystylus bancanus* (Ramin) and *Aquilaria malaccensis* (Karas) have been accomplished with minor modification on certain activity. The outcomes from the Activity have definitely contributed towards better improvement of managing this species in the natural environment for both conservation and sustainable use.

## 4.2 Outputs

The above objective are achieved through five main Activity/Output below:

- Output 1: Information on Ramin and Karas distributions in Malaysia.
- Output 2: Information on research and development on Ramin and Karas in Malaysia.
- Output 3: Information on timber trading and production of Ramin and Karas in Malaysia.
- Output 4: Information on Malaysia's policy and management practices of Ramin and Karas in Malaysia.
- Output 5: A comprehensive web-based database information system of Ramin and Karas in Malaysia.

## 4.3 Impact/outcome

The five outputs indicated above could influence sectoral policies and programs in the Ministry of Natural Resources and Environment Malaysia, particularly with regards to the following:

- i. The procedure for mapping the population distribution of endangered species such as *Gonystylus bancanus* and *Aquilaria malaccensis*
- ii. All research and development on Ramin and Karas in Malaysia were listed
- iii. All information on statistic of import and export and the list of product that produced by Ramin and Karas were listed and explained properly
- iv. Policy and management practices of Ramin and Karas in Malaysia have been discussed properly.
- v. The successful of development of comprehensive web-based database information system of Ramin and Karas. The website are called MyCITES. (<http://mycites.frim.gov.my>).

List of publications:

1. F. Mohd Azahari, Y. Siti Yasmin & K. Abd Rahman (2015). Technical Report : Development of an Information Database for the Conservation and Sustainable Use of *Gonystylus bancanus* (Ramin) and *Aquilaria malaccensis* (Karas) in Malaysia.
2. F. Mohd Azahari, Y. Siti Yasmin & K. Abd Rahman (2015). Annotated Bibliography of Publications on Ramin and Karas (1927 – 2015).
3. F. Mohd Azahari, Y. Siti Yasmin & K. Abd Rahman (2015). MyCITES User Manual.

#### **4.4 Intended situation after Activity completion**

The successful development of the web-based database information system of Ramin and Karas will contribute towards the best practices in managing and monitoring these endangered species in Malaysia. As a one-stop centre of Malaysian CITES-listed tree species, the information database that will be known as the MyCITES will comprise a full and complete set of information on Ramin and Karas, including the current status of their population, production, trade and management practices in Malaysia. The MyCITES will be used as a platform to disseminate information on Ramin and Karas, including the outcomes and findings of previous ITTO-CITES Activities implemented in Malaysia. The development of the MyCITES could also provide a guide for developing integrated information systems for other endangered tree species not only in Malaysia, but also in other countries. Indirectly, it could assist ITTO and CITES in monitoring the management activities of threatened tree species. The developed database and website will be regularly updated with current information and FRIM will take the responsibility to monitor the updated information placed on the website. At the end of the Activity, relevant government agencies in Malaysia, particularly the forestry departments have better understanding on these species in the natural forest and can contribute to better management of this species in the future. The outcome of this Activity has also generated relevant information required for the preparation of the non-detrimental findings (NDF) reports, as required for species listing under CITES.

#### **4.5 Participation of targeted beneficiaries**

The target beneficiaries of the web-based database information system of Ramin and Karas will be the relevant stakeholders involved with the management, conservation and trade in Ramin and Karas in Malaysia. This will include MTIB; the Malaysian Timber Council (MTC); FDP; the State Forestry Departments in Malaysia; the Malaysian Timber Certification Council (MTCC); and institutes of higher learning. In addition, the information compiled in the database could enable ITTO and CITES to monitor the management of these species. FRIM as the implementing agency will be able to enhance its knowledge and capacity in developing comprehensive web-based database information systems. The indirect beneficiaries would include other research institutions, academicians, conservationists, forest communities, environmental non-governmental organizations (NGOs) and the public. The forestry departments will also be direct beneficiaries as they are committed to ensuring management and utilisation of the resources on a sustainable basis. Although the Activity focuses on Ramin and Karas, it could also be applied to other species and/or species groups, while the results and outputs could also be easily adapted and applied to other countries as well. FRIM as the implementing agency in Malaysia benefited in terms of enhancement of its knowledge and capacity in developing the comprehensive web based information system.

#### **4.6 Expectations of Activity sustainability**

FRIM will undertake maintenance and update of MyCITES website and database based on existing human and financial resources in FRIM. The maintenance activity including updating information on new publications, new R&D, next coming annual statistic on production, import and export of Ramin and Karas, and new policy implemented regarding this species. However, the financial contribution either from the Government or ITTO is most welcome when it involves the hardware and software upgrade in the future if necessary.

## 5.0 ASSESSMENT AND ANALYSIS

- i. The Activity was designed efficiently such that all the objectives were achieved according to the plan. The execution of the first four activity was in accordance with the milestones and expectation outlined during the preparation of the proposal. However the project required two months extension due to delay of the last activity (Activity 5: Web-based development) as it required many procedures that must be follow before the web-developer can be awarded.
- ii. The participation and support given by the targeted stakeholders were very encouraging throughout the Activity. The MyCITES website has two language options; English and Bahasa Malaysia. The need of MyCITES to have in Bahasa Malaysia language as we observe that some of Karas's plantation owners are consists of a variety of people with different levels of knowledge (the observation were made during the cultivation workshop which was also attended by many villagers who are unable to communicate in English). This showed that they are also looking for information regarding this species.
- iii. The exact GPS location of individual standing tree must be hidden from public to ensure this information is not misuse by illegal loggers especially Karas's hunter. Therefore, for distribution map, the species population only showed in the forest reserve level, by showing the individual standing trees can give ideas for them where the Karas can be found abundantly (high population density) in the forest.
- iv. In general, it can be said that the Activity was implemented on schedule except a short extension of two month given to complete the development process of MyCITES website.

## 6. LESSON LEARNT

The Activity was proposed due to the need of a comprehensive web-based information database to conserve and sustainably manage Malaysia CITES-listed tree species. Initially, the project focused on two species, *Gonystylus bancanus* (Ramin) and *Aquilaria malaccensis* (Karas) before MyCITES can be expand to another Malaysia CITES-listed tree species.

### **Activity identification and development, including problem analysis and stakeholder identification and participation**

The Activity benefited tremendously from the cooperation and participation of various stakeholders in particular forestry departments and Malaysian Timber Industry Board. Smooth coordination by the NRE was very important to ensure all agencies involved in the Activity implementation give their full cooperation and participated actively.

### **Additional arrangements that could improve cooperation between the relevant parties interested in the Activity**

It is important that the coordination be made systematically in order to make the Activity runs smoothly. The implementation of the Activity was coordinated by NRE. A working group should be set up not only from government agencies but also private parties, who are interested to share and get the information required related to Ramin and Karas industries in Malaysia. Frequently discussions with the web developer are required to resolve the outstanding issues that may delay the development of the website in this Activity.

### **Activity design, including implementation strategy, which most contributed to success or failure in achieving the Specific Objective**

The design of the Activity was sufficient to enable an effective implementation of the Activity. Early consultation with the state authority helped in getting support and approval from them to undertake the Activity. The Activity implementation also took into consideration the active involvement of the state forestry department staff, in particular during the field verification survey.

### **Actions to be taken to avoid variations between planned and actual implementation (schedule, costs, etc); quality of Activity planning**

The main thing that needs to be taken seriously is to expedite the process to appoint a web developer because there are several levels of approval before appointing a web developer can be made. What needed to avoid the variations between planned and actual implementation of the Activity is a good coordination by the team members.

### **Activity sustainability after completion including dissemination strategy, post Activity strategy, and involvement stakeholders**

FRIM will undertake maintenance and update of MyCITES website and database based on existing human and financial resources in FRIM. The maintenance activity including updating information on new publications, new R&D, next coming annual statistic on production, import and export of Ramin and Karas, and new policy implemented regarding this species. However, the financial contribution either from the Government or ITTO is most welcome when it involves the hardware and software upgrade in the future if necessary. The developed database and website will be regularly updated with current information and FRIM will take the responsibility to monitor the updated information placed on the website. The information that has been shared in MyCITES can be used by the relevant government agencies in Malaysia, particularly the forestry departments to have better understanding on these species in the natural forest and can contribute to better management of this species in the future.

### **Activity organization and management**

The organization and the management of this Activity have been successful in implementing the planned operational activities. In terms of progress monitoring, FRIM monitors all research activities including the ITTO-CITES Activity during its biannual

Project Evaluation Meeting (PEM) to ensure the smooth implementation of all research undertaken by the institute.

### **Flow of funds**

In general, the flow and the use of the Activity fund have been appropriate to enable the implementation of the planned activities. From the total budget allocation for this Activity amounted of USD 90,480.00, only USD 66,598.89 only used by this activity. This was due to the cooperation between this Activity with several existing research project especially in conducting field verification activity. There is no request to ITTO-CITES for last budget instalment by this Activity. Efficient coordination by NRE has minimise the delay in the fund disbursement for this Activity.

### **Definition of the roles and responsibilities of the institutions involved in the Activity implementation**

The role and responsibility of each organization involved was clearly understood.

### **Activity documentation**

All documents of the Activity are kept at the Activity secretariat and FRIM for records.

### **Monitoring and evaluation**

In term of project monitoring and evaluation the Activity was monitored internally at FRIM level in Project Evaluation Meeting (PEM) on 20 April 2015. These levels of monitoring helped to ensure that all activities planned be undertaken according to the schedule and objectives targeted earlier achieved at the end of the Activity.

### **External factors that influenced the Activity implementation and that could have been foreseen and that could have not been foreseen**

External factors that affect the implementation of this Activity are an efficiency of web developer during the development of MyCITES, where the time taken to complete the MyCITES database structure is more than the planned time period due to frequent comment and improvement by the team member.

## **7. CONCLUSIONS AND RECOMMENDATIONS**

The Activity objective has been successfully achieved in accordance with the problems raised in the Activity document, with the full involvement of stakeholders and wise use of resources to produce the outputs. It is recommended that similar Activity can be replicated for different CITES listed species. Nonetheless, the duration was found inadequate to fulfil all objectives including the report writing.

A few recommendations have been suggested by related person for improving MyCITES:

- i. FRIM's ICT suggested maintenance of the MyCITES are required for at least first year to ensure this website can function well as we wish
- ii. At least one permanent staff required to monitor/updating the web in the future as currently the team members of this project were contract staff
- iii. The security of certain information must be emphasized to ensure there is no misuse of this database and to ensure the population of these species were not threatened in their original habitat.



ANNEX 1 A Activity financial statement (ITTO)

ACTIVITY FINANCIAL STATEMENT (in US Dollar)						
ITTO CONTRIBUTION FUNDING						
	Component	Original	Expenditures To-date			Available
		Amount	Accrued	Expended	Total	Funds
		(A)	(B)	(C)	(D)	(E)
			b/		{ B + C }	{ A - D }
<b>I.</b>	<b>Funds managed by Executing Agency</b>					
10.	Personnel					
11.	Coordinator					
12.	Other Personnel					
	12.1 Assistant 1					
	12.2 Assistant 2					
	12.3 Other labour	30,800.00	0.00	31,067.55	31,067.55	-267.55
13.	National Experts					
	13.1 Expert 1					
	13.2 Expert 2					
	13.3 Expert 3					
14.	International Consultant(s)					
	14.1 Consultant 1					
	14.2 Consultant 2					
<b>15.</b>	<b>Personnel Total:</b>	<b>30,800.00</b>	<b>0.00</b>	<b>31,067.55</b>	<b>31,067.55</b>	<b>-267.55</b>
16.	Workshop/Seminar and Training					
	(specify beneficiaries)					
	16.1 Travel/Transportation (participants)					
	16.2 Daily Subsistence Allowances (participants)					
	16.3 Venue and Logistics					
	16.4 Workshop Materials	3,000.00	0.00	1,272.73	1,272.73	1,7,727.27
	16.5 Others					
<b>17.</b>	<b>Workshop/Seminar and Training Total:</b>	<b>3,000.00</b>	<b>0.00</b>	<b>1,272.73</b>	<b>1,272.73</b>	<b>1,7,727.27</b>
20.	Sub-contracts					
21.	Sub-contract					
22.	Sub-contract (MyCITES)	12,000.00	0.00	16,627.27	16,627.27	-4,627.27
<b>29.</b>	<b>Component Total:</b>	<b>12,000.00</b>	<b>0.00</b>	<b>16,627.27</b>	<b>16,627.27</b>	<b>-4,627.27</b>

\* Note: -Mean Exchange rate USD to MYR ~ 3.3

30.	Travel						
	31.	Daily Subsistence Allowance					
		31.1 National Expert(s)	12,000.00	0.00	6,024.18	6,024.18	5,975.82
		31.2 International Consultant(s)					
		31.3 Others					
	32.	International Travel					
		32.1 National Expert(s)					
		32.2 International Consultant(s)					
		32.3 Others					
	33.	Local Transport Costs					
		33.1 National Expert(s)	8,000.00	0.00	2,300.32	2,300.32	5,699.68
		33.2 International Consultant(s)					
		33.3 Others					
	<b>39.</b>	<b>Travel Total:</b>	<b>20,000.00</b>	<b>0.00</b>	<b>8,324.50</b>	<b>8,324.50</b>	<b>11,675.50</b>
40.	Capital Items						
	41.	Premises					
	42..	Vehicle(s)					
	43.	Capital Equipment					
		43.1 Computer Equipment (specify)					
		43.2 Others					
	<b>49.</b>	<b>Capital Items Total:</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
50.	Consumable Items						
	51.	Raw Materials	4,680.00	0.00	1,347.00	1,347.00	3,333.00
	52.	Utilities	4,500.00	0.00	2,040.91	2,040.91	2,459.09
	53.	Office Supplies	8,000.00	0.00	5,912.12	5,912.12	2,087.88
	54.	Publication Printing and Currier	7,500.00	0.00	0.00	0.00	7,500.00
	<b>59.</b>	<b>Consumable Items Total:</b>	<b>24,680.00</b>	<b>0.00</b>	<b>9,300.03</b>	<b>9,300.03</b>	<b>15,379.97</b>
60.	Miscellaneous						
	61.	Bank charge	0.00	0.00	6.81	6.81	-6.81
	62.	Contingencies					
	<b>69.</b>	<b>Miscellaneous Total:</b>	<b>0.00</b>	<b>0.00</b>	<b>6.81</b>	<b>6.81</b>	<b>-6.81</b>
70.	Others (specify)						
	71.	Others					
	79.	Others Total					
100.		<b>GRAND TOTAL:</b>	<b>90,480.00</b>	<b>0.00</b>	<b>66,598.89</b>	<b>66,598.89</b>	<b>23,881.11</b>
	Note: -Mean Exchange rate USD to MYR ~ 3.3						

**ANNEX 1 B Activity cash flow statement (ITTO)**

<b>ACTIVITY CASHFLOW STATEMENT (in US Dollar)</b>						
<b>ITTO CONTRIBUTION FUNDING</b>						
	<b>Component</b>				<b>Amount</b>	
			<b>Reference</b>	<b>Date</b>	<b>in US\$</b>	<b>Local Currency</b>
<b>A.</b>	<b>Funds received from ITTO:</b>					
	1.	First instalment		11-Jul-13	44,975.04	148,417.63
	2.	Second Instalment		24-Dec-14	23,124.32	76,310.26
	3.	Third instalment				
	4.	Fourth instalment				
	7.	Interest on bank deposits				
		<b>Total Funds Received:</b>			<b>68,099.36</b>	<b>224,727.89</b>
<b>B.</b>	<b>Expenditures (by Executing Agency):</b>					
10.	Personnel					
	11.	Coordinator				
	12.	Other Personnel				
		12.1 Assistant 1				
		12.2 Assistant 2				
		12.3 Other labour			31,067.55	102,522.91
	13.	National Experts				
		13.1 Expert 1				
		13.2 Expert 2				
		13.3 Expert 3				
	14.	International Consultant(s)				
		14.1 Consultant 1				
		14.2 Consultant 2				
	<b>15</b>	<b>Personnel Total:</b>			<b>31,067.55</b>	<b>102,522.91</b>
	16.	Workshop/Seminar and Training				
		(specify beneficiaries)				
		16.1 Travel/Transportation Costs (participants)				
		16.2 Daily Subsistence Allowances (participants)				
		16.3 Venue and Logistics				
		16.4 Workshop Materials			1,272.73	4,200.00
		16.5 Others				
	<b>17.</b>	<b>Workshop/Seminar and Training Total:</b>			<b>1,272.73</b>	<b>4,200.00</b>
* Note: -Mean Exchange rate USD to MYR ~ 3.3						

20.	Sub-contracts					
	21.	Sub-contract				
	22.	Sub-contract (MyCITES)			16,627.27	54,870.00
	<b>29.</b>	<b>Sub-contracts Total:</b>			<b>16,627.27</b>	<b>54,870.00</b>
30.	Travel					
	31.	Daily Subsistence Allowance				
		31.1 National Expert(s)			6,024.18	19,879.80
		31.2 International Consultant(s)				
		31.3 Others				
	32.	International Travel				
		32.1 National Expert(s)				
		32.2 International Consultant(s)				
		32.3 Others				
	33.	Local Transport Costs				
		33.1 National Expert(s)			2,300.32	7,591.05
		33.2 International Consultant(s)				
		33.3 Others				
	<b>39.</b>	<b>Travel Total:</b>			<b>8,324.50</b>	<b>27,470.85</b>
40.	Capital Items					
	41.	Premises				
	42.	Vehicle(s)				
	43.	Capital Equipment				
		43.1 Computer Equipment (specify)				
		43.2 Others (specify)				
	<b>49.</b>	<b>Capital Items Total:</b>				
50.	Consumable Items					
	51.	Raw materials			1,347.00	4,445.10
	52.	Utilities			2,040.91	6,735.01
	53.	Office Supplies			5,912.12	19,510.00
	54.	Publication printing and courier				
	<b>59.</b>	<b>Consumable Items Total:</b>			<b>9,300.03</b>	<b>30,690.11</b>
60.	Miscellaneous					
	61.	Bank charge			6.81	22.48
	62.	Contingencies				
	<b>69.</b>	<b>Miscellaneous Total:</b>			<b>6.81</b>	<b>22.48</b>
70.	Others (specify)					
	71.	Others (specify)				
	<b>79.</b>	<b>Others Total:</b>			<b>0.00</b>	<b>0.00</b>
		Total Expenditures To-date:			66,598.89	219,776.35
		<b>Remaining Balance of Funds (A-B):</b>			<b>1,500.47</b>	<b>4,951.54</b>
Note: -Mean Exchange rate USD to MYR ~ 3.3						

ANNEX 2A Activity financial statement (GOM)

ACTIVITY FINANCIAL STATEMENT (in US Dollar)							
GOVERNMENT OF MALAYSIA FUNDING							
	Component		Original	Expenditures To-date			Available
			Amount	Accrued	Expended	Total	Funds
			(A)	(B)	(C)	(D)	(E)
				b/		{ B + C }	{ A - D }
<b>I.</b>	<b><u>Funds managed by Executing Agency</u></b>						
10.	Personnel						
	11.	Coordinator	66,000.00	0.00	66,000.00	66,000.00	0.00
	12.	Other Personnel					
		12.1 Assistant 1					
		12.2 Assistant 2					
		12.3 Other labour					
	13.	National Experts					
		13.1 Expert 1					
		13.2 Expert 2					
		13.3 Expert 3					
	14.	International Consultant(s)					
		14.1 Consultant 1					
		14.2 Consultant 2					
	<b>15.</b>	<b>Personnel Total:</b>	<b>66,000.00</b>	<b>0.00</b>	<b>66,000.00</b>	<b>66,000.00</b>	<b>0.00</b>
	16.	Workshop/Seminar and Training					
		(specify beneficiaries)					
		16.1 Travel/Transportation (participants)					
		16.2 Daily Subsistence Allowances (participants)					
		16.3 Venue and Logistics					
		16.4 Workshop Materials					
		16.5 Others					
	<b>17.</b>	<b>Workshop/Seminar and Training Total:</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
20.	Sub-contracts						
	21.	Sub-contract (Topic 1)					
	22.	Sub-contract (Topic 2)					
	<b>29.</b>	<b>Component Total:</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

\* Note: -Mean Exchange rate USD to MYR ~ 3.3

30.	Travel						
	31.	Daily Subsistence Allowance					
		31.1 National Expert(s)					
		31.2 International Consultant(s)					
		31.3 Others					
	32.	International Travel					
		32.1 National Expert(s)					
		32.2 International Consultant(s)					
		32.3 Others					
	33.	Local Transport Costs					
		33.1 National Expert(s)					
		33.2 International Consultant(s)					
		33.3 Others					
	<b>39.</b>	<b>Travel Total:</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
40.	Capital Items						
	41.	Premises					
	42..	Vehicle(s)					
	43.	Capital Equipment					
		43.1 Computer Equipment (specify)					
		43.2 Others					
	<b>49.</b>	<b>Capital Items Total:</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
50.	Consumable Items						
	51.	Raw Materials					
	52.	Spares					
	53.	Utilities	1,800.00	0.00	1,800.00	1,800.00	0.00
	54.	Office Supplies					
	<b>59.</b>	<b>Consumable Items Total:</b>	<b>1,800.00</b>	<b>0.00</b>	<b>1,800.00</b>	<b>1,800.00</b>	<b>0.00</b>
60.	Miscellaneous						
	61.	Sundry	1,800.00	0.00	1,800.00	1,800.00	0.00
	62.	Contingencies					
	<b>69.</b>	<b>Miscellaneous Total:</b>	<b>1,800.00</b>	<b>0.00</b>	<b>1,800.00</b>	<b>1,800.00</b>	<b>0.00</b>
70.	Others (specify)						
	71.	Others (Management cost)	9,048.00	0.00	9,048.00	9,048.00	0.00
	<b>79.</b>	<b>Others Total</b>	<b>9,048.00</b>	<b>0.00</b>	<b>9,048.00</b>	<b>9,048.00</b>	<b>0.00</b>
<b>100.</b>		<b>GRAND TOTAL:</b>	<b>78,648.00</b>	<b>0.00</b>	<b>78,648.00</b>	<b>78,648.00</b>	<b>0.00</b>
* Note: -Mean Exchange rate USD to MYR ~ 3.3							

**ANNEX 2B** Activity cash flow statement (GOM)

<b>ACTIVITY CASHFLOW STATEMENT (in US Dollar)</b>						
<b>GOVERNMENT OF MALAYSIA FUNDING</b>						
	<b>Component</b>				<b>Amount</b>	
			<b>Reference</b>	<b>Date</b>	<b>in US\$</b>	<b>Local Currency</b>
<b>A.</b>	<b><u>Funds received from ITTO:</u></b>					
	1.	First instalment		Jul-13	78,648.00	259,538.40
	2.	Second Instalment				
	3.	Third instalment				
	4.	Fourth instalment				
	5.	Interest on bank deposits				
		<b>Total Funds Received:</b>			<b>78,648.00</b>	<b>259,538.40</b>
<b>B.</b>	<b><u>Expenditures (by Executing Agency):</u></b>					
10.	Personnel					
	11.	Coordinator			66,000.00	217,800.00
	12.	Other Personnel				
		12.1 Assistant 1				
		12.2 Assistant 2				
		12.3 Other labour				
	13.	National Experts				
		13.1 Expert 1				
		13.2 Expert 2				
		13.3 Expert 3				
	14.	International Consultant(s)				
		14.1 Consultant 1				
		14.2 Consultant 2				
	<b>15</b>	<b>Personnel Total:</b>			<b>66,000.00</b>	<b>217,800.00</b>
	16.	Workshop/Seminar and Training				
		(specify beneficiaries)				
		16.1 Travel/Transportation Costs (participants)				
		16.2 Daily Subsistence Allowances (participants)				
		16.3 Venue and Logistics				
		16.4 Workshop Materials				
		16.5 Others				
	<b>17.</b>	<b>Workshop/Seminar and Training Total:</b>			<b>0.00</b>	<b>0.00</b>
20.	Sub-contracts					
	21.	Sub-contract (Topic 1)				
* Note: -Mean Exchange rate USD to MYR ~ 3.3						

	22.	Sub-contract (Topic 2)				
	<b>29.</b>	<b>Sub-contracts Total:</b>			<b>0.00</b>	<b>0.00</b>
30.		Travel				
	31.	Daily Subsistence Allowance				
		31.1 National Expert(s)				
		31.2 International Consultant(s)				
		31.3 Others				
	32.	International Travel				
		32.1 National Expert(s)				
		32.2 International Consultant(s)				
		32.3 Others				
	33.	Local Transport Costs				
		33.1 National Expert(s)				
		33.2 International Consultant(s)				
		33.3 Others				
	<b>39.</b>	<b>Travel Total:</b>			<b>0.00</b>	<b>0.00</b>
40.		Capital Items				
	41.	Premises				
	42.	Vehicle(s)				
	43.	Capital Equipment				
		43.1 Computer Equipment (specify)				
		43.2 Others (specify)				
	<b>49.</b>	<b>Capital Items Total:</b>			<b>0.00</b>	<b>0.00</b>
50.		Consumable Items				
	51.	Raw materials				
	52.	Spares				
	53.	Utilities			1,800.00	5,940.00
	54.	Office Supplies				
	<b>59.</b>	<b>Consumable Items Total:</b>			<b>1,800.00</b>	<b>5,940.00</b>
60.		Miscellaneous				
	61.	Sundry			1,800.00	5,940.00
	62.	Contingencies				
	<b>69.</b>	<b>Miscellaneous Total:</b>			<b>1,800.00</b>	<b>5,940.00</b>
70.		Others (specify)				
	71.	Others (Management cost)			9,048.00	29,858.40
	<b>79.</b>	<b>Others Total:</b>			<b>9,048.00</b>	<b>29,858.40</b>
		<b>Total Expenditures To-date:</b>			<b>78,648.00</b>	<b>259,538.40</b>
		<b>Remaining Balance of Funds (A-B):</b>			<b>0.00</b>	<b>0.00</b>
* Note: -Mean Exchange rate USD to MYR ~ 3.3						



