

5 June 2007

**Government of Malaysia**

**United Nations Development Programme**

**Planning and Development for a Natural History Museum (NHM) in Malaysia**

This project is to develop a framework for the establishment of a Natural History Museum (NHM) in Malaysia. The decision to set up a Natural History Museum was made at the Fifth National Biodiversity and Biotechnology Council (NBBC5) meeting on 29th September 2006. A Natural History Museum (NHM) is very crucial for a mega diverse country like Malaysia as it will play a pivotal role of a national depository for its biodiversity resources. A good NHM requires the need to maintain a high standard of curation in its collections so that the collections are preserved in perpetuity. NHM provides an important platform for systematic documentation of the flora and fauna resources of the country to meet the objectives of the Global Taxonomic Initiative (GTI), a cross cutting issue under the Convention on Biological Diversity (CBD) in which Malaysia is a signatory. NHM supports conservation; promote sustainable utilization of components of biological diversity and enables benefit sharing of the genetic resources found in the country. It builds upon local expertise and international collation through technology and technological transfer and capacity building. NHM will also cater as a centre for communication, education and public awareness in biodiversity conservation of the country. The project document will form the basis for a study to chart the development of a master plan for a Natural History Museum in Malaysia.

**SIGNATURE PAGE**

Country: Malaysia

United Nations Development Assistance Framework (UNDAF) Outcome(s)/Indicator(s):  
(Link to UNDAF outcome, if no UNDAF, leave blank)

Not Applicable

Expected Outcome(s)/Indicator(s):

Global environmental concerns and commitments integrated in national development planning and policy.

(Country Programme (CP) outcomes linked to the Strategic Results Framework (SRF/MYFF goal and service line):

MYFF Goal 3: Energy and environment for Sustainable development  
Service Line 3.5: Conservation and Sustainable use of biodiversity

Expected Output(s)/Indicator(s):

Development of a framework towards the establishment of Natural History Museum in Malaysia

(CP outcomes linked to the SRF/MYFF goal and service line)

Implementing partner:

Forest Research Institute Malaysia (FRIM)

(Designated Institution/Executing Agency)

Programme Period: <u>July 2007-March 2008</u> Programme Component: <u>MYFF Goal</u> Project Title: <u>Planning and Development of a National Natural History Museum (NHM) in Malaysia</u> Project ID: <u>00056928</u> Project Duration: <u>9 months</u> Management Arrangement: <u>National Execution (NEX)</u>
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<u>Budget</u>	<u>USD</u>
Allocated Resources:	
Government of Malaysia (GoM)	
In-kind contribution	64,000
UNDP	
TRAC	170,000
Cost share	243,000
General Management Services (GMS)	14,580
<b>Total Budget:</b>	<b>491,580</b>

On behalf Of:	Signature:	Date:	Name/Title:
Government	_____	_____	_____
UNDP	_____	_____	_____

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## **PART 1 A: SITUATIONAL ANALYSIS**

### **Background**

South-east Asia is the most biodiversity-rich region in the world. Its terrestrial and marine ecosystem is unsurpassed and Malaysia often highlights this richness. In South-east Asia, our diversity is surpassed only by Indonesia's. Indonesia itself is often quoted as the country with the most diverse biodiversity and is given an index of "1" in National Biodiversity Index (Anon. 2001). Malaysia in this world comparison has an index of 0.809, ranked twelfth.

We owe much to the knowledge of the diversity in the region or a country like Malaysia from taxonomic research. Although the science of fungal, plant and animal taxonomy is a very old field of scientific endeavour, it still remains the foundation of biological study. Moreover, knowledge of the species found in many parts of the world is still patchy. In very diverse groups like insects and fungi, a huge percentage of their taxa remain undocumented or undecided. Even in better known groups like higher plants, on an average about 2,000 new species are added each year in the International Plant Name Index (IPNI) database (see <http://www.ipni.org/index.html>).

Key to the documentation of the biodiversity is the work of taxonomists who often takes years of experience to build up expertise enable them to define and describe species. Experts in many organism groups are often found in developed countries where such a tradition continues. In many developing countries, including Malaysia, such expertise is often lacking. The reasons are both historical and often country priorities. Very often other more pressing needs in nation building takes over resources needed to build up basic sciences resulting in low priority accorded to the documentation the country's biodiversity.

Specimen holdings are essentially kept in natural history museums for both plants and animals, and plant herbaria. These holdings are important because they form the basis to enumerate the taxa of the region or country. These collections also provide the basis for the further understanding of their biology, ecology and of their usefulness. Without the infrastructure to collect and curate specimens and the expertise to interpret and study the biodiversity of the area, it would be impossible to build knowledge of biodiversity in any one area. And the follow-up sciences on species conservation and utilisation etc. cannot be developed. Natural history museums and herbaria are essentially centres where such functions are performed.

Historically, in Malaysia, the collection of biodiversity was centred in Singapore at the Raffles Museum and the Singapore Botanic Gardens under the British colonial administration. The former was for animal research study and the latter for fungus and plant study. A forest herbarium and entomological collection which were at the Forest Research Institute, in Kepong concentrated mainly on forestry research linked with timber and its preservation. With the independence of Malaya and subsequent formation of Malaysia and secession of Singapore, Malaysia lost the very important biodiversity collection to Singapore. Although a National Museum was subsequently set up, its functions until today are that of an anthropological or cultural museum. It never had a strong emphasis on natural history museum functions. In this context, it is pertinent to note that among the ASEAN countries today, only Laos, Cambodia and Malaysia do not have a Natural History Museum.

### **Natural History and Herbarium Collections in Malaysia**

Although Malaysia lacks a Natural History Museum, the size of actual collections maintained by different institutions is large. Based on a recent survey of museum and herbarium biological specimens held among institutions in Malaysia, there are close to 1 million plant specimens and over 1.6 million animal specimens held at forest research institutions, universities and various departments in the country (see Tables 1, 2 & 3).

Table 1. Major herbarium collections in Malaysia for plant specimens

<b>Institutions</b>	<b>Specimens</b>
FRIM	300,000
Forest Research Centre, Sabah	254,000
Forest Research Centre, Sarawak	200,000
University Malaya	65,000
Universiti Kebangsaan Malaysia	72,000

Table 2. Vertebrate collections in Malaysia

<b>Institutions</b>	<b>Mammals</b>	<b>Herpeto-fauna</b>	<b>Birds</b>	<b>Marine fishes</b>	<b>Fresh water fishes</b>
Borneo Marine Research Institute, Universiti Malaysia Sabah	0	13	0	149	0
Jabatan Perikanan Malaysia	2	0	0	1,147	348
Jabatan Perlindungan Hidupan Liar dan Taman Negara	3,655	1,530	500	0	59
FRIM	0	2,106	0	0	0
Sabah Museum	3,519	5,194	3,628	272	2,893
Sabah Parks	1,827	7,925	2,527	0	2,652
Sarawak Biodiversity Centre	94	441	913	0	0
Sarawak Museum	12,000	3,400	12,000	1,500	4,000
Kolej Universiti Sains & Teknologi Malaysia	0	15	0	100	500
<b>Total</b>	<b>21,097</b>	<b>20,624</b>	<b>19,568</b>	<b>3,168</b>	<b>10,452</b>

Tables 1, 2 and 3 show the more significant collections found in many institutions in the country. Collections in the forest research institutes such as FRIM and the Forest Research Centres of Sabah and Sarawak, Sarawak Museum, Agriculture Department Sabah Parks, UKM and UM are particularly important for plant and entomological collections. For vertebrate collections, most important include Sarawak and Sabah Museums, PERHILITAN and Sabah Parks.

Table 3. Invertebrate collections in Malaysia

<b>Institutions</b>	<b>Insects</b>	<b>Crustaceans</b>	<b>Molluscs</b>
Universiti Malaysia Sabah	n.a.	0	617
Jabatan Pertanian	60,000	200	150
Jabatan Perikanan Malaysia	0	50	0
PERHILITAN	2,533	0	0
Forest Research Centre, Sabah	130,800	0	0
FRIM	600,000	0	0
Sabah Museum	5,639	304	0
MARDI	30,000	0	0
Sabah Parks	52,106	314	568
Sarawak Biodiversity Centre	4,079	874	468
Sarawak Forestry Corporation	458,133	0	0
Sarawak Museum	100,000	1,000	1,200
Universiti Kebangsaan Malaysia	130,000	0	0
UNIMAS	47,000	0	0
<b>Total</b>	<b>1,620,290</b>	<b>2,742</b>	<b>3,003</b>

## **The Need for a Natural History Museum**

The question now arises with such a large collection found within the country, is there a need for a Malaysian Natural History Museum (NHM). This can be justified by the following:

### **1. Provide systematic documentation of the flora and fauna of Malaysia**

Currently, there is no institution in Malaysia that deals with the systematic documentation of all biodiversity found in the country. Institutions with large and significant collections often concentrate on the organisms or groups which they have been entrusted to work on. For example, FRIM and the forest research centres concentrate mainly on timber plant species for plants while entomological and fungal collections that are often linked to pest and diseases of important plants. The universities tend to concentrate on specimens which their researchers or lecturers are interested in. The two state museums of Sabah and Sarawak while possessing broader range of collections concentrate on specimens found in their respective states only. What is missing is a national institution that deals with the total biodiversity of the country. Such an institution will significantly build up a national collection of all specimens within the country.

### **2. Conservation of all biological diversity of Malaysia**

Similarly in the important field of conservation of the biological diversity found in the country, national programmes must be developed in a more holistic fashion. Conservation should include all habitats and organisms. Malaysia has developed its National Biodiversity Policy in 1998. Implementation of this important document can now be taken up primarily by the NHM. In the area of conservation, the strategies and action plans found in the national policy can become its main functions. Currently, conservation is carried out very much on a sectoral basis; departments and ministries tend to concentrate only on those sectors for which they are directly in charge.

### **3. Source for sustainable utilisation of natural resources**

Having a well understood and documented record of the nation's biodiversity can be a resource for their sustainable utilisation and exploitation. Malaysia's huge biological resources can be tapped for bio-medicine, herbal and pharmaceutical products, food, nutritional uses, etc. Research along these areas of utilisation has in the last few years becoming very important in Malaysia. Researchers or institutions could work closely with NHM to exploit our national treasures in a sustainable manner.

### **4. Need for a national depository**

Over the years, retiring researchers have donated their specimens to the established museums such as museums in Europe or America or even to the Raffles Museum in Singapore. This is due to the fact that without a formal set up for a national museum, the specimens are often neglected after they leave. A national depository is essential if these important collections are to remain in the country as a national heritage. The NHM can function to meet this need for a national depository.

### **5. Maintaining a high standard of curation in collections**

Curation of collections in museums and herbaria is a demanding task that requires long-term commitment. Standards of curation must be maintained irrespective of changes of in government or institutional policies. Such commitment sometimes cannot be provided outside a national setup. Specimens in collections are meant to be preserved in perpetuity. In well curated museums and herbaria, specimens collected from the time of Charles Darwin or even Carl Linnaeus in the 18<sup>th</sup> and 19<sup>th</sup> centuries are still in pristine condition allowing present-day researchers to examine these specimens. Specimen curation also includes allowing researchers' access to specimens, record keeping and tracking of literature in publications. Curation functions must include maintenance of library facilities that document the publication

of species names in journals, books and other taxonomic publications. Old literature and publications must be part of the collection. Increasingly, information on specimen collection should be stored in databases. These many functions can only be met by a well funded and adequately staffed centralised institution such as the NHM.

#### **6. Build local expertise for local and international collaboration**

To build up local expertise, there must be avenues for such development. A national programme would certainly ensure that a pool of local experts can be built up. As the diversity of organisms is very large in Malaysia, it would be impossible for Malaysia to have expertise in all the groups but a critical pool of experts must be available. This pool of experts can then form good international collaborations with colleagues currently found in the more established museums and herbaria elsewhere in the world. Such collaboration is essential to develop a good foundation to both curate and study the collection. The NHM would host these experts and become the focal point of contact/reference for taxonomic expertise in the country.

#### **7. Source of public education and awareness**

Of essential function in any museum is the role for public education and awareness. This is well exemplified in many established museums in Europe and America. Presently such a system is not well established in Malaysia. The NHM would function as an important resource centre for outreach to the public and raising awareness on the importance and functions of our rich biodiversity.

### **Options available towards a Natural History Museum in Malaysia**

The options available in setting up a NHM are as follows:

1. Use an existing instrument such as Museum Negara
2. Build up a new entity – A new Natural History Museum under NRE
3. Upgrade a division in an existing institution to function as the Natural History Museum
4. Develop a network of institutions functioning as the Natural History Museum – A consortium of collections from different institutions
5. Develop a NHM using a combination of options from 2, 3 and 4 above

In a recent meeting discussing the options that Malaysia could take towards setting up a NHM, the committee members were more supportive of Options 2-4. Option 1 would be difficult to implement because a) Museum Negara has traditionally had an emphasis on anthropological (human) aspects of Malaysia's heritage and history, and is under the Ministry of Culture, Arts and Tourism and, therefore, b) it lacks the top-down mandate, human resources and expertise to function as a NHM. There have already been attempts to set up a NHM under Museum Negara but these attempts have not succeeded for these reasons. In most countries, museums of history and natural history are separate entities.

Option 2 (a new entity) requires tremendous investment of financial and human resources, and would require strategic planning and budgeting by the NRE. Option 3 (upgrade a division in an existing institution) would require an institution to perform a dual role as a NHM as well as an institution that caters to the other specific tasks with which it is entrusted (such as forestry research). It will also require that the institution concerned upgrade its manpower and infrastructure greatly to ensure that it has the attributes of a NHM mentioned above. In order to function effectively, the NHM would need to be under independent administration in order to ensure that its objectives are met and not influenced by the role of the institution that houses it. At the same time, the NHM would need to work closely with the institution and could benefit from existing land and infrastructure. The collections of the institute could remain separate but closely networked with the NHM's or may be incorporated into the NHM's with full access maintained for staff of the host institution.

Option 4 has been practiced in some countries such as India and America, which could provide case studies for Malaysia. In a country like Malaysia, where there are pre-existing collections in different institutions with different areas of emphasis and different expertise, Option 4 has the advantage of providing a ready-made resource that can be networked to form a NHM that does not have to be built up entirely from scratch. Institutions identified in the network as part of the NHM network will continue to hold and curate the specimens. There will be no movement of specimens. The role of the NHM will be to ensure that the biodiversity needs for Malaysia are met in the consortium of collections in the network. Among the roles it plays will be those already discussed under "The Need for a Natural History Museum". Some institutions may be identified to play leading role to lead research and collection in particular organisms or biodiversity group.

However, a NHM of this sort would still require an independent administration and Centre of its own where research areas not already covered by existing institutions within the NHM network are addressed. This would ensure adequate coverage of all geological biological aspects of our biodiversity. The Centre could be hived off from an existing Institution and may utilise the infrastructure of the host Institution or a completely new institute can be formed. This leads to Option 5. Various combinations can be used in Option 5. Under this option, it is also possible to phase out the establishment of a NHM with an initial existing institute that will form the interim NHM and through a phase approach, develop a new NHM when resources and political will are put in place for the new entity.

## **PART I B: STRATEGY**

The need to establish a Natural History Museum was identified in the National Biodiversity Policy in 1998 as part of Action Plan 2 of Strategy 1 of the Policy to improve on the scientific knowledge base and to support the documentation of species diversity. At the Fifth National Biodiversity and Biotechnology Council (NBBC5) meeting on 29th September 2006, a decision was made to undertake the implementation of the recommendation. To ensure the sustainability and the viability of the options that were identified, the Ministry of Natural Resources and Environment (NRE) convened a stakeholder's meeting on 22<sup>nd</sup> December 2006. In that meeting and in line with the above options, it was decided it is very important for a study to examine in detail the consequences of each option. The study is also important to examine the strategic needs of the country in the area of biodiversity inventory, conservation and utilisation. The study should chart the direction and mission of a NHM in Malaysia and should include details for a framework leading to a master plan. FRIM was appointed to lead the initiative for such a study and a proposal was developed towards this end as an initial phase of the NHM development.

The strategy to implement this project is for an expert team comprising both local and international Natural History Museum experts to conduct a short-term, 9-month study towards the development of Natural History Museum for Malaysia. The study is to produce a framework for the establishment of the Museum taking into consideration the background information provided in Part 1A above. The team will comprise a full time lead consultant that will oversee and develop the framework. He/she will be supported by a team of six short-term consultants (mostly biologists with broad experiences in biodiversity research and NHM management); three local experts and three international experts. The three international experts will be pooled from successful museums that have present and past interest on the Malaysian biodiversity. Examples include Chicago Field Museum, USA, Natural History Museum, UK and the Raffles Museum, Singapore. The team will work closely with a National Project Director appointed by the Implementing Partner and the Ministry of Natural Resources and Environment. A Technical committee will provide technical advice to the team on the project and a Steering Committee will provide the overall policy direction for the implementation of the study.

The consultants working together will also be given specific assignments to aid the development of the framework master plan. Where foreign consultants are hired, they are expected to share best practices based on international standards and experiences. The assignments for the expert team include:

**A. Research and Specimen Curation**

1. Biodiversity conservation mission, policies and programmes for the Natural History Museum
2. National, regional and international priorities on biodiversity research and activities pertinent to Malaysia
3. Specimen collection policy, programmes and curation  
Assignees: Lead consultant and 1 foreign consultant

**B. Exhibits, Education and Public Awareness**

4. Exhibits and public displays
5. Education programmes and public awareness  
Assignees: 1 local consultant and 1 foreign consultant

**C. Organisation Structure and Human Resource Development**

6. Organisation structure
7. Human resource, capacity needs and development  
Assignee: 1 local consultant

**D. Administration, Finance and Development of Infrastructure**

8. Administration and management of the Natural History Museum;
9. Funding mechanism to ensure sustainability
10. Infrastructure development including identification of possible sites towards a Malaysian Natural History Museum  
Assignees: 1 local consultant and 1 foreign consultant

The study will include an initial desk review of biological diversity in Malaysia, the status of collections from the various institutions, manpower resources and research activities. The initial fact finding phase of the project is to provide the background for the framework and will be conducted via interviews, questionnaires and email correspondence. The desk review will be followed by site visits as a means for verification and to further consult experts in the field. Two consultative stakeholder meetings will be organised to obtain feed back from biodiversity experts in the country as how best to develop the Natural History Museum in Malaysia and what directions the museum would follow towards the work of the NHM; the first will be conducted at the launch of the project and a final one at the end. A workshop will be conducted to invite biodiversity experts to present some background papers for more in depth discussion and feed back. Among items for more in depth discussion will be the issue of the options that are available for the NHM establishment as described above. The workshop will also provide opportunities for NHM experts to provide presentations of some successful NHM in the world, how such museums are managed, role of exhibits and the public in the museum etc.

A fact finding study tour to some successful NHMs in United States (e.g. the Field Museum, Chicago and American Museum of Natural History, New York), Europe (e.g. Natural History Museum, London and National Museum of Natural History, Leiden) and Asia (e.g. Natural History Museum, India and Raffles Museum, Singapore) will also be organised. Members of the study tour will be mostly the local experts with National Project Director. The aim of the study tour is to obtain further pertinent information for their assignments as listed above. The study tour team will visit the three museums mentioned above and with the help of the international consultants identify possible other museums to visit that will help in the preparation of the report.

The listed assignments will provide the expert team the appropriate information and direction to develop the report on the framework for a NHM in Malaysia. The report should also contain inputs

from the consultative meetings and workshop. Inputs should also be obtained from the Ministry of Natural Resources and Environment, the Economic Planning Unit and other pertinent government organisation to ensure sustainability of the NHM development.

The report from the consultants (Expert Team) will be subjected to endorsement by the Technical Committee and Steering Committee. Results of the study will form the basis for reporting to the upcoming Sixth National Biodiversity and Biotechnology Council (NBBC6) for further endorsement of the NHM establishment. Following the approval of the NBBC6, the management team will draw up further proposals from the report for submission towards the mid-term review of the Ninth Malaysia Plan (9MP).

The project will include a pilot project to improve curation standards in one institute. As an initial step to develop the project, members of the FRIM team visited a few institutions in the Klang valley to ascertain the condition and state of some of the collections. It became apparent that very little funds and resources were provided towards specimen curation and the state of curation in some of the collections was poor. As part of this study, it is included a pilot project to improve curation standards in one institute. The pilot project will provide computer facilities for databasing and some facilities and consumables such as specimen bottles, chemicals (alcohol, formaldehyde) etc. for preservation and improve the curation standards in the collection. This will provide an example of what the NHM will ultimately function as the main custodian for biodiversity in the country.

UNDP will also provide input into the project where pertinent in areas where it has expertise through UNDP's knowledge networks. Additionally, every effort would be undertaken to ensure that this project would create linkages with existing UNDP and Government of Malaysia's projects, where relevant. One such project is the National Capacity Self Assessment for Global Environmental Management (NCSA) project, which reviews current capacity needs of Malaysia in fulfilling our obligations towards the three international Conventions, of which the United Nations Convention on Biological Diversity (CBD) is one.

Together with the reports the team will develop, the project will also aim towards publishing the findings of the study. This will serve as a permanent record of the study and can be used as an example for NHM development.

## PART II: RESULTS FRAMEWORK

<p><b>Intended Outcome as stated in the Country Results Framework</b></p> <ul style="list-style-type: none"> <li>• Global environmental concerns and commitments integrated in national development planning and policy.</li> </ul>
<p><b>Outcome indicator as stated in the Country Programme Results as Resource Framework, including baseline and target</b></p> <ul style="list-style-type: none"> <li>• Formulation of a framework for a master plan towards the establishment of a Natural History Museum in Malaysia</li> <li>• Baseline: Malaysia is a signatory to the United Nations Convention on Biological Diversity (CBD)</li> <li>• End Target: Framework for a Master Plan for the Establishment of a Natural History Museum (NHM) in Malaysia</li> </ul>
<p><b>Multi-Year Funding Framework 2004-2007:</b> MYFF 3 - Energy and Environment for sustainable development  <b>Strategic Goals and Service Lines:</b> SL 3.5 - Conservation and Sustainable use of biodiversity</p>
<p><b>Project Title and ID:</b> 00056928 - Planning and Development for the Natural History Museum (NHM) in Malaysia</p>

Intended Outputs	Output Targets	Indicative Activities	Inputs
1. Establishment of coordination and support mechanisms	1.1 Appointment of members of Project Management Team (PMT) by July 2007	1.1.1 Appointment of the Lead Consultant 1.1.2 Appointment of a contract Research Officer and a Research Assistant 1.1.3 Appointment of 3 local consultants 1.1.4 Appointment of 3 international consultants 1.1.5 Establishment of Project Management Team (PMT) and work plan and budgets.	<ul style="list-style-type: none"> <li>• Project document</li> <li>• Terms of reference for PMT</li> <li>• List of potential local and foreign consultants</li> </ul>

Intended Outputs	Output Targets	Indicative Activities	Inputs
2. Status and state of museum and herbarium collections, biodiversity experts known	2.1 Study on current status of museum and herbarium collections in Malaysia conducted by August 2007	2.1.1 Literature review of biodiversity in Malaysia and knowledge gaps 2.1.2 Conduct survey through a questionnaire on museum and herbarium holdings 2.1.3 Conduct survey on biodiversity experts and their fields of expertise, and areas of biodiversity research 2.1.4 To conduct field visits to assess state of curation of museum and herbarium collections in Malaysia	<ul style="list-style-type: none"> <li>• Library resources</li> <li>• References</li> <li>• Questionnaires</li> <li>• Interviews</li> <li>• Analysis of surveys</li> <li>• Roster of biodiversity experts</li> <li>• Field visits</li> </ul>
3. Consultative, consultant meetings and workshop held	3.1 Consultative meetings with curators and researchers held in August 2007 and February 2007 3.2 Consultant meetings held in September 2007 and February 2007 3.3 Workshop held on September 2007	3.1.1 To conduct two consultative meetings with curators and researchers from different institutions with museum holdings or research 3.1.2 To conduct two meetings of consultants 3.1.3 To conduct one workshop on the creation of a NHM in Malaysia	<ul style="list-style-type: none"> <li>• Meeting venue</li> <li>• Workshop venue</li> <li>• List of participants</li> <li>• Secretariat</li> <li>• Rapporteurs</li> </ul>
4. Fact finding study tours conducted	4.1 Fact finding study tours conducted by October 2007	4.1.1 To conduct fact finding study tour of a 5-member team to selected successful NHM (2 in Europe, 2 in US and 2 in Asia)	<ul style="list-style-type: none"> <li>• List of reputable NHMs</li> </ul>

<b>Intended Outputs</b>	<b>Output Targets</b>	<b>Indicative Activities</b>	<b>Inputs</b>
5. Project findings and documentation completed	5.1 Project findings and framework developed for NBBC6 by September 2007 and Mid-term Review by March 2008	5.1.1 To formulate and prepare final report and documentation of a framework for a NHM in Malaysia 5.1.2 To present report and recommendations for a NHM in Malaysia to the National Biodiversity Biotechnology Council 5.1.3 To formulate proposal from framework (activity 5.1.1) for submission to the Government of Malaysia for funding in the mid-term review of the Ninth Malaysia Plan 5.1.4 To prepare and format report into a publishable form for publication	<ul style="list-style-type: none"> <li>• Technical drawings</li> <li>• Draft report to NBBC6</li> <li>• Draft report for Mid-term Review of the Ninth Malaysia Plan</li> <li>• Publication of findings of the study</li> </ul>
6. NHM pilot project conducted	6.1 To conduct a NHM pilot project by March 2008	6.1.1 Curation equipment for specimens 6.1.2 Equipment for museums 6.1.3 Inputting specimen information into database (employment of a technician to input data)	<ul style="list-style-type: none"> <li>• Specimen bottles</li> <li>• Chemicals of specimen storage</li> <li>• Dehumidifiers</li> <li>• Computers</li> <li>• Printer</li> </ul>

### **PART III: MANAGEMENT ARRANGEMENTS**

The Conservation and Environmental Management Division (CEMD), Ministry of Natural Resources and Environment (NRE) would have the overall responsibility for the execution of the project, and will be the “National Execution Agency (NEA)/ Executing Agency (EA)” of the project. The Implementing Agency (IA) would be the Forest Research Institute of Malaysia (FRIM), will identify the needed technical aspects of the Project.

The Executing Agency shall name a senior officer to assume the role of National Project Director (NPD). The NPD should be an employee of the Implementing Agency and is appointed before project activities commence. The NPD is accountable to Government and UNDP for the implementation of the project in line with the signed project document. He/she is the approving officer for the project. The NPD is the focal point for responsibility and accountability in the National Execution Agency. The NPD will be at the level of a Director or higher in the IA. The NPD works on the project on a part time basis and should be able to devote a reasonable amount of time to project activities, and his/her participation in the project can be considered as Government in-kind contribution (*see Annex 2*).

The NPD, the Executing Agency and UNDP will be responsible for overseeing the recruitment and procurement processes as may be necessary in carrying out the project. The Executing Agency shall ensure that the contracting processes meet at the minimum, UNDP procurement guidelines subject to the written approval of the Government.

The UNDP Resident Representative ensures that the UNDP country office has an internal control system that allows it to monitor effectively the financial activity of the project and to support and monitor the progress towards achieving results.

UNDP will disburse quarterly advances to the Implementing Agency to implement the project.

### **PART IV: MONITORING AND EVALUATION**

The project will be subject to standard UNDP project monitoring and evaluation procedures as approved in writing by the Government from time to time. The Executing Agency will ensure effective documentation of all processes undertaken, lessons learnt and successful initiatives through a database for long-term planning and management purposes. Information on successful experiences and lessons learnt will be disseminated through national and local networks as well as to the international sites, where applicable, in order to stimulate replication. Project experience will also, where applicable, be disseminated internationally, nationally, and locally through appropriate vehicles. The first progress report, which will be due within the first 2 months of commencement, will serve as the Inception Report, which will ensure the full operation of the UNDP Project Document. The NPD or his/her assigned staff shall prepare an Annual Project Report (APR). The preparation of the APR must be done in consultation with the stakeholders and will be used as one of the basic document for discussions in the Tripartite Review meeting and must be ready two weeks prior to the meeting.

#### **Project Steering Committee (PSC)**

The NPD will be responsible to the Project Steering Committee (PSC). The PSC will be established to provide the overall guidance to the implementation of the project. It is proposed that the PSC be chaired by NRE, and include members such as UNDP, state agencies, relevant ministries and representation from civil society. The Terms of Reference for the PSC is attached in Annex 1.

## Technical Committee (TC)

A Technical Committee (TC) will be established to provide technical advice and to ensure that the project remains relevant development policies. The Terms of Reference for the TC is attached in Annex 2.

## Project Management Team (PMT)

The PMT will consist of a Lead Consultant who will be employed throughout the project period and a full time research officer employed by the Project. The terms of references for the Project Management Team are attached in Annex 4.

## Tripartite Review

Prior to the completion of the project, it will be subject to Tripartite Review (TPR), which is a joint review by representatives of the Government and UNDP.

## Organisation Chart

Figure 1 shows the organisation structure of the project depicting the relationships of PSC, TC, NPD and PMT. The chart also reflects the reporting and monitoring channels in place to ensure the smooth implementation of activities towards achieving the project purpose.

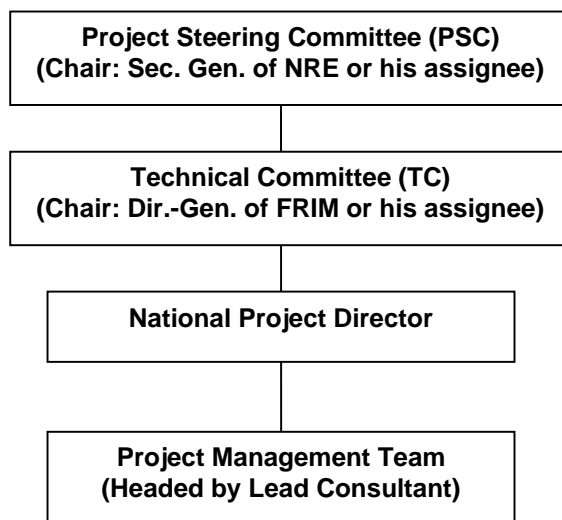


Figure 1. Organisation Chart for the project.

## **PART V: LEGAL CONTEXT**

This project document shall be the instrument envisaged in the Supplemental Provisions to the Project Document, attached hereto. The Supplemental Provisions to the Project Document is a standard annex to project documents that is used in countries which are not parties to the Standard Basic Assistance Agreement (SBAA). The Supplemental Provisions outlines the specific basic conditions under which UNDP assists the Government in carrying its development programmes. It specifies the UNDP privileges and immunities, the forms of assistance, the management arrangements, the role of the Government and the executing agency, resources, costs and general provisions. The host country-implementing agency shall for the purpose of the Supplemental Provisions to the Project Document, refer to the Government Cooperating agency described in the Supplemental Provisions.

All activities stipulated in the Project Document shall be implemented accordingly. However, should there be a need to make changes/modifications to any of the agreed activities; all signatories of the Project Document must concur, before such changes are made.

The following types of revisions may be made to this project document with the signature of the UNDP principal project representative and the Government of Malaysia, provided he or she is assured that the other signatories of the project document have no objection to the proposed changes:

1. Revisions in, or addition of, any of the annexes of the project document [with the exception of the Standard Legal Text for non-SBAA countries which may not be altered and the agreement to which is a pre-condition for UNDP assistance].
2. Revisions which do not involve significant changes in the immediate objectives, outputs or activities of a project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation; and
3. Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or to take into account agency expenditure flexibility.

### **Audit Requirements**

As with all nationally executed projects, the project must be audited periodically. The objective of the audit is to provide the UNDP Administrator with the assurances that UNDP resources are being managed in accordance with:

- a) The financial regulations, rules, practices and procedures prescribed for the project.
- b) The project document and work plans, including activities, management and the project implementation arrangements, monitoring, evaluation, and reporting provisions
- c) The requirements for execution in the areas of management, administration and finance.

While the Government is responsible for ensuring that the audit requirements are met, the project may also be subject to audit by the auditors of UNDP, and UNDP shall have right of access to the relevant records.

UNDP will assist the Government Auditors, subject to written request, to provide the relevant vouchers on direct payment and other documents related to cash advances, provided always that these specific documents are not available from the implementing agency. The final Combined Delivery Report (CDR) will be provided by UNDP by 15 March of each year.

The Government must ensure that the audit is performed in accordance with the generally accepted standards and ensure that the audit report is duly reviewed and will reach UNDP Headquarters via the UNDP Malaysia office by 30 April of each year.

## **Confidentiality**

The Parties shall undertake that neither Party shall disclose or distribute any confidential information, documents or data received or supplied to the other Party in the course of the implementation of this Project Document and any other agreements made pursuant to this Project Document, to any third party except to the extent as authorised in writing to do so by the other Party.

Both the Parties agree that the provisions of this Article shall continue to be binding between the Parties notwithstanding the expiry or termination of this Project Document.

## **Suspension**

Each Party reserves the right for reasons of national security, national interest, public order or public health to suspend temporarily, either in whole or in part, the implementation of this Project Document which suspension shall take effect immediately after notification has been given to the other Party in writing.

## **Revision, Modification and Amendment**

Any Party may request in writing a revision, modification or amendment of all or any part of this Project Document. Any revision, modification or amendment agreed to by the Parties shall be reduced into writing and shall form part of this Project Document. Such revision, modification or amendment shall come into force on such date as may be determined by the Parties. Any revision, modification or amendment shall not prejudice the rights and obligations arising from or based on this a Project Document prior or up to the date of such revision, modification or amendment.

## **Arbitration**

Any dispute, which cannot be resolved amicably, shall be settled by arbitration in accordance with the Arbitration Act 1952 [Act 93] and the rules of arbitration as adopted by the Regional Centre for Arbitration at Kuala Lumpur.

The number of arbitrators shall be three (3), with one (1) arbitrator to be appointed by UNDP and one (1) arbitrator by the Government and the third to be agreed between the two (2) nominated arbitrators. If the two (2) arbitrators fails to agree on the person to be nominated, on the application of either Party hereto the same shall be appointed by the Director of the Regional Centre of Arbitration in Kuala Lumpur.

Any such reference to arbitration shall be deemed to be a submission to arbitration within the meaning of the Arbitration Act 1952.

The decision of the panel of arbitrators shall be final and binding on both Parties.

The arbitrator shall have the power to order specific performance of any obligation under this Project Document.

## **Entry into Force, Duration and Termination**

This Project Document shall enter into force on the Starting Date and shall remain in force until the Completion Date unless on of the Parties notify the other Party of its intention to terminate this Project Document by a notice in writing, at least six (6) months prior to the date of the intended termination.

The termination of the Project Document shall not affect the implementation of on going activities/programmes, which have been agreed upon prior to the date of the termination of this Project Document.

### **Protection of Intellectual Property Rights**

The protection of intellectual property rights shall be enforced in conformity with the national laws and regulations of Malaysia and with other international agreements signed by the Parties.

The use of the name, logo and/or official emblem of any of the Parties on any publication, document and/or paper is prohibited without the prior written approval of Party concerned.

Notwithstanding anything in paragraph 1 above, the intellectual property rights in respect of any technological development, products and services development, carried out:

1. Jointly by the Parties or the research results obtained through the joint effort of the Parties, shall be owned by the Parties in accordance with the terms to be mutually agreed upon; or
2. Solely and separately by the Party or the research results obtained through the sole and separate effort of the Party, shall be solely owned by the Party concerned.

## **ANNEX 1 — TERMS OF REFERENCE FOR THE PROJECT STEERING COMMITTEE**

A Project Steering Committee (PSC) will be established to provide the overall guidance to the implementation of the project.

The Chairman of the Project Steering Committee will be the Secretary General or his representative of the Ministry of Natural Resources and Environment (NRE). Its members will consist of representatives of relevant agencies and UNDP. The Forest Research Institute Malaysia (FRIM) will be the Secretariat for the PSC with the National Project Director as the overall coordinator for the Project.

The PSC will consist of members of the following agencies/institutions:

### **Federal**

Environment and Natural Resource Economics Section, Economic Planning Unit  
Ministry of Tourism  
Ministry of Higher Education  
Ministry of Agriculture and Agro-Based Industries  
Ministry of Science, Technology and Innovation  
Ministry of Arts, Culture and Heritage  
Forest Research Institute Malaysia (Secretariat)

### **State**

Ministry of Tourism Culture and Environment, Sabah  
Ministry of Environment and Public Health, Sarawak

Resident Representative, United Nations Development Programme, Malaysia

The PSC will meet after the receipt of each project report and or twice a year within the project life cycle, whichever is more, and have the following responsibilities:

1. Provide Policy guidance on matters pertaining to the implementation of the project.
2. Monitor and evaluate the implementation of the project towards fulfilment of the objectives stated in the project document.
3. Coordinate and manage overall project activities and budget.
4. Review and comment on the proposed work plan and budget.
5. Initiate remedial actions to overcome all constraints in progress of the project;
6. Review and approve relevant changes to the project design.
7. Coordinate the roles of the various organisations involved in the execution of the project and ensure harmony with related activities.
8. Review and approve progress and technical reports.

The PSC may choose to co-opt other members, such as NGOs and local community representatives, as may be necessary. The PSC operates and makes all decisions by consensus.

The PSC also has the general responsibilities of the following:

1. All phases and aspects of UNDP assistance to this project shall be governed by and carried out in accordance with the relevant and applicable resolutions and decisions of the competent United Nation's organs and in accordance with UNDP's policies and procedures for such projects, and subject to the requirements of the UNDP Monitoring, Evaluation and Reporting System and the approval in writing of the Government.
2. The Government and UNDP shall remain responsible for this UNDP-assisted development project and the realization of its objectives as described in this Project Document.
3. UNDP may subject to the prior written approval of the Government release information relating to any investment-oriented project to potential investors.

## **ANNEX 2 — TERMS OF REFERENCE FOR THE NATIONAL PROJECT DIRECTOR (NPD)**

The Government shall appoint a National Project Director to be responsible, on behalf of the government, for the project. The NPD will be responsible for:

- Assuring the Government inputs to the project are forthcoming in a timely and effective manner
- Assuring the project stays in line with national programs, strategies, and objectives and full achievements of the immediate objectives and outputs
- Overseeing project implementation and the timely undertaking of all activities

The NPD shall also:

1. Work closely with the PMT in overseeing the sound management of activities and financial disbursements.
2. Prepare detailed draft work plan and inception report for all project objectives and identify resource requirements, responsibilities, task outlines, performance evaluation criteria and work plans/schedules.
3. Assume duties as Secretary to the PSC
4. Coordinate national and international experts and advise on meetings and workshop.
5. Submit, as required, Annual Project Report (APR) to tripartite (TPR) review meetings.
6. Approve detailed terms of reference and qualifications for each consultant.
7. Direct and supervise the establishment of project administration procedures for all staff, consultants, and participating agencies.
8. Approve quarterly status and financial reports for comment and approval of the Project Steering Committee.
9. Approve budget revisions and requests as and when required for approval of the National Steering Committee.
10. Provide full support to the Auditor-General's Office in its execution of the NEX Audit.

### **ANNEX 3 — TERMS OF REFERENCE FOR THE TECHNICAL COMMITTEE (TC)**

A Technical Committee (TC) will be established to assist the PSC in monitoring and controlling the technical implementation of the project and the activities. The TC will act as the technical advisors to the PSC. The TC will be chaired by the Director General of the Forest Research Institute Malaysia (FRIM). The Project Management Team (PMT) will be the Secretariat for the TC with the National Project Director as the overall coordinator for the Project.

The tentative members of the TC are as follows. The membership will be confirmed in the first National Steering Committee meeting.

1. Forestry Department, Peninsular Malaysia
2. Sarawak Forestry Department
3. Sarawak Forest Corporation (Forest Research Centre, Sarawak)
4. Sarawak Biodiversity Centre
5. Sabah Forestry Department (Forest Research Centre, Sabah)
6. Department of Wildlife and National Parks, Peninsular Malaysia
7. Sabah Wildlife Department
8. Department of Fisheries
9. Museum Negara
10. Museum Sarawak
11. Sabah Museum
12. Department of Agriculture
13. Malaysian Agricultural Research and Development Institute (MARDI)
14. Faculty of Science, University of Malaya (UM)
15. University Malaysia Sabah (UMS)
16. Universiti Kebangsaan Malaysia (UKM)
17. Universiti Malaysia Terengganu (UMT)
18. Malaysian Nature Society (MNS)
19. World Wide Fund for Nature Malaysia (WWFM)
20. United Nations Development Programme (UNDP)

The responsibilities of the TC include:

1. Reporting to the PSC on the technical progress of the Project and activities;
2. Advising the PSC on the technical aspects of the implementation of the project;
3. Reviewing and reconciling all relevant technical reports and information produced by the project;

## **ANNEX 4 — TERMS OF REFERENCE FOR THE PROJECT MANAGEMENT TEAM**

### **4a. Terms of Reference for Short Term Lead Consultant**

The Lead Consultant will be recruited by the Executing Agency. He/she will report directly to the NPD. He/she will assist in the coordination the different project outputs, ensuring coherency and progression of the project.

#### **Principal Duties**

1. To coordinate all planned activities (project outputs) within the project programmes and facilitate the workings of the TC as provided by Annex 3.
2. To coordinate and prepare stakeholder consultation workshop.
3. To assist the NPD in coordinating and supervising the implementation and reporting of work progress.
4. To prepare quarterly progress and financial reports to UNDP or other relevant agencies requiring such reports.
5. To request for quarterly funds from UNDP.
6. To perform all tasks required as Lead Consultant and as directed by the NPD.
7. To coordinate and work with other short-term consultants in compiling and preparation of the framework for the establishment of the Natural History Museum for Malaysia
8. To coordinate and prepare the drafting and preparation of the final document as the framework towards the establishment of the Natural History Museum for Malaysia
9. Report to the PSC and NPD on the technical progress of the Project;
10. Advise the PSC and NPD on the technical aspects of the implementation of the Project;
11. Provide recommendations for both short- and long-term strategies towards the establishment of a NHM in Malaysia that will complement the biodiversity initiatives in the country;
12. Make recommendations as appropriate, on programmes for scientific work and other activities for natural history inventory, research, conservation, education and public awareness that can be supported by a NHM in Malaysia;
13. Provide technical inputs to PSC and NPD for museum collections, state of the art curation, exhibit design and human resource planning and development for the NHM in Malaysia.
14. Provide expert advice and to assist in the curation of existing museum collections especially in the pilot projects stated in the project.
15. Review and reconcile all relevant technical reports and information produced by the project;

#### **Professional Requirements**

1. PhD in Forestry/Life Sciences/Project Development or equivalent.
2. At least 10 years experience in biodiversity research such as taxonomy and systematics
3. Experience in the curation of museum or herbarium specimens will be an added advantage.
4. Good project implementation, reporting and communication skills
5. Good leadership skills
6. Good writing skills in English

#### **Base Station**

Forest Research Institute Malaysia (FRIM)

#### **Duration**

9 months

#### **4b. Terms of Reference for Short Term Consultants – Research and Specimen Curation**

##### **Principal Duties**

1. Work is principally in the area of research and specimen curation for the Natural History Museum, including:
  - Biodiversity conservation mission, policies and programmes for the Natural History Museum
  - National, regional and international priorities on biodiversity research and activities pertinent to Malaysia
  - Specimen collection policy, programmes and curation
2. Identify potential challenges, problems and issues of the principal assignment listed in (1) above
3. Provide a development strategy in the assignment in the short, medium and long-term towards a successful Natural History Museum for Malaysia
4. Provide any other pertinent input as necessary for the assignment
5. Work closely with the Lead Consultant and other Short-term Consultants in the different assignments so as to integrate the assignments into a holistic framework for a Malaysian Natural History Museum
6. Coordinate and prepare pertinent reports for the framework for the establishment of a Natural History Museum

##### **Professional Requirement**

1. PhD in Forestry/Life Sciences/Project Development/Taxonomy or equivalent.
2. Some experience in NHM planning and development
3. Capability in the curation of museum specimens will be an added advantage.
4. Good project implementation, reporting and communication skills
5. Good leadership skills
6. Good writing skills in English

##### **Base Station**

Forest Research Institute Malaysia (FRIM)

##### **Duration**

2-man months per consultant

#### **4c. Terms of Reference for Short Term Consultants – Exhibits, Education and Public Awareness**

##### **Principal Duties**

1. Work is principally in the area of Exhibits, Education and Public Awareness for Natural History Museum including
  - Policies and programmes towards exhibits, galleries and public displays
  - Education programmes and public awareness
  - Tourism and the Natural History Museum
2. Identify potential challenges, problems and issues of the principal assignment listed in (1) above

3. Provide a development strategy in the assignment in the short, medium and long-term towards a successful Natural History Museum for Malaysia
4. Provide any other pertinent input as necessary for the assignment
5. Work closely with the Lead Consultant and other Short-term Consultants in the different assignments so as to integrate the assignments into a holistic framework for a Malaysian Natural History Museum
6. Coordinate and prepare pertinent reports for the framework for the establishment of a Natural History Museum

#### **Professional Requirement**

1. PhD in Forestry/Life Sciences/Project Development/Exhibit Design/Human Resource or equivalent.
2. Some experience in NHM planning and development
3. Experience in developing exhibits, educational and public awareness programme for NHM.
4. Capability in the curation of museum specimens will be an added advantage.
5. Good project implementation, reporting and communication skills
6. Good leadership skills
7. Good writing skills in English

#### **Base Station**

Forest Research Institute Malaysia (FRIM)

#### **Duration**

2-man months per consultant

### **4d. Terms of Reference for Short Term Consultants – Organisation Structure and Human Resource Development**

#### **Principal Duties**

1. Work is principally in the area of Organisation Structure and Human Resource Development for Natural History Museum including:
  - Organisation structure and phasing of organisation
  - Human resource, capacity needs and development
2. Identify potential challenges, problems and issues of the principal assignment listed in (1) above
3. Provide a development strategy in the assignment in the short, medium and long-term towards a successful Natural History Museum for Malaysia
4. Provide any other pertinent input as necessary for the assignment
5. Work closely with the Lead Consultant and other Short-term Consultants in the different assignments so as to integrate the assignments into a holistic framework for a Malaysian Natural History Museum
6. Coordinate and prepare pertinent reports for the framework for the establishment of a Natural History Museum

#### **Professional Requirement**

1. PhD in Forestry/Life Sciences/Project Development/Exhibit Design/Human Resource or equivalent.
2. Some experience in NHM planning and development

3. Some experience in human resource planning and development.
4. Good project implementation, reporting and communication skills
5. Good leadership skills
6. Good writing skills in English

**Base Station**

Forest Research Institute Malaysia (FRIM)

**Duration**

2-man months per consultant

**4e. Terms of Reference for Short Term Consultants – Administration, Finance and Development of Infrastructure**

**Principal Duties**

1. Work is principally in the area of Administration, Finance and Development of Infrastructure for a Natural History Museum
  - Administration and management alternatives of the Natural History Museum under government mechanism
  - Funding mechanism to ensure sustainability
  - Infrastructure development towards a Malaysian Natural History Museum
2. Identify potential challenges, problems and issues of the principal assignment listed in (1) above
3. Provide a development strategy in the assignment in the short, medium and long-term towards a successful Natural History Museum for Malaysia
4. Provide any other pertinent input as necessary for the assignment
5. Work closely with the Lead Consultant and other Short-term Consultants in the different assignments so as to integrate the assignments into a holistic framework for a Malaysian Natural History Museum
6. Coordinate and prepare pertinent reports for the framework for the establishment of a Natural History Museum

**Professional Requirement**

1. PhD in Forestry/Life Sciences/Project Development/Exhibit Design/Human Resource or Advance degree in Administration/ Finance management or equivalent.
2. Some experience in NHM planning and development
3. Some experience in administration, government organisation and budgeting.
4. Good project implementation, reporting and communication skills
5. Good leadership skills
6. Good writing skills in English

**Base Station**

Forest Research Institute Malaysia (FRIM)

**Duration**

2-man months per consultant

#### **4f. Terms of Reference for Research Officer**

The Research Officer will be recruited by the Implementation Partner. He/she will report directly to the Lead Consultant (LC). He/she will provide support in the coordination the different project outputs, ensuring coherency and progression of the project.

##### **Principal Duties**

1. To assist in the coordination of all planned activities (project outputs) within the project programmes and facilitate the workings of the TC as provided by Annex 3.
2. To assist in the coordination and preparation of stakeholder consultation workshop.
3. To assist the LC in the coordinating and supervising the implementation and reporting of work progress.
4. To assist in the preparation of quarterly progress and financial reports to UNDP or other relevant agencies requiring such reports.
5. To assist in the coordination and work with other short-term consultants in compiling and preparation of the framework for the establishment of the Natural History Museum for Malaysia
6. To assist in the coordination and prepare the drafting and preparation of the final document as the framework towards the establishment of the Natural History Museum for Malaysia

##### **Professional Requirements**

1. BSc in Forestry/Life Sciences/Project Development or equivalent.
2. Field experience in biodiversity research such as taxonomy and systematics
3. Some experience in the curation of museum or herbarium specimens will be an added advantage.
4. Good project implementation, reporting and communication skills
5. Good leadership skills
6. Good writing skills in English
7. Computer literate (esp. in MS Excel, Word and Power Point)

##### **Base Station**

Forest Research Institute Malaysia (FRIM)

##### **Duration**

9 months

#### **4g. Terms of Reference for Assistant Research Officer**

The Assistant Research Officer will be recruited by the Implementation Partner. He/she will report directly to the Lead Consultant. He/she will provide support to the Research Officer (RO) in the coordination the different project outputs, ensuring coherency and progression of the project.

##### **Principal Duties**

1. To assist the RO in the coordination of all planned activities (project outputs) within the project programmes and facilitate the workings of the TC as provided by Annex 3.
2. To assist the RO in the coordination and preparation of stakeholder consultation workshop.
3. To assist the RO in coordinating and supervising the implementation and reporting of work progress.
4. To assist the RO in the preparation of quarterly progress and financial reports to UNDP or other relevant agencies requiring such reports.
5. To assist the RO in the coordination and work with other short-term consultants in compiling and preparation of the framework for the establishment of the Natural History Museum for Malaysia
7. To assist the RO in the coordination and prepare the drafting and preparation of the final document as the framework towards the establishment of the Natural History Museum for Malaysia

##### **Professional Requirements**

- 1 SPM or GCE 'O' Levels or equivalent.
- 2 Field experience in specimen collections and curation of museum or herbarium specimens will be an added advantage.
- 3 Good writing skills in English will be an added advantage

##### **Base Station**

Forest Research Institute Malaysia (FRIM)

##### **Duration**

9 months

## **ANNEX 5 — TERMS OF REFERENCE FOR FACT FINDING STUDY TOURS**

A fact finding study tour will be conducted to a few internationally successful Natural History Museums with the aim of obtaining pertinent and additional information and best practices for the establishment of NHM. The team will visit two museums in United States of America, two in Europe and two in Asia. Visits to each country will range from 4-5 days per country. The project proposes the following museums for the study tours:

- The Field Museum, Chicago, US
- American Museum of Natural History, US
- Natural History Museum, London, UK
- National Museum of Natural History, Leiden, the Netherlands
- Natural History Museum, India
- Raffles Museum, National University of Singapore, Singapore

Three of the foreign consultants will be from these target museums (most likely the Chicago Field Museum, Natural History Museum, London and the Raffles Museum, Singapore). They will be the main contact point for the study tour when the team visits their respective museum. These foreign consultants will also help where possible make arrangements or contacts for museums which the project does not have representation. These foreign consultants will arrange the necessary itinerary for the visits within their museums so as to facilitate the team to obtain the necessary information and access to ensure success of the visits.

### **Delegation**

The delegation of this fact finding study tour will follow up on their specific assignments as listed out in the TOR's in Annexes 4b to 4e. The National Project Director will represent the Government of Malaysia during the visit and ensure that the overall aim of the visit is achieved.

## ANNEX 6 — INPUT-OUTPUT BUDGET

No.	Description	Amount (RM)	Amount (USD)
1	Contribution from Government of Malaysia (In-kind)		
	Personnel Support from FRIM	125,400	38,000
	Office Running Cost	39,600	12,000
	Equipment and Transportation	46,200	14,000
	Subtotal	211,200	64,000
2	Contribution from UNDP General Management Services (GMS)	1,362,900	413,000
	Subtotal	48,114	14,580
		1,411,014	427,580
	<b>Total</b>	<b>1,622,214</b>	<b>491,580</b>

USD 1 = RM3.30

### Government inputs

The Government of Malaysia will provide the following inputs:

#### (i) In-kind contribution

- The Terms of Reference of the National Project Director is given in Annex I.
- Appropriate officers to be attached as counterparts to the consultants
- Access to all relevant data and information required to undertake the project
- Use of office support facilities (for example, computers, facsimile and photocopying services, stationery, telephones), local transport and secretarial support
- Facilities for convening meetings

## ANNEX 7 — WORKPLAN

Year	2006		2007											2008			
Description	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Stakeholders' consultative meetings with curators and researchers from different institutions		■								■						■	
Preparation of project proposal			■	■													
Preparation of TOR for Consultants					■												
Awaiting government approval to initiate project						■	■	■									
Launch of project and set up secretariat/project management team to initiate study									■								
Appointment of lead consultant									■								
Appointment of local and foreign NHM experts									■	■							
Museum holding survey in Malaysia via correspondences and emails									■	■							
Conduct field visits to assess state of curation of museum/herbarium collections in Malaysia									■	■							
Conduct biodiversity expert survey and their fields of expertise									■	■							
Conduct workshop on the creation of a NHM in Malaysia											■						
Meeting of consultants											■					■	
Formulate paper for endorsement to the Sixth National Biodiversity/ Biotechnology Council											■						
Conduct study tours												■					
Formulate proposal from the framework plan for submission to the Government of Malaysia for funding in the mid-term review of the Ninth Malaysia Plan																	■
Preparation of report for final submission of the framework towards a master plan																■	■
Pilot project											■	■	■	■	■	■	■

Key:

- Activities prior to project implementation
- Activities in project

## ANNEX 8 — BUDGET

Award ID: 00056928											
Project Title: Development of Framework for Master Plan for the Establishment of Malaysia's Natural History Museum											
	GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Source of Funds	Atlas Code	ERP/ATLAS Budget Description/Input	Amount (USD)	Amount (RM)	Amount (USD)	Amount (RM)	Total (USD)	Total (RM)
1	Output 1: Establishment of Project Management Team	FRIM	UNDP	71305	Local Consult.-Sht Term-Tech - Lead Consultant - (USD5,000/mth/pax @ 9 mths @ 1 pax)	45,000.00	148,500.00			45,000.00	148,500.00
				71205	Intl Consultants-Sht Term-Tech (USD10,000/mth/ pax @ 2 mths @ 3 pax)	60,000.00	198,000.00			60,000.00	198,000.00
				71305	Local Consult.-Sht Term-Tech (USD5,000/mth/pax @ 2mths @ 3 pax)	30,000.00	99,000.00			30,000.00	99,000.00
				71635	Travel-Other (Monitoring and Evaluation)	5,000.00	16,500.00			5,000.00	16,500.00
				74525	Miscellaneous Expenses - Sundry	20,000.00	66,000.00			20,000.00	66,000.00
				75100	Facilities & Administration	14,580.00	48,114.00			14,580.00	48,114.00
			FRIM	71405	Service Contracts-Individual (Research Officer) - USD850/mth/pax @ 9 mths @ 1 pax			7,650.00	25,245.00	7,650.00	25,245.00
				71405	Service Contracts-Individual (Research Assistant) - USD450/mth/pax @ 9 mths @ 1 pax			4,050.00	13,365.00	4,050.00	13,365.00
				73125	Common Services-Premises			27,000.00	89,100.00	27,000.00	89,100.00
				74525	Miscellaneous Expenses			5,000.00	16,500.00	5,000.00	16,500.00
				75100	Facilities & Administration			2,000.00	6,600.00	2,000.00	6,600.00
Sub-total						174,580.00	576,114.00	45,700.00	150,810.00	220,280.00	726,924.00
2	Output 2: Status and state of museum and herbarium collections, biodiversity experts known	FRIM	UNDP	71610	Travel Tickets-Local (3 trips @ USD400/trip/pax @ 3 pax)	3,600.00	11,880.00			3,600.00	11,880.00
				71620	Daily Subsistence Allow-Local (USD170/day@ 10days @ 3 pax)	5,100.00	16,830.00			5,100.00	16,830.00
				71635	Travel-Other	3,000.00	9,900.00			3,000.00	9,900.00
				74525	Miscellaneous expenses-sundry	2,300.00	7,590.00			2,300.00	7,590.00
			FRIM	71610	Travel Tickets-Local			1,000.00	3,300.00	1,000.00	3,300.00
				71620	Daily Subsistence Allow-Local			1,000.00	3,300.00	1,000.00	3,300.00
				71635	Travel-Other			1,000.00	3,300.00	1,000.00	3,300.00
				74525	Miscellaneous Expenses			6,000.00	19,800.00	6,000.00	19,800.00
Sub-total						14,000.00	46,200.00	9,000.00	29,700.00	23,000.00	75,900.00

	GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Source of Funds	Atlas Code	ERP/ATLAS Budget Description/Input	Amount (USD)	Amount (RM)	Amount (USD)	Amount (RM)	Total (USD)	Total (RM)
3	Output 3: Consultative, consultant meetings and workshops held	FRIM	UNDP	71605	Travel Tickets-International (2 trips for 1 pax @ USD8,000/trip/pax from USA)	16,000.00	52,800.00			16,000.00	52,800.00
				71605	Travel Tickets-International (2 trips for 1 pax @ USD6,000/trip/pax from UK)	12,000.00	39,600.00				
				71605	Travel Tickets-International (2 trips for 1 pax @ USD300/trip/pax from Singapore)	600.00	1,980.00				
				71610	Travel Tickets-Local (USD400/trip/pax @ 2 trips @ 10pax)	8,000.00	26,400.00			8,000.00	26,400.00
				71620	Daily Subsistence Allow-Local (USD170/day @ 20 days @ 3 pax)	10,200.00	33,660.00			10,200.00	33,660.00
				74500	Miscellaneous Expenses	10,200.00	33,660.00			10,200.00	33,660.00
		FRIM		74500	Miscellaneous Expenses			3,500.00	11,550.00	3,500.00	11,550.00
Sub-total						57,000.00	188,100.00	3,500.00	11,550.00	60,500.00	199,650.00
4	Output 4: Fact finding study tours conducted	FRIM	UNDP	71605	Travel Tickets-International (USD10,000/trip/pax via US and Europe @ 1 trip @ 5 pax)	50,000.00	165,000.00			50,000.00	165,000.00
				71605	Travel Tickets-International (USD2,000/trip/pax to India @ 1 trip @ 5 pax)	10,000.00	33,000.00				
				71605	Travel Tickets-International (USD300/trip/pax to Singapore @ 1 trip @ 5 pax)	1,500.00	4,950.00				
				71615	Daily Subsistence Allow-Intl (USD600/day @ 20 days @ 5 pax)	60,000.00	198,000.00			60,000.00	198,000.00
				71635	Travel-Other	2,500.00	8,250.00			2,500.00	8,250.00
Sub-total						124,000.00	409,200.00	0.00	0.00	124,000.00	409,200.00

	GEF Outcome/Atlas Activity	Responsible Party/Implementing Agent	Source of Funds	Atlas Code	ERP/ATLAS Budget Description/Input	Amount (USD)	Amount (RM)	Amount (USD)	Amount (RM)	Total (USD)	Total (RM)
5	Output 5: Project findings and documentation completed	FRIM	UNDP	74105	Management and Reporting Svcs	5,000.00	16,500.00			5,000.00	16,500.00
				74210	Printing and Publications	20,000.00	66,000.00			20,000.00	66,000.00
				74215	Promotional Materials and Dist	5,000.00	16,500.00			5,000.00	16,500.00
				74230	Audio & Visual Equipment	5,000.00	16,500.00			5,000.00	16,500.00
			FRIM	74105	Management and Reporting Svcs			2,400.00	7,920.00	2,400.00	7,920.00
				74210	Printing and Publications			2,400.00	7,920.00	2,400.00	7,920.00
				74215	Promotional Materials and Dist			1,000.00	3,300.00	1,000.00	3,300.00
Sub-total						35,000.00	115,500.00	5,800.00	19,140.00	40,800.00	134,640.00
6	Output 6: NHM pilot project conducted	FRIM	UNDP	72399	Other Materials and Goods	20,000.00	66,000.00			20,000.00	66,000.00
				72815	Inform Technology Supplies	3,000.00	9,900.00			3,000.00	9,900.00
			Sub-total						23,000.00	75,900.00	0.00
TOTAL (Without GMS)						413,000.00	1,362,900.00				
<b>TOTAL (With GMS)</b>						<b>427,580.00</b>	<b>1,411,014.00</b>	<b>64,000.00</b>	<b>211,200.00</b>	<b>491,580.00</b>	<b>1,622,214.00</b>